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Against Financial Literacy Education

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AGAINST FINANCIAL LITERACY EDUCATION -- 3/20/08 DRAFT

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Lauren E. Willis*

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I. INTRODUCTION

There can hardly be a better time to make the case for economic and financial literacy than right now... [W]e face a downturn... fueled, at least in part, by unwise mortgage borrowing... [A] better informed citizenry would likely have resulted in more-prudent decision making and... less harm to the economy.

- Federal Reserve Board Governor Frederic S. Mishkin, February 2008¹

Financial literacy provides the foundation to build wealth and fully participate in the economy.... By understanding basic financial principles and putting them to use, you can be on the road to improving the lives of your household and your community...

- NAACP Financial Empowerment Guide²

[T]here needs to be financial education measures in place.

- President George W. Bush, regarding home mortgage foreclosure rates, August 2007³

Although the cry for financial literacy education has been audible for decades, the volume has recently increased.⁴ Why? Technological advances allowing industry to create and profit from more complex and riskier financial products offered to a broader array of people, in conjunction with political dominance of an ideology favoring deregulation, have dramatically altered this marketplace. This consumer finance revolution has given Americans more apparent choices and formal control over their personal credit, insurance, and retirement planning decisions. But with this choice and control comes added responsibility to make financial decisions well, or face potentially disastrous health and welfare results.

As the SEC's Division of Investment Management Director put it: "[A]n era of self-reliance has begun. Today we stand at what may be a defining moment in American economic history, as more and more of us are taking responsibility for our own retirement needs."⁵ Although defined benefit pension plans once covered many workers, most retirement plans today, when offered at all, are defined contribution, requiring individuals to decide how much to save and how to invest.⁶ Similarly, employer-sponsored health insurance has declined, leaving more Americans to find their own policies.⁷ As for credit, lenders once required evidence of sufficient income, given

¹ Frederic S. Mishkin, Fed. Res. Bd. of Governors, Speech before the Third National Summit on Economic and Financial Literacy: The Importance of Economic Education and Financial Literacy (Feb. 27, 2008).

² NAACP Financial Empowerment Guide 4 & 5 (2003), available at http://www.naacp.org/pdfs/finance_fei.pdf (last visited Feb. 10, 2008).

³ Remarks by the President in Roundtable Interview with Business Reporters (Aug. 8, 2007), available at http://www.washingtonpost.com/wp-dyn/content/article/2007/08/09/AR2007080900780_pf.html.

⁴ In pursuit of the creation of a "nation of economic literates," the first National Conference on Consumer Education was held in 1939. See Leland J. Gordon, *Review: Next Steps in Consumer Education, Proceedings of a National Conference on Consumer Education*, 6 S. ECON. J. 403 (1940). In the last decade, promotion of financial literacy education has proliferated. See Jump\$tart Coalition, *Financial Literacy: Improving Education*, 2006 National Jump\$tart Coalition Survey, Executive Summary at 1.

⁵ Paul Roye, *Protecting Pension Plan Participants Through Investor Education*, Keynote Address Before the International Foundation of Employee Benefit Plans (May 9, 2000), available at <http://www.sec.gov/news/speech/spch369.htm>.

⁶ See, e.g., GAO, *EMPLOYER-SPONSORED HEALTH AND RETIREMENT BENEFITS* GAO-07-355 at 28-31 (Mar. 2007) (describing move from defined benefit to defined contribution plans); *id.* at 38 fig.4 (22% of full-time workers and 62% of part-time or seasonal workers are not offered employer-sponsored retirement benefits).

⁷ *Id.* at 17 & 18 Tbl. 1 (reporting declines in both the percentage of workers covered by employer-sponsored health plans and the percentage of employers offering health benefits between 2001 and 2005).

consumers' financial obligations, to afford their mortgages. Today's lenders offer loans requiring little or no documentation, so consumers must determine for themselves what payments they can afford, or risk losing their homes.⁸

Seller disclosure and largely unfettered consumer choice is the dominant model of regulation in the U.S. for credit, insurance, and investment products. As these products have become more complex and the consequences of consumers' inability to understand them more dire, financial literacy education is a necessary corollary to the disclosure model. This education is widely believed to turn consumers into "responsible" and "empowered" market players, motivated and competent to handle their own credit, insurance, savings, and investment matters by confidently navigating the bountiful unrestricted marketplace. This vision, which promises both a free market and increased consumer welfare, seduces conservatives and liberals alike.

This vision depends on the belief that financial literacy education can not only improve decisions, but can do so to the degree necessary for consumers to protect and even increase their welfare in the modern financial marketplace.⁹ But what evidence supports this belief? Given what is known about the marketplace and human decisionmaking, how plausible is the belief? What are the costs of financial regulation through education and are these costs commensurate with the benefits it reasonably could be expected to provide? Is there any alternative but to pursue financial literacy?

A prior article demonstrated that belief in the effectiveness of financial literacy education lacks empirical support.¹⁰ This article argues that the belief is implausible. The gulf between the literacy levels of most Americans and that required to assess the plethora of credit, insurance, and investment products sold today—and new products as they are invented tomorrow—cannot realistically be bridged. Educators would need to impart a sophisticated understanding of finance because rules of thumb are not useful for decisions about complex products in a volatile market. Further, high financial literacy can be necessary for good financial decisionmaking, but is not sufficient; heuristics, biases, and emotional coping mechanisms that interfere with welfare-enhancing personal finance behaviors are unlikely to be eradicated through education, particularly in a dynamic market. To the contrary, the advantage in resources with which to reach consumers that financial services firms enjoy puts firms in a better position to capitalize on decisionmaking biases than educators who seek to train consumers out of them.

Harboring this belief may be innocent, but it is not harmless; the pursuit of financial literacy poses costs that almost certainly swamp any benefits. For some consumers, financial education appears to increase confidence without improving ability, potentially leading to worse decisions. When consumers find themselves in dire financial straits, the

⁸ Compare David Listokin *et al.*, Fannie Mae Foundation, *The Potential and Limitations of Mortgage Innovation in Fostering Homeownership in the United States* 27-36 & tbls 6 & 7 (2002) (listing historical loan, borrower, and property underwriting characteristics), with *Ending Mortgage Abuse: Safeguarding Homebuyers: Hrg. Before the S. Comm. on Banking, Housing & Urban Affairs*, 110th Cong. (2007) (testimony of Michael D. Calhoun, Center for Responsible Lending) (more than a third of loans in a sample of 2007 mortgage backed securities offerings lacked documentation of borrower income).

⁹ Although beyond the scope of this article, another predicate belief is that poor financial outcomes are to a significant extent the result of illiteracy, independent of income or wealth. For critiques of this belief, see, e.g., A. Mechele Dickerson, *Can Shame, Guilt, or Stigma Be Taught? Why Credit-Focused Debtor Education May Not Work*, 32 *LOY. L.A. L. REV.* 945, 958-59 (1999) (noting financial education will not help someone propelled into bankruptcy by job loss, medical expenses, or divorce); Angela C. Lyons *et al.*, *Translating Financial Education into Behavior Change for Low-Income Populations*, 17 *FIN. COUNSELING & PLAN.* 27, 41 (2006) ("It may be that some individuals, because of their particular financial situation, are unable to change certain financial behaviors no matter how much financial education they receive."); Katherine Porter & Deborah Thorne, *The Failure of Bankruptcy's Fresh Start*, 92 *CORNELL L. REV.* 67, 70 (2006) (finding insufficient income, not financial mismanagement, is key barrier to long-term financial health).

¹⁰ Lauren E. Willis, *Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education* (Jan. 2008).

regulation through education model blames them for their plight, shaming them and deflecting calls for effective market regulation. Requiring consumers to act as their own financial experts is socially inefficient. Opportunity costs should not be overlooked; a single-minded focus on financial education inhibits pursuit of other policy tools for improving the financial welfare of Americans.

This article proceeds as follows: Part II summarizes my prior work finding no reliable empirical evidence that financial literacy programs are effective. Part III explains why it is implausible that this education could teach consumers how to make welfare-enhancing decisions about credit, insurance, and investments. Part IV exposes some of the costs of pursuing financial regulation through consumer education. Part V suggests alternative policy tools that could be effective, given the complexity and fluidity of the consumer financial marketplace.

II. DOES FINANCIAL LITERACY EDUCATION WORK?¹¹

Financial literacy education is conducted through classroom teaching, self-study materials, informational websites, interactive games, and the educational component of one-on-one counseling. Programs vary in content, audience, and methodology. But they all aim to achieve welfare-enhancing behavior engaged in as the result of acquired financial literacy. The cognitive components of this literacy include “being knowledgeable, educated, and informed on the issues of managing money and assets, banking, investments, credit, insurance, and taxes” and “understanding the basic concepts underlying the management of money and assets (e.g., the time value of money in investments and the pooling of risks in insurance).”¹²

Turning cognitive literacy into positive action requires a well-calibrated degree of confidence—neither underconfidence¹³ nor overconfidence.¹⁴ Consumers’ beliefs about the efficacy of their own financial decisionmaking must match the actual and perceived difficulty of the decision at hand. Overconfident consumers are unlikely to ask for help when they need it and will spend too little time and effort on financial decisions. Underconfident consumers tend to shy away from engaging in the information search, planning, and calculations that good financial decisions require.¹⁵

Ultimately, financial literacy education is only effective if it enables consumers, given their resource constraints, to make the decisions and take the actions necessary for financial well-being today.¹⁶ Effectiveness must be measured against the decisions and actions our society and marketplace require. Diagramed, the financial literacy education policy model appears:



Although routinely cited by policymakers, industry, literacy advocates, and even academics,¹⁷ studies claiming to find support for the financial literacy model suffer a

¹¹ This section summarizes my prior critique of the existing empirical research. *See id.*

¹² Jeanne M. Hogarth, *Financial Literacy and Family and Consumer Sciences*, 94 J. FAMILY & CONSUMER SCI. 14, 15 (2002).

¹³ *See, e.g.,* Lois A. Vitt *et al.*, *Personal Finance and the Rush to Competence: Financial Literacy Education in the U.S.* 29-35 (Fannie Mae Found. 2000).

¹⁴ *See, e.g.,* Brad M. Barber & Terrance Odean, *Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors*, 55 J. FIN. 773, 791 (2000).

¹⁵ *See* Jing Hu *et al.*, *The Relationship Between Task Complexity and Information Search: The Role of Self-Efficacy*, 24 PSYCHOL. & MARKETING 253, 265 (2007).

¹⁶ *See, e.g.,* National Endowment for Financial Education, *Closing the Gap Between Knowledge and Behavior—Turning Education into Action* (Denver, CO, Aug. 10-12, 2005).

¹⁷ *See, e.g.,* A Bill to Promote Youth Financial Education, Senate Bill 925, 109th Cong., 1st Sess. (2005); Ben S. Bernanke, *Increasing Economic Opportunity: Challenges and Strategies*, Remarks at the Fifth Regional Issues Conf. of the Fifteenth Cong. Dist. of Texas (June 13, 2006); Howell E. Jackson & Stacy A.

variety of fatal weaknesses. First, many use data collection techniques biased toward finding that this education is effective. Most rely on participant self-assessments of whether the course changed their own knowledge, confidence, and behaviors.¹⁸ But people overestimate how much they have learned and how much their future behavior will change.¹⁹ Data from follow-up surveys suffer from a similar bias because participants are likely, intentionally or unconsciously, to overstate the extent to which they are behaving as they were taught they should.²⁰ High nonrandom nonresponse rates similarly skew the data—those who think they have changed their behavior are likely to be the most eager to report it, and those who do not are less likely to respond.²¹ Attempting to connect current financial condition with respondent self-reports of having learned from past classes or seminars introduces potential recall bias—people who have experienced good financial outcomes are more likely to think they “learned” from a class and to remember having taken one at all.²²

Second, because programs often bundle direct assistance with education, outcomes may be attributable to the assistance rather than the education.²³ Assistance can include financial rewards, lowered payments, or special loan programs.²⁴ Credit counselors can intervene with creditors, lenders, or credit bureaus on behalf of the participant, give the consumer rote assignments (e.g., “do not sign for this loan because I have determined you cannot afford it”), or impose self-control devices.²⁵ Changes in participants after the

Anderson, *Can States Tax National Banks to Educate Consumers About Predatory Lending Practices?*, 30 HARVARD J.L. & PUBLIC POL’Y 831, n.__(2007).

¹⁸ For a study using participant self-assessments to evaluate financial education, see Sharon M. Danes, *Evaluation of the National Endowment for Financial Education High School Financial Planning Program* (2004).

¹⁹ In one study, consumers who attended retirement-related financial classes thought their literacy had increased, but their scores on financial tests did not. Douglas A. Hershey *et al.*, *Challenges of Training Pre-Retirees to Make Sound Financial Planning Decisions*, 24 EDUC. GERONTOLOGY 447, 467 (1998). In another, employees who reported at the end of a retirement investing seminar they would increase their savings generally failed to do so. James Choi *et al.*, *Saving for Retirement on the Path of Least Resistance* 308, in BEHAVIORAL PUBLIC FINANCE (Ed McCaffrey & Joel Slemrod eds. 2006).

²⁰ See, e.g., Roger Tourangeau & Ting Yan, *Sensitive Questions in Surveys*, 133 PSYCHOL. BULL. 859, 875-76 & 877 (2007). One study of financial education using consumer self-reports of savings admits that “education may affect reporting, rather than behavior.” B. Douglas Bernheim & Daniel M. Garrett, *The Effects of Financial Education in the Workplace: Evidence From a Survey of Households*, 87 J. PUB. ECON. 1487, 1489 (2003).

