

Welcome to the 2018 Boulder Summer Conference on Consumer Financial Decision Making!

Consumer financial decision-making is a topic that is naturally interdisciplinary. No one field can claim to have all the answers, so there is a very real benefit in having a forum like this for conversation with scholars from Finance, Economics, Marketing, Behavioral Science, Public Policy, Management, Law, Operations & Information Management, Strategy, Anthropology, Psychology, Risk and Actuarial Studies, Human Development, Family Studies, Public Health, and Consumer Sciences. Consumer welfare is strongly affected by household financial decisions large and small; we are very fortunate to have participation in the conference by people involved in the regulation of consumer financial products, by experts from nonprofit organizations that have a mission to promote better financial decision making, and by experts from the business world of financial services.

Over the next three days, we are in for a treat. Sunday afternoon, the Director of Behavioral Science and Investment at Betterment Dan Egan will present opening keynote remarks on the rise of machines in consumer financial decision making. The keynote talk will be followed by a keynote panel discussion with leading experts on this topic from industry and academia. We hope that the keynote session stimulates academic research on the topic. We will follow the keynote session with a cocktail party and poster session, giving us a chance to get to know more about others at the conference.

Monday, we begin our plenary sessions with a focus on struggles consumers have with debt, debt repayment, and financial shocks that can be buffered by insurance. On Tuesday, we begin with a look at how financial information and financial education influence financial behaviors. We will then turn to the psychology of consumer investing in their efforts to create future financial security.

The conference will be highly interactive, with plenty of time built into each session for discussion and opportunities for informal interaction built into our receptions and luncheons at fun places near the St. Julien Hotel.

Thank you!

John Lynch & Donnie Lichtenstein, Conference Co-Chairs, and our fellow members of the Program Committee: Asaf Bernstein, Steve Billings, Tony Cookson, Shaun Davies, Bart de Langhe, Phil Fernbach, Diego Garcia, Christina Kan, Ryan Lewis, Nick Reinholtz, Brian Waters

**2018 Boulder Summer Conference on
Consumer Financial Decision Making
May 20-22, 2018**

St. Julien Hotel and Spa, Xanadu Ballroom

PROGRAM

Sunday, May 20th

- | | |
|----------------|---|
| 1:00 – 2:00 PM | Conference Packet Pick-up & Poster Setup
St. Julien, Xanadu Ballroom Lobby |
| 2:15 – 2:30 PM | Welcome (John Lynch and Donnie Lichtenstein)
Xanadu Ballroom |
| 2:30 – 3:00 PM | Opening Remarks

“The Rise of Machines in Consumer Financial Decision Making”
Dan Egan (Director of Behavioral Science and Investment, Betterment) |
| 3:00 – 4:15 PM | Keynote Panel Discussion on the Rise of Machines in Consumer Financial Decision Making

Charles Chaffin (Director of Academic Initiatives, CFP Board Center for Financial Planning)

Kristen Berman (Co-founder, Common Cents Lab)

Berkeley Dietvorst (University of Chicago, Marketing) |
| 4:15 – 4:30 PM | Break |
| 4:30 - 6:30 PM | Poster Session and Reception
St. Julien, Outdoor Terrace (weather permitting)
(Conference registrants only, please) |

Monday, May 21st

7:00 – 8:00 AM

Continental Breakfast

Xanadu Ballroom Lobby (Conference registrants only, please)

8:00 – 9:15 AM

Session 1: Narrowly Targeted Financial Assistance for the Poor

Access to Credit and Labor Market Outcomes: Evidence from Credit Lotteries

Janis Skrastins (Washington University in St. Louis, Finance)

Armando Gomes (Washington University in St. Louis, Finance)

Bernadus Doornik (Banco Central do Brazil)

Restricted-Use Funds and Budgeting Decisions

Quentin André (Rotterdam School of Management, Marketing)

Nicholas Reinholtz (Leeds School of Business, University of Colorado Boulder, Marketing)

John G. Lynch Jr. (Leeds School of Business, University of Colorado Boulder, Marketing)

Discussant: **Clinton Key** (Pew Charitable Trust)

9:15 – 9:30 AM

Beverage Break (Xanadu Ballroom Lobby)

9:30 – 10:45 AM

Session 2: Investment Versus Consumption Framing

The Curious Case of Chattel Financing and Manufactured

Housing: Ethnographic Evidence from Nebraska and Colorado Mobile Homeowners

Allison Formanack (University of Colorado Boulder, Anthropology)

Health Insurance Design Meets Tax Incentives for Saving: Consumer Responses to Complex Contracts

Adam Leive (University of Virginia, Batten School of Leadership & Public Policy, Economics)

Discussant: **Tess Wilkinson-Ryan** (University of Pennsylvania, Law & Psychology)

10:45 – 11:00 AM

Beverage Break (Xanadu Ballroom Lobby)

11:00 – 12:15 PM

Session 3: Consumer Protection

“Unconscionability” and Consumer Contracts: Can Courts Tailor Remedies for Heterogeneous Consumers?

Jacob Russell (Rutgers, The State of University of New Jersey, Law)

Revolving Credit: Shrouded by Construction

Mary Zaki (University of Maryland, Agricultural and Resource Economics)

Discussant: **Greg Eliehausen** (Board of Governors of the Federal Reserve System)

12:20 – 1:45 PM

Lunch Break – The Mediterranean Restaurant, 1002 Walnut Street (Conference registrants only, please)

2:00 – 3:15 PM

Session 4: Credit Cards and Mental Accounting

Evidence of Mental Accounting from Credit Card Expenditure on Durable and Non-Durable Items

Nick Pretnar (Carnegie Mellon, Tepper School of Business, Economics)

Alan Montgomery (Carnegie Mellon, Tepper School of Business, Marketing)

Christopher Olivola (Carnegie Mellon University, Tepper School of Business, Marketing)

Categorizing Spending as Exceptional Decreases Consumer Motivation to Repay Debt

Keri Kettle (University of Manitoba, Marketing)

Remi Trudel (Boston University, Marketing)

Simon Blanchard (Georgetown University, Marketing)

Discussant: **Jeanne Hogarth** (Center for Financial Services Innovation)

3:15 – 3:30 PM

Beverage & Snack Break (Xanadu Ballroom Lobby)

3:30 – 4:45 PM

Session 5: Financial Overconfidence

Financial Education and Subjective Financial Knowledge Among Young Adults

Stephen Atlas (University of Rhode Island, Marketing)

Nilton Porto (University of Rhode Island, Human Development and Family Studies)

Jing Xiao (University of Rhode Island, Human Development and Family Studies)

Better Together: The Effect of Gender and Joint Decision-Making on Investor Overconfidence

Dominik Piehlmaier (University of Wisconsin Madison, Consumer Science)

Dee Warmath (University of Wisconsin Madison, Consumer Science)

Discussant: **David Robinson** (Duke University, Finance)

5:00 – 7:00 PM

Reception – St. Julien Outdoor Terrace (weather permitting)
(Partners & spouses welcome)

Tuesday, May 22nd

7:00 – 8:00 AM

Continental Breakfast – Xanadu Ballroom Lobby
(Conference registrants only, please)

8:00 – 9:15 AM

Session 6: Savings and Defaults

How Do Consumers Respond When Default Options Push the Envelope?

Richard Mason (University of London, Voya Financial)
Shlomo Benartzi (University of California Los Angeles, UCLA
Anderson School of Management, Behavioral Decision Making
Group)
John Beshears (Harvard University, Harvard School of Business,
Business Administration)
Katherine Milkman (University of Pennsylvania, Wharton
School)

Can Precommitment Increase Savings Deposits? Evidence from a Tax
Time field Experiment

Stephen Roll (Washington University in St. Louis, Social Work)
Michal Grinstein-Weiss (Washington University in St. Louis,
Social Work)
Cynthia Cryder (Washington University in St. Louis, Business)
Emily Gallagher (Washington University in St. Louis, Social
Work & Business)

Discussant: **Yanwen Wang** (University of British Columbia, Marketing)

9:15 – 9:30 AM

Beverage Break (Xanadu Ballroom Lobby)

9:30 – 10:45 AM

Session 7: Thinking About Others

Do Investors Value Sustainability? A Natural Experiment Examining
Ranking and Fund Flows

Abigail Sussman (University of Chicago, Marketing)
Samuel Hartzmark (University of Chicago, Finance)

Can Making Family Salient Improve Retirement Contributions? Evidence
from Field Experiments in Mexico

Avni Shah (University of Toronto, Marketing)
Matthew Osborne (University of Toronto, Marketing)
Dilip Soman (University of Toronto, Marketing)
Jaclyn Lefkowitz (Ideas42, Practitioner)

Discussant: **Anat Bracha** (Federal Reserve Bank of Boston)

10:45 – 11:00 AM

Beverage Break (Xanadu Ballroom Lobby)

11:00 – 12:15 PM

Session 8: Mispredicting the Future

Motivated Saving: The Impact of Projections on Retirement Saving Intentions

Susan Thorp (University of Sydney, Finance)
Ben Newell (UNSW Sydney)
George Smyrnis (University of Sydney, Finance)
Hazel Bateman (UNSW Sydney, Risk and Actuarial Studies)
Isabella Dobrescu (UNSW Sydney, Economics)

Leveraging Temporal Asymmetry to Improve Consumer Financial Predictions

Chuck Howard (University of British Columbia, Marketing & Behavioral Science)
David Hardisty (University of British Columbia, Marketing & Behavioral Science)
Abigail Sussman (University of Chicago, Marketing)
Melissa Knoll (Consumer Finance Protection Bureau)

Discussant: **Leaf Van Boven** (University of Colorado Boulder, Psychology)

12:20 – 1:45 PM

Lunch Break – The Mediterranean Restaurant, 1002 Walnut Street (Conference registrants only, please)

2:00 – 3:15 PM

Session 9: Ignoring Publicly Available Information in Investing

Naïve News Trading: Experimental Evidence

Ferdinand Langnickel (University of Zurich, Banking & Finance)

Disaster on the Horizon: The Price Effect of Sea Level Rise

Asaf Bernstein (University of Colorado Boulder, Finance)
Matthew Gustafson (Pennsylvania State University, Finance)
Ryan Lewis (University of Colorado Boulder, Finance)

Discussant: **Gal Zauberman** (Yale University, Marketing)

3:15 – 3:30 PM

Beverage & Snack Break (Xanadu Ballroom Lobby)

3:30 – 4:45 PM

Session 10: Prospect Theory and Stock Investing

Doing Less With More

Alex Imas (Carnegie Mellon University, Chicago Booth,
Decision Sciences)
Rawley Heimer (Boston College, Finance)

Fully Closed: Individual Responses to Realized Capital Gains and Losses

Michaela Pagel (Columbia University, Finance)
Steffen Meyer (Leibniz University Hannover, Economics)

Discussant: **Suzanne Shu** (University of California Los Angeles,
Marketing)

4:45 – 5:00

Closing Remarks: John Payne (Duke University, Management)

Poster Presentations by Category

Sunday, May 20st, 4:30-6:30 PM

St. Julien, Outdoor Terrace (Weather permitting)

1. “Beyond Anchoring: Examining the Impact of Minimum Payments on Credit Card Debt Repayment”
Samuel Hirshman – Chicago Booth (Behavioral Science)
2. “Attribute Overload: Examining the effects of price dimensionality on market outcomes”
Dustin Beckett – Consumer Financial Protection Bureau, Office of Research
3. “Financial Vulnerability and Personal Finance Outcomes of Natural Disaster”
Kelly Edmiston – Federal Reserve Bank of Kansas City (Economics & Community Development)
4. “Mortgage Default and Ability to Pay: Evidence from the PSID”
Eva Nagypal – Consumer Financial Protection Bureau, Office of Research
5. “Health Insurance, Consumption, and Borrowing: Evidence from the Affordable Care Act’s Dependent Coverage Mandate”
Vyacheslav Mikhed – Federal Reserve Bank of Philadelphia (Payment Cards Center)
6. “Payment Size, Consumption, and Default: Evidence from Small Changes in the National Mortgage Rate”
Dimuthu Ratnadiwakara – University of Houston (Finance)
7. “Fooled by Smart Payments?: The effect of digital payment account settings on payment transparency”
Rufina Gafeeva – University of Cologne (Management, Economics & Social Sciences)
8. “Effects of Bonus on the Demand for Auto Loans and the Long-Term Consequences”
Zhenling Jiang – Washington University in St. Louis (Marketing)
9. “The Impact of State Earned Income Tax Credit Expansions on Material and Medical Hardships”
Olga Kondratjeva – Washington University in St. Louis, Center for Social Development
10. “Trust and Delegated Investing: A Money Doctors Experiment”
Benjamin Loos – University of Mannheim, Chair of Finance and Banking
11. “Prognosis for financial health: Diagnosing consumers’ vulnerability to financial hardship”
Dee Warmath – University of Wisconsin – Madison (Consumer Science)

12. “Information Frictions in Consumer Credit Markets: A Structural Empirical Approach”
Santiago Truffa – Tulane University (Finance)
Sheisha Kulkarni – University of Virginia
13. “Evaluating a Cooling-off Period for Personal Loans: Evidence from an Extension in Switzerland”
Thomas Spycher – University of St. Gallen (Finance)
14. “Altruism and Egoism in Investment Decisions”
Daniel Brodback - Muenster School of Business and Economics
15. “Perfect Pitch: Entrepreneur Appearance and Early-Stage Investors”
Mikael Paaso - Aalto University (Finance)
16. “Affect and Social Security Retirement Claiming”
Helen Colby – Indiana University (Marketing)
17. “Cross-Sectional and Longitudinal Factors Promoting Will and Trust Ownership”
Zhikun Liu – Texas Tech University
18. “Who Gains and Who Loses from Credit Card Payments? Theory and Calibrations”
Scott Schuh – West Virginia University (Economics)

Housing

19. “Did Social Interactions Fuel or Suppress the US Housing Bubble?”
K. Jeremy Ko – U.S. Securities and Exchange Commission (Finance)
20. “Household Finance and Mortgage Performance after a Health Crisis: The Case of Flint”
Nathan Blascak – Federal Reserve Bank of Philadelphia (Consumer Finance)

Financial Literacy & Education

21. “Investigating the Impact of Income Shocks on Consumer Spending and Saving: Does Financial Literacy Matter?”
Michael Harrison – Kenan-Flagler Business School, University of North Carolina
22. “‘Anyway I end up broke, so why work?’ On Education, Financial Decisions and Labor Supply”
Galit Eizman – Harvard University (Economics)
23. “Underbanked: Communal Financial Orientation as a Pathway to Financial Inclusion for Consumers in Banking Deserts”
Linda Salisbury – Boston College (Marketing)
24. “Confidence with Financial Knowledge and its Association with Long-Term and Short-Term Goal-Setting Behaviors”
James Blair – University of Rhode Island (Marketing)

25. “Who participates in financial education? Understanding use of a home and mortgage information website”

Alanna Williams – Consumer Financial Protection Bureau

Household Financial Decision Making

26. “Policy Uncertainty and Household Stock Market Participation”

Honglin Ren – Georgia State University (Finance)

27. “Product Market Competition and Entrepreneurial Activity by Households”

Hadiye Aslan – Georgia State University (Finance)

28. “The Israeli Child Savings Account Program: Early Analysis of Household Participation Decisions”

Sam Bufo – Washington University in St. Louis

29. “Inflection Points in the Relationship Between Household Buffers and Hardship”

Jorge Sabat – Washington University in St. Louis, Olin Business School

Inequality in Financial Wellbeing

30. “Gender and Credit: Disparities Across Financial Products”

Anna Tranfaglia – Federal Reserve Bank of Philadelphia, Consumer Finance Institute (Payment Cards Center)

31. “Endogenous Skills and Labor Income Inequality”

Guanyi Yang – Ohio State University (Economics)

32. “Winners and Losers of Marketplace Lending: Evidence from Borrower Credit Dynamics”

Nikhil Paradkar – Georgia Institute of Technology, Scheller College of Business (Finance)

33. “What Accounts for Racial and Ethnic Differences in Credit Use?”

Ryan Goodstein – Federal Deposit Insurance Program, Division of Depositor and Consumer Protection (Economics)

Retirement

34. “Retirement drawdown defaults: The role of implied endorsement”

Hazel Bateman – University of New South Wales, School of Risk and Actuarial Studies (Economics)

35. “How Providing Information on Inflation Affects Pension Contributions: A Field Experiment”
Henning Cordes – University of Muenster (Finance Center Muenster)
36. “The Psychological Impact of Annuities: Can Pension Payout Choice Influence Health Behavior?”
Anja Schanbacher – London Business School (Marketing)
37. “The ‘BS’ You Believe. Retirement Product Deliberation of Reddit”
Soenke Ehret – Centre for Experimental Social Sciences, Nuffield College, University of Oxford
38. “Longevity risk aversion, financial risk aversion, values, and allocating assets in retirement”
Paul Gerrans – The University of Western Australia (Finance)
39. “Costly Zero Bias in Target Retirement Fund Choice”
Xiao Liu – New York University (Marketing)

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Kristen Berman (Co-founder, Common Cents Lab)

Berkeley Dietvorst (University of Chicago, Marketing) |

Biographies:

Dan Egan is the Director of Behavioral Finance and Investing at Betterment. He is responsible for ensuring customers’ success in saving and growing their wealth. He was instrumental in delivering Betterments tax loss harvesting and asset location services, as well as a behavioral design program that empirically improves investor returns. Dan holds a B.A. with Distinction in Economics from Boston University and an M.Sc. in Decision Science from the London School of Economics. Dan’s career includes health economics research at the University of Pennsylvania and a stint at corporate finance advisory firm Chiliogon in the UK (FSA authorized). Previous to Betterment, he helped establish the quantitative behavioral finance team at Barclays Wealth in 2007, working in both Europe and the U.S.

Charles Chaffin Dr. Charles R. Chaffin has been Director of Academic Programs and Initiatives since March 2010. In this role, he provides guidance and oversight to the 370 CFP Board Education Programs across the United States. His educational background has focused upon teaching pedagogy, curriculum and instruction, educational and cognitive psychology, learner assessment, and higher education administration. He has taught all levels of learners, from elementary and secondary instruction in the public schools, to baccalaureate, graduate, and doctoral-level courses in higher education. Dr. Chaffin has collaborated with a variety of colleges and universities in developing and revising curricula to enhance student achievement in both degree and non-degree programs of study. He has published several papers that have focused upon the cognitive workload of learners in different task settings, reflective practice, and best practices in higher education curriculum and instruction. Dr. Chaffin is the editor of the Financial Planning Competency Handbook from CFP Board, published in 2013 by John Wiley & Sons. He holds a Doctor of Education degree from the University of Illinois at UrbanaChampaign with an additional graduate degree from the University of Michigan.

Kristen Berman studies how people actually act in the marketplace, as opposed to how they should or would perform if they were completely rational. Currently she is a co-founder and head of product at Common Cents Lab, a Duke University initiative dedicated to improving the financial well-being for low to middle Americans. Kristen also co-founded Irrational Labs, a non-profit behavioral consulting company, with Dan Ariely in 2013. Irrational Labs helps companies and nonprofits understand and leverage behavioral economics to increase the health, wealth and happiness of their users. She was on the founding team for the behavioral economics group at Google, a group that touches over 26 teams across Google, and hosts ones of the top behavioral change conferences globally, StartupOnomics. She co-authored a series of workbooks called Hacking Human Nature for Good: A practical guide to changing behavior, with Dan Ariely. These workbooks are being used at companies like Google, Intuit, Netflix, Fidelity, Lending Club for business strategy and design work. She has given talks at the World Bank, Google, Facebook, Expedia, Aetna, Equifax and many other organizations and companies.

Berkeley Dietvorst Berkeley Dietvorst's research focuses on understanding how consumers and managers make judgments and decisions, and how to improve them. His main focus, thus far, has been when and why forecasters fail to use algorithms that outperform human forecasters, and explores prescriptions that increase consumers' and managers' willingness to use algorithms. Dietvorst's other research looks at such topics as order effects on consumer choice, choice architecture, and consumers' reactions to corporate experiments. His research has been published in the *Journal of Experimental Psychology: General and Management Science*, and has been referenced in such media outlets as the *Financial Times*, *Harvard Business Review*, and *The Boston Globe*. Dietvorst earned both a BS in economics and a PhD in decision processes from The Wharton School, University of Pennsylvania.

4:15 – 4:30 PM

Break

4:30 - 6:30 PM

Poster Session and Reception

St. Julien, Outdoor Terrace (weather permitting)
(Conference registrants only, please)

Monday, May 21st

7:00 – 8:00 AM

Continental Breakfast

Xanadu Ballroom Lobby (Conference registrants only, please)

8:00 – 9:15 AM

Session 1: Narrowly Targeted Financial Assistance for the Poor

Access to Credit and Labor Market Outcomes: Evidence from Credit Lotteries

Janis Skrastins (Washington University in St. Louis, Finance)

Armando Gomes (Washington University in St. Louis, Finance)

Bernadus Doornik (Banco Central do Brazil)

Abstract: In this paper, we examine how access to credit affects households' job market outcomes by exploiting randomized timing in the allocation of a pre-specified durable good (motorcycle) through a unique credit product in Brazil – Consorcio. The order in which consorcio participants are awarded the good is determined randomly through a monthly lottery. We find that households' wages increase by 2.47 percent after winning a credit lottery and business ownership increases by 67 basis points compared to participants who did not yet win in a lottery. On examining the underlying mechanism, we find that borrowers travel further to their job after receiving a motorcycle, possibly improving the quality of job match. Moreover, we find that earlier access to credit has lasting effects on labor market outcomes. Even five years after all participants have been awarded a motorcycle, early winners still earn higher wages and are more likely to own a business. Together, these results suggest that households credit constraints matter for labor market outcomes and have persistent effects on future earnings.

Restricted-Use Funds and Budgeting Decisions

Quentin André (Rotterdam School of Management, Marketing)

Nicholas Reinholtz (Leeds School of Business, University of Colorado Boulder, Marketing)

John G. Lynch Jr. (Leeds School of Business, University of Colorado Boulder, Marketing)

Abstract: Restricted-use funds—sums of money that can only be used for specific purposes—are increasingly prevalent in the consumer landscape. People shop with store gift cards, pay for medical services with health savings accounts, and buy groceries with Supplemental Nutrition Assistance Program benefits. This paper explores the effect of restricted-use funds on consumer budgeting decisions. Building on research from mental accounting and categorization, we contend that people endowed with a restricted-use fund will be averse to spending their unrestricted money on products that could be purchased with the restricted money. When the restricted-use fund is insufficient to meet their preferred level of consumption, this should lead to under-consumption of these products. We test this prediction using a multi-round, interactive budgeting task in which participants are endowed with a salary and either a restricted currency that can only be spent on food purchases or an equivalent amount of unrestricted currency. Across two studies, we find that the people endowed with food-restricted money spend *less* on food than those endowed with unrestricted money. Alternative explanations of these results based on economic and psychological theories are tested, and found to be inconsistent with the data.

Discussant: **Clinton Key** (Pew Charitable Trust)

Biographies:

Janis Skrastins is an Assistant Professor of Finance at Washington University in St. Louis, Olin Business School. Janis' research focuses on organizational economics, financial intermediation, and labor. His work provides empirical insights on the trade-offs of organizational design and their broader implications for the real economy. His current research explores organizational hierarchy and delegation of decision-making, organizational design of risk management, and how lenders develop alternative enforcement mechanisms through their design when institutions are weak. Some of his current work on labor economics analyzes the incentive effects of unemployment insurance, the propagation of firm-specific shocks to the labor market, and the risk sharing between firms and employees. His work on alternative credit enforcement mechanisms has received two best paper awards.

Quentin André joined the Marketing department of the Rotterdam School of Management, Erasmus University as an assistant professor in Spring 2018. He holds a Masters' degree in Managerial and Financial Economics from HEC Paris, and a Ph.D. in Marketing from INSEAD, France. His main stream of research is consumer financial decision making, with a special focus on consumers' perception and management of their financial resources. In his job market paper (with Nicholas S. Reinholtz and John G. Lynch Jr.), he studies restricted-use funds: monetary allowances that can only be used on specific goods or services. The main finding from this paper is that restricted resources can paradoxically bring people to spend less in the categories that they cover. He is also curious about people's perception and understanding of numerical distributions (such as prices), and investigates how individuals encode, remember and use those distributions in their everyday decisions. In an ongoing research project (with Nicholas S. Reinholtz and Bart de Langhe), he documents that impressions of variance are shared across distributions: learning a distribution with high variance will increase the amount of perceived variance in another unrelated distribution. Finally, Quentin is a passionate programmer, and a strong advocate for open science. He has developed two open-source libraries: DistributionBuilder (a Javascript library to help measuring people's perception of numerical distributions) and PyProcessMacro (a Python library to estimate moderation, mediation and conditional processes, based of Andrew F. Hayes' Process Macro). The source code and documentation of those libraries are shared on his website (<http://www.quentinandre.net>)

Clinton Key leads Pew's research on savings and financial security including conducting original research that explores when, how, and how much American households save, examines how savings are used for financial security, and evaluates the potential of programs and policies to improve the financial situation of Americans. In leading this research portfolio, Key develops and implements rigorous data collection and analysis strategies to create a better understanding of household saving behavior and the role of savings in people's lives. As a primary spokesman for the project, he presents findings to diverse audiences, including policymakers, across the country.

9:15 – 9:30 AM

Beverage Break (Xanadu Ballroom Lobby)

9:30 – 10:45 AM

Session 2: Investment Versus Consumption Framing

The Curious Case of Chattel Financing and Manufactured Housing: Ethnographic Evidence from Nebraska and Colorado Mobile Homeowners

Allison Formanack (University of Colorado Boulder, Anthropology)

Abstract: An estimated 18 million Americans occupy manufactured housing (MH), however according to the CFPB (2014) less than one quarter of MH owners title their homes as real estate. Instead, most MH owners opt to finance their home purchase through “chattel” loans, which typically carry higher interest rates and have fewer consumer protections. Drawing from ongoing (2011-present) anthropological research conducted within urban MHCs in Lincoln (Nebraska) and Boulder (Colorado), this paper details the many complicating factors MH owners in land-lease MHCs consider before deciding to occupy depreciating assets titled as chattel. MH owners in Lincoln, for example, tend to emphasize the cost saving features of their manufactured home, in particular its lower tax rate and maintenance costs. With the benefit of protective municipal ordinances, Boulder MH owners instead typically describe their homes as investments, and resist efforts to restrict or limit (mobile) home sales even when located in land-lease MHCs. Together, these case studies illustrate differing perspectives, motivations, and sociolegal contexts in which land-lease MH owners decide to purchase unaffixed chattel property. By attending to these disparate scenarios, this paper offers detailed insights useful to regulators, advisors, and advocates interested in delving into a notoriously shadowy and purposefully opaque industry.

Health Insurance Design Meets Tax Incentives for Saving: Consumer Responses to Complex Contracts

Adam Leive (University of Virginia, Batten School of Leadership & Public Policy, Economics)

Abstract: To lower health care costs, health savings accounts (HSAs) offer tax incentives encouraging people to trade off current health care consumption against future income. In this paper, I test whether consumers use HSAs as self insurance or to reduce their current health insurance deductible (supplemental insurance). I study this question in the context of a large U.S. health insurer that fully replaced its traditional, low-deductible health insurance offerings with a menu of high-deductible health plans and HSAs for its own employees. Using discontinuities in the employer’s matching rate for HSA contributions, I estimate a marginal propensity to consume from HSA assets of 0.68. There is no evidence that HSAs crowd out 401(k) saving. The large majority of employees fail to treat HSA money as fungible with retirement saving, and instead use HSA contributions to offset the higher deductible. In this setting, health spending did not decline as HSA contributions functioned as supplemental insurance. To interpret these empirical patterns, I develop a model that incorporates the continuous choice of HSA saving with the discrete choice of deductibles (JEL D14, D81, G22, H51, I13).

Discussant: **Tess Wilkinson-Ryan** (University of Pennsylvania, Law & Psychology)

Biographies:

Allison Formanack is a doctoral candidate in anthropology at the University of Colorado Boulder, where she also holds a master's degree in anthropology. Her research focuses on the financial, legal, health, and social impacts of cultural bias against owners of manufactured homes (MH), commonly referred to as "mobile homes" or trailers." Formanack has conducted 28 months of ethnographic research (2011-16) in urban mobile home communities (MHCs) in Lincoln, Nebraska scheduled for eventual closure and redevelopment, as well as supplemental qualitative and mixed-methods research among MH owners and activists in the Denver (Colorado) metropolitan area. In addition to teaching anthropology, Formanack's work has been featured on public radio (KZUM Lincoln) and print media, as well as being published in academic venues such as *City & Society* and *Anthropology News*.

Adam Leive is an Assistant Professor of Public Policy & Economics at the University of Virginia. He studies consumer choices of health insurance plans and the role of tax incentives in health insurance markets. His current work focuses on Health Savings Accounts and their relationship with retirement savings. His research has been published in the *Journal of Health Economics*, *American Journal of Health Economics*, the *New England Journal of Medicine*, and *Health Affairs*. Adam earned his Ph.D. from the University of Pennsylvania's Wharton School and his B.A. from Princeton University's Woodrow Wilson School. Prior to graduate school, he worked at the IMF and World Bank in Washington, DC.

Tess Wilkinson-Ryan is a Professor of Law and Psychology at the University of Pennsylvania Law School. She received her JD from Penn Law in 2005 and her Ph.D. in psychology from Penn in 2008. She studies the role of moral judgment in legal decision-making, with a particular focus on contracting. Her research draws on experimental methods from psychology and behavioral economics to ask how moral intuitions motivate or inform legal choices. Recent publications include "Incentives to Breach" in *American Law and Economics Review*, "The Common Sense of Contract Formation" in the *Stanford Law Review*, and "Intuitive Formalism in Contract" in the *University of Pennsylvania Law Review*. She has also written on the behavioral finance in the retirement investing context, including her 2014 article "Why Do Retail Investors Make Costly Mistakes? An Experiment on Mutual Fund Choice" with Jill Fisch.

10:45 – 11:00 AM **Beverage Break** (Xanadu Ballroom Lobby)

11:00 – 12:15 PM **Session 3: Consumer Protection**

"Unconscionability" and Consumer Contracts: Can Courts Tailor Remedies for Heterogeneous Consumers?

Jacob Russell (Rutgers, The State of University of New Jersey, Law)

Abstract: Reports of unconscionability's death are greatly exaggerated. The widespread view among courts and scholars is that the common-law contracts doctrine is rarely used, except in limiting clauses that purport to waive consumers' procedural rights. In fact, as this article documents, the doctrine appears to be quietly flourishing in state courts, who are using it to strike down substantive terms, including interest rates, in consumer finance contracts. To name just a few recent examples, courts have rewritten or voided payday loans, signature loans, overdraft fees, and mortgage contracts on the basis of unconscionability. This Article uses the renaissance of classical unconscionability in

consumer debt contracts to identify and analyze a major gap in the doctrine's contours. How tailored should the unconscionability analysis be to the characteristics of a particular consumer entering into a contract, versus untailored to the typical, median, or "reasonable" consumer? Current cases side-step this question uncomfortably, with no guiding theory. Tailoring has important implications for the remedial aspects of the unconscionability doctrine. All consumer protection efforts have to consider the heterogeneity of consumers, which is often a limitation of one-size-fits-all ex ante regulations. By contrast, a judicially tailored unconscionability analysis has the promise of helping customize protections to heterogeneous consumers, and courts are accustomed to individualized fact-finding. But tailoring unconscionability also imposes costs, including the possibility of judicial error, unpredictability, and potentially diminished ability to use class action remedies.

Interest Rates: Prices Hidden in Plain Sight

Mary Zaki (University of Maryland, Agricultural and Resource Economics)

Abstract: I study if the primary method we use to communicate price of credit, interest rates, obscures cost obligations from consumers and, if so, how this impacts consumer and firm behavior. In an experiment in an online labor market, consumers are overwhelmingly unable to translate interest rates into credit cost obligations and this causes insensitivity to price changes and over-purchasing of goods. Constructing a new record of credit prices from mail-order catalogs, I find that the innovation of credit instruments that only disclose interest rates allows less efficient creditors to exploit this myopia by raising prices while simultaneously experiencing increased sales.

Discussant: **Greg Elliehausen** (Board of Governors of the Federal Reserve System)

Biographies:

Jacob Russell is assistant professor of law at Rutgers Law School. His research focuses on consumer and investor protection, the retirement and pension industry, and corporate governance. Jacob's recent work has focused on challenges presented by the use of behavioral evidence in law and regulation. He teaches courses on business law, securities regulation, and the history of the corporation. He previously taught contracts and the economic analysis of corporate law at Stanford Law School and joined Rutgers Law School in July 2016. He is a faculty affiliate of the Rutgers Center for Corporate Law and Governance and co-organizes its annual corporate compliance institute. Jacob received his J.D. from Stanford Law School, his master's degree in political science from M.I.T., and his bachelor's degree from Harvard. Before law school, Jacob was a staff reporter for *The Wall Street Journal* in New York, covering arts, culture, and philanthropy. Jacob is admitted to practice in Massachusetts and New Hampshire and his legal practice has involved the representation of financial services firms, mutual funds, and technology start-ups.

Mary Zaki is an Assistant Professor in the Department of Agricultural and Resource Economics of the University of Maryland. Her research focuses on household finance and food consumption issues especially among low-income populations. She currently is studying household spending patterns between paycheck receipts, the effects of high cost credit on food consumption among military families, the influence of food acquisition costs on SNAP month spending, historical consumer credit costs, food access programs in food deserts and the effect of school breakfast program expansions on health outcomes and test scores. She received her B.S. and B.A. in Economics from the University of Pennsylvania and her M.S. and Ph.D. in Economics from Northwestern University.

Greg Eliehausen is Principal Economist in the Consumer Finance Section of the Division of Research and Statistics at the Board of Governors of the Federal Reserve System. His current research focuses on consumer financial behavior, regulation of financial markets and services, and markets for high-rate credit products. His research has been published in numerous professional journals. Recent work includes *Truth in Lending: Theory, History, and a Way Forward* (coauthored with T.A. Durkin), which analyzes the purposes, strengths, and weaknesses of disclosures as consumer protections in financial transactions, and *Consumer Credit and the American Economy* (coauthored with T.A. Durkin, M.S. Staten, and T.J. Zywicki), which examines the economics, psychology, law, and regulation of consumer credit in the United States. Previously, Eliehausen held research positions at George Washington University (2006–09), Georgetown University (1998–2005), and the Board of Governors of the Federal Reserve System (1981–98). He has a Ph.D. degree in business administration from the Pennsylvania State University.

12:20 – 1:45 PM

Lunch Break – The Mediterranean Restaurant, 1002 Walnut Street
(Conference registrants only, please)

2:00 – 3:15 PM

Session 4: Credit Cards and Mental Accounting

Evidence of Mental Accounting from Credit Card Expenditure on Durables, Non-Durables, and a Structural Test of Fungibility

Nick Pretnar (Carnegie Mellon, Tepper School of Business, Economics)

Alan Montgomery (Carnegie Mellon, Tepper School of Business, Marketing)

Christopher Olivola (Carnegie Mellon University, Tepper School of Business, Marketing)

Abstract: In his 1999 summary of all things mental accounting (see Thaler [21]), Richard Thaler describes one of the primary components of mental accounting as the budgeting of specific utility-providing activities which can depend, but does not have to, on the resources used to fund those activities. The analysis presented in this paper focusses specifically on household expenditure of durable and non-durable goods and the liquidity sources used to fund these different expenditures. Specifically, we exploit a linked dataset of credit and debit card users to examine consumer purchasing patterns of durable and non-durable consumption commodities under both methods of payment. Our findings suggest that on average durable purchases are more sensitive to increases in available credit than non-durable purchases, and most consumers are more likely to increase total consumption due to increases in available credit than increases in available checking account balances. We empirically show that the standard neo-classical consumption/savings model, the

equilibrium conditions of which implicitly assume that the household's available resources (liquidity and investments) are perfectly fungible, fails to rationalize our data for the median/modal consumer in our sample. However, our results are rich because we also show that the behavioral distribution of consumers includes both households which treat liquidity as fungible and those that do not. Given the heterogeneity we find, future work should test whether these results would matter on aggregate.

Categorizing Spending as Exceptional Decreases Consumer Motivation to Repay Debt

Keri Kettle (University of Manitoba, Marketing)

Remi Trudel (Boston University, Marketing)

Simon Blanchard (Georgetown University, Marketing)

Abstract: Credit card companies and financial planning applications (e.g., Mint.com) use algorithms to distinguish ordinary (common, frequent) from exceptional (uncommon, infrequent) expenditures. Some programs notify clients when exceptional spending is detected, presumably to motivate better financial decisions by bringing attention to the exceptional spending. We find that such notifications may actually backfire. Evidence from a field study of more than 3,000 indebted consumers and from three experiments shows that consumers make greater credit card repayments when a greater proportion of their spending is labeled as ordinary, rather than exceptional, and that bringing attention to exceptional spending only enhances debt repayment when that spending is actually ordinary. We propose that this effect occurs because consumers view debt as less acceptable if it results from ordinary spending than exceptional spending, and that consumers are motivated to repay debt they consider unacceptable. Our findings suggest that the explicit labeling of expenditures is a necessary condition for this effect, and that outside of such interventions consumers do not categorize certain expense levels as exceptional. Our research provides clear, actionable directions for financial planning programs seeking to help their indebted clients.

Discussant: **Jeanne Hogarth** (Center for Financial Services Innovation)

Biographies:

Nick Pretnar is an Economics PhD Candidate at Carnegie Mellon University's Tepper School of Business. His research is funded by an NSF-GRFP grant and focuses on how consumers make consumption/savings decisions and how idiosyncratic behavior drives broad, macroeconomic trends. At Carnegie Mellon, Nick coauthors with members of both the Marketing and Economics faculties. Generally, his research falls into two basic camps: 1) empirical analysis of microeconomic consumption/savings data to understand individual consumption/savings decisions; 2) broad analysis of the relationship between macroeconomic consumption/savings trends and long-run growth. Currently, he is working on two papers with coauthors Alan Montgomery and Chris Olivola which employ dynamic, structural economic models to understand individual decisions under different types of mental accounting. In addition, he is coauthoring a paper with Nobel prize-winning economist Finn Kydland which asks how an aging population affects aggregate economic outcomes when working-age adults provide off-market time to care for their parents. He also works on building aggregate economic models examining the factors contributing to stagnating economic growth in the developed world and the structural evolution of OECD economies toward consumer services. Nick is a 2015 graduate of the University of Missouri with Bachelor's degrees in English, Mathematics, and Economics. Having just completed his third year in the Tepper PhD program, he plans to be on the job market within the next couple of years.

Keri Kettle received a B.A. (Honours Business Administration) from the Royal Military College of Canada, an M.B.A. (Marketing) from the University of Calgary, and a Ph.D. (Consumer Behaviour) from the University of Alberta. Prior to entering academia, Dr. Kettle served 12 years in the Canadian Armed Forces as a Logistics Officer. Dr. Kettle is a recipient of the NATO Medal for Kosovo, the Canadian Peacekeeping Service Medal, and the Canadian Forces Decoration. Dr. Kettle's research falls into two major streams: consumer self-identity and motivated goal pursuit. The first stream focuses on how identity-relevant cues and engagement in identity-relevant actions – such as signing one's own name – differentially activate aspects of a consumer's self-concept, and thus predictably influence consumers' thoughts, motivation, and behaviour. His second stream of research examines goal-directed behaviour, with a particular focus on self-important goals that can be readily quantified, such as financial goals (e.g., debt repayment, savings), health goals (e.g., weight loss), and work or athletic performance goals (e.g., running a marathon). Dr. Kettle's research examines how consumers' goal-directed behavior is influenced by the nature of their personal forecasts and the nature of the anticipated and actual feedback they receive about their goal progress and/or success in attaining each goal. Dr. Kettle primarily uses experimental methods, but also uses his strong quantitative behavioural science skills to utilize advanced experimental methods and statistics. Dr. Kettle's work has been published in the *Journal of Consumer Research*, *Psychological Science*, and the *Personality and Social Psychology Bulletin*.

Jeanne Hogarth is the founder of William L Reed & Associates, a consulting firm dedicated to improving consumer financial well-being. Formerly she was a Vice President at the Center for Financial Services Innovation (CFSI), working to strengthen CFSI's research and engagement with policy makers, NGOs, non-profits, consumer advocacy organizations, and other stakeholders. Also, she worked in Consumer and Community Affairs at the Federal Reserve Board, was on faculty at Cornell University, and taught high school in Ohio. She has authored research articles as well as consumer financial education resources. She received a B.S. in Education from Bowling Green State University and an M.S. and Ph.D. in Family and Consumer Economics from The Ohio State University.

3:15 – 3:30 PM

Beverage & Snack Break (Xanadu Ballroom Lobby)

3:30 – 4:45 PM

Session 5: Financial Overconfidence

Financial Education and Subjective Financial Knowledge Among Young Adults

Stephen Atlas (University of Rhode Island, Marketing)

Nilton Porto (University of Rhode Island, Human Development and Family Studies)

Jing Xiao (University of Rhode Island, Human Development and Family Studies)

Abstract: Contemporary consumer education interventions are typically designed to improve welfare by expanding consumer access to knowledge. This research examines how a 2.5-hour online financial education intervention impacts financial capability of young adults over 6- months. To understand financial capability, we examine financial confidence (subjective financial knowledge), financial knowledge and financial behavioral intentions. The results show that the financial education intervention had a larger and longer impact on financial confidence than financial knowledge or behavioral intentions. Practices that align confidence and knowledge to promote

financial capability are discussed.

Better Together: The Effect of Gender and Joint Decision-Making on Investor Overconfidence

Dominik Piehlmaier (University of Wisconsin Madison, Consumer Science)

Dee Warmath (University of Wisconsin Madison, Consumer Science)

Abstract: This study examines the impact of shared decision-making and gender on investor overconfidence. It analyzes data from 2,000 investors, 6,394 consumers, and 240 experimental subjects to answer the question whether investors who share the decision-making responsibility are less affected by the overconfidence bias than those who decide on their own. Similarly, it critically assesses whether investor overconfidence remains a male-driven phenomenon after controlling for shared decision-making. The results from a set of Bayesian estimations and Bayesian structural models (BSEM) suggest that people who share financial decisions are substantially less affected by investor overconfidence. However, sharing with family members and friends seems to be more effective in reducing the bias than sharing with a professional advisor. In addition, men are not more overconfident regarding their financial knowledge than women. In fact, the data suggest that the only traceable gender effect is that, on average, females are much more affected by the bias than men. The causal claim in regard to the effect of shared decision-making on investor overconfidence is supported by a randomized controlled trial. The study provides investors and professional advisors with a feasible tool to decrease overconfidence. Furthermore, it calls for a more nuanced discussion about the impact of gender on overconfidence.

Discussant: **David Robinson** (Duke University, Finance)

Biographies:

Stephen Atlas is an Assistant Professor of Marketing in the College of Business of the University of Rhode Island. Professor Atlas's research uses both experiments and large administrative data sets to investigate how psychological factors influence contemporary consumer financial behaviors. In particular, his research examines how consumers interpret financial commitments such as subscriptions and mortgages, and how to modify the social and technological environment to support intentional financial outcomes. He has been published in the *Journal of Marketing Research*, the *Journal of Consumer Research* and *Nature Sustainability*, and his research has been supported by grants from the National Endowment for Financial Education and the Foundation for Food and Agriculture Research. He received a Ph.D. in Marketing from Columbia University.

Dominik Peihlmaier is currently a dissertator and graduate teaching assistant in Consumer Behavior and Family Economics at the University of Wisconsin-Madison. His primary research interest is in the field of judgment and decision-making with a focus on heuristics and biases. His research sheds light on the development of overconfidence and its confounders. He published the second edition of his book "Irrational and Overrated" about the connection between academic achievements and overconfidence in 2014. The goal of his research is to explore the dynamics of overconfidence and to provide decision makers with useful tools to decrease its negative impact. His broader research interests are in experimental game theory, behavioral finance, and applied quantitative methods.

David Robinson is a Professor of Finance and the J. Rex Fuqua Distinguished Professor of International Management at the Fuqua School of Business. He is also a Faculty Research Associate at the National Bureau of Economic Research, where he serves as the Director of the Entrepreneurship Working Group. In addition to his work at Duke, he is the Bertil Daniellson Visiting Professor of Finance at the Swedish House of Finance and a Distinguished Affiliate Professor at the European School of Management and Technology in Berlin, Germany. His research has appeared in leading academic journals in finance and economics, including the Journal of Finance, Journal of Financial Economics, Review of Financial Studies, and the American Economic Review. Professor Robinson earned an MBA and PhD from the University of Chicago Graduate School of Business, a Master of Science in Economics from the London School of Economics and Political Science, and a Bachelor of Arts with highest honors in economics from the University of North Carolina. Prior to joining the faculty of Duke University, he was an Assistant Professor of Finance and Economics at Columbia University. He holds an honorary degree from the Stockholm School of Economics, where he is.

5:00 – 7:00 PM

Reception – St. Julien Outdoor Terrace (weather permitting)
(Partners & spouses welcome)

Tuesday, May 22nd

7:00 – 8:00 AM **Continental Breakfast** – Xanadu Ballroom Lobby
(Conference registrants only, please)

8:00 – 9:15 AM **Session 6: Savings and Defaults**

How Do Consumers Respond When Default Options Push the Envelope?

Richard Mason (University of London, Voya Financial)

Shlomo Benartzi (University of California Los Angeles, UCLA
Anderson School of Management, Behavioral Decision Making
Group)

John Beshears (Harvard University, Harvard School of Business,
Business Administration)

Katherine Milkman (University of Pennsylvania, Wharton
School)

Abstract: Many employers have increased the default contribution rates in their retirement plans, generating higher employee savings. However, a large fraction of employers are reluctant to default employees into savings rates that are high enough to leave those employees adequately prepared for retirement without supplementary savings. There are two potential concerns regarding a high default: (i) it may drag an employee along to a high contribution rate even when this outcome is not in the employee's best interest, and (ii) perhaps more importantly, it may cause an employee to opt out of plan participation entirely. We conducted a field experiment with 10,000 employees who visited a website that facilitated savings plan enrollment. They were randomly assigned to see a default contribution rate ranging from 6% (a typical default) to 11%. Relative to the 6% default, higher defaults increased average contribution rates 60 days after a website visit by 20-50 basis points of pay off of a base of 6.11% of pay. We find little evidence that the concerns with high defaults are warranted, although the highest default (11%) increases the likelihood of not participating by 3.7 percentage points. The evidence suggests that erring on the high side when choosing a default contribution rate is less likely to generate unintended consequences than erring on the low side.

Can Precommitment Increase Savings Deposits? Evidence from a Tax
Time field Experiment

Stephen Roll (Washington University in St. Louis, Social Work)

Michal Grinstein-Weiss (Washington University in St. Louis,
Social Work)

Cynthia Cryder (Washington University in St. Louis, Business)

Emily Gallagher (Washington University in St. Louis, Social
Work & Business)

Abstract: This work aims to encourage the saving of the tax refund through an experiment embedding behavioral interventions in a tax filing platform serving almost a million low- and moderate-income households. American households, and LMI households in particular, do not have enough savings for unforeseen drops in income or rise in expenses. Data from the Pew Charitable Trusts (2015a) found that 41% of households do not have enough liquid savings to cover a \$2,000 expense; for low income families that rises to 78%. Financial emergencies are also commonplace: 60% of American households report experiencing a financial shock in the past year (Pew Charitable Trusts, 2015b). The tax refund offers a small period of relief from the low level of liquid funds that households have on hand. For LMI households, the tax refund may be the only time of the year they can afford to make big ticket purchases, pay down debt, set aside money for their children, or save some money for a rainy day (Halpern-Meekin et al., 2015; Barr & Dokko, 2012; Grinstein-Weiss et al., 2015). Our research seeks to encourage filers to make positive financial decisions at the moment they are deciding how to allocate their tax refund to their bank accounts.

Discussant: **Yanwen Wang** (University of British Columbia, Marketing)

Biographies:

Richard Mason serves as Head of the Voya Behavioral Finance Institute for Innovation, where he sets strategy and works with leading academics to conduct experimental research to improve retirement decision making. Voya's Institute is focused on gaining deeper insights into the behaviors and decisions of Americans regarding their financial and retirement planning activities. The Institute's work seeks to test novel concepts that could translate into large scale digital solutions that help people save more and achieve better retirement outcomes. Previously, Mason served as President of the Small/Mid Corporate and Institutional Investment Markets for Retirement at Voya Financial, responsible for the company's small and mid-sized 401(k) plan market segments, as well as stable value and the pension risk transfer businesses. During his 30-year tenure with Voya and its predecessor companies, Mason's career has spanned a number of P&L leadership positions driving business strategy, merger and acquisition activity and integration, distribution growth, and customer experience improvement strategies. Mason is a recognized speaker and thought leader in the retirement industry and he has provided testimony to the U.S. Department of Treasury. Mason has also been named in the past as one of the most influential people in the defined contribution market by the 401(k)Wire. Mason currently serves on the Board of Trustees for the Manlius Pebble Hill School. He has previously served on the Board of Trustees for Employee Benefits Research Institute (EBRI) and is a Connecticut Business and Industry Association (CBIA) Director Emeritus. Mason graduated summa cum laude and has a Bachelor of Science in business administration from Providence College and has a Master of Business Administration from the Johnson Graduate School of Management at Cornell University. He is currently a Ph.D. candidate focusing on behavioral finance and experimental economics, at City, University of London. His research interests focus on incorporating insights from psychology into financial decision making and applying these insights to inform positive retirement outcomes.

Stephen Roll is an assistant research professor at the Brown School of Washington University in St. Louis. Roll's research focuses on promoting asset building, debt management, and financial stability in financially vulnerable populations. His work is motivated by understanding how to design, target and implement behavioral interventions to promote financial well-being. Working within the Center for Social Development, Roll is one of the lead researchers on the Refund to Savings initiative, and he is also involved in research on child development accounts, employer-based financial wellness programs, and nonprofit credit counseling agencies. Roll's dissertation explored the impact of a nationwide credit counseling program, as well as the dynamics that drive success in financial coaching programs. Roll has also worked in consumer research and client consulting for companies including Proctor & Gamble.

Yanwen Wang is an assistant professor of marketing at the Sauder School of Business at the University of British Columbia. She earned a Ph.D. in Marketing from Emory University in 2014. Her research lies at the intersection between marketing and public policy. She focuses on the regulatory implications of marketing actions in a variety of contexts including financial decision making, anti-smoking campaigns, political advertising, secondary market restrictions, and mobile hailing technology adoption. She is an empirical modeler. She studies research problems using a variety of techniques including optimization techniques such as dynamic programming, state space models, and Bayesian statistics. She also uses a variety of data sources ranging from publicly available data sets to field experiments in partnership with firms.

9:15 – 9:30 AM

Beverage Break (Xanadu Ballroom Lobby)

9:30 – 10:45 AM

Session 7: Thinking About Others

Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows

Abigail Sussman (University of Chicago, Marketing)

Samuel Hartzmark (University of Chicago, Finance)

Abstract: Examining a shock to the salience of the sustainability of \$8 trillion of mutual funds, we present causal evidence that investors market wide value sustainability. Being categorized low sustainability resulted in outflows of more than \$12 billion and increased probability of liquidation while being categorized high sustainability led to inflows greater than \$22 billion. Investors reacted to extreme categories, ignoring middle categories and rating details, demonstrating that categorization makes extreme features salient, with market wide impact. Experimental evidence suggests that sustainability is viewed as positively predicting future performance, but we find evidence suggesting underperformance of high sustainability funds.

Can Making Family Salient Improve Retirement Contributions? Evidence from Field Experiments in Mexico

Avni Shah (University of Toronto, Marketing)

Matthew Osborne (University of Toronto, Marketing)

Dilip Soman (University of Toronto, Marketing)

Jaelyn Lefkowitz (Ideas42, Practitioner)

Abstract: Despite good intentions, consumers regularly struggle to reach their retirement savings goals. While this is a persistent and pervasive issue all over the world, the task of improving retirement contributions is particularly challenging in Mexico, where less than 0.5% of active pension holders make more than the minimum contribution to their retirement accounts. In this paper, we conduct three large-scale field experiments aimed at designing interventions to help overcome biases surrounding excessive discounting in retirement contributions. Using redesigned retirement account statements, some of our experiments provide evidence that various nudges traditionally associated with improving savings (e.g., gain frame, loss frame, fresh start framing, small amounts, and wallet cutout) do not always lead to positive outcomes: We observe that traditional nudges have either no effect, or even a significant negative effect, on an individual's propensity to make voluntary contributions to his or her retirement savings account when the individual is relatively unengaged or unmotivated to save for his or her future. Promisingly, we find evidence for a novel mechanism to help overcome disengagement from the savings decision: increasing the salience of making savings choices to save for one's family. We find that family messaging prompts significantly improve voluntary contribution rates in comparison to the control condition and in relation to other treatments in comparison to the control condition. These effects are significant both in the short term (over a three-month period following the prompt) and in the longer term (six months later). To provide a theoretical framework to interpret our findings, we develop a stylized model of consumption and savings where individuals receive current period utility from bequests to family members, but underestimate future utility from such bequests. We show that nudges which correct this bias can be especially effective on unengaged individuals if these individuals heavily weight bequest utility relative to their own consumption utility.

Discussant: **Anat Bracha** (Federal Reserve Bank of Boston)

Biographies:

Abigail Sussman is an associate professor of marketing at The University of Chicago Booth School of Business. She is interested in how consumers form judgments and make decisions, from underlying mechanisms to applications. She investigates questions at the intersection of consumer behavior, psychology, and economics, with the aim of improving human welfare. Her central research examines psychological biases that can lead consumers to commit errors in budgeting, spending, and borrowing. Abby's research has been published in journals such as *Psychological Science*, the *Journal of Marketing Research*, and the *Journal of Consumer Research* and has been profiled in popular press including *The Wall Street Journal*, *The Washington Post*, and *The Boston Globe*. Her prior experience includes work at ideas42 and in the equity research division at Goldman Sachs. She earned a bachelor's degree from Brown University in cognitive science and economics, and a joint PhD from the psychology department and the Woodrow Wilson School of Public and International Affairs at Princeton University.

Avni Shah is an Assistant Professor of Marketing in the Department of Management at the University of Toronto Scarborough, with a cross-appointment to the Marketing area at the Rotman School of Management. Using a mixed-method approach of field experiments, laboratory and online experiments, as well as archival and panel data she investigates how a) different payment factors (i.e., payment method, pricing structures, payment timing) and b) social influences (i.e., peer effects) influence consumer spending, saving, and well-being particularly in financial and health contexts. Her research has covered a broad range of topics such as looking at how paying with different forms of payment influence purchase behavior, how paying a surcharge on unhealthy food items influences unhealthy food consumption, how nudges and mobile payment can influence retirement contributions, and whether peers influence how households make mortgage decisions. Avni's work has been published in the Journal of Consumer Research, Journal of Marketing Research, and Psychological Science.

Anat Bracha is a senior economist in the research department of the Federal Reserve Bank of Boston. Prior to joining the Boston Fed, she was an assistant professor at Tel-Aviv University at the Eitan Berglas School of Economics. She holds a Ph.D. in economics from Yale University, where she integrated insights from psychology into the standard economic model of decision making under risk. Specifically, she suggested using a two-system reasoning framework to study risk perception and insurance decisions. More recently her work has been experimental, studying topics such as relative thinking in incentives—for instance status and image concerns—in pro-social behavior and labor supply, and studying the effect of reminders and delayed feedback on credit scores among low-to-moderate income individuals in the United States.

10:45 – 11:00 AM **Beverage Break** (Xanadu Ballroom Lobby)

11:00 – 12:15 PM **Session 8: Mispredicting the Future**

Motivated Saving: The Impact of Projections on Retirement Saving Intentions

Susan Thorp (University of Sydney, Finance)

Ben Newell (UNSW Sydney)

George Smyrnis (University of Sydney, Finance)

Hazel Bateman (UNSW Sydney, Risk and Actuarial Studies)

Isabella Dobrescu (UNSW Sydney, Economics)

Abstract: The implications of current balance information for retirement provision are considerably difficult to grasp or anticipate. We study how balance and/or income projections motivate the voluntary savings intentions of pension plan participants over a sequence of ten choices. To this effect, we collect savings intentions from 1,615 respondents aged 25-57 years via an online experimental survey that compares four different formats for retirement account information. The formats are (i) current balance; (ii) current balance and projected retirement balance; (iii) current balance and projected retirement income; and (iv) current balance, projected retirement balance and retirement income. Regardless of information format, merely inviting plan participants to top up their retirement account prompts substantial increases in savings, especially among older respondents. At the first choice round, the income projection triggers marginally more voluntary saving intentions than the lump sum projection alone. However at both the first choice and over sequential choices, the combination of balance and income projections is what matters most. Furthermore, even though older respondents save at a higher level across all treatments, younger

respondents are more sensitive to income balance projections than the older survey respondents.

Leveraging Temporal Asymmetry to Improve Consumer Financial Predictions

Chuck Howard (University of British Columbia, Marketing & Behavioral Science)

David Hardisty (University of British Columbia, Marketing & Behavioral Science)

Abigail Sussman (University of Chicago, Marketing)

Melissa Knoll (Consumer Finance Protection Bureau)

Abstract: Expense prediction bias is the phenomenon that consumers tend to under-predict their future expenses. The present research theorizes that this bias occurs because people mentally represent the future using prototypes, and leverages this insight to develop a simple cognitive tool that improves expense prediction accuracy. Four studies ($N = 2,022$) provide support for this theory and validate the effectiveness of the tool. Study 1 demonstrates that consumers predict their future expenses will be both lower and more typical than their past expenses, and that higher perceived typicality is correlated with lower expense predictions. Study 2 replicates these findings in a nationally representative sample of Americans and shows that decreasing perceived typicality of future expenses increases expense predictions. Study 3 shows that the tool improves expense prediction accuracy (vs. control) in a week-long financial diary study that compares expense predictions against actual expenses incurred during the target week. Study 4, a five week longitudinal field study with clients of a Canadian bank, shows that without intervention mean prediction accuracy does not improve over time, but that the tool is capable of completely neutralizing the bias. Underlining the substantive importance of the tool, studies 3 and 4 also provide evidence that the expense prediction bias is correlated with financial decisions and outcomes related to savings and debt.

Discussant: **Leaf Van Boven** (University of Colorado Boulder, Psychology)

Biographies:

Susan Thorp is Professor of Finance at the University of Sydney. She researches consumer finance with a particular focus on retirement savings and decumulation, using theoretical, empirical and experimental techniques to understand financial decision making. Much of this research has tested the way decision makers respond to advisers, disclosures and choice architecture. Susan has published 40 papers in international academic journals. She has led and participated in grant projects attracting over \$3 million dollars in public and industry funding. Susan is also a regular contributor to consumer finance and pension policy discussions, and her research is cited by major public reviews and inquiries. Susan is a member of the Steering Committee of the Melbourne Mercer Global Pensions Index, an annually compiled internationally recognized index of pension system quality and a member of the Research Committee of the OECD/International Network on Financial Education.

Chuck Howard studies the causes and consequences of consumer financial misprediction, and designs simple cognitive tools that help consumers improve their prediction accuracy. Chuck's work has been recognized with awards from the Behavioral Insights Group at Harvard University and the Social Sciences and Humanities Research Council of Canada. He holds a BA in Economics and Finance from Ryerson University and is currently a PhD student in Marketing and Behavioural Science at the Sauder School of Business, University of British Columbia. Prior to starting his PhD, Chuck worked in marketing and sales management for the Fairmont Chateau Lake Louise and the Four Seasons Centre for the Performing Arts, then as General Manager of Marben Hospitality. When he is not conducting research Chuck can be found cheering on his beloved Toronto Blue Jays.

Leaf Van Boven is Professor in the Department of Psychology and Neuroscience at the University of Colorado Boulder. He earned his BS in Psychology from the University of Washington, and his PhD in Psychology from Cornell University 2000. He had held faculty appointments at Cornell University's Johnson Graduate School of Management, and the University of British Columbia's Sauder School of Business. Professor Van Boven Directs the Emotion, Decision, Judgment, and Identity (EDJI) lab. He is currently Associate Editor of *Psychological Science* and was previously Associate Editor of *Journal of Personality and Social Psychology: Attitudes and Social Cognition*. Dr. Van Boven's research examines the interrelation of emotion, judgment, and decision-making in everyday life. His early research examined how investing in life experiences makes people happier than investing in material possessions. Professor Van Boven has also published widely on empathy gaps in emotional perspective taking, examining how people misunderstand emotional experience in themselves and others. More recently, Professor Van Boven examined the psychology of political polarization in the United States. In addition to writing for academic audiences, Professor Van Boven has written for the New York Times, Los Angeles Times, the Washington Post, and Politico.

12:20 – 1:45 PM

Lunch Break – The Mediterranean Restaurant, 1002 Walnut Street
(Conference registrants only, please)

2:00 – 3:15 PM

Session 9: Ignoring Publicly Available Information in Investing

Naïve News Trading: Experimental Evidence

Ferdinand Langnickel (University of Zurich, Banking & Finance)

Abstract: This study documents experimental evidence that naïve beliefs about the behavior of others contribute to excessive trading. The mechanism is based on the idea that when people process new information they naïvely neglect other market participants' reaction to the information and consequently trade too much. In a series of laboratory experiments, I find that people actively trade on information that they should expect to be already incorporated into the price by other players. In line with naïve news trading, people underestimate the response of others to new information and consequently trade too much compared to the rational benchmark. A simple model with naïve investors who partially neglect that other investors respond to new information provides a good fit of the observed trading behavior.

Disaster on the Horizon: The Price Effect of Sea Level Rise

Asaf Bernstein (University of Colorado Boulder, Finance)
Matthew Gustafson (Pennsylvania State University, Finance)
Ryan Lewis (University of Colorado Boulder, Finance)

Abstract: Homes exposed to sea level rise (SLR) sell at a 7% discount relative to observably equivalent unexposed properties equidistant from the beach. This discount has grown over time and is driven by sophisticated buyers and communities worried about global warming. Consistent with causal identification of long horizon SLR costs we find no relation between SLR exposure and rental rates, and current SLR discounts are not caused by differential investment, flooding, or views. Overall, we provide the first evidence on how markets price SLR exposure thereby contributing to the literature on how investors price long-run risky cash flows and providing insights for optimal climate change policy.

Discussant: **Gal Zauberan** (Yale University, Marketing)

Biographies:

Ferdinand Langnickel is a Ph.D. candidate in Finance at the Department of Banking and Finance of the University of Zurich. His primary research interests include behavioral finance and experimental finance. Prior to his doctoral studies, Ferdinand received an M.Sc. in Quantitative Finance from ETH Zurich and University of Zurich and a B.Sc. in Industrial Engineering from the Karlsruhe Institute of Technology.

Asaf Bernstein is an assistant professor of finance at the University of Colorado at Boulder's Leeds School of Business. Prior to joining Leeds he completed his PhD in Financial Economics at the Massachusetts Institute of Technology. His primary area of research is empirical corporate finance, but his interests generally lie at the intersection of policy and finance and include economic history, asset pricing, and household finance. Professor Bernstein's research has looked at the effect of financial regulations and institutions, including the Federal Reserve, rating agencies, centralized clearing, and mortgage assistance programs, as well as household decision making more broadly. This includes research examining the effect of home equity on moving decisions and the role climate change plays in coastal communities. This work has been published in the Journal of Political Economy, Journal of Financial Economics and selected for inclusion in the American Finance Association, SFS Finance Cavalcade and Western Finance Association annual meetings. Based on his graduate work he received the 2016 AQR Top Finance Graduate Award by Copenhagen Business School, which recognizes the most promising finance PhD graduates in the world. Prior to graduate school, he received his B.S. in Economics and Mathematics at Harvey Mudd College and worked as a quantitative trader at an investment bank in New York.

Gal Zauberan is a Professor of Marketing at Yale University. He was previously the Laura and John J. Pomerantz Professor of Marketing and Professor of Psychology at The University of Pennsylvania's Wharton School. His academic background includes a B.A. with Highest Honors in Psychology and Economics from The University of North Carolina, Chapel-Hill, and a PhD in Business from Duke University. Professor Gal Zauberan studies consumer behavior, time in judgment and decision making, financial decision making, and enjoyment and memory of experiences. He won numerous research and teaching awards, including the William O'Dell and the Paul Green best paper awards, and the 2007 Early Career Award for Distinguished Contributions to Consumer Psychology, Society for Consumer Psychology. His research has been published in top tier academic journals including the Journal of Consumer Research, Journal of Experimental Psychology: General, the Journal of Marketing Research, Management Science, and Psychological Science, and received international media coverage, including the New York Times, Scientific American, and others.

3:15 – 3:30 PM

Beverage & Snack Break (Xanadu Ballroom Lobby)

3:30 – 4:45 PM

Session 10: Prospect Theory and Stock Investing

Doing Less With More

Alex Imas (Carnegie Mellon University, Chicago Booth,
Decision Sciences)
Rawley Heimer (Boston College, Finance)

Abstract: The ability to borrow (use leverage to trade assets) increases an individual's opportunity set. According to standard theories of decision-making under uncertainty, this makes individuals better off, because they can borrow to enter new positions without having to liquidate advantageous holdings. In contrast, we argue that leverage interacts with existing behavioral biases to impair financial decision-making. To identify leverage's effect, we exploit regulation that restricts the amount of leverage available to U.S. retail traders of foreign exchange. These traders make fewer trading mistakes – they have better market timing and less of a disposition effect – following the leverage constraint. We corroborate these findings in a controlled, incentivized laboratory experiment. Leverage leads to significantly lower earnings, and these lower earnings are caused by a greater tendency to hold losses. A dynamic model of cumulative prospect theory and realization utility explains these results. Together, our findings suggest that paternalistic regulations that constrain financial choices can improve welfare.

Fully Closed: Individual Responses to Realized Capital Gains and Losses

Michaela Pagel (Columbia University, Finance)
Steffen Meyer (Leibniz University Hannover, Economics)

Abstract: We use transaction-level data for portfolio holdings and trades as well as account balances, income, and spending of a large sample of retail investors to explore how individuals respond to paper versus realized capital gains and losses. To identify the effects of realized gains and losses, we exploit plausibly exogenous mutual fund liquidations. Specifically, we estimate the marginal propensity to reinvest out of one dollar received from a forced sale event when the investor either achieved a capital gain or a loss relative to his or her initial investment. Theoretically, if individuals held optimized portfolios, the marginal propensity to reinvest out of forced liquidations should be 100% independent of realizing a gain or a loss. Individuals should just reinvest all of their liquidity immediately into a fund with similar characteristics. Empirically, individuals keep a share of their newly found liquidity in cash, save it, consume it, or reinvest it into different funds, stocks, or bonds. Moreover, individuals reinvest 80% if the forced sale resulted in a capital gain, but only 40% in the event of a loss. Such differential treatment of gains and losses is inconsistent with active rebalancing or tax considerations, but consistent with mental accounting and the idea that individuals treat realized losses differently from paper losses (Barberis and Xiong, 2012; Imas, 2016).

Discussant: **Suzanne Shu** (University of California Los Angeles,
Marketing)

Biographies:

Alex Imas is an Assistant Professor of Social and Decision Sciences at Carnegie Mellon University, where he teaches Behavioral Economics and Human Judgment and Decision Making, and a visiting Assistant Professor of Behavioral Science at the Booth School of Business at the University of Chicago. Imas' research spans a variety of topics across economics and psychology. He has studied how prior losses and gains affect risk-taking, the use of prosocial incentives to motivate performance, and the ways in which people use others' emotions strategically. His research has been published in the *American Economic Review*, *Proceedings of the National Academy of Sciences*, and *Management Science*, among others. Imas is the recipient of the Hillel Einhorn New Investigator Award from the Society of Judgment and Decision Making, the Distinguished CESifo Affiliate Award, and the NSF Graduate Research Fellowship. Imas was born in Bender, Moldova. He did his PhD in economics at the University of California, San Diego and earned a BA from Northwestern University. Prior to graduate school, Imas helped found a startup and co-authored several patents as part of its intellectual property strategy.

Michaela Pagel is an Assistant Professor at Columbia Business School. She received her Ph.D. from the Economics Department at UC Berkeley and works on topics in behavioral economics, household finance, and macroeconomics. Her dissertation focused on the consumption and investment implications of non-standard preferences. More specifically, she theoretically studied how decision-making is affected by people's beliefs about their consumption. Her current work analyzes transaction-level data on income, spending, balances, credit limits, and logins stemming from a financial aggregation app. Furthermore, she is working with bank account data linked to individual investors' security trades and portfolios.

Suzanne Shu is an Associate Professor of Marketing at UCLA's Anderson School of Management whose research focuses on behavioral economics and marketing. Her most recent work on financial decisions has focused specifically on decumulation during retirement (annuities, Social Security claiming) as well as on perceived fairness for financial products. Professor Shu received a PhD from the University of Chicago in 2004; she also holds undergraduate and advanced degrees in electrical engineering from Cornell University. She is an NBER Faculty Research Fellow and an MSI Scholar, holds a joint faculty appointment at the UCLA Medical School, and is a visiting scholar at the Consumer Financial Protection Bureau.

4:45 – 5:00

Closing Remarks: **John Payne** (Duke University, Management)

Poster Session

Biographies (alphabetically):

Hadiye Aslan is an assistant professor of finance at the J. Mack Robinson College of Business at Georgia State University. Professor Aslan received her Ph.D. in finance from Cornell University and her M.A. in Economics from Vanderbilt University. Professor Aslan's research interests focus on empirical corporate finance, financial intermediation, debt markets, and household finance. She is the recipient of the S.A.C. Capital Advisors, L.P. Prize for the Best Conference Paper, European Finance Association Annual Meetings, McGraw-Hill Distinguished Paper Prize in Finance from the Southwestern Finance Association, Barclays Global Investors Prize for the Best Paper at the 22nd Australasian Finance and Banking Conference, Lehman Brothers Fellowship for Research Excellence in Finance, 2004. Professor Aslan's work has been published in *Journal of Financial Economics*, *Review of Financial Statistics*, *Journal of Financial and Quantitative Analysis*.

Hazel Bateman is a Professor of Economics in the School of Risk & Actuarial Studies at UNSW Sydney and Deputy Director of the ARC Centre of Excellence in Population Ageing Research (CEPAR). Hazel has research expertise in private and public pensions and consumer financial decision making. Her current research investigates the role of choice architecture, information disclosure, financial literacy and financial advice on consumer financial decisions, particularly retirement outcomes; and the taxation and regulation of pension funds. Hazel has been a consultant on retirement income issues to a range of Australian and international organizations including the OECD and the World Bank. Prior to joining UNSW Sydney, Hazel worked as an economist with the Australian Treasury.

Dustin Beckett is an Economist in Decision-making and Behavioral Studies group in the Office of Research at the Consumer Financial Protection Bureau (CFPB). His fields of interest include experimental economics, applied game theory, and applied microeconomics. At the Consumer Bureau, Dustin has worked to build the Bureau's capacity for conducting consumer research, and in particular, has led an initiative to bring the capacity for laboratory-based experiments to the CFPB. Dustin holds a Ph.D. in social science from the California Institute of Technology.

James Blair is a marketing PhD student at the University of Rhode Island. He has recently accepted a position as an Assistant Marketing Professor of Marketing at the Eastern Kentucky University. His work has been published in *Applied Research in Coaching and Athletics Annual* and *Markets, Globalization and Development Review* and has been honored with the *Emerald Publishing Best Poster Award* at the 2016 CIBER Faculty Development in International Business Globalization Workshops as well as the *Ph.D. in Business Administration Award for Outstanding Teaching by the University of Rhode Island College of Business Administration*. He is a consumer behavior research with research interests in branding, pricing, consumer financial decision making, and sport marketing.

Nathan Blascak is an associate industry specialist at the Federal Reserve Bank of Philadelphia's Consumer Finance Institute. His research interests center on applied microeconometrics, with applications in health economics, consumer credit, household finance, and identity theft. His current work focuses on the intersection of health insurance policy and financial well-being and exploring the determinants and effects of identity theft. He received his Ph.D. in economics from Temple University in 2017.

Daniel Brodback is a Ph.D. student at the University of Muenster (Germany). His research focuses on understanding socially responsible investment decisions, in particular regarding psychological motivations and willingness-to-pay for social responsibility. Prior to his doctoral studies, he received his B.Sc. in Information Systems and his M.Sc. in Business Administration at the University of Muenster.

Sam Bufo is a Statistical Data Analyst at the Center for Social Development at Washington University in St. Louis. Since joining the Center's staff in January 2017, Sam has worked on the analysis of the Savings for Every Child Program, Israel's national child development account program and on the Refund to Savings Initiative, a project that uses the principles of behavioral economics to encourage savings in low- and moderate-income households in the United States. Sam is a graduate of Marquette University in Milwaukee, WI, where he received a bachelor's degree in economics and a master's degree in applied economics. His interests include behavioral economics, household finance, and international development.

Helen Colby is an assistant professor of marketing at the Kelly School of Business Indianapolis. Colby received her PhD in cognitive psychology and marketing from Rutgers University, where she also received her master's degree. She holds an undergraduate degree from the University of Chicago in economics and psychology. Most recently, Colby worked as a post-doctoral research fellow at UCLA Anderson School of Management. Colby's research interests include consumer judgment and decision-making (both financial and health decision-making), information effects, self-control and goals. She has published in *Psychological Science*, *Medical Decision Making*, *Judgment and Decision Making*, *The Journal of the American Medical Association* and *Design & Test of Computers*. Her research in *The Journal of the American Medical Association* considers flu vaccines and appointments, finding that giving people a default appointment time to get their vaccines largely increases the number of people receiving flu shots.

Henning Cordes is a postdoctoral scholar at the University of Münster, Germany. His research focuses on consumer financial decision making and in particular on the psychology of retirement savings decisions. Henning's current work explores how supplemental information on the effects of inflation affect the long-term financial planning of private investors. Lately, Henning became increasingly interested in how the economic and social environment shape the individual's risk-taking behavior. In his work, Henning applies a variety of approaches including surveys, lab experiments, field experiments, and neuroscientific methods. Henning received his doctorate in Behavioral Finance from the University of Münster in 2017, and his Bachelor and Master in Business Administration from the University of Mannheim in 2009 and 2011 respectively.

Kelly D. Edmiston is a senior economist at the Federal Reserve Bank of Kansas City. He conducts research on issues involving regional economic growth and development, housing, community development, consumer finance, public finance, and poverty. He also advises Federal Reserve officials, publishes research in academic journals and Federal Reserve publications, and provides information and analysis to policymakers, community leaders, the media, and the general public. Prior to joining the Federal Reserve, he was Assistant Professor of Economics, Senior Associate at the Fiscal Research Center, and Senior Associate at the International Center for Public Policy at the Andrew Young School of Policy Studies at Georgia State University. He has also worked extensively for the World Bank and USAID. He holds a BA and a PhD from the University of Tennessee.

Sönke Ehret is a Postdoctoral Researcher at Nuffield CESS. He specializes in big data, behavioral political economy experiments and methodology. His current focus is on deception and credibility detection, investment and retirement decision making.

Galit Eizman is a Research Associate at the Harvard Kennedy School and has been a research scholar at the Economic Department of Harvard University since the year of 2010. Her main research interests are labor economics, economics and financing of education, public policy and economic growth. In addition, she is researching innovative methods for teaching economics and econometrics. Among her other publications, her book “3D Economics” is soon to be published. Galit has been teaching a variety of courses, in the undergraduate and graduate levels, such as: microeconomics, macroeconomics, econometrics, globalization and international trade. She had teaching positions at the Harvard Economics Department and Harvard Kennedy School, Yale University, Tufts University, Jerusalem College of Technology (Tenure position), Bar Ilan University, and the University of International Relations (UIR) in Beijing, China. Galit completed her post-doc studies at Harvard University, studied her PhD and MA studies in Economics at Bar Ilan University and her BA in Economics and Education at the Hebrew University of Jerusalem. Prior to her arrival to the USA, Galit worked as in charge of research and external relations in the Planning and Budgeting Committee (PBC) of the Council for Higher Education (CHE) of Israel and as a chief economist for the Israeli Parliament.

Rufina Gafeeva is a PhD candidate at the Cologne Graduate School in Management, Economics and Social Sciences (University of Cologne, Germany). She holds a Master of Science degree and a Bachelor of Science degree in Business Administration from the Catholic University of Eichstätt-Ingolstadt, Germany. Her academic interests are in the field of Economic Psychology, with particular focus on the effect of innovative payment modes on consumer judgment and decision making. Using field studies, she is interested in capturing consumer behavior in a natural environment. At the poster session of the 2018 Boulder Summer Conference she will present a paper from her dissertation, titled: "Fooled by smart payments?: The effect of digital payment account settings on payment transparency".

Paul Gerrans is a Professor of Finance at The University of Western Australia. Paul's research focuses on consumer financial decision making, particularly within a retirement savings context, and the role of financial literacy in these decisions. This research has been aided by transaction databases provided by a number of large retirement savings funds. Paul teaches personal finance and financial planning and undertakes related research into financial literacy and financial advice seeking. He has an interest in all aspects of financial literacy with an emphasis on the acquisition of financial literacy by young adults (e.g. undergraduate students) and the interaction of financial literacy and cognitive decline among older adults. Paul has previously been a member of federal government retirement savings advisory bodies, a member of the MoneySmart Teaching Evaluation Steering Committee at the Australian Securities and Investments Commission, and presently is a member of the OECD/INFE Research Committee.

Ryan Goodstein is a Senior Economist in the Division of Depositor and Consumer Protection at the Federal Deposit Insurance Corporation. Since joining the FDIC in 2008, Ryan's work has focused on consumer finance topics including access to financial services, housing, and the mortgage market. He has provided technical and analytic support to the FDIC's economic inclusion survey efforts, including the National Survey of Unbanked and Underbanked Households and the Survey of Banks' Efforts to Serve the Unbanked and Underbanked. His research has been published in peer-reviewed academic journals and in government reports. Ryan earned his PhD in Economics from the University of North Carolina at Chapel Hill, and his B.S. in Economics from James Madison University.

Michael Harrison is both a Lead Data Scientist at USAA and a second year PhD student in Marketing at the University of North Carolina at Chapel Hill. Prior to USAA, Michael worked as a Director in Marketing Analytics at Deloitte Consulting who focused on the financial services industry. Michael has consulted for financial services institutions such as HSBC, Bank of America, Wells Fargo, US Bank, BNY Mellon, PNC Bank, UBS, Credit Suisse and Deutsche Bank. Michael has spent several years living abroad in Australia, Switzerland and Germany.

Samuel Hirshman is a PhD Student in Behavioral Science at Chicago Booth. His research focuses on consumer financial decision making, particularly applying core JDM concepts like Mental Accounting and Prospect Theory to market situations. In addition, he uses lab experiments to examine new implications and to identify mechanisms for real world behavior. His current work looks at people's strategies to repay credit card debt and how those strategies are affected by minimum payments. Prior to starting his PhD, Sam graduated from Swarthmore College with a self-created major in "Theories of Decision Making" and was a research assistant at the RAND corporation.

Zhenling Jiang is a Ph.D. candidate in quantitative marketing at Washington University in St. Louis, advised by Professor Tat Y. Chan. I am an empirical researcher, and my research interest is to study consumer behavior with economic models using observational data. My job market paper studies people's perception bias when processing numbers in the auto loan market. More specifically, I incorporate perception bias in a bargaining framework to explain the observed monthly payment bunching and interest rate pattern. Interestingly, de-biasing is not always beneficial, especially among low bargaining power consumers. More broadly speaking, I am interested in understanding consumer response to different kinds of triggers or incentives. I have explored this topic in several contexts including consumer search and purchase decisions with retargeting, auto loan uptake decisions with receiving a bonus payment, as well as consumer retention decisions with loyalty program.

K. Jeremy Ko is a Senior Economist in the Division of Economic and Risk Analysis at the Securities and Exchange Commission where he has been for nine years. His specialization is in the areas of behavioral and household finance. He is currently leading an initiative to build a consumer and behavioral finance policy and research program within the SEC. This program seeks to address issues such as risk-taking by retail investors, the effectiveness of consumer finance disclosures, regulation of brokers and advisers, and helping design effective investor outreach. Jeremy has also been working on developing online tools to assist individuals in making financial planning decisions. He received his Ph.D. in financial economics from the Sloan School of Management at MIT in 2003. He was an assistant professor of finance at Penn State University until 2009.

Olga Kondratjeva is a Postdoctoral Research Associate at the Center for Social Development (CSD) at Washington University in St. Louis. Her current research centers around the issues of financial inclusion, financial capability and household well-being among lower-income households in the United States and abroad. Olga received her PhD in public policy from The Ohio State University. Her doctoral dissertation examined the relationship between borrowing from formal and informal financial institutions, and household well-being in Nepal. Prior to joining the CSD, Olga has worked or conducted research in the U.S., Nepal, Russia, Peru, Lithuania, and other regions. She holds a Master's degree in applied economics from The Ohio State University, and a Bachelor's degree in economics from Williams College.

Sheisha Kulkarni received her PhD in Finance from Berkeley's Haas School of Business and is now a Postdoctoral Fellow at the University of Virginia. She worked in the Bank of Canada's Regulatory Policy Division prior to graduate school. Her research concerns household finance in the consumer credit and education markets. Her current research concerns whether regulations that increase transparency improve borrower outcomes.

Xiao Liu joined New York University Stern School of Business as an Assistant Professor of Marketing in July, 2015. Professor Liu's research focuses on quantitative marketing and empirical industrial organization, with a particular interest in consumer financial service innovations and high-tech marketing. In a recent paper, she looked at how to create new pricing and product design strategies to overhaul the overdraft fees. Her current methodological approach applies parallel computing techniques to data on a large scale. Professor Liu is the recipient of the 2014 Marketing Science Institute (MSI) Alden G. Clayton Doctoral Dissertation Proposal Award and the 2014 INFORMS Society for Marketing Science (ISMS) Doctoral Proposal Competition Award. She received her B.S. in Marketing Science from Carnegie Mellon University Tepper School of Business.

Zhikun Liu is a fourth-year Ph.D. candidate in the Personal Financial Planning Department at Texas Tech University. Prior to his study at Texas Tech, Zhikun has completed an M.S. degree in Mathematics from the University of Texas and an M.S. degree in Economics from OSU. He finished his undergraduate program at Oujing Normal University in China with a dual B.S. degree major in Information Technology and Computing Sciences with the second major in English. Zhikun is expecting to graduate from Texas Tech University in August 2018 with Ph.D. and M.S. in Personal Finance and Corporate Finance. He has passed the CFP Exam in 2016 and is expecting to receive the CFP Certification upon his graduation. Zhikun's research interests include behavioral finance, financial decision-making, risk analysis, estate, retirement, and charitable planning. He has various teaching experiences including courses in Mathematics, Economics and Personal Financial Planning.

Benjamin Loos received my Ph.D. from Goethe University in Frankfurt and is currently an Assistant Professor of Finance at the University of Mannheim. Benjamin will join the University of Technology Sydney in July as an Associate Professor of Finance. Prior to his Ph.D. he worked in the investment banking department of HSBC and Bank of America. Benjamin's work is mainly in behavioral and household finance. Benjamin investigate possible solutions to individual investors' investment mistakes, namely different forms of financial advice (unbiased-, fee-based-, robo-advice) and product innovations like ETFs. His work has appeared in the *Review of Financial Studies* and the *Review of Finance*. He presented his work at leading conferences like the American Economic Association meetings, the European Finance Association Meetings, the Financial Intermediation Research Society meetings, and specialized conferences like the CEPR Household Finance workshop. Benjamin's papers also received attention by the media and were covered by the Frankfurt Allgemeine Zeitung, Financial Timers, Neue Zürcher Zeitung, USA today, and the Wall Street Journal.

Slava Mikhed is a Senior Industry Specialist at the Payment Cards Center of the Federal Reserve Bank of Philadelphia. His research interests lie in the areas of consumer finance, personal bankruptcy, health economics, and urban economics. His current research explores the ways income shocks, peer effects, health insurance, and identity theft affect consumer credit and payments. Slava's is also examining the effect of identity theft and data breaches on consumer behavior. His previous work has been published in the *Journal of Banking and Finance* and the *Journal of Housing Economics*.

Éva Nagypál, Ph.D., joined the Office of Research at the Consumer Financial Protection Bureau (CFPB) as a Senior Economist in 2012. Since there, she has conducted analysis and supervised policy work relating to checking account overdraft, payday loans, financial well-being, and ability to pay on mortgages. During her tenure, she has developed a research interest in the dynamics of household finances. Before joining the CFPB, she was an Associate Director at Navigant Economics, where she performed and directed quantitative and qualitative economic and statistical analyses in support of clients' litigations. Previously she has held faculty positions at Northwestern University for seven years and Stockholm University for one year. During her academic career, she conducted empirical and theoretical research in the areas of labor-market dynamics and macroeconomics. Her area of expertise was job-to-job transitions and the effect of these transitions on labor market and macroeconomic outcomes. Her findings have been published in top economics journals including the *Review of Economic Studies* and the *Review of Economic Dynamics*. She received her Ph.D. from Stanford University in 2001 and her M.A. and B.A. from Brandeis University in 1996 and 1995.

Mikael Paaso is a 5th year PhD candidate at the Department of Finance at Aalto University in Helsinki. His research interests are behavioral finance, entrepreneurship and corporate finance, with a special focus on topics that intersect all three areas. In general, Mikael's research is empirical with a focus on clean identification of interesting behavioral biases that affect the financial decisions of small firms and their owners. He has studied topics such as the impact of entrepreneur appearance on the funding outcomes of young, high-growth startups as well as extrapolation bias in the investment decisions of small Finnish firms. Prior to starting his PhD, Mikael has worked in investment banking and equity capital markets at Morgan Stanley and goetzpartners Corporate Finance in London, and outside of academia he likes to travel (101 countries visited so far.)

Nikhil Paradkar is a fourth-year doctoral student in the Finance department in the Scheller College of Business at the Georgia Institute of Technology. His research interests include financial intermediation, household finance, and behavioral finance. Nikhil received his BS in computer engineering and economics from the University of Michigan and his MS in quantitative finance from Georgia Tech.

Dimuthu Ratnadiwakara is a finance doctoral student at C.T. Bauer College of Business, University of Houston. His research interests include household finance, behavioral finance and banking. In his job market paper, he uses policy induced variation in collateral value and rich auto loan microdata to estimate the causal effect of collateral value on strategic default. Prior to joining the PhD program, he worked as an Analyst at Liege Capital, a Risk Analyst at DFCC Bank and a researcher at LIRNEasia. He completed his Bachelor's Degree in Computer Science from University of Peradeniya, Sri Lanka .

Honglin Ren is a fifth year Ph.D. student in finance at the Robinson College of Business at Georgia State University. Honglin holds a Master's degree in Finance from Syracuse University and a Bachelor's degree in Financial Management from Fudan University in China. Honglin's research interests are in financial market, institutional investors and retail investors.

Jorge Sabat is in the DBA program at the Olin Business School - Washington University in St. Louis. His research focuses on household finance, macro-finance and structural empirical economics. He has been a consultant for The World Bank, and worked as Head of Fixed Income and Asset Allocation in Principal Financial Group. He earned a bachelor's degree in Industrial Engineering from the Adolfo Ibañez University (Chile) in 2010, a M.S. in Financial Engineering from the same university in 2011, and is expected to earn his DBA in 2019.

Linda Court Salisbury is Associate Professor of Marketing at the Carroll School of Management, Boston College. Her research in consumer financial decision-making includes phenomena such as debt repayment, retirement savings, credit worthiness, financial vulnerability, and consumer choice. Linda's research has appeared in the *Journal of Consumer Psychology*, *Journal of Marketing Research*, *Journal of Public Policy & Marketing*, and *Marketing Science*. She is very happy to be a part of the Boulder Summer Conference community again this year!

Anja Schanbacher is a PhD student in Marketing at London Business School, studying consumer behavior. Her main research interests are self and identity, consumer financial decision-making, and health behavior. For example, she studies how future changes in income affect present discretionary spending; how pension payout choice influences consumer behavior; and how identity-continuity influences decision-making. She investigates these questions using laboratory and online experiments, field studies and survey data. Her research has potential implications for consumer well-being and offers a basis for marketing and public policy interventions.

Anja was also a visiting PhD student at the UCLA Anderson School of Management. Prior to her PhD studies she earned a Diplom (equivalent to Master's) degree in Psychology from Ludwig-Maximilians-University in Munich. She also spent time as a student and research assistant in Social Psychology at the University of California, Santa Barbara, for which she received a fellowship by the German Academic Exchange Service.

Scott Schuh is an associate professor of economics at West Virginia **University**. **Dr.** Schuh's research and teaching focus on macroeconomics and monetary economics, with applications in econometrics, labor, and international economics. His current work aims to identify economic forces underlying the FinTech revolution and its transformative changes to money, payments, banking, and household finance. A distinctive feature of Schuh's research agenda is the explicit linkage between microeconomic foundations of firm and household behavior and macroeconomic outcomes over the business cycle and in long-run growth. He co-authored two books, including the award-winning *Job Creation and Job Destruction* (1995), and published articles in the *Journal of Monetary Economics*; *RAND Journal of Economics*, *International Economic Review*; *Journal of Money, Credit, and Banking*; *Review of Economic Dynamics*; and *Journal of International Economics*. Prior to arriving at WVU, Schuh worked 26 years as an economist in the Federal Reserve System at the Board of Governors (1991-1997) and Boston (1997-2018), where he served as the founding Director of the Consumer Payments Research Center (2008). Schuh led the creation and development of the *Survey of Consumer Payment Choice* and the *Diary of Consumer Payment Choice*. He also worked as a staff economist for President Reagan's Council of Economic Advisers, and has previously taught at Boston University, Boston College, and Johns Hopkins University.

Thomas Spycher is a Ph.D. candidate in Economics and Finance at the University of St. Gallen, Switzerland. For the academic year 2017/2018, he is a Visiting Fellow at Harvard University. His research interests include household finance, behavioral economics and banking. In his research, Thomas studies the impact of consumer finance regulation and the accumulation of financial literacy.

Anna Tranfaglia is a senior research assistant at the Consumer Finance Institute at the Federal Reserve Bank of Philadelphia and a PhD student in Economics at Temple University. Her research interests include financial inclusion- specifically access to formal financial institutions, economics of gender, and applied spatial econometrics. Anna holds a BS in Economics from the University of Pittsburgh and an MA in Economics from American University.

Santiago Truffa has a PhD from Haas School of Business at the University of California at Berkeley, and is working as a visiting assistant professor of Finance at Tulane University. His research interests lie in the intersection of Household Finance and Applied Microeconomics. Santiago is currently studying the effects of policies oriented to simplify the analysis and understanding of loans in consumers credit markets. Santiago is also interested in economic geography and finance. For example, he is studying how city fundamentals contribute to housing price inequality through the sorting of heterogeneously skilled workers, and is empirically analyzing the connection between clustering and corporate investment.

Dee Warmath, Ph.D. is currently an Assistant Professor of Consumer Science in the School of Human Ecology at the University of Wisconsin-Madison. Dr. Warmath's research examines the role of shared decision making and decision skill in the interplay of money, relationships, and health in achieving wellbeing. She earned her Ph.D. in Consumer Science from the University of Wisconsin-Madison. Her research has been published in the *Journal of Consumer Research* and presented at the Association for Consumer Research, American Council of Consumer Interests, CFP Academic Research Colloquium, Financial Planning Association, and other conferences. For the past five years, she has served as the Principal Investigator for the Consumer Financial Protection Bureau Financial Well-Being project.

Alanna Williams is a research assistant and financial analyst at the Consumer Financial Protection Bureau. As part of the Decision-making and Behavioral Studies team in the Office of Research, she has worked on projects related to financial disclosures, mortgage shopping and financial education. She is interested in behavioral economics, household finance, and economic mobility. She received a BA in Economics from Princeton University and will shortly begin work with Raj Chetty, Nathan Hendren and John Friedman at the Equality of Opportunity Project.

Guanyi Yang is a PhD candidate in economics at the Ohio State University. In August 2018, he will join the Department of Economics at St. Lawrence University as an Assistant Professor. Guanyi's research interests broadly include forays into inequality, lifecycle decisions, human capital theories, economics of education, business cycle fluctuations, and the causes and consequences of factor misallocation in the labor market. At the center of his research, Guanyi use calibrated heterogeneous agent models in a general equilibrium setting to address interesting normative and positive economics questions. His research has been presented at numerous international conferences, including the European and Asian Meetings of the Econometric Society.

Donnie Lichtenstein is Professor of Marketing. He received his undergraduate degree at the University of Alabama (1978) and his Ph.D. at the University of South Carolina (1984). His research interests lie primarily in the areas of consumer processing of price and sales promotion information. Much of his research has focused on consumer processing of reference price advertisements, consumer price-quality perceptions, influences on consumer price acceptability, and consumer perceptions and response to alternative sale promotion techniques. More recently, he has done research regarding corporate social responsibility, consumer-company identification, and consumer processing of nutritional information. Prior to the University of Colorado in 1988, he was an assistant at Louisiana State University (1984- 1988). In addition to his current administrative position as marketing division chair, he has also served as Associate Dean of Faculty and Academic Programs (1998-2001). He is the recipient of the 2004 Fordham Life-time Achievement Award in Behavioral Pricing Research. His work has appeared in journals such as the Journal of Consumer Research, the Journal of Marketing Research, The Journal of Marketing, and Marketing Science. Professor Lichtenstein currently serves on the editorial review board of the Journal of Marketing.

John G. Lynch, Jr., is Director of the Center for Research on Consumer Financial Decision Making and Senior Associate Dean for Faculty and Research at the Leeds School of Business, University of Colorado Boulder. Lynch studies the psychology of consumer financial decision making, focusing on two primary topics: financial literacy and financial education; and how the psychology of planning and thinking about the future affects consumer financial decision making. He co-chairs the annual Boulder Summer Conference on Financial Decision Making, a highly interdisciplinary academic-industry-government forum for research on consumer financial decision making. Lynch received his BA in economics, his MA in psychology, and his Ph.D. in psychology, all from the University of Illinois at Urbana-Champaign. He was a member of the faculty at University of Florida from 1979-1996, where he was Graduate Research Professor. From 1996-2009 he was the Roy J. Bostock Professor of Marketing at the Fuqua School of Business at Duke University. Lynch is a Fellow of the American Marketing Association, the Association for Consumer Research, and the American Psychological Association and he is a recipient of the Paul D. Converse Award for Outstanding Contributions to the Science of Marketing and the Society for Consumer Psychology's Distinguished Scientific Achievement Award. He is a member of the Academic Research Council of the US Consumer Financial Protection Bureau.