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The third conference on the future of life-cycle saving and investing, entitled “Financial Education and Consumer Financial Protection,” was held at the Boston University School of Management on 23–25 May 2011. Like the previous two conferences, it was organized by Professor Zvi Bodie of Boston University and financially supported by the Research Foundation of CFA Institute, the Federal Reserve Bank of Boston, and Boston University. Also as in the previous conferences, speakers from a wide variety of disciplines, not just finance, offered their perspectives.

Keynote Speaker: Robert Merton

The Nobel Prize–winning economist Robert Merton was the keynote speaker. He asked whether financial innovation and engineering would be helpful in keeping financial decision-making simple for the ordinary person. He addressed this question through the lens of a product he has been working on—namely, a retirement income solution for retirement-provided plans. He began by defining the goal as a given level of income rather than wealth—having 10,000 pounds a year, as Jane Austen’s fictitious (and wealthy) Mr. Darcy is described, rather than 200,000 pounds of net worth. The desire for simplicity means that the product has to work by itself, he explained, without a financial planner or other expert.

The risk-free asset is then identified as a deferred annuity (like a traditional pension payout) instead of cash, which is considered to be the riskless asset in most analyses. Unfortunately, deferred annuities are subject to a number of regulatory and practical hurdles and to credit risk. But the ideal portfolio for a would-be retiree is some combination of deferred annuities, representing risk-free investing, and a world market portfolio of equities, capturing the payoff for taking risk.

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Merton concluded by recommending that we not force advanced financial education on surgeons, truck drivers, and others disinclined to learn about investing. Instead, we should make the technology transparent, in the same way that automotive engineers have made automobile technology almost invisible to the user, who, for example, can drive a modern car using the same skills he or she acquired in 1955 when first learning to drive. “We can make smart consumers...,” said Merton, “by creating products that make them smart rather than by literally educating them. Intelligent product design and oversight can be an effective substitute for consumer financial education” (p. 13).

Opening Remarks: Elizabeth Duke

Elizabeth Duke is a member of the board of governors of the Federal Reserve System. She began by summarizing recent economic and investment trends, including tendencies to save too little, retire early, use retirement savings for nonretirement purposes, and (only recently) rent instead of buying a house. She then made recommendations for financial education: Start early (”math problems [in school] can involve consumer financial calculations”), take advantage of “teachable” moments, and think imaginatively about the use of social media and new technologies (p. 24). Duke concluded with highlights from Doorways to Dreams and other youth financial education programs, including finance-related games, and noted that finance education is most effective when it can be tied to actual life outcomes.

Session 101: Consumer Finance 101 for Financial Educators, Financial Advisers, and Regulators

Bodie moderated a panel composed of Stephen Horan of CFA Institute, John Gannon of the FINRA Investor Education Foundation, Peter Tufano of the University of Oxford, and Chris Farrell of the public radio program Marketplace Money.

Horan emphasized three ideas: (1) the need for humility in investor education because we don’t know much about its efficacy; (2) the need to define the goals of education and think about what behavior we are trying to motivate; and (3) the need to emphasize numeracy, the ability to use numbers. He drew an extensive analogy between investor education and driver education. In both, there are three skill levels: (1) “the skills that everybody needs to have,” (2) “an intermediate set of skills for those who...reasonably choose to take on more-advanced tasks,” and (3) “some highly advanced skills that really ought to be left to the experts.” In investing, the first set includes budgeting and debt

FINRA is the Financial Industry Regulatory Authority, the industry self-regulating entity in the United States.
management; the second set includes “compounding, dollar cost averaging, and diversification,” and the third set includes “risk management, asset allocation, and security selection” (p. 30).

Gannon focused on financial fraud. He noted that the typical fraud victim fits a surprising profile: “male, 55–65 years of age, married, more financially literate, college educated, recently subjected to a change in financial or health status, a risk taker, self-directed, and overly optimistic” (p. 34). While such investors may not be the most susceptible to fraud, they are overrepresented simply because they have more investments, and more complex investments, than most people. Frauds usually have a number of psychosocial factors in common: the promise of great riches, apparent credibility of the source, social consensus (other people participating in the fraudulent investment), reciprocity (thinking that one owes something to the fraudster), and scarcity (thinking that the fraudulent investment is hard to get). Gannon concluded by offering suggestions for fraud avoidance.