²¹ See, e.g., Angela C. Lyons *et al.*, *Are We Making the Grade? A National Overview of Financial Education and Program Evaluation*, 40 J. CONSUMER AFF. 208, 218-19 (2006).

²² For a study relying on respondent recall of exposure to financial education, see Marsha J. Courchane & Peter M. Zorn, *Consumer Literacy and Creditworthiness*, Fed. Res. Sys. Comm. Affs Res. Conf. (Apr. 2004).

²³ See Jean Braucher, *An Empirical Study of Debtor Education in Bankruptcy: Impact on Chapter 13 Completion Not Shown*, 9 AM. BANKR. INST. L. REV. 557, 574-75 (2001) (finding positive effect of bankruptcy debtor education disappeared after controlling for easier repayment plans and other assistance).

²⁴ For a study without controls for cash assistance, see Mark Schreiner *et al.*, *Savings and Asset Accumulation in Individual Development Accounts*, Washington, DC: Fed. Res. Sys. Comm. Affs Res. Conf. (Apr. 2001).

²⁵ See, e.g., ALAN MALLACH, HOME OWNERSHIP EDUCATION AND COUNSELING: ISSUES IN RESEARCH AND DEFINITION 11 (2001), available at <http://www.philadelphiafed.org/ccapubs/homeowner.pdf> (“[S]ome of those involved ... believe that the most effective aspect ... is not the counseling itself but the act of intervention [by the counselor] with the lender.”); Abdighani Hiram & Peter M. Zorn, *A Little Knowledge Is a Good Thing: Empirical Evidence of the Effectiveness of Pre-Purchase Homeownership Counseling*, in LOW-INCOME HOMEOWNERSHIP: EXAMINING THE UNEXAMINED GOAL 147 (Nicolas Retsinas & Eric Belsky, eds. 2002) (explaining that their finding that classroom homeownership education was effective but self-study and telephone counseling were not could reflect individualized teacher directions to participants). Although the directive to close accounts is common, see Jinhee Kim *et al.*, *Relationships Among Credit Counseling Clients’ Financial Well-being, Financial Behaviors, Financial Stressor Events, and Health*, 14 FIN. COUNSELING & PLAN., 75, 77 (2003) (“The first requirement for credit counseling clients is to cut up all their credit cards and close the accounts.”), one frequently-cited study claims that a reduction in open accounts is evidence that financial education is effective, see Gregory E. Elliehausen *et al.*, *The Impact of Credit Counseling on Subsequent Borrower Behavior*, 41 J. CONSUMER AFF. 1, 27 (2007).

education could be due to these types of assistance, which are potential policy tools for improving consumer welfare but are not financial literacy education.

A third problem is self-selection bias introduced because participation in financial education is usually voluntary. Researchers generally cannot randomize citizens into treatment and control groups. Individuals who choose to attend personal finance classes may be better informed or more motivated, may have more free time for researching and making financial decisions, may possess personalities more conducive to welfare-enhancing financial behavior, or may experience less embarrassment or denial due to fewer past financial problems.²⁶ The improved financial outcomes sometimes experienced by consumers who receive education may reflect that the same factors that led them to participate in the education would have led them to engage in welfare-enhancing financial behavior regardless.²⁷

Putting aside methodological weaknesses, the improvements that have been claimed have been far shy of the financial literacy education model's goal. Some investigations have found that personal finance courses increase confidence,²⁸ but this may reflect overconfidence, not the accurate degree of confidence in one's own knowledge and skills needed for good financial behaviors. Studies based on testing attribute less than a single additional correct answer, on average, to participation in financial literacy education.²⁹ The questions, moreover, are inadequate to demonstrate whether even a high scorer could make welfare-enhancing decisions in today's marketplace. Some are factual—for example, whether annual returns on a diversified U.S. stock mutual fund “can be expected” to average 5%, 10%, 15%, 20%, or 25%; others specify the figures with which calculations must be performed—for example, whether someone with income of \$2000 and expenses of \$800 for rent and \$200 for groceries who spends another \$700 each month will need 1, 2, 3, or 4 months to save \$900.³⁰ As discussed further below, the policymakers who embrace regulation through financial literacy education expect educated consumers to be able to do far more, and in an environment in which the answers are not multiple-choice.

Finally, it is revealing that industry universally supports financial literacy programs even though customers who exercise welfare-enhancing personal financial behaviors are less profitable. Credit card issuers obtain about 80 percent of their revenues from finance charges and penalty fees, and, therefore, earn more on accounts that pay late, exceed credit limits, and/or do not pay off balances each month than they do on accounts that produce only merchant fees.³¹ When consumers engage in better financial behavior, the net effect on the issuer is a decrease in card issuer profits.³² Investment firms derive

²⁶ See, e.g., Stephan Meier & Charles Sprenger, *Selection into Financial Literacy Programs*, Federal Reserve Bank of Boston Discussion Paper No. 07-5 (Nov. 2007). (finding that consumers with more education, more financial knowledge, and lower financial discount rates were more likely to accept an offer of a brief, free, credit counseling session).

²⁷ For a study without controls for self-selection, see, e.g., E. Thomas Garman *et al.*, *Workplace Financial Education Improves Personal Financial Wellness*, 10 FIN COUNSELING & PLAN. 79 (1999).

²⁸ See, e.g., U.S. Department of Agriculture, Cooperative State Research, Education, and Extension Service, *Financial Security in Later Life Impact Report*, available at http://www.csrees.usda.gov/nea/economics/pdfs/fsll_impacts_jan06.pdf.

²⁹ See, e.g., Tzu-Chin Martina Peng *et al.*, *The Impact of Personal Finance Education Delivered in High School and College Courses*, 28 J. FAM. & ECON. ISSUES 265 (2007); Richard L. Weiner *et al.*, *Debtor Education, Financial Literacy, and Pending Bankruptcy Legislation*, 23 BEHAV. SCI. & THE LAW 347 (2005); Sharon Tennyson & C. Chau Nguyen, *State Curriculum Mandates and Student Knowledge of Personal Finance*, 35 J. CONSUMER AFF. 241 (2001).

³⁰ The first question is from the National Association of Securities Dealers investment knowledge test and the second is from the Jump\$tart Coalition's 2006 National Financial Literacy survey of high school seniors.

³¹ GAO, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DISCLOSURES TO CONSUMERS, GAO-06-929 at 67 (Sept. 2006).

³² When consumers charge less and do not incur late fees, card issuers lose more in interest and fees than they would have lost due to charge-offs of uncollectible debts from consumers with poorer financial habits.

higher profits from the sale of funds that generate higher management fees, although consumers are better off with indexed or other low fee funds.³³ Insurers similarly benefit from policies that cost more and cover less.³⁴ Yet these firms uniformly support financial literacy initiatives, both rhetorically and with multi-million dollar donations.³⁵ Even payday lenders and check-cashers are on the bandwagon; the mission of their trade group includes “[i]mprov[ing] consumer protections through education, disclosure and transparency in all financial transactions.”³⁶ So too debt collectors, who are launching an internet-based personal financial management course even though they only make money when consumers fail to pay their debts on time.³⁷ That industry supports financial literacy education is, while indirect, perhaps the strongest evidence that this education is not effective in improving consumer financial decisions.³⁸

III. IS FINANCIAL LITERACY EDUCATION LIKELY TO WORK?

If financial literacy education’s effectiveness as a policy tool cannot be empirically validated, one response might be that educators just have not found the right way to educate people. But is it plausible that financial literacy programs would work? Examining the skills and biases with which consumers currently operate and the structure and offerings of today’s largely unregulated financial services marketplace, the prospects for financial education as an effective policy tool are bleak.

A. *Information Asymmetries and Chasing Moving Targets*

The consumer financial products available in today’s marketplace are bountiful, manifold, and dynamic. As the National Strategy for Financial Literacy explains:

Personal financial management is an extremely complex matter that requires significant resources and commitment by consumers to understand and evaluate the multitude of products available in the broad financial services market.... [T]he marketplace is constantly changing, with new products, services, and providers emerging to meet consumer demand. As a result, the range of topics and issues that consumers must evaluate is vast and ever-growing.³⁹

Information asymmetry between sellers and consumers is inherent in such a market. Not only do sellers have access to more information and resources to analyze it, but by the

Kimberly Gartner & Richard M. Todd, *Effectiveness of Online “Early Intervention” Financial Education for Credit Cardholders*, Fed. Res. Bank of Chicago Proceedings 12 (Apr 2005).

³³ Although investor education instructs consumers to minimize mutual fund fees, fund advertisements rarely mention them. Bruce A Huhmann & Nalinaksha Bhattacharyya, *Does Mutual Fund Advertising Provide Necessary Investment Information?*, 23 INT’L J. BANK MKTG. 296, 305 (2005).

³⁴ See David Dietz & Darrell Preston, *Home Insurers’ Secret Tactics Cheat Fire Victims, Hike Profits*, BLOOMBERG.COM, Aug. 3, 2007 (reporting increasing numbers of coverage exclusions, systematic underpayment, denial, and postponements of claim payouts, and record home insurer profits).

³⁵ See, e.g., Allstate Community Commitment website, National Programs webpage, available at <http://www.allstate.com/Community/PageRender.asp?Page=natprogs.html> (announcing spending \$1.3 million in 2005 on financial and economic literacy); Consumer Bankers Assoc., 2005 Survey of Bank-Sponsored Financial Literacy Programs 11 (Apr. 2005) (documenting that in 2005 JP Morgan Chase allotted \$50 million to financial literacy and home buyer education programs).

³⁶ Press Release, Coalition for Financial Choice Advocates for Basic Rights in Financial Services for All Consumers (Jan. 9, 2007), available at www.coalitionforfinancialchoice.org.

³⁷ David Streitfeld, *Debt Collectors Try to Put on a Friendlier Face*, N.Y. TIMES, Mar. 14, 2008.

³⁸ Cf. Jean Braucher, *Debtor Education in Bankruptcy: The Perspective of Interest Analysis*, in CONSUMER BANKRUPTCY IN GLOBAL PERSPECTIVE 319, 337-39 (Johanna Niemi-Kiesilainen et al. eds., 2003). Braucher details creditor support for bankruptcy education programs, which are funded from payments that otherwise would be distributed to creditors and which, if efficacious, would reduce demand for high-cost credit. She suggests that creditors expect these programs to have “no effect on behavior” but to “deliver the rhetorical advantage of emphasizing debtor responsibility, but without an impact on the bottom line.” *Id.* at 339.

³⁹ U.S. FINANCIAL LITERACY AND EDUCATION COMMISSION, TAKING OWNERSHIP OF THE FUTURE: THE NATIONAL STRATEGY FOR FINANCIAL LITERACY vii (2006) [hereinafter, TAKING OWNERSHIP].

time the latest insurance, credit, or investment developments filter through educators to consumers, the marketplace will have changed. Outdated lessons may be not only irrelevant, but counterproductive. Financial literacy education is chasing a moving target it will never reach.

Technological change—specifically, advances in data collection, storage, and processing—has revolutionized the ability of the financial services industry to model behavior to more accurately forecast each consumer’s future profitability and the risks of each transaction.⁴⁰ Insurers, lenders, and investment companies now have the capacity to take millions of data points mined from past consumers, feed them into a multivariate model, and generate a constantly updated predictive tool that, although imperfect, is more accurate and more sensitive to the interactions among variables than human judgment. Each small change in one variable can be met by a change in another variable, resulting in a constant expected return to the seller. For example, credit can be priced according to risk rather than rationed. Life insurers can compensate for a consumer’s refusal to undergo a medical examination, which might have led to a per se rejection in the past, by increasing the policy price or decreasing the expected payout.⁴¹

Computer-driven modeling allows financial firms to develop an array of niche offerings, each consisting of a cocktail of terms.⁴² Each product is theoretically responsive to the needs of different consumer segments, yet the complexity and proliferation of new products impairs consumers’ ability to identify which products are appropriate for them. For example, seniors are offered over 50 Medicare drug plans in almost every state, some so complex that over 30 pages are needed to explain annual changes in costs and benefits.⁴³ A single defined contribution retirement plan might contain dozens of investment funds, each requiring its own novella-length prospectus to explain its holdings and operations.⁴⁴ Credit cards carry multiple rates for various balances, each of these rates can be variable, and issuers can reset each rate monthly.⁴⁵

As a result, products are sold to consumers outside the niche for which the products were ostensibly developed. For example, loans structured to have low monthly payments followed by larger monthly payments—called “2/28” or “exploding” adjustable rate mortgages (ARMs) because payments spike up after a typically two-year teaser period—are useful for those with incomes scheduled to increase sharply or expenses expected to decrease sharply, such as a medical student in a residency or a purchaser of a home needing renovations. Nonetheless, as a 2005 article in *The American Banker* explained, “mortgages with the potential for severe payment shocks ... once considered niche products” are now sold to households that do not expect an income or expense change.⁴⁶ In June 2007, federal banking regulators instructed institutions selling these ARMs to evaluate the repayment ability of consumers with poor credit histories using the higher, future monthly payment, but did not restrict sale of these loans to only consumers for

⁴⁰ For a fuller explanation, see Lauren E. Willis, *Decisionmaking and the Limits of Disclosure: The Problem of Predatory Lending: Price*, 65 MD. L. REV. 101, 109-11 (2006).

⁴¹ See, e.g., Linda Koco, *Innovation With Riders—And Without*, 109 NAT’L UNDERWRITER: LIFE & HEALTH 37, 37 (2005).

⁴² See, e.g., *id.*; Meg Fletcher, *Shifting Markets Demand Cutting-Edge Ideas*, 41 BUS. INS. A18 (June 18, 2007).

⁴³ Kaiser Family Foundation, *Medicare Part D Plan Characteristics 2007*, Medicare Fact Sheet at 1 (Nov. 10, 2006); Robert Pear, *Drug Plan Companies Failed to Tell of Changes*, N.Y. TIMES, Dec. 27, 2006 at A18.

⁴⁴ Gur Huberman & Wei Jiang, *Offering vs. Choice by 401(k) Plan Participants: Equity Exposure and Number of Funds*, 61 J. FIN. 763, 763 & 768 n.3 (2006) (finding that among plans administered by Vanguard the number of funds offered varied between 4 and 59 and the median number offered was 13).

⁴⁵ See GAO, CREDIT CARDS, *supra* note __, at 14-15.

⁴⁶ Jody Shenn, *Mortgage Risk Debate Heating Up*, AM. BANKER, May 5, 2005, at 1.

whom they were designed. The one hypothetical example the regulators provided assumes consumers accepting these loans will not have an income or expense change.⁴⁷

Consumers today can invest in vehicles developed for sophisticated investors. The latest “in a growing lineup of new investment products”⁴⁸ combines risky investments with derivatives to hedge exposure and promises the individual an opportunity to earn returns previously only available to institutional investors in hedge funds. In unveiling the product in August 2007, the managing director of Deutsche Bank’s retail unit described it as a “simple solution” that employs an “easily accessible” strategy. Yet during this same time period sophisticated investors were claiming they did not understand derivative products they had purchased in the mortgage securities market.⁴⁹

These niche offerings are ever-changing, with fresh products regularly replacing existing products in the personal finance version of planned obsolescence. To stay competitive—and thereby outpacing regulation—consumer financial product innovation has become institutionalized as “product lifecycle management.”⁵⁰ For example, in 2007 the mortgage lender Ditech began selling a product that integrates a home mortgage with a home equity line and a credit card account, making household equity almost entirely liquid.⁵¹ Another recent invention is the medical credit card, offered by hospital chains and health maintenance organizations to consumers to pay for medical bills. A typical card allows users to charge up to \$5,000 of medical debts, with a 9 percent interest rate during the first year and a 23 percent interest rate for balances then remaining.⁵² General-purpose credit cards are perhaps the most volatile financial product because an issuer can change terms unilaterally on 15 days notice, enabling sellers to change the product consumers have already bought rather than selling them new products.⁵³

Insurance products might appear to be less fluid, given that state approval is needed before they are sold.⁵⁴ Nevertheless, the industry’s priority today is bringing new products through the regulatory process to market more quickly. The National Association of Insurance Companies promotes this agenda thus:

[The] Speed to Market initiative not only benefits regulators and insurers through the streamlining of the rate and form filing process, but ultimately, benefits consumers, ensuring that our constituents have insurance available to them through a wealth of products that effectively meet individual needs.⁵⁵

Even without new products, policies can be customized with a host of riders, allowing insurers to go “deeper into the insurance design frontier” without the time and expense of bringing a new product to market. These riders are not mere variations on older well-known products; they are “next-generation” riders, so unique companies file for patent protection on them.⁵⁶

⁴⁷ Final Interagency Statement on Subprime Mortgage Lending, 72 Fed. Reg. 37,569 & n. 23 (July 10, 2007).

⁴⁸ Chidem Kurdas, *Deutsche Offers Portable Alpha to the Masses*, HEDGEWORLD DAILY NEWS, Aug. 10, 2007, at 1.

⁴⁹ See, e.g., Alan S. Binder, *Six Fingers of Blame in the Mortgage Mess*, N.Y. TIMES, Sept. 30, 2007, at C34.

⁵⁰ Fletcher, *supra* note __, at A18. Cf. Henry T.C. Hu, *Swaps, The Modern Process of Financial Innovation and the Vulnerability of a Regulatory Paradigm*, 138 U. PA. L. REV. 333, 340 (1989) (making similar observation about corporate finance products).

⁵¹ PR Newswire, *Ditech Real Life Plan Empowers Customers with Package of Home Finance Solutions* (May 21, 2007), available at <http://www.prnewswire.com>.

⁵² Daniel Costello, *Hospital Bills—But with Interest*, L.A. TIMES, Dec. 12, 2005, at F1.

⁵³ *Examining the Billing, Marketing, and Disclosure Practices of the Credit Card Industry, and Their Impact on Customers: Hrg. Before the S. Comm. on Banking, Housing, & Urban Affairs*, 110th Cong. 6-7 (2007) (testimony of Elizabeth Warren, Leo Gottlieb Professor of Law, Harvard Law School).

⁵⁴ 44 CORPUS JURIS SECUNDUM INSURANCE § 298 (2007).

⁵⁵ National Association of Insurance Commissioners, Annual Report, available at http://www.naic.org/documents/about_2005_annual_report.pdf.

⁵⁶ Koco, *supra* note __, at 37.

The velocity of change in the marketplace means regulators are perpetually struggling to keep up, and regulations—once they are vetted politically and have survived notice and comment—are designed for a market gone by. “Information lag”⁵⁷ affects the government’s ability to regulate these financial products substantively, as well as its ability to understand the products well enough to educate people about them. Ironically, the same complexity and fluidity preventing individuals from making good financial decisions may induce regulators to proclaim reliance on education so that consumers, theoretically, will protect themselves.⁵⁸ Education is a policy tool requiring consumers to be their own regulators in a domain in which even professional regulators have difficulty.

The “option” or “pick-a-payment” ARM provides a case study. These mortgages permit borrowers to choose each month among various payment options, which typically include a fully amortizing principal and interest payment, an interest-only payment, and a negative amortization payment that results in capitalized unpaid interest. These payment options are periodically recast to reflect outstanding principal. The less-than-fully-amortizing payment option ends when the principal reaches an amount set by the lender to protect its collateral.⁵⁹ This product is appropriate for the few individuals who use the options to handle highly fluctuating income or expenses but can afford the payments over the long haul.⁶⁰ When option ARMs are sold to those who cannot afford more than the minimum monthly payment, the end of the negative amortization option causes the monthly payment due to spike, putting the borrowers into default and foreclosure.⁶¹

Although option ARMs were developed as a cash management tool, in 2003 the Comptroller of the Currency acknowledged that these mortgages were being “mass marketed as ‘affordability products’”⁶² to homeowners who, month after month, made only minimum payments.⁶³ In 2005, a third of U.S. home mortgage originations were option ARMs.⁶⁴ That same year, option ARMs were defaulting at an alarming rate.⁶⁵ Thus, federal regulators knew no later than 2003 the product was being sold predominately outside its appropriate niche, and knew it was causing serious defaults by 2005 at the latest. However, the first federal agency consumer education material even mentioning option ARMs was not published until October 2006.⁶⁶

In September 2007, Secretary of the Treasury Henry Paulson responded to criticism of the government’s failure to act to prevent the home foreclosure crisis by explaining

⁵⁷ Hu, *supra* note __, at 406 (describing admission by IRS officer: “financial markets have been inventing new products faster than the Internal Revenue Service can keep up with”).

⁵⁸ Cf., Toni Williams, *Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services*, 28 LAW & POL’Y 226, 233 & 240 (2007) (suggesting financial education “reliev[es] regulators of some of their responsibility for the state of the market” and can be used to “manage the risk of blame for regulatory failure”).

⁵⁹ BD. OF GOVERNORS OF THE FED. RESERVE, INTEREST-ONLY MORTGAGE PAYMENTS AND PAYMENT-OPTION ARMS: ARE THEY FOR YOU? (Nov. 27, 2006) [hereinafter, OPTION ARM HANDBOOK].

⁶⁰ Remarks by John C. Dugan, Comptroller of the Currency, Before the Consumer Federation of America 9 (Dec. 1, 2005).

⁶¹ Kenneth R. Harney, *Payment Spikes Might Gore Those with ARMs*, S.F. CHRON., Aug. 20, 2006, at K14.

⁶² Dugan, *supra* note __, at 10.

⁶³ On more than 70% of option ARMs outstanding in 2005-06, homeowners were making only the minimum payment. Mara Der Hovanesian, *Nightmare Mortgages*, BUSINESSWEEK, Sept. 11, 2006.

⁶⁴ *Id.*; Kenneth R. Harney, *Banks Warned They Must Scale Back on Payment Option Mortgage*, S.F. CHRON., Dec. 11, 2005, at K12.

⁶⁵ Defaults were so high in 2005 that ratings agencies started requiring credit enhancements for securities backed by option ARMs. See Remarks by Federal Reserve Governor Susan Schmidt Bies (Oct. 12, 2005), available at <http://www.federalreserve.gov/BoardDocs/Speeches/2005/20051012/default.htm>.

⁶⁶ Press Release, <http://www.fdic.gov/news/news/press/2006/pr06093.html> (Nov. 27, 2006). The brochure does not answer the question posed in its title, “Payment-Option ARMs: Are They for You?” Instead, it explains how option ARMs work and leaves consumers to regulate the market for themselves. OPTION ARM HANDBOOK, *supra* note __.

that “[h]istory says it’s very difficult for policy to keep up with innovation.”⁶⁷ The following month, Secretary Paulson went further, stating not only that “innovation often outpaces regulation,” but that “we would not want it the other way around.”⁶⁸ By March 2008, with the economy diving into recession, he admitted that “regulation needs to catch up with innovation.”⁶⁹

If the regulators cannot or do not want to keep up, educators are in no position to do so. One investigation found erroneous information being taught at the financial education courses that consumers who declare bankruptcy are required to take.⁷⁰ The answers to some financial literacy tests appear to be flawed, raising the suspicion that the material taught is too.⁷¹ With industry always at least one step ahead, there is “an enormous disconnect between the educational and informational needs of Americans and the programs and information provided by the government and financial literacy advocates.”⁷²

B. Insurmountable Knowledge, Comprehension, and Numeric Skill Limitations

The knowledge, comprehension, and skills necessary to make independent, welfare-enhancing decisions in today’s personal financial marketplace are prodigious. Decisions about credit, insurance, and investments require, *e.g.*, knowledge of concepts and terminology; extraction of information from text; understanding of arithmetic calculations; comprehension of fractions, percentages, and probabilities; predictions about one’s own future income, expenses, and health; and predictions about market factors such as interest rates, investment fund performance, and inflation. The gulf between the knowledge, comprehension, and skills of most American adults and those needed in today’s market cannot be bridged by financial literacy education.

Efforts to teach consumers the meaning of “annual percentage rate” (“APR”), for example, have failed spectacularly. For forty years, the law has required creditors to use APR to disclose the cost of credit, so as to help consumers compare the cost of credit products through a single metric that incorporates both fees and interest.⁷³ But only 10 percent of surveyed consumers who had applied for or obtained home loans in the previous five years understood the concept well enough to accurately answer whether the APR is higher, lower, or the same as the note or loan contract interest rate—fewer than would have guessed the correct answer by chance.⁷⁴ Although people need not know what APR means to learn a rule-of-thumb to shop for the lowest APR, if they do not understand that it represents interest, points, and (most) fees over the term of the loan, they cannot make welfare-enhancing tradeoffs among these. A “lowest APR” rule will not help them choose between two loans with the same APR and term but different

⁶⁷ James Kanter, *Paulson Cautions Against Rush to Regulation in Credit Crisis*, N.Y. TIMES, Sept. 18, 2007, at C1.

⁶⁸ Remarks by Henry M. Paulson, Jr., Secretary of the Treasury, on Current Housing and Mortgage Market Developments, Georgetown University Law Center (Oct. 16, 2007).

⁶⁹ Remarks by Henry M. Paulson, Jr., Secretary of the Treasury, on Recommendations from the President’s Working Group on Financial Markets (Mar. 13, 2008) *available at* <http://www.ustreas.gov/press/releases/hp872.htm>

⁷⁰ DEANNE LOONIN *ET AL.*, NEW BURDENS BUT FEW BENEFITS: AN EXAMINATION OF THE BANKRUPTCY COUNSELING AND EDUCATION REQUIREMENT IN MASSACHUSETTS 37 (National Consumer Law Center, June 2007).

⁷¹ ROBERT LERMAN & ELIZABETH BELL, FINANCIAL LITERACY STRATEGIES: WHERE DO WE GO FROM HERE?: OPPORTUNITY AND OWNERSHIP PROJECT REPORT NO. 1, 8 (Urban Institute, Aug. 2006).

⁷² *Adult Financial Literacy Conference*, FINANCIAL FOCUS 22 (Apr. 2006), *available at* <http://www.networksfinancialinstitute.org> (quoting executive director of Networks Financial Institute). Although industry-provided programs might be more up-to-date, these programs will inevitably have a bias toward teaching lessons that will increase industry’s profits. *See, e.g.*, [GET bias reports].

⁷³ Truth in Lending Act, Regulation Z, 12 CFR 226.18(e).

⁷⁴ Jinkook Lee & Jeanne M. Hogarth, *The Price of Money: Consumers’ Understanding of APRs and Contract Interest Rates*, 18 J. PUB. POL’Y & MARKETING 66, 70 (1999).

combinations of points, fees, and interest. Further, without sufficient understanding to know when and why “lowest APR” is a good rule, they have little allegiance to it and can be swayed by sales techniques that downplay APR.

The modern marketplace exacerbates consumer incomprehension because the jargon and acronyms used, in addition to being specialized and unintuitive, usually are neither standardized nor static. A readability assessment of credit card holder agreements found that information regarding grace periods, balance computation methods, and payment allocation methods was written at a fifteenth-grade or higher level. Almost half of U.S. adults cannot read beyond the eighth-grade level.⁷⁵

Personal finance decisions routinely require searching for information, much of which must be extracted from text to be useable. Federal regulators, for example, recently issued the following illustration of what sellers of interest-only or payment-option ARMs should provide to “assist consumers in their product selection decisions”:⁷⁶

SAMPLE MORTGAGE COMPARISON <i>(Not actual loans available)</i>			
Sample Loan Amount \$200,000 – 30-Year Term – Interest Rates For Example Purposes Only			
	Traditional Fixed Rate Mortgage <small>(7%)</small>	5-Year Interest-Only ARM <small>(initial rate 7%; maximum rate 12%)</small>	Payment Option ARM <small>(rate in 1st month 2%; variable rate after 1st month (starting at 7%); maximum rate 12%)</small>
REQUIRED MONTHLY PAYMENTS			
Years 1-5	\$1,331	\$1,167	\$739–\$987 (increasing annually)
Year 6 – if rates don't change	\$1,331	\$1,414	\$1,565
Year 6 – if rates rise 2%	\$1,331	\$1,678	\$1,859
Year 8 – if rates rise 5%	\$1,331	\$2,094	\$2,319
EFFECT ON LOAN BALANCE AND HOME EQUITY			
After 5 Years, How Much Will You Owe?	\$188,263	\$200,000	\$221,486
After 5 Years, How Much Home Equity Have Your Loan Payments Built?	\$11,737	\$0	NEGATIVE \$21,486

But when faced with tables or graphs, people have difficulty understanding the information, extracting figures, and performing implied arithmetic operations.⁷⁷ Even twenty-five years ago, when financial products were simpler, a review of life insurance policies found their technical language and tabular format placed their readability somewhere between *The Wall Street Journal* and Einstein's *The Meaning of Relativity*.⁷⁸

Evaluating financial courses of action often requires multiplication, division, and compounding and amortization calculations. Even with calculating aids, consumers need sufficient understanding of the underlying concepts to know which calculations to make.

⁷⁵ GAO *supra* note ___, at 38.

⁷⁶ Illustrations of Consumer Information for Nontraditional Mortgage Products, 72 Fed. Reg. 31825, 31826, 31830 (June 8, 2007).

⁷⁷ Iddo Gal, *Systemic Needs in Adult Numeracy Education*, 12 ADULT BASIC EDUC. 20, 23 (2002).

⁷⁸ Roger A. Formisano *et al.*, *Choice Strategy in a Difficult Task Environment*, 8 J. CONSUMER RES. 474, 475 (1982).

In a 2006 survey, however, over 80 percent of Baby Boomers approaching retirement could not correctly answer the following question: “Let’s say you have 200 dollars in a savings account. The account earns 10 percent interest per year. How much would you have in the account at the end of two years?”⁷⁹ Nearly half of the respondents did not understand compounding and many others could not multiply and add well enough to calculate 10 percent interest on \$200 over two periods.

Facility with fractions and percentages is required for many personal finance decisions, but people often treat all numerical values as whole positive integers.⁸⁰ In an experiment giving subjects investment returns information in percentage terms (shares that had been \$1 “experienced a 19 percent decrease”) or in dollar terms (shares “decreased by \$0.19”), subjects were more likely to take action (sell the stock) in response to the percentage information than the dollar format, apparently responding to the percentage term as if it were a whole integer.⁸¹ Sometimes people ignore fractional amounts entirely,⁸² treating a 10 percent and a 10.8 percent interest rate as identical even though a \$240,000 30-year fixed rate mortgage at 10.8 percent will cost over \$50,000 more than the same loan at 10 percent.⁸³

Personal finance decisions often involve amounts of money greatly exceeding the consumer’s daily experience. However, as numbers become larger, people have greater difficulty distinguishing between them, even when the numbers remain equally far apart.⁸⁴ At the extreme, someone who could distinguish between paying \$250 per month and \$300 per month for health insurance might fail to appreciate the difference between a \$252,000 and a \$259,000 mortgage after a \$7,000 broker fee is added. Large dollar values can be too big to comprehend for those who rarely encounter them,⁸⁵ yet many major personal finance decisions must be made by evaluating large numbers. For example, using 1998 figures, the difference between \$504,700 versus \$567,000 of savings could determine whether a married couple could retire at age 65.⁸⁶

Important financial decisions require reasonably accurate forecasts based on probabilistic information.⁸⁷ For example, forecasting future medical needs and the cost of medical care is necessary to compare one insurance plan with a high deductible and comprehensive catastrophic coverage to another with a low deductible and many exclusions or coverage limits. Probabilities are another area, however, in which most people have poor arithmetic intuitions. People tend to conceptualize probabilities as only a few focal points such as very likely, somewhat likely, or very unlikely, rather than on a continuous probability scale.⁸⁸ This modal understanding of probabilities can lead to poor decisions. For example, the probability of becoming sick with any particular major illness may be small, but the collective probability of becoming sick with at least one

⁷⁹ Annamaria Lusardi & Olivia S. Mitchell, *Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education Programs*, 42 BUS. ECON. 35, 39 (2007).

⁸⁰ STANISLAS DEHAENE, *THE NUMBER SENSE: HOW THE MIND CREATES MATHEMATICS* 88 (1997).

⁸¹ Enrico Rubaltelli *et al.*, *Numerical Information Format and Investment Decisions*, 6 J. BEHAV. FIN. 19, 21 tbl.1 & 23 (2005).

⁸² See DEHAENE, *supra* note __, at 80.

⁸³ Calculations performed using Bankrate.com’s mortgage calculator, available at <http://www.bankrate.com/brm/mortgage-calculator.asp>.

⁸⁴ DEHAENE, *supra* note __, at 76.

⁸⁵ Amos Tversky & Daniel Kahneman, *Introduction in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES* 1, 1 (Daniel Kahneman *et al.* eds., 1982) [hereinafter, JUJ].

⁸⁶ Olivia S. Mitchell & James F. Moore, *Can Americans Afford to Retire? New Evidence on Retirement Saving Adequacy*, 65 J. RISK & INS. 371, 380 (1998).

⁸⁷ See Kenneth Joseph Arrow, *The Future and the Present in Economic Life*, 16 ECON. INQUIRY 157 (1978).

⁸⁸ See Baruch Fischhoff & Wandu Bruine de Bruin, *Fifty-Fifty = 50%?*, 12 J. BEHAV. DEC. MAKING 149, 160 (May 1999).

such illness is much higher.⁸⁹ If the consumer discounts small risks to zero then the collective probability of needing medical care, which most consumers underestimate,⁹⁰ could appear too small to warrant buying insurance.

In addition to arithmetic manipulation of data, determining the expected value of many financial choices requires assessing information reliability and interpreting results. The skills needed to take data about the past and information about the future and predict the probabilities of future events and confidence intervals for those probabilities are elusive for even sophisticated consumers. Becoming a Certified Financial Planner therefore requires a program of study that includes financial planning, risk management and insurance, estate planning, retirement planning, employee benefits, investments and individual income tax, three years of relevant experience, a ten-hour exam that requires an integrated application of skills and knowledge to particular client situations, and thirty hours of continuing education every two years to maintain the credential.⁹¹

Consumers must acquire not only the particular knowledge and skills described above, but also the ability to employ all of them at once. The U.S. Department of Labor's *Taking the Mystery Out of Retirement Planning* booklet guides individuals over the course of 62 pages and through eight worksheets to determine how much they need to save monthly to retire in ten years. To complete the worksheets, consumers must find over 100 pieces of data from other sources, predict their monthly expenses in retirement, predict rates of return so as to select growth and income conversion factors for each of their assets, and repeatedly add, subtract, and multiply these figures.⁹² It is implausible that financial literacy education could impart the knowledge, comprehension, and skills consumers need to do what society currently demands.

C. Poor Conditions for Debiasing

Even if education could close the gulf between current consumer knowledge and skill levels and those needed to make welfare-enhancing decisions in today's credit, insurance, and investment markets, this would not be enough. Psychologists and behavioral economists have catalogued a host of influences apart from skill or information deficits that can interfere with decisionmaking. These influences include: biases that systematically lead to over- or under-weighting various considerations when making a decision;⁹³ mental rules of thumb or "heuristics" by which complex decision tasks are reduced "to simpler judgmental operations";⁹⁴ attraction to decisions that superficially appear consistent;⁹⁵ coping mechanisms that avoid or limit emotional discomfort during decisionmaking;⁹⁶ and visceral drives (hunger, pain, fear) that overwhelm reasoning.⁹⁷

The following describes the ubiquity of these "biases" in personal finance decisionmaking. There is no evidence that financial literacy education can change

⁸⁹ Neil D. Weinstein, *What Does It Mean to Understand a Risk? Evaluating Risk Comprehension*, 1999 J. NAT'L CANCER INST. MONOGRAPHS 15, 17-18.

⁹⁰ Press Release, HealthMarkets, *The Price is Wrong: Most Americans Significantly Underestimate Health Care Costs, Survey Shows* (Dec. 14, 2006), available at http://www.healthmarkets.com/home/media/press_releases/2006_Press_Releases/The_Price_is_em_Wrong_em_Most_Americans_Significantly_Underestimate_Health_Care_Costs_Survey_Shows_December_14_2006.html.

⁹¹ CERTIFIED FINANCIAL PLANNER BOARD OF STANDARDS, INC., *GUIDE TO CFP® CERTIFICATION 5* (2006).

⁹² U.S. DEPARTMENT OF LABOR, *TAKING THE MYSTERY OUT OF RETIREMENT PLANNING 47* (2006).

⁹³ Amos Tversky & Daniel Kahneman, *Prospect Theory: An Analysis of Decision Under Risk in CHOICES, VALUES, AND FRAMES 17* (Daniel Kahneman & Amos Tversky eds., 2000) [hereinafter, CVF].

⁹⁴ Tversky & Kahneman, *Introduction*, in JUU, *supra* note __, at 1, 1.

⁹⁵ Eldar Shafir *et al.*, *Reason-Based Choice*, in CVF, *supra* note __, at 597, 600.

⁹⁶ Roy F. Baumeister, *Esteem Threat, Self-Regulatory Breakdown, and Emotional Distress as Factors in Self-Defeating Behavior*, 1 REV. GEN. PSYCHOL. 145, 148 (1997).

⁹⁷ George Loewenstein, *Out of Control: Visceral Influences on Behavior*, 65 ORG. BEHAV. & HUMAN DECISION PROCESSES 272 (1996).

people’s biases, nor evidence of much effort by educators to do so. Yet even if financial education programs tried to reduce or eliminate decisionmaking biases, the evidence on debiasing presented below indicates that such an attempt would have little effect.

1. The Intangible Transaction Costs Schematic

Decisionmaking typically is conceived in terms of its outputs—the costs and benefits of the selected alternative. More elaborate models consider tangible resources spent on information search and processing.⁹⁸ But “intangible transaction costs”⁹⁹ are less frequently accounted for even though they powerfully influence decisions. These intangible costs include attention and effort spent on the process of decisionmaking, negative or threatening feelings experienced during that process, cognitive dissonance,¹⁰⁰ and energy required to inhibit visceral drives that might derail the process.

Cognitive and emotional resource outlays are usually invisible during decisionmaking. People do not make conscious tradeoffs between intangible expenses such as, for example, the emotional cost of considering one’s own mortality when choosing whether and how much life insurance to buy, and tangible benefits such as obtaining the best policy. Instead of weighing the cost of continuing discomfort against the cost of making a decision without evaluating all alternatives, consumers tend automatically and subconsciously to minimize use of intangible cognitive and emotional resources.¹⁰¹ People minimize cognitive effort by relying on heuristics and allowing biases to simplify decisionmaking, rather than engaging in deep cognitive processing. They minimize the experience of negative emotions by avoiding or denying threats to self-esteem and ego, and by escaping situations that cause unpleasant feelings such as fear or embarrassment. They minimize cognitive dissonance by ignoring contradictory information or misinterpreting that information as supportive of prior beliefs. They fail to apply sufficient energy to inhibit visceral drives. Even when motivated to try to engage in rational, effortful, careful decisionmaking, these attempts may be futile, and can even deepen the effects of biases on the decision.

2. The Prevalence of Biases in Personal Finance Decisionmaking

Consumer financial decisions present a host of triggers for decisionmaking biases. Commonly, these decisions concern emotionally-charged high stakes. The nonmonetary considerations involve aspects of life most of us would rather not think about. When making these decisions, households face a deluge of information and choices but also substantial ambiguity and uncertainty. Financial choices are not merely about dollar figures; they require tradeoffs between often incommensurable near and long term costs and benefits. To avoid much of the time, effort, and unpleasantness of financial decisionmaking, consumers often passively accept defaults or “free” (nonexpert) advice.

i. Overwhelming Information and Choices. Consumers today are drowning in financial choices and detailed information about every one of them. Too many choices

⁹⁸ See generally Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99 (1955). Cf. Jeff Sovern, *Towards a New Model of Consumer Protection: The Problem of Inflated Transaction Costs*, 47 WM. & MARY L. REV. 1635 (2006) (detailing ways in which sellers profit from imposing tangible transaction costs on consumers).

⁹⁹ Willis, *supra* note __, at 754-59 (offering the intangible transaction costs schematic as integrating the heuristics, biases, and emotional coping decision theories developed by psychologists and economists).

¹⁰⁰ Cognitive dissonance is an uncomfortable feeling caused by holding two thoughts sensed to be logically inconsistent. E.g., LEON FESTINGER, *A THEORY OF COGNITIVE DISSONANCE* (Stanford, California 1957).

¹⁰¹ See, e.g., Colin Camerer *et al.*, *Neuroeconomics: How Neuroscience Can Inform Economics*, 43 J. ECON. LIT. 9, 26 (2005) (explaining people interpret their choices as the product of cognitive deliberation even when caused by automatic affective responses); Antoine Bechara *et al.*, *Deciding Advantageously Before Knowing the Advantageous Strategy*, SCIENCE, Feb. 28, 1997, at 1294 (providing evidence of affective somatic responses to stimuli before cognitive awareness of the stimuli); Richard E. Nisbett & Timothy De Camp Wilson, *Telling More Than We Can Know*, 84 PSYCHOL. REV. 231, 231-32 (1977) (finding people cannot access their reasoning processes, but perceive their post-hoc constructions to be based on such access).

and too much information may be as harmful as too few and too little, however, for reasons collectively called “information overload” and “choice overload.”¹⁰²

In personal finance decisions, the quantity of information and number of products the average consumer must search through is daunting. Because the costs of complete information search and choice processing seem too high, the consumer may not even attempt to use a rational decisionmaking strategy. For example, increasing the number of retirement investment fund choices can overwhelm employees, pushing some to move their allocations away from stock funds to low-risk low-return options, and paralyzing others to the point that they are less likely to participate in their employer’s 401(k) plan at all.¹⁰³ When advertising from a small loan lender described a single loan choice rather than a variety of loan sizes and term lengths, consumers were more likely to borrow; the effect of simplifying by describing only a single alternative increased likelihood of borrowing to the same degree as a 2.3 percentage drop in monthly interest rates.¹⁰⁴ In buying life insurance, one study found that households had hundreds of companies to choose from, each of which offered dozens of basic policies and riders. Faced with so many choices, 75 percent of insureds reported considering only a single insurance company and nearly as many allowed the salesperson to select their policy for them. As the authors conclude, faced with choice overload, people “*chose not to engage in decision making.*”¹⁰⁵

Even when not deterred from decisionmaking, individuals may lack sufficient mental resources to consider all alternatives and relevant information.¹⁰⁶ People faced with more than three alternatives typically use simplified decision strategies to quickly narrow their choice set.¹⁰⁷ One strategy is to focus on only the best-known alternatives; when new employees were given a choice of 14 health plans, 83 percent signed up for one of the two plans with the most well-known insurers.¹⁰⁸ When selecting among the remaining alternatives, people routinely consider fewer than five attributes of each alternative.¹⁰⁹ Yet to make welfare-enhancing personal finance decisions, consumers must consider

¹⁰² Herbert A. Simon, *Rationality as Process and as Product of Thought*, 68 AM. ECON. REV. 1, 13 (1978); Sheena S. Iyengar & M. R. Lepper, *When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?*, 79 J. PERSONALITY & SOCIAL PSYCHOL. 995, 996 (2000). Even a small amount of information and a few choices can cause overload. In one experiment, consumers given information about 11 attributes of 6 investment fund choices felt there were too many options to consider, found the decision to be overwhelming, stressful, and difficult, and said it was a relief to make a decision. Julie R. Agnew & Lisa R. Szykman, *Asset Allocation and Information Overload: The Influence of Information Display, Asset Choice, and Investor Experience*, 6 J. BEHAV. FIN. 57, 64-65 & Tbls. 7 & 8 (2005).

¹⁰³ Sheena S. Iyengar *et al.*, *How much choice is too much?: Contributions to 401(k) Retirement Plans*, in PENSION DESIGN AND STRUCTURE: NEW LESSONS FROM BEHAVIORAL FINANCE (Olivia Mitchell & Stephen Utkus, eds. 2007) [*hereinafter*, PENSION DESIGN]; Alexander Kempf & Stefan Ruenzi, *Status Quo Bias and the Number of Alternatives: An Empirical Illustration from the Mutual Fund Industry*, 7 J. BEHAV. FIN. 204 (2006).

¹⁰⁴ Marianne Bertrand *et al.*, *What’s Psychology Worth? A Field Experiment in the Consumer Credit Market* 9 & 17 (Yale U. Econ. Growth Ctr. Discussion Paper No. 918 July 2005).

¹⁰⁵ Formisano *et al.*, *supra* note __, at 478 (emphasis in original) & 476-77. See also Christopher J. Anderson, *The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion*, 129 PSYCHOL. BULL. 139 (2003).

¹⁰⁶ *E.g.*, Jacob Jacoby, *Information Load and Decision Quality: Some Contested Issues*, 14 J. MARKETING RES. 569, 569 (1977).

¹⁰⁷ Barbara E. Kahn & Jonathan Baron, *An Exploratory Study of Choice Rules Favored for High-Stakes Decisions*, 4 J. CONSUMER PSYCHOL. 305, 314 (1995) (citing studies).

¹⁰⁸ Catherine G. McLaughlin, *Health Care Consumers: Choices and Constraints*, 56 MEDICAL CARE RES. & REV. 24, 45 (1999) (citing source).

¹⁰⁹ See, *e.g.*, David M. Grether *et al.*, *The Irrelevance of Information Overload: An Analysis of Search and Disclosure*, 59 S. CAL. L. REV. 277, 302 app. (1986) (listing studies showing consumers consider, in addition to price, between 1 and 3 attributes in making purchase decisions); David Mechanic, *Consumer Choice Among Health Insurance Options*, 8 HEALTH AFFS. 138, 142-43 (1989) (consumers make decisions about health care plans through focusing on only a subset of the dimensions of the plans).

many attributes and a great deal of information. The Federal Reserve's Handbook on Adjustable Rate Mortgages instructs: "To compare two ARMs with each other or to compare an ARM with a fixed-rate mortgage, you need to know about indexes, margins, discounts, caps on rates and payments, negative amortization, payment options, and recasting (recalculating) your loan."¹¹⁰ Even if a consumer understood these attributes, they are too numerous to make tradeoffs among them.

To the extent that financial education gives consumers even more information and choices, it could increase overload, and thereby decrease decision quality.

ii. High Financial and Emotional Stakes. Financial choices pose the potential for significant negative and significant positive material and emotional outcomes. Minimal substantive regulation means that a wrong guess about future medical expenses, income, life span, etc., could land the consumer in serious financial trouble, but also that consumers can obtain credit and insurance relatively easily and even reap stock market windfalls. Consumers often consider not only their own future welfare but also family or household members for whose welfare they feel responsible or will be held accountable.

In addition, consumers may feel the weight of social judgment of their financial behavior. American culture views financial decisions not merely as expressions of preferences but as signifiers of character traits such as responsibility, trustworthiness, self-control, industry, frugality, and wisdom.¹¹¹ The possibility of failure to meet financial expectations threatens a consumer's ego, while purchasing a home, enjoying a comfortable retirement, amassing wealth, and passing on that wealth to future generations are all culturally esteemed. When financial success and failure are equated with character, the former can lead to ego boosts and positive emotions, and the latter to ego threats and negative emotions.¹¹²

High stakes, whether positive or negative, typically motivate people to expend more effort in a conscious attempt to engage in systematic rational processing.¹¹³ Ironically, however, high motivation and effort also frequently result in worse performance.¹¹⁴ When people anticipate receiving credit or blame for the outcome of a high stakes decision, they find the decision more difficult and are more likely to engage in a losing course of action.¹¹⁵ Why? Prior to the reasoning process, emotions or the "affect heuristic" can exert great and often subconscious power over preferences, without any

¹¹⁰ BD. OF GOVERNORS OF THE FED. RES., CONSUMER HANDBOOK ON ADJUSTABLE RATE MORTGAGES (Dec. 2006) [hereinafter, ARM HANDBOOK].

¹¹¹ See, e.g., JAMES D. SCURLOCK, MAXED OUT 24-25, 93 (2007); DAVID A. SKEEL, DEBT'S DOMINION—A HISTORY OF BANKRUPTCY LAW IN AMERICA 189-91 (2001); ROBERT D. MANNING, CREDIT CARD NATION 16-18, 103-109 (2000); LENDOL CALDER, FINANCING THE AMERICAN DREAM: A CULTURAL HISTORY OF CONSUMER CREDIT 87-88 (1999); VIVIANA A. ZELIZER, THE SOCIAL MEANING OF MONEY 148 (1994); TERESA A. SULLIVAN ET AL., AS WE FORGIVE OUR DEBTORS: BANKRUPTCY AND CONSUMER CREDIT IN AMERICA 8-9 (1989); Regina Austin, *Of Predatory Lending and the Democratization of Credit: Preserving the Social Safety Net of Informality in Small-Loan Transactions*, 53 AM. U. L. REV. 1217, 1221 (2004).

¹¹² Baumeister, *supra* note __, at 145-46.

¹¹³ E.g., Kahn & Baron, *supra* note __, at 307; Luce et al., *Choice Processing in Emotionally Difficult Decisions*, 23 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY & COGNITION 384 (1997).

¹¹⁴ E.g., Dan Ariely et al., *Large Stakes and Big Mistakes* 5 & 19-21 (Fed. Reserve Bank of Boston, Res. Ctr. for Behav. Econ. & Decision-Making Working Paper No. 05-11, July 23, 2005) (finding higher levels of financial rewards consistently lowered performance on a broad range of experimental tasks requiring cognitive effort); Paul A. Klaczynski & Gayathri Narasimham, *Development of Scientific Reasoning Biases: Cognitive Versus Ego-Protective Explanations*, 34 DEVELOPMENTAL PSYCHOL. 175, 185 (1998) (finding increased accuracy goals led to superior justifications, but no decrease in cognitive biases).

¹¹⁵ Yinlong Zhang & Vikas Mittal, *Decision Difficulty: Effects of Procedural and Outcome Accountability*, 32 J. CONSUMER RES. 465, 469 (2005); Itamar Simonson & Barry M. Staw, *Deescalation Strategies: A Comparison of Techniques for Reducing Commitment to Losing Courses of Action*, 77 J. APPLIED PSYCHOL. 419, 424 (1992).

cognitive mediation.¹¹⁶ A consumer facing a high stakes personal finance decision is likely to have an affective response, the positive or negative valence of which will depend on whether the feelings aroused by potential costs or by potential benefits dominate. Over the course of the decisionmaking process positive and negative affective responses can see-saw. A former home loan officer explains “Be ready for an emotional roller coaster. It really is true that your mortgage will probably be the most expensive transaction of your lifetime, so don’t be surprised if it’s emotionally draining.”¹¹⁷

Fear of accountability for poor outcomes can be distressing, provoking anger, embarrassment, or frustration. Unconscious processing of information can avoid these negative feelings by biasing evaluations of alternatives in favor of the one that is chosen. People with an initial inclination toward a particular choice, particularly when they feel that potential negative consequences of a poor decision are high, will search for new data and reinterpret existing data as favoring that choice and disfavoring alternatives.¹¹⁸ Another mechanism used to cope with these negative feelings is to truncate the decision process, acting quickly rather than gathering all of the necessary information for making the decision well.¹¹⁹ Marketers play to these emotional responses; personal finance software programs advertise that they will help consumers make financial decisions “quickly and easily,” and even, one software program developed by a psychologist claims, “painlessly.”¹²⁰

Indirectly, stress can occupy cognitive resources, reducing those available for financial decisionmaking.¹²¹ With less capacity to handle the task at hand, the consumer must take mental shortcuts, focusing on only a few salient, tangible, and immediate dimensions of the decision.¹²² Although personal financial decisionmaking requires assessing not only the costs and benefits but also the probabilities of decision outcomes, stressful thoughts can lead people to ignore probabilities and consider only potential costs, meaning that they will avoid a low probability high cost alternative even when the expected value of other alternatives, once probabilities are taken into consideration, would dictate a different result.¹²³

On the other hand, focusing on potential positive outcomes of financial decisions can lead to wishful thinking or irrational exuberance. People tend to confuse their emotional response to the choice presented with a cognitive appraisal of underlying costs, benefits, and risks. If they are focused on potential benefits, they will not merely weigh these against expected costs but truly will perceive the costs and the probabilities of those costs to be lower.¹²⁴ For example, the positive vision of homeownership could lead households

¹¹⁶ E.g., Paul Slovic *et al.*, *Risk As Analysis and Risk As Feelings: Some Thoughts About Affect, Reason, Risk, and Rationality*, 24 *RISK ANALYSIS* 311, 314-15 (2004); Andrew Caplin & Jonathan Leahy, *Psychological Expected Utility Theory and Anticipatory Feelings*, 116 *Q. J. ECON.* 51 (2001).

¹¹⁷ Dieter Brunner, *The Mistakes Borrowers Make, and How to Avoid Them*, CONSUMERAFFAIRS.COM (June 6, 2006).

¹¹⁸ Aaron L. Brownstein, *Biased Predecision Processing*, 129 *PSYCHOL. BULL.* 545, 561 & 564 (2003).

¹¹⁹ Baumeister, *supra* note __, at 148.

¹²⁰ ScenarioNow.com, About ScenarioNow, available at <http://www.scenarionow.com/aboutretirenow/aboutsn.htm>. See also, e.g., CUVillage.com, Financial Calculators, available at <http://cuvillagesolutions.cuvillage.com/files/cucorp/904/file/pdf/products/enhancements/calculators-spreads.pdf>.

¹²¹ Giora Keinan, *Decision Making Under Stress: Scanning of Alternatives Under Controllable and Uncontrollable Threats*, 52 *J. PERSONALITY & SOC. PSYCHOL.* 639, 642 (1987).

¹²² Karen Pezza Leith & Roy F. Baumeister, *Why Do Bad Moods Increase Self-Defeating Behavior? Emotion, Risk Taking, and Self-Regulation*, 71 *J. PERSONALITY & SOC. PSYCHOL.* 1250, 1264 (1996).

¹²³ Subjects in one experiment were sensitive to probability changes in gambles for small dollar amounts (low stakes), but relatively insensitive to probability changes in gambles for a painful electric shock (high and emotionally-charged stakes). Yuval Rottenstreich & Christopher K. Hsee, *Money, Kisses, and Electric Shocks: On the Affective Psychology of Risk*, 12 *PSYCHOL. SCI.* 185, 188 (May 2001).

¹²⁴ Slovic *et al.*, *supra* note __, at 315-16; Brownstein, *supra* note __, at 565.

to home purchase and mortgage choices with expected costs that, neutrally appraised, outweigh expected benefits.¹²⁵ Likewise, a positive affective response to imagined wealth could lead to mentally downplaying costs and risks and land the consumer in a fraudulent financial scheme. As a Better Business Bureau officer explains: “Consumers often know it’s a scam, but they want to believe so much that they participate knowing they most likely will lose. They’re thinking so much about the prize, they don’t consider that you shouldn’t have to pay [up front] to get it.”¹²⁶

Ironically, the very stakes that motivate consumers to try to engage in good financial decisionmaking can prevent them from reaching welfare-enhancing decisions. To the extent that financial literacy education draws attention to the stakes involved, it exacerbates this problem.¹²⁷

iii. Discomforting Thoughts. Personal finance decisions require recognizing susceptibility to misfortune, illness, aging, and even death, topics most people would rather avoid. To come to rational decisions about how much debt to take on, what kind of insurance to buy, and how much to save for retirement, consumers must assess the probabilities, timing, and potential costs of these personal risks. These decisions demand tradeoffs between money and life or health, protected values that people resist commodifying.¹²⁸ Contemplating these facts of life can bias decisionmaking, but so too can the psychological mechanisms used to avoid contemplating these facts.

Thinking about unpleasant facts can bias decisionmaking by inducing fear or anxiety, similar to the negative feelings that can be triggered by high stakes decisionmaking. Because the negative feelings occupy attention, capacity for decisionmaking is reduced. People at times escape the bad feelings by truncating the decision process to end it quickly, at the expense of making a good decision. For example, avoiding thoughts about death appears to contribute to inadequate purchase of life insurance. Nearly half of all U.S. households have not purchased life insurance and think they should or have purchased life insurance but think they should buy more.¹²⁹ Households at risk for severe declines in living standards upon the death of a wage-earner might find a lack of this insurance particularly stressful. These families most need to have life insurance, yet are the least likely to have it.

To avoid the fear and anxiety produced by contemplation of the unpleasant facts of life, some consumers appear to engage in denial. For example, when asked in anonymous surveys about their finances, consumers regularly engage in “debt denial,” understating their credit card debts.¹³⁰ Of particular relevance to financial decisions is whether people are accurate in their expectations about their prospects of future employment and income. In one longitudinal study, about one-third of workers who lost their jobs had previously reported a zero expected probability of job loss. Even those who reported a high expectation of job loss appeared to be in simultaneous denial of that expectation—they did not reduce their household food consumption when they knew

¹²⁵ Willis, *supra* note __, at 149-50.

¹²⁶ Jeff Langenderfer & Terence A. Shimp, *Consumer Vulnerability to Scams, Swindles, and Fraud: A New Theory of Visceral Influences on Persuasion*, 18 PSYCHOL. & MKTG. 763, 775 (2001).

¹²⁷ See Andrew Caplin & Jonathan Leahy, *Behavioral Policy*, in 1 THE PSYCHOLOGY OF ECONOMIC DECISIONS: RATIONALITY AND WELL-BEING 73, 79-85 (Isabelle Brocas & Juan D. Carrillo, eds. 2003) (finding retirement financial education produces anxiety and stress).

¹²⁸ See, e.g., Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203 (Fall 2003).

¹²⁹ B. Douglas Bernheim *et al.*, *The Mismatch Between Life Insurance Holdings and Financial Vulnerabilities: Evidence from the Health and Retirement Study*, 93 AM. ECON. REV. 354, 360-61 (2003).

¹³⁰ For example, about 60% claim they pay off their credit card balances in full every month, but issuer data puts the proportion closer to 40%. Larry Getlen, *Why We Lie About Money and Debt*, BANKRATE.COM (Apr. 2005). Families on average report about a third as much credit card debt as issuers. Tamara Draut & Javier Silva, *Borrowing to Make Ends Meet: The Growth of Credit Card Debt in the '90s*, DEMOS (Sept. 2003).

their job loss probability was high, but waited until they had lost their jobs to do so.¹³¹ This denial might help explain why borrowers agree to unaffordable loans, when a more realistic assessment of income prospects would lead to less debt.

Alternatively, consumers can avoid fear and anxiety when contemplating objectively unpleasant facts of life by perceiving personal risk overoptimistically, a pervasive bias.¹³² People maintain overoptimism about their own susceptibility to risks through overconfidence or illusions as to the degree to which they can control whether these risks befall them. Even when faced with a game of pure luck, people often perceive some element of control, such as the way they throw the dice or the lottery card they choose.¹³³ Although education might increase the accuracy of their knowledge about the actuarial probabilities of negative life events, individuals frequently will continue to believe their own odds are better so as to minimize thoughts of their personal vulnerability.¹³⁴ Giving consumers more information through financial education may only produce the “illusion of knowledge.” When consumers are given more information about investments, for example, they become overconfident in their ability to invest well, believing that the information gives them more knowledge even when it does not.¹³⁵

Overoptimism and overconfidence in personal finance decisionmaking is widespread. Consumers fail to save enough for retirement in part because they are overoptimistic about the future performance of their investments and because they have the illusion that they can control their rate of return through savvy investment strategies.¹³⁶ Although many financial products in the U.S. come with disclosures about risks—e.g., “past performance is no guarantee of future results,” “you could lose your home, and any money you have put into it, if you do not meet your obligations under the loan”¹³⁷—consumers routinely ignore warnings that are not obviously tailored to their own situation, assuming these warnings are for others.¹³⁸ Insufficient retirement savings also appears to be the product of overoptimism about health and ability to earn income during retirement and denial about the probability of illness and of needing long-term care.¹³⁹ Overconfidence probably plays a role in the persistence of high penalty credit card fees. Competition does not drive fees down in part because “[m]ost people never anticipate they will pay late, so they do not shop around for better late fees.”¹⁴⁰

Effective financial literacy education must therefore reduce consumers’ overoptimism and their illusion of an unrealistic degree of control over their lives. However, the use of this education as a policy tool is premised on the idea that consumers

¹³¹ Melvin Stephens, Jr., *Job Loss Expectations, Realizations, and Household Consumption Behavior*, 86 REV. ECON. & STATISTICS 253 (2006).

¹³² Neil D. Weinstein & William M. Klein, *Resistance of Personal Risk Perceptions to Debiasing Interventions*, 14 HEALTH PSYCHOL. 132, 132-33 (1995).

¹³³ Ellen J. Langer, *The Illusion of Control*, in JUU, *supra* note __, at 230, 231 & 236-37.

¹³⁴ Paul Slovic *et al.*, *Facts Versus Fears: Understanding Perceived Risk*, in JUU, *supra* note __, at 463, 468-70; Weinstein, *supra* note __, at 19.

¹³⁵ Brad M. Barber & Terrance Odean, *The Internet and the Investor*, 15 J. ECON. PERSPECTIVES 41 (2001).

¹³⁶ E.g., Gerlinde Fellner *et al.*, *Illusion of Expertise in Portfolio Decisions: an Experimental Approach*, 55 J. ECON. BEHAV. & ORG. 355, 372 (2004); Gokul Bahndari & Richard Deaves, *The Demographics of Overconfidence*, 7 J. BEHAV. FIN. 5, 6 (2006).

¹³⁷ This disclosure is under the Home Ownership and Equity Protection Act of 1994 (HOEPA). See Willis, *supra* note __, at 224-29 (Appendix).

¹³⁸ Thomas A. Durkin & Gregory Elliehausen, *Disclosure as a Consumer Protection*, in THE IMPACT OF PUBLIC POLICY ON CONSUMER CREDIT 109, 127 (Thomas A. Durkin & Michael E. Staten, eds. 2002) (generic disclosures “might add little to general awareness ... consumers already have.”).

¹³⁹ Lois A. Vitt, *Consumers’ Financial Decisions and the Psychology of Values*, J. FIN. SERV. PROFESSIONALS 68, 69-70 (Nov. 2004) (citing Mathew Greenwald & Associates, *Retirement Preparedness*, in ENCYCLOPEDIA OF RETIREMENT AND FINANCE (Lois A. Vitt, ed. 2003)).

¹⁴⁰ Sumit Agarwal *et al.*, *Two Steps Forward, One Step Back: The Dynamics of Learning and Backsliding* 2 n.1 (2006) (quoting Frontline television program; internal quotation marks omitted).

can, to a significant extent, control their financial situation. Financial literacy programs are deemed a success when they strengthen participants' "internal locus of control," their sense of self-efficacy in controlling their own financial condition.¹⁴¹ Paradoxically, financial literacy programs may increase overoptimism about financial risks in the course of educating people about these risks.

iv. Uncertainty and the Future. Personal finance decisions must be made despite, because of, and accounting for uncertainty—uncertainty about future medical expenses, income, life span, disability, inflation, returns on investments, etc. Unfortunately, decisions laced with future uncertainty are particularly likely to trigger biases.

People typically must mentally visualize and emotionally experience a future contingency to give it weight in their decisions.¹⁴² Contingencies that are farther out in the future, or more uncertain, can be less vividly brought to mind, and therefore influence decisions less strongly than those that are immediate and certain.¹⁴³ Time and uncertainty can be conceptualized as decreasing the weight put on an outcome by making the current imaginings of the outcome murkier, or immediacy and certainty can be seen as increasing the weight put on an outcome by making the current imaginings more vivid. Time bias correspondingly may reflect discounting or myopia, and certainty bias may reflect ambiguity discounting or certainty preference.¹⁴⁴

Not all future or uncertain consequences of decisions are equally affected by this phenomenon; aspects construed at a high or abstract level are little affected, but lower-level concrete details are weighted more strongly when made more immediate and certain.¹⁴⁵ For example, regardless of time or uncertainty households are likely to place the same value on homeownership, an abstract feature of a home loan, whereas they are unlikely to attend as carefully to a change in the amount of a monthly loan payment if that change is not happening anytime soon or the amount of the change is uncertain (an ARM). As a consequence, decisions about near-term, certain events are judged by tangible aspects such as feasibility, whereas events that are either long-term or uncertain are judged by the desirability of the broad-brush outcome.

Consumer decisions about credit are easily influenced by time and certainty effects. Anything bought on credit is an immediate benefit, and the costs of payment are always in the future, making all uses of credit ripe for time bias.¹⁴⁶ Consumers therefore will pay higher prices and spend more overall using credit cards than when paying with cash.¹⁴⁷ The pricing mechanisms used for credit products also capitalize on these biases. Teaser rates on mortgage loans and credit cards are profitable for lenders in part because when taking on the debt, borrowers often do not examine the feasibility of paying a higher monthly amount when the teaser expires. Further, many think they will refinance or switch cards as soon as the teaser ends because when they obtain the credit the logistical costs of refinancing or switching in the future are discounted. When it comes time to

¹⁴¹ Pamela P. Stokes & Sharon Polansky, *Shifting the Economic Locus of Control: Improving Financial Decision-Making in High Risk Populations*, 3 ACADEMIC ACCTG. FIN. STUDS. J. 116, 121 (1999).

¹⁴² See, e.g., Slovic *et al.*, *supra* note __, at 314; ANTONIO R. DAMASIO, DESCARTES' ERROR: EMOTION, REASON, AND THE HUMAN BRAIN xii-xiii (1994); THOMAS J. COTTLE & STEPHEN L. KLINEBERG, THE PRESENT OF THINGS FUTURE 13-35 (1974).

¹⁴³ See Yaacov Trope *et al.*, *Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior*, J. CONSUMER PSYCHOL. 83, *passim* (2007).

¹⁴⁴ See Shane Frederick *et al.*, *Time Discounting and Time Preferences: A Critical Review*, 40 J. ECON. LIT. 351, 360 (2002) (reviewing literature); Tversky & Kahneman, *supra* note __, at 20-22 (calling this the "certainty effect").

¹⁴⁵ Trope *et al.*, *supra* note __, at 83-87, 89-90 & 93.

¹⁴⁶ David Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 Q.J. ECON. 443, 461-65 (1997).

¹⁴⁷ Drazen Prelec & Duncan Simester, *Always Leave Home Without It: A Further Investigation of the Credit-Card Effect on Willingness to Pay*, 12 MKTG. LETTERS 5, 8 (2001); Elizabeth C. Hirschman, *Differences in Consumer Purchase Behavior by Credit Card Payment System*, 6 J. CONSUMER RES. 58, 64 (1979).

refinance or switch, however, these costs loom large, leading to delay.¹⁴⁸ When future costs are uncertain, as with a teaser ARM tied to an index, the uncertainty bias might heighten to this effect.¹⁴⁹ Prepayment penalties, over-the-limit fees, late fees, and finance charges, future expenses that are, from the consumer's perspective, uncertain future costs at the time of mortgage or credit card selection, probably do not register any weight on decisionmaking about entering into loan contracts.¹⁵⁰

Time and uncertainty biases partly account for failure to plan and save adequately for retirement, even among consumers who know a fair amount about financial planning.¹⁵¹ Consumers are aware of the importance of retirement planning but “may procrastinate on investing for retirement exactly *because* it is one of the most important life decisions.”¹⁵² Given its importance, consumers believe they should spend significant resources on planning and saving for retirement, but bear the costs of these in the present while the tangible benefits are in the future. To take advantage of compounding, people should save for retirement early, when the benefits are farthest away and the most uncertain. To plan, a consumer must forecast the future, including “lifetime earnings, asset returns, tax rates, family and health status, and longevity.”¹⁵³ Not only are these uncertain, but many of them go to feasibility questions such as how much food, shelter, and health care will cost per month after retirement. These uncertain future logistical matters are particularly difficult to imagine and account for in the present.

Time and uncertainty biases undoubtedly contribute to inadequate insurance coverage as well. Premium payments are certain and immediate, whereas the benefits of coverage for insured events are uncertain and delayed. For example, consumers selecting health insurance plans, unless they have existing health needs, tend to base their decisions on premium prices and provider availability, near-term costs and benefits, rather than uncertain future health needs.¹⁵⁴

Educating consumers about these biases is unlikely to help. Consumers are aware of their susceptibility these biases, and have developed numerous self-control mechanisms to counteract them. They cut up their credit cards and use automatic withdrawals for retirement plans. They support mandatory insurance coverage laws and accept mortgage lender insurance conditions. They maintain mental accounts, setting (but not always following) rules allowing themselves to spend only current income, not credit, for

¹⁴⁸ Given that credit card offers choke residential mailboxes, consumers experience surprising costs in switching to a new card. See, e.g., Paul S. Calem *et al.*, *Switching Costs and Adverse Selection in the Market for Credit Cards: New Evidence*, 30 J. BANKING & FIN. 1653, 1684 (2006).

¹⁴⁹ See, e.g., Eric Van Dijk & Marcel Zeelenberg, *The Discounting of Ambiguous Information in Economic Decision Making*, 16 J. BEHAV. DEC. MAKING 341, 348 (2003).

¹⁵⁰ E.g., GAO, CREDIT CARDS, *supra* note __, at 31 (credit card penalty fees); Jack Guttentag, *Your Mortgage: Prepayment Penalty a Surprise*, L.A. TIMES, Oct. 14, 2001, at K5 (mortgage prepayment penalty fees).

¹⁵¹ Bernheim *et al.*, *supra* note __ (finding standards of living decline unexpectedly after retirement); Douglas A. Hershey & John C. Mowen, *Psychological Determinants of Financial Preparedness for Retirement*, 40 GERONTOLOGIST 687, 693 (Dec. 2000) (finding time bias leads to procrastination of retirement planning); Joy M Jacobs-Lawson & Douglas A Hershey, *Influence of Future Time Perspective, Financial Knowledge, and Financial Risk Tolerance on Retirement Saving Behaviors*, 14 FIN. SERVS. REV. 331, 339 (2005) (finding time perspective influences financial planning more strongly than financial knowledge).

¹⁵² Ted O'Donoghue & Matthew Rabin, *Procrastination in Preparing for Retirement*, in BEHAVIORAL DIMENSIONS OF RETIREMENT ECONOMICS 125 (Henry Aaron ed., 1999) (italics in original).

¹⁵³ Olivia Mitchell & Stephen Utkus, *Lessons from Behavioral Finance for Retirement Plan Design*, in PENSION DESIGN, *supra* note __ at 3, 5.

¹⁵⁴ Mechanic, *supra* note __, at 141-42; see also Colin F. Camerer & Howard Kunreuther, *Decision Processes for Low Probability Events: Policy Implications*, 8 J. POL'Y ANALYSIS & MGMT. 565, 578 (1989).

nondurables.¹⁵⁵ Creating more and stronger precommitment devices could be helpful, but is not financial literacy education.

v. Opaque Attributes and Incommensurate Tradeoffs. Financial products can be difficult for consumers to evaluate. Even when they know which information they should use and aim to make their decisions based on it, they frequently, albeit unconsciously, focus instead on that which is the easiest to evaluate, including their own emotional responses. The evaluability bias¹⁵⁶ operates similarly to time and uncertainty biases, in that aspects of a decision that are easier to evaluate, analytically or emotionally, weigh more heavily in the decision than less evaluable—even if more important—aspects. For example, the affect heuristic evoked by high stakes is an evaluability bias in that an affective response creates an instantaneous evaluation, without decisionmaker effort. As explained above, the heuristic can lead consumers to confuse outcomes with probabilities, skewing expected value calculations necessary for good financial decisions.

Decision strategies that avoid tradeoffs among incommensurable features of financial products reflect an evaluability bias.¹⁵⁷ Where people have multiple options, some with incommensurate features, a common response is to avoid trading off incommensurables by ignoring alternatives or features that would require tradeoffs.¹⁵⁸ For example, a borrower might compare monthly payment amounts and APRs of mortgage options, but if only one has a prepayment penalty, might ignore that feature rather than calculating its worth in a common currency with monthly payment and APR. Another strategy to avoid difficult comparisons is to select the alternative that appears average, relative to the alternatives presented, along every dimension about which the consumer lacks preexisting preferences.¹⁵⁹ In one experiment, subjects choosing among three retirement investments with given associated risk levels tended to select the middle-ranked option, regardless of absolute risk level or which investments were presented.¹⁶⁰ Decisions using this strategy depend on where each alternative falls within the consumer’s choice set.

Similarly, consumers frequently rely on the information handed to them in forming their assessment of a product, and if key information is missing, will neglect that fact.¹⁶¹ Although insureds report that quality of healthcare is paramount in selecting a health plan, few look beyond the promotional materials they receive to consult quality ratings from a neutral source.¹⁶² This “omission neglect” bias is less likely when the consumer knows the product type well and the decision context provides reference points that highlight the missing information.¹⁶³ But consumers are rarely knowledgeable about financial products, and sellers hide cues that would call attention to omitted information. About a third of all home loan borrowers in a national survey said their lender presented them with only a single loan option.¹⁶⁴

¹⁵⁵ Richard H. Thaler, *Mental Accounting Matters*, 12 J. BEHAV. DEC. MAKING 183, 184 (1999); Amar Cheema & Dilip Soman, *Malleable Mental Accounting: The Effect of Flexibility on the Justification of Attractive Spending and Consumption Decisions*, 16 J. CONSUMER PSYCHOL. 33, 42 (2006).

¹⁵⁶ Christopher K. Hsee, *The Evaluability Hypothesis: An Explanation for Preference Reversals Between Joint and Separate Evaluations of Alternatives*, 67 ORG. BEHAV. & HUMAN DEC. PROCESSES 247, 255-56 (1996).

¹⁵⁷ *Id.*; Dedre Gentner & Arthur B. Markman, *Structural Alignment in Comparison: No Difference Without Similarity*, 5 PSYCHOL. SCI. 152 (1994).

¹⁵⁸ See Brownstein, *supra* note __, at 555 (citing sources).

¹⁵⁹ Ravi Dhar *et al.*, *Trying Hard or Hardly Trying: An Analysis of Context Effects on Choice*, 9 J. CONSUMER PSYCHOL. 189, 197-98 (2000); Itmar Simonson & Amos Tversky, *Choice in Context: Tradeoff Contrast and Extremeness Aversion*, 29 J. MKTG RES. 281, 282 (1992).

¹⁶⁰ Shlomo Benartzi & Richard H. Thaler, *How Much Is Investor Autonomy Worth?*, 57 J. FINANCE 1593, 1594-95 (2002).

¹⁶¹ Frank R. Kardes *et al.*, *Debiasing Omission Neglect*, 59 J. BUS. RES. 786, 786 (2006).

¹⁶² McLaughlin, *supra* note __, at 46.

¹⁶³ Kardes, *supra* note __, at 786.

¹⁶⁴ FANNIE MAE, NATIONAL HOUSING SURVEY 2001, at 6 (2002).

A related decisionmaking shortcut is the “availability heuristic.”¹⁶⁵ When events, costs, benefits, and information are experienced, observed, or received frequently, recently, or with vividness or strong emotion, they are more easily brought to mind. Even when consumers have the numerical knowledge and skills to use statistical data—which seems dry, abstract, and remote—they often ignore that data in favor of making judgments based on the mental “availability” of an event. The more mentally available an event is, the more probable it seems. The more mentally available a cost or benefit is, the larger it seems. The more mentally available a piece of information is, the greater weight put on it in decisionmaking.

The classic demonstration of the availability heuristic is in the personal finance realm. When consumers living in floodplains decide whether to purchase flood insurance, they are more strongly influenced by personal experience than by objective information about the probability and costs of a future flood.¹⁶⁶ This bias likely also contributes to consumer failure to appreciate financial product risks that are not mentally available. Although news stories report on high mortgage default rates, the paperwork of the foreclosure process does not lend itself to dramatic photographs or video footage. A sheriff placing the former homeowner’s belongings on the street would catch attention, but virtually no consumers stay in the home long enough for this to happen.¹⁶⁷ Because poor credit outcomes are viewed as the product of bad character, consumers who have lost their homes to foreclosure generally avoid advertising that fact. With the low availability of images of foreclosure within the minds of most consumers, they are likely to underestimate the risk and costs of foreclosure at the time they take the loan.

The availability heuristic is routinely exploited by sellers of financial products. Historical returns data are prominent in investment fund prospectuses. Although the fees associated with investments should be weighted as heavily, if not more, than past returns, fees are buried in the fine print. The unsurprising result is that active consumer investors chase returns.¹⁶⁸ In an experiment in which MBA students chose among several index funds, they consistently ranked fees as the most important factor in their decision.¹⁶⁹ Yet giving the students irrelevant information (each fund’s returns since inception, which varied based only on the lifespan of the fund) in a salient manner (on a single, separate piece of paper) increased the average weight returns data had on their decisions. They were unable to ignore visually prominent information they knew was irrelevant.

Another evaluation shortcut is the representativeness heuristic. Consumers tend to judge unfamiliar products based on their similarity to familiar products, even when important features differ.¹⁷⁰ That is, one product is taken to be representative of another along more than the dimensions they share. Consumers chase investment returns in part because they believe past performance is representative of future performance, regardless of how many times they are told otherwise.¹⁷¹ The representativeness heuristic can make experience a poor teacher, particularly in a quickly-changing market. Experience can lull consumers into a false sense of security when they assume their knowledge of an earlier

¹⁶⁵ See generally Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, in JUU 163, 174-75.(availability and probability judgments); Christopher K. Hsee & Howard C. Kunreuther, *The Affect Effect in Insurance Decisions*, 20 J. RISK & UNCERTAINTY 141-42, 154 (2000) (availability and judgments about costs).

¹⁶⁶ *Id.*

¹⁶⁷ Many consumers avoid foreclosure altogether, either by deed-in-lieu of foreclosure or short sale. See Peter G. Miller, *Foreclosure Numbers: A Guide for the Perplexed*, available at <http://www.realtytrac.com/ContentManagement/RealtyTracLibrary.aspx?&ItemID=2909&acct=64953>.

¹⁶⁸ See Mitchell & Utkus, *supra* note __, at 20-23.

¹⁶⁹ James J. Choi *et al.*, *Why Does the Law of One Price Fail?* 16 (NBER Working Paper No. 12261, 2006).

¹⁷⁰ Tversky & Kahneman, *Introduction*, in JUU *supra* note __, at 4-7.

¹⁷¹ See Mitchell & Utkus, *supra* note __, at 20.

product applies to a new product of the same type.¹⁷² For example, many believe “that a lender would not provide credit to a consumer who did not have the capacity to repay.”¹⁷³ When lenders engaged in credit rationing this assumption was reasonable because creditors made loans based on projections that borrowers could afford payments. As consumers are slowly discovering, that is no longer true now that today’s lending models, with varying degrees of success, can price default risk.¹⁷⁴

Use of the availability and representativeness heuristics can result in estimating the frequency of an event to be lower than the sum of the frequencies of components, called the “subadditivity effect.”¹⁷⁵ For example, “losing one’s job” could be too vague to bring an available image to mind, and therefore a consumer might underestimate its probability. The detail in the mental picture of component events that could cause job loss—losing one’s job because of becoming disabled, because of factory closure, etc.—can increase probability assessments of each, so that their assessed probabilities sum to a more accurate, larger figure.¹⁷⁶ The representativeness heuristic could also cause subadditivity. Consumers might estimate the probability of not job loss, but rather the most likely cause of job loss, and then extrapolate this as representative of the broader category of job loss. Consumers might try to account for other causes of job loss by increasing their probability estimate somewhat, but due to anchoring effects, discussed below, will be unlikely to adjust their estimates enough to account for all causes.¹⁷⁷ This subadditivity effect can derail good personal finance decisions because many—how much debt to incur, how much to save for retirement this month, how much to save for a rainy day, etc.—are based in large part on forecasts about income and employment.

Consumers do not want to evaluate choices based on inaccurate predictions. They want to make tradeoffs among incommensurate traits and to pay adequate consideration to traits that are difficult to evaluate.¹⁷⁸ Educating consumers that they should use healthcare quality ratings or a cost/benefit strategy would not debias them. They already know that making these tradeoffs is preferable—in one survey, 61 percent of Americans said that it is important to comparison shop for insurance—but find themselves unable to do so in practice—only 39 percent of respondents said they did so.¹⁷⁹

vi. The Passivity Alternative: Defaults and “Experts.” Consumers are not forced to make many of their own financial decisions, and so must first overcome inertia and passivity to even begin to engage in financial planning. A number of biases are at work here: status quo and anchoring biases, omission or inertia bias, and biases in advisor selection and advice acceptance.

The status quo and anchoring biases are tendencies to stay with whatever the status quo or initial “anchor” position is, even when conditions have changed or the

¹⁷² Stacy L. Wood & John G. Lynch, Jr., *Prior Knowledge and Complacency in New Product Learning*, 29 J. CONSUMER RES. 416, 417 (2002).

¹⁷³ Federal Reserve System, *Truth in Lending: Proposed Rule*, 73 F.R. 1672, 1687 (Jan. 9, 2008) (mortgage lenders); Eugene M. Bland *et al.*, *Students And Bankruptcy Filers On Causes Of Financial Distress*, 5 J. BUS. & ECON. RES. 53, 56 (2007) (credit card issuers).

¹⁷⁴ See Willis, *supra* note __, at 720-21.

¹⁷⁵ Amos Tversky & D. J. Koehler, *Support Theory: A Nonextensional Representation of Subjective Probability*, 101 PSYCHOL. REV. 547, 549-50 (1994). Whether the single event estimate or the sum of subevents estimates is more accurate is indeterminate from the theory, although in experiments the summed probabilities tend to be more accurate. *Id.*

¹⁷⁶ Cf. Craig R. Fox & R. Birke, *Forecasting Trial Outcomes: Lawyers Assign Higher Probability to Possibilities that Are Described in Greater Detail*, 26 LAW & HUMAN BEHAV. 159-73 (2002). Failing to account for every factor that could derail forecasts has been called the planning fallacy. Daniel Kahneman & Amos Tversky, *Intuitive Prediction: Biases and Corrective Procedures*, in JUU, *supra* note 85, at 414, 415.

¹⁷⁷ Kahneman & Tversky, *supra* note __, at 415.

¹⁷⁸ Dhar *et al.*, *supra* note __.

¹⁷⁹ Getlen, *supra* note __.

decisionmaker's own needs would dictate a position far from the anchor.¹⁸⁰ Consumer "decisions" about health care plans, for example, appear to be strongly affected by these biases. Once consumers initially choose a plan, they are very unlikely to change, regardless of changes in their health care needs that would make switching to another plan beneficial.¹⁸¹ Over a ten-year period, only 15 percent of federal government employees, who have a large number of health plans to choose from, report even considering changing plans.¹⁸² The same is true for investment allocations in retirement plans. Once employees make an initial allocation between stock funds and bond or money market funds, they are unlikely to change that allocation, despite widespread advice to shift from higher to lower risk investments as retirement draws near.¹⁸³

Even when making an initial "decision," people frequently accept options chosen by others. The classic study here is of auto insurance: New Jersey and Pennsylvania both gave their residents a choice between the type of auto insurance plan already on the market and a new type that had lower rates and limited the insured's right to sue. In New Jersey the default was the new plan, and in Pennsylvania it was the old plan. Over 80 percent of New Jersey residents "selected" the new plan, but 75 percent of Pennsylvanians "selected" the old plan, evidence that many people did not select their plan at all, but simply accepted the default.¹⁸⁴ Retirement fund decisions follow a similar pattern, in that many employees keep whatever contribution level and allocation the plan sponsor set as a default. Regardless of whether the employer's default contribution rate is 2 percent or 6 percent, a majority of employee contributions appear to mirror the default rate. This does not reflect differences in retirement needs; when companies change their defaults for new employees, the old employees often stay at the old default and the new employees accept the new default.¹⁸⁵

Why do consumers stay with a status quo that is no longer—or never was—the best option for them? Beyond choice overload and procrastination resulting from time biases described above, consumers who are uncertain whether changes would improve their finances may stick with the status quo to avoid blame for any poor outcomes. The omission or inertia bias, a tendency to judge the quality and morality of actions but not to pass judgment on failures to act, will exonerate them from staying with the default.¹⁸⁶ Actions are salient, available in thought, and therefore likely to be judged, whereas omissions are not salient and are ignored.

Consumer passivity is abetted by the market participants who have an interest in deciding how consumers should arrange their financial affairs. Of course, when faced with a difficult decision involving specialized knowledge, a normally quite appropriate response is to seek advice from an expert. When the advisor employs the necessary expertise and acts in the consumer's best interests, relying on the advisor to make the decision can reduce the effects of the consumer's biases on the decision.¹⁸⁷ Unfortunately, consumers have difficulty selecting advisors possessing sufficient

¹⁸⁰ Kahneman & Tversky, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124, 1128-30 (1974).

¹⁸¹ David Mechanic, *Consumer Choice Among Health Insurance Options*, 8 HEALTH AFFS. 138, 138 (1989).

¹⁸² McLaughlin, *supra* note __, at 45 (citing source).

¹⁸³ Mitchell & Utkus, *supra* note __, at 11. This advice is not uniformly endorsed, however. See Zvi Bodie, *An Analysis of Investment Advice to Retirement Plan Participants*, in *THE PENSION CHALLENGE* 19 (Olivia S. Mitchell & Kent Smetters, eds. 2003).

¹⁸⁴ E.J. Johnson *et al.*, *Framing, Probability Distortions, and Insurance Decisions*, 7 J. RISK & UNCERTAINTY 35 (1993).

¹⁸⁵ Choi *et al.*, *supra* note __, at 313 Fig. 11.2.

¹⁸⁶ Jonathan Baron & Ilana Ritov, *Omission Bias, Individual Differences, and Normality*, 94 ORG. BEHAV. & HUMAN DECISION PROCESSES 74, 83 (2004).

¹⁸⁷ See, e.g., James N. Druckman, *Using Credible Advice to Overcome Framing Effects*, 17 J.L. ECON. & ORG. 62, 77 (2001).

expertise and incentives to act in the consumers' best interests. Once a consumer selects an advisor, reliance on the advisor can become another form of passivity in that the consumer may not sufficiently monitor the advisor's performance.¹⁸⁸

Selection of inexpert advisors is particularly likely for important financial decisions because as decision stakes and difficulty increase, people rely less on rational criteria in favor of emotional criteria. When stakes are low, they favor the advice of a qualified expert, but when stakes are high, they rely on advice from friends, family, or others perceived to be benevolent. When subjects were asked whose advice they would rely on when choosing whether to keep money in a risky investment fund, the "Chief Advisor for mutual funds at an internationally successful investment firm" or an "especially caring and honest" accountant with limited experience, they chose the former for a less important decision and the latter for the more important decision. Although this might appear to be a conscious and rational tradeoff between benevolence and accuracy, consumers avoid the tradeoff. Instead, as decisions become more emotionally fraught, consumers perceive benevolent advisors to dispense more accurate advice than experts.¹⁸⁹

Consumers fail to employ expert financial advisors for more tangible reasons as well. Even if consumers knew how to select a qualified expert, not everyone has the resources to hire or enough money at stake to warrant hiring a financial advisor.¹⁹⁰ This is an informational problem too; before implementing an expert's advice, a consumer has little means to determine whether its benefits will outweigh its costs. Without independent advice, consumers tend to rely on the advice dispensed by the "expert" closest at hand, the seller. Even with substantial literacy gleaned from financial education, the consumer rarely will be as familiar as a salesperson with the latest financial products.¹⁹¹ This "free" advice may have a price. Among other things, yield spread premiums for selling consumers higher cost mortgages than that for which they qualify¹⁹² and soft-dollar payments to investment brokers for favoring particular funds¹⁹³ can place the financial interests of mortgage and investment brokers at odds with their clients.

Financial product salespeople can take advantage of the "reciprocity effect" invoked by "befriending" the consumer, who then reciprocates the seller's "kindness" with trust and business.¹⁹⁴ Social mores inhibit customers from challenging the credibility of this new "friend." Linguistic conventions contribute to role confusion: the broker, officer, or agent is "my broker," "my loan officer," or "my agent" even without any fiduciary duty to the consumer; the agent or broker "gets" or "finds" a policy or mortgage and the insurer or lender "gives" the coverage or credit, rather than "selling" the financial product. Once trusted, sellers have broad opportunities to influence consumer financial decisions. As a former loan officer explains: "You don't lie to your client, but you make them feel like you're their best friend and can be trusted."¹⁹⁵

¹⁸⁸ However, consumers who pay financial experts a fee for advice tend to be less passive and engage in more information search than consumers who rely on the advice of "free" experts or non-experts. Jinkook Lee & Jinsook Cho, *Consumers' Use of Information Intermediaries and the Impact on Their Information Search Behavior in the Financial Market*, 39 J. CONSUMER AFF. 95, 118 (2005).

¹⁸⁹ Tiffany Barnett White, *Consumer Trust and Advice Acceptance*, 15 J. CONSUMER PSYCHOL. 141, 143 & 146-47 (2005).

¹⁹⁰ Lee & Cho, *supra* note __, at 117.

¹⁹¹ See Howard Latin, "Good" Warnings, Bad Products, and Cognitive Limitations, 41 UCLA L. REV. 1193, 1209 & nn. 55-57 (1994) (citing sources for proposition that consumers frequently ignore written information and instead rely on explanations provided not only by experts such as doctors, but also salespersons).

¹⁹² *Predatory Mortgage Lending Practices: Hrg. Before the S. Comm. on Banking, Housing, & Urban Affairs*, 107th Cong. 55-56 (2002) (statement of Howell E. Jackson, Professor of Law, Harvard Law School).

¹⁹³ See Choi *et al.*, *supra* note __, at 6 & n.4.

¹⁹⁴ ROBERT B. CALDINI, *INFLUENCE: SCIENCE AND PRACTICE* 20-50 (4th ed. 2001).

¹⁹⁵ Michael Moss, *Erase Debt Now. (Lose Your House Later.)*, N.Y. TIMES, Oct 10, 2004, at C1 (quoting former loan officer for Aames Financial, then a mid-sized lender).

Examples abound. If a homeowner is stressed by the mortgage buying process, a lender might invoke the representativeness heuristic to calm her. One lender training manual directed its loan officers, when they placed a stack of paperwork in front of refinance mortgage borrowers to sign, to announce: “Okay, folks, we have about fifteen papers to okay. Now, most of these papers are the same ones you signed when you took out your last mortgage.”¹⁹⁶ If selling investments or insurance that will have costs now and uncertain benefits later, the broker might emphasize higher-level abstract benefits, which are less affected by time and uncertainty biases.¹⁹⁷ Focusing on the low price of these products, for example, is unlikely to be persuasive, but as insurance and investment advertising indicates, a better strategy is to remind consumers that buying these products demonstrates their love for, and will be reciprocated by love from, their blissful families. Similarly, a former mortgage broker explains that rather than focusing on feasibility dimensions such as monthly payment, he would ask the borrower in great detail about her plans for the loan proceeds. If her plan was to build a bedroom for her daughter painted purple, then throughout the mortgage purchase process he would invoke the vivid image of the purple room with her daughter enjoying it.¹⁹⁸

Certainly not all attempts to maneuver consumer biases are effective; significant variability in susceptibility to any particular bias exists not only among people, but within a single individual at different times, in different moods, etc. The potential for biased decisionmaking, however, has not gone unnoticed by the financial services industry. The insurance industry adage has spread to the rest of the industry—that their wares, whether insurance, credit, or investment products, are “sold not bought.”¹⁹⁹

3. *The Difficulty of Debiasing*²⁰⁰ *Personal Finance Decisionmaking*

Biases are resistant to change, particularly under the conditions presented by most personal finance decisions. Telling consumers they must think more carefully before making a financial decision will have no effect on unconscious biases. Consumers might increase their conscious attention and effort, but they will do so in the same biased way.²⁰¹ People are often unable to recognize their biases and prevent the effects of these biases on their decisions, even when taught about them.²⁰² However, particular

¹⁹⁶ See Willis, *supra* note __, at 186 (citing sources).

¹⁹⁷ Ravi Dhar & Eunice Y. Kim, *Seeing the Forest or the Trees: Implications of Construal Level Theory for Consumer Choice*, 17 J. CONSUMER PSYCHOL. 96, 97 (2007).

¹⁹⁸ Brunner, *supra* note __.

¹⁹⁹ See, e.g., A.P. Woodward, *The Disability Insurance Policy*, 70 ANNALS OF THE AM. ACADEMY OF POL. & SOC. SCI.: MODERN INSUR. PROBS. 227, 236 (1917) (disability insurance); Bernheim *et al.*, *supra* note __, at 354 (life insurance); Gene A. Marsh, *The Hard Sell in Consumer Credit: How the Folks in Marketing Can Put You in Court*, 52 CONSUMER FIN. L.Q. REP. 295, 298 (1998) (mortgages); Walter Updegrave, *Annuity Options in a Retirement Plan*, CNNMoney.com (Feb. 20 2007) (annuities); Daniel Bergstresser *et al.*, *Assessing the Costs and Benefits of Brokers in the Mutual Fund Industry* 34 (Sept. 2007) (mutual fund investments).

²⁰⁰ Some have suggested “debiasing” consumer financial decisions by invoking another bias pushing the consumer’s decision in the opposite direction from existing biases. E.g., Cass R. Sunstein, *Boundedly Rational Borrowing*, U. CHI. L. REV. 249, 261-67 (2006); Richard H. Thaler & Shlomo Benartzi, *Save More Tomorrow™: Using Behavioral Economics to Increase Employee Savings*, 112 J. POLITICAL ECON. S164 (2004); Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, J. LEGAL STUD. (2006). Counterbiasing would be a more accurate term, in that these strategies do not train consumers out of their biases; biases remain, but are used in service of the desired consumer behavior. Counterbiasing is not education.

²⁰¹ E.g., Nicholas Epley & Thomas Gilovich, *When Effortful Thinking Influences Judgmental Anchoring*, 18 J. BEHAV. DEC. MAKING 199, 209 (2005) (biases occurring through a conscious, effortful process can be reduced by thinking harder, but unconscious biases can not).

²⁰² Asher Koriat *et al.*, *Reasons for Confidence*, 6 J. EXPERIMENTAL PSYCHOL. 107, 114 & 117 (1980); Timothy D. Wilson *et al.*, *Mental Contamination and the Debiasing Problem*, in HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 125-26 (Thomas Gilovich *et al.*, eds. 2002). Similarly, even when taught to engage in expected value calculations, multiplying costs and benefits by probabilities, people’s biases frequently take over when they reach real-world decisions. E.g., Kahn & Baron, *supra* note __, at 309.

conditions can reduce the prevalence and influence of biases. Unfortunately, these conditions rarely exist in the context of personal finance decisions, and education probably cannot create these conditions, at least not without exacerbating other biases.

i. Repeat Play With Immediate Unambiguous Feedback. The most widely cited debiasing method is to give the decisionmaker immