Recent financial woes in America have prompted a closer look at the relationship between the health of an economy and the decisions of its households. The Great Recession, in particular, was driven partly by mounting household debt and plummeting household spending. Now, while the rebonding savings rate has reversed a longstanding trend, it has weakened the economic recovery. In “Consumption and Finance,” the third annual conference of the Julis Rabinowitz Center for Public Policy and Finance (JRC), this relationship between financial systems and consumer demand is explored in detail. In search of new insights and necessary policy reforms, researchers delve into our saving and spending habits from economic and behavioral perspectives, under various conditions—both good and bad, and across regions, classes, and generations. The driving factors of debt and credit, interest rates and borrowing capacity, monetary policy and human biases, are given fresh analytical consideration and are summarized here.

The conference opened with a look at the other side of consumption: saving. In “Dissecting Saving Dynamics: Measuring Wealth, Precautionary, and Credit Effects,” Christopher Carroll and coauthors trace the US personal saving rate through its long stability from the 1960s to the 1980s, its steady decline from the 1980s to 2007, and its unprecedented rise from 2008 to 2011. Carroll applies an analytical model to quantify how the rate is affected by wealth, employment uncertainty, and availability of credit. He finds that most of the secular decline reflects the greater availability of credit—in particular, the financial liberalization of the 1980s, making it increasingly easy to borrow. He finds that the cyclical movements, however, reflect changes predominantly in wealth and in unemployment expectations, in addition to credit tightening. In essence, Carroll’s work reveals economic agents to be impatient, likely to run down their wealth if not for their uncertainty about the future. If so, as wealth increases and unemployment falls, people are likely to consume more and save less.

How our inclinations to save or spend, and
the factors that drive them, impact the overall health of the economy was the focus of the keynote address from Robert E. Hall. Hall finds that during the recent recession, the GDP contraction was driven not by government purchases, which were flattened as more infrastructure spending at the federal level was offset by less at state and local levels, but by household purchases (including residential investment), which declined markedly. He points out that household consumption fell more than disposable income, signaling an increase in the savings rate. Hall offers a tripartite explanation: household welfare (income and wealth) suffered a permanent decline, reducing consumption at all levels; financial institutions tightened lending standards and required repayments, imposing a “financial squeeze” that drained purchasing power; and intertemporal substitution spurred saving, as a precautionary measure against considerable financial insecurity. Today, while both the financial squeeze and the intertemporal substitution behavior have reverted to more normal levels, the decline in the perception of permanent well-being continues to constrain consumption.

In order to explore the impact of macro shocks on consumption, Atif Mian and Amir Sufi turn to real estate. In “Cash on Hand and Consumption: Evidence from Mortgage Refinancing,” Mian and Sufi link aggregate shifts in house prices and interest rates to waves of mortgage refinancing from 2000 to 2012. They allow that cash-on-hand shocks to homeowners might involve either “cash-out-refinancing,” yielding lower interest payments from lower interest rates. Then, they estimate how spending, on automobiles in this case, responds to either cash-on-hand shock. They find that, across zip codes, spending responds strongly to price-driven refinancing shocks but somewhat less so to interest-rate-driven ones. The findings reveal that cash-on-hand shocks are mediated by household demographics: low-income and low-credit-score households, in particular, tend to spend more when a rise in house prices drives them to refinance. The impact of macro shocks on cash-on-hand and, ultimately, on individual consumption, seems shaped by the specific characteristics of the affected population.

In “Trickle-Down Consumption,” Adair Morse and a coauthor explore the question of how income distribution influences consumption. Specifically, she asks: Could the long-term increase in income inequality explain the secular decline in the savings rate? Morse begins by overlaying the secular decline in personal saving, from the 1980s to 2007, onto the rise in income inequality. Morse then attempts to establish a causal link in consumption patterns between rich and non-rich households. In particular, Morse finds that non-rich households exposed to rich households spend larger shares of their income and, ultimately, suffer greater financial distress and more frequent bankruptcy. Morse posits that this “trickle-down” consumption reveals a kind of keeping-up-with-the-Joneses phenomenon: even at lower income levels, more visible expensive goods drive people toward more

Household spending responds more strongly to cash-on-hand shocks arising from higher house prices than from lower interest rates. The spending response of low-income, low-credit score households is stronger than that of better-off households.

Non-rich households exposed to rich households spend larger shares of their income, and suffer from greater financial distress and bankruptcy.

The jump in the savings rate can be explained by a permanent decline in welfare, a financial squeeze and intertemporal substitution.

Robert E. Hall

Amir Sufi

In “Cash on Hand” and Consumption: Evidence from Mortgage Refinancing,” Mian and Sufi link aggregate shifts in house prices and interest rates to waves of mortgage refinancing.
visible spending. Counterfactually, she offers, closing the income gap would have cut household consumption by about $1,800 and boosted household saving by about 2 percent.

The spendthrift tendencies revealed by trickle-down consumption are only part of a growing awareness that Americans do not save enough. Over half of the population lives hand-to-mouth, doubtful that they could find even $2,000 to cover an emergency next month. In “Self Control and Liquidity: How to Design a Commitment Contract,” David Laibson and coauthors conduct an experiment to answer: Can the design of savings accounts determine the demand for them and, ultimately, how much people put away? In the experiment, Laibson assigns people to either a freedom account, which permits unrestricted activity, or a goal account, which penalizes early withdrawals. While both accounts offer the same interest, the disparity of initial investments is striking: the higher the penalty, the greater the allocation to the goal account relative to the freedom account. According to prevailing wisdom, an economic agent is rational and, for that reason, ought to enjoy considerable freedom. But that view presumes a level of self-control necessary to carry out rational decisions, which may be unrealistic. More than uncovering human foibles, the findings suggest that optimal retirement systems are highly illiquid—which, nearly everywhere in the world except the U.S., they are.

Nowhere is the savings leakage more urgent in America than among an increasing number of cash-strapped Baby Boomers, who do not save enough for retirement. In “Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts: Evidence from Denmark,” Raj Chetty and coauthors draw from extensive observation among Danes to assess two retirement savings models: one defined by automatic contributions, the other by government-subsidized contributions. What he finds is that a minority of savers who are considered savvy or “active” (about 15 percent of the population), and tend to be wealthier and more financially sophisticated, are somewhat incentivized by subsidies—but more to shift savings across accounts than to save more. The far greater remaining fraction of savers who are considered uninitiated or “passive” (about 85 percent), however, are altogether unresponsive. The findings suggest that $1 in subsidies might lift total personal saving by less than 1 cent. By contrast, “opt-out” retirement systems such as automatic employer contributions, for instance, which raise contributions if people take no action, grow wealth substantially—but by at least 80 cents for every

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Automatic contributions are more effective in increasing saving rates: $1 in subsidies may increasing saving by only 1 cent, in contrast, automatic contributions may increase saving by 80 cents for every $1.

85 percent of the Danish population takes no action in response to changes in retirement savings policies. Only 15 percent actively responds—by shifting across accounts rather than by saving more.

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In “Debt and Debt Management Among Older Adults,” Annamaria Lusardi and a coauthor evaluate how consumers manage debt, particularly as they head into retirement. More recent cohorts, she finds, are taking on more debt and facing more financial insecurity than previous ones. Compared to their counterparts in a 1992 cohort, early Boomers and War Babies bought more expensive homes with smaller down payments, used alternative financial services (such as payday loans), carried credit card debt, and borrowed on retirement accounts. As a result, they are significantly more financially fragile—confronted by bankruptcy and retirement insecurity. In part, they have suffered wealth shocks late in life. But mostly, they lack the financial know-how and other core capacities to manage such leveraged portfolios. (Having more children, suffering from poor health, and losing an unexpected portion of income, all exacerbated that fragility; being married, white, well-educated, higher-income, and financially literate, all mediated it.) Recent evidence suggests that being saddled with such debt is pushing people to work longer, and that rising interest rates could threaten the economy as a whole.

Evidence shows that subprime mortgage advertisement rather than informative was actually persuasive, steering individuals to worse instead of better products. The effect was more pronounced for less sophisticated consumers.

$1. Ultimately, people seem more inclined to save when the saving is done for them, something relevant to consider in the US, where approximately $100 billion is spent annually to subsidize savings.

In some instances, those looking to borrow but lacking business savvy are preyed upon—notably, though predatory lending. Leading up to the recession, mortgages were turning toxic and yet mortgage advertisements were booming. There is much anecdotal evidence, leading to civil litigation and new advertising regulations, that such practices cut against consumer interests by playing up introductory rates and disguising reset rates. In “Advertising Expensive Mortgages,” Gregor Matvos and coauthors seek empirical evidence: consumers who overpaid for the same product. In particular, Matvos asks whether subprime mortgage advertising was informative, alerting to better products, or merely persuasive, steering toward bad ones. In support of the persuasive model, he finds that advertising in a particular region was positively correlated with expense (about $7,500 more), and advertised prices were negatively correlated with transacted prices. The effects were most pronounced for less sophisticated consumers, who also happened to be less delinquent—naively succumbing to false advertising and then naïvely making the payments.

“For a day, I thought I was in heaven. How should we value the future of our great-great-great grandchildren? Does advertisement make us take really bad financial decisions? Would we be happier if employers saved on our behalf and governments heavily penalized us for withdrawing retirement savings? Does credit make us consume too much? It was a privilege to watch some of the best minds in the business grapple with these questions.”

Atif R. Mian, Co-Director of JRC
Many economic decisions have very long-run implications. Current climate change policy, for instance, will affect many generations to come. In “Very Long-Run Discount Rates,” Johannes Stroebel and coauthors search for an empirical estimate of the discount rate applied to long-run payoffs. Stroebel observes that cost-benefit analysis is beholden to the discount rates applied to those very distant benefits and, as of yet, there’s little empirical evidence to suggest where to set those rates. (The range: from 0 percent to 7 percent.) But by exploiting residential housing markets in England, Wales, and Singapore, Stroebel is able to compare temporary ownership contracts (in the form of leaseholds) and permanent ones (freeholds), yielding a differential that uncovers the present value of future rental income. The overall long-run discount rates he finds, ultimately, are low, signifying that the price of risk is also low. The finding can be extended to policies aimed at reducing global warming, for instance, demonstrating a high willingness to pay to reduce very certain long-run climate costs, but less willingness to pay to reduce uncertain ones.

For all the trouble saving for the future, or even saving at all when contributions are not automated, preliminary evidence offers some indication of prudence. In “Following the Money: Methods for Identifying Consumption and Investment Responses to a Liquidity Shock,” Jonathan Zinman and coauthors trace the impacts of liquidity shocks on spending decisions among households operating small businesses. Unlike most analyses of household consumption and business investment, his invokes short-term, high-frequency data, offering a pilot for a new, portable method to uncover underlying mechanisms. For microenterprise loan applicants, a pool of borrowers long considered impatient and impulsive (not to mention difficult to survey), he finds that liquidity funds not household consumption but business investment.

Drawing to a close, the conference highlighted the multifaceted relationship between finance and consumer demand on many fronts: the impact of credit on consumption, and the limits and regional variation to that relationship; the behavioral determinants of consumption, and how often they are counterintuitive; the impact of consumption on the overall health of the economy, and how that has changed post-recession; the significance of looking more closely at financial decision-making; and finally, the limits of our financial knowledge, and how ongoing research may expand them.

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