Tufano began by noting that the knowledge base of most investors is very poor but their self-regard is not: They often believe themselves to be knowledgeable. He then discussed whether financial institutions might be providing good service as a substitute for having informed customers and suggested that the answer is no. For example, broker-sold mutual funds perform worse than directly sold funds, even before adjusting for the difference in fees, which are higher for broker-sold funds. Likewise, banks take advantage of consumers by charging foolish customers (e.g., those who overdraw their accounts often) high fees that are then used to subsidize wise customers (who never overdraw). Tufano recommended that more effort go into the “architecture for making choices,” intended to nudge consumers toward better decisions, and into “encourag[ing] financial institutions to deliver better products and services and hold[ing] them to higher fiduciary duties” (p. 40). He concluded with an “outrageous suggestion: We hijack not only the SAT exam but also the PSAT and ACT exams.” Students, he argued, do not care if the exam tests “whether two trains are coming closer together or whether the balances on a savings and an investment account are getting further apart” (p. 42). If the latter is taught, financial education can be achieved through the back door of preparation for standardized testing.

Farrell noted that most of the callers on his radio show ask about student loans and retirement savings. He also noted that the poor can benefit the most from financial education because “being poor . . . costs a lot of money” (p. 43). Farrell discussed the barrier to college education due to FAFSA (the complex student loan application), as well as favorable outcomes when financial literacy requirements are tied to certain types of aid to individuals. He concluded with a number of useful suggestions for getting people to save more.
Session 2: Housing Decisions: Do Consumers Know What They Need to Know?

Paul Willen of the Federal Reserve Bank of Boston made a presentation entitled “Disclosure in the Mortgage Market,” which was then discussed by the Wellesley College professor Karl Case, Christopher Mayer of the Columbia Business School, and Robert Lerman of the Urban Institute and American University.

Willen focused on the Consumer Financial Protection Bureau’s (CFPB’s) proposed disclosure to borrowers who are getting a mortgage. The idea behind the proposed disclosure is that borrowers need a simple, clear explanation of the important parts of their mortgage. At the top of the proposed form (shown by the speaker) are the key loan terms, which show the interest rate and how it could change, the monthly payment and how it could change, and the taxes and insurance and how they could change. Much of the rest of the form continues to focus on how payments could change, reflecting the prevailing view that the mortgage crisis was due to increases in required mortgage payments.

But Willen argued that the crisis was caused instead by falling house prices, so the proposed disclosure wouldn’t do much good. “Some people think that a lot of borrowers got into trouble, which pushed house prices down, but that is not what happened,” Willen said. “We have had episodes of high delinquency before, but delinquencies do not turn into foreclosures unless house prices are falling” (p. 56). The reason is that if mortgages are not “underwater”—that is, with a mortgage balance higher than the house value—a buyer who gets in trouble can sell the house without needing to pay the loss in cash at the closing and avoid foreclosure.

Willen then proposed an alternative disclosure form that discusses the risk that house prices will fall and the risk that a foreclosure will take place given the terms of the loan, the income of the borrower, and so forth.

In a comment, Karl Case noted that the high interest rate environment of 1979–1981 caused Vancouver house prices to crash but not California house prices. The difference was that fixed-rate mortgages were prevalent in the United States but five-year adjustable mortgages were used in Canada. The adjustable feature destabilized the Canadian housing market.

Mayer said that mortgage prepayment penalties, which are generally poorly regarded and have mostly been abandoned, may be helpful because they promote a kind of risk sharing. Consider a pool of borrowers who all take out loans. All the loans represent a similar level of risk, but some of the borrowers end up doing well while others fare poorly. If the borrowers who do well are allowed to pay off their mortgages and drop out of the loan pool, the only people left in the pool are those who have done poorly. (The situation
is similar to health insurance. If healthy people are allowed to opt out of the insurance pool, the only people left are sick people, who then have to be charged higher premiums.)

Thus, prepayment penalties discourage borrowers from leaving the pool and encourage more viable risk sharing among borrowers. . . . Many other countries have mortgages that are not prepayable, and they have not seen the same level of housing troubles that we have. (p. 63)

Lerman commented on housing from the perspective of the low-income household. He began by noting that many low-income households spend a very high proportion of their income on rent when they could do better by buying. Moreover, low-income housing is surprisingly cheap to buy. He described a hypothetical homeownership voucher program patterned on the Section 8 rent voucher program and suggested a recoupment plan, by which the government can share in capital gains experienced by the subsidized low-income buyer. Lerman enumerated a long list of problems that would be remedied by such a plan.

Session 3: Credit Decisions: Do Consumers Know What They Need to Know?

Mel Stiller, president of Money Management International of Massachusetts, a nonprofit credit counseling agency, made a presentation, upon which William Samuelson of the Boston University School of Management commented.

Stiller began by noting that a legitimate credit counseling agency has three functions: education, counseling, and debt management. In competition with these legitimate agencies are “credit clinics,” which offer to repair clients credit for a fee; debt settlement companies, which negotiate with lenders to reduce the principal owed; and agencies that charge the creditor for setting up and administering debt management programs (creditors will pay because they are getting something instead of nothing).

Stiller set forth a list of questions that the Federal Trade Commission says should be asked by consumers seeking credit counseling and debt management. Among them are

• “Does the organization offer a range of services rather than just debt management plans?”
• “Will the agency help develop a plan not just to solve the immediate problem but also to avoid future problems?”
• “What are the fees? Will fees be waived or reduced if they are not affordable?”
• “Are commissions paid to counselors if a debt management plan is established?”

• “Will options other than a [debt management plan] be discussed?” (p. 81)

Stiller concluded with suggestions for better regulatory oversight of the credit counseling business.

**Session 4: Saving and Investing by Low- and Middle-Income Households**

Lerman and Eugene Steuerle of the Urban Institute presented “The Two Worlds of Personal Finance: Implications for Promoting the Economic Well-Being of Low- and Moderate-Income Families.” Moshe Milevsky of York University in Toronto was the discussant, and Laurence Kotlikoff of Boston University moderated.

Conventional personal finance is aimed at investors with liquid assets, generally meaning the well-to-do. But a different kind of personal finance can help people of ordinary means. It is concerned with budgeting, maintaining good credit, and making sensible purchasing and borrowing decisions. Those who want to help people in these circumstances need to keep in mind that most people’s largest asset by far is human capital (the discounted present value of future wages) and that Social Security makes up a large fraction of their financial assets. Lerman estimated that the lifetime value of Social Security and Medicare, plus an allowance for public support of nursing-home care, adds to almost $1 million per couple—more, he said, than the private wealth of 75–80% of the population.

Because of the high value of human capital, the most important decision that low- and middle-income people make is when to retire. Each additional year worked increases the post-retirement standard of living by 8% (real). “If they work eight additional years, shifting their retirement age from 62 to 70,” Lerman said, “they can typically increase their retirement income by two-thirds or more, which is a lot more than they can obtain through any other portfolio decision” (p. 93).

Poor people rely to a large extent on very high-interest loans, including payday loans and tax refund anticipation loans. The “banked”—those with bank accounts and access to credit through banks or credit unions—do much better than those without these services. It is vitally important to maintain a good credit score.

Lerman concluded that Social Security benefits, homeownership, and pensions are the best ways for low- and middle-income households to have a successful retirement. Social Security benefits depend on a “stable employment record.” Houses eventually get paid off, providing free rent to the owner. And employment choices should take the availability of pension plans into account.
Milevsky discussed the book *Portfolios of the Poor.* The book suggests, according to Milevsky, that “low-income people are actually extremely sophisticated in their management of personal finances” (p. 97). The authors of the book interviewed participants selected from among the world’s poorest people, and according to the *Economist,* “the subjects used a combination of loans and savings to ensure that their lives were not, literally, hostage to fortune. Hardly anyone lived utterly hand to mouth.” On good days, they saved a little money to help them through the anticipated bad days. Milevsky concluded that “economists can learn a lot about consumption smoothing from low- and middle-income households” (p. 98).

Although human capital is the most important asset for most people, it is difficult to convince many people of that fact. For example, accountants say that capitalizing future wages is improper and young people often don’t understand the calculation. But when an older audience is asked how much of their financial capital they would give up to be 25 years old again and have their human capital back, they say that they would give up most or all of it. Milevsky concluded that “at some point in our lives, we realize how valuable human capital is. . . . So [we should] put a number on it and start treating it like an asset class” (p. 99).

**Session 5: Financial Education: What Have We Learned So Far?**


Mandell compared the effectiveness of financial education with that of sex education based on research findings. In one study he discusses, “educational interventions designed to reduce unwanted pregnancies among adolescents neither delayed initiation of sexual intercourse nor reduced pregnancy rates” (p. 112). Likewise, financial education in high school does not typically help young adults save money, avoid become indebted, or avoid bouncing checks. He said that some types of financial education have been shown to be more effective than others. A short financial or consumer education course has the least favorable outcomes in the research; an economics course has better outcomes; and a stock market game has the best outcomes.

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Adults fare somewhat better. “Retirement seminars have a positive wealth effect on participation in retirement plans, but . . . participants in retirement seminars had much better intentions than follow-through capabilities”; the dollar amounts of post-seminar increases in contributions to retirement plans are negligible. “Credit counseling tended to improve both borrowing behavior and creditworthiness,” and “pre-purchase counseling programs for prospective homebuyers decreased delinquency rates.” Mandell concluded that “financial education is most useful if it is specific to important, imminent decisions because pre-purchase motivation to learn is very high” (p. 114). Mandell finished with an extensive set of suggestions for improving financial education and training, including the use of “‘plain vanilla’ products [that] could be created, vetted, and blessed for each major financial product category for consumers who are not capable of making more complex financial choices” (p. 118).

Willis argued that financial literacy education is unhelpful and should not be pursued. Many studies have shown that consumers who participate in financial education make worse financial decisions than other consumers. This finding applies broadly—to soldiers, bankrupt individuals, high school students, and other populations for whom data could be gathered. One possible reason is that “a little knowledge is a dangerous thing,” giving its possessor a false sense of expertise (p. 130). Another is that financial education is often provided at a level of language complexity that most readers cannot comprehend. Finally, financial innovation proceeds more quickly than financial educators can keep up with, so consumers are continually being asked to evaluate products of which they have little or no knowledge.

Attention, according to Willis, should be placed instead on teaching basic math skills: “We might then replace current financial education programs with programs to teach consumers when they need expert help, how to locate competent and trustworthy advisers, and how to implement adviser instructions” (p. 133).

Session 6: Consumer Financial Protection and the Way Forward

Joseph Cherian and Wee Kang Chua, both of the National University of Singapore, and Bodie presented their paper entitled “Worry-Free Inflation-Indexing for Sovereigns: How Governments Can Effectively Deliver Inflation-Indexed Returns to Their Citizens and Retirees.”

The authors argued that the availability of assets with payoffs indexed to inflation is key to retirement security. Such assets exist in the United States, the United Kingdom, and some other countries, but most Asian countries do not have them. While anyone can issue inflation-indexed bonds, “government
is the natural institution to provide [safe] inflation-linked benefits,” the authors said, “because tax revenues (both income and sales taxes) are indexed automatically to inflation” (p. 140).

Investors, according to the authors, are concerned with (1) receiving an adequate level of income every month that (2) is indexed to their cost of living and (3) lasts for as long as they live. Point 1 is dependent on the amount saved or provided in a social benefit, and Point 2 is covered by the existence of inflation-indexed bonds. But Point 3 requires the availability of life annuities. Singapore has begun issuing life annuities, although they are not inflation-indexed. The authors suggested that the simplest way to ensure an inflation-indexed post-retirement income is to build a laddered portfolio of inflation-linked government bonds, with the last bond maturing at the “expected mortality date.” This solution, however, does not provide the longevity insurance (income beyond the expected mortality date) that an annuity would provide.

The authors offered technical suggestions on how the governments of smaller countries can “manufacture” inflation-adjusted returns. One way is simply to take on the risk of issuance (the main risk being that the increased payout to investors will not be completely covered by increased tax receipts). Another way is to take positions in the derivatives market, and a third way is to invest in the inflation-indexed bonds of other sovereigns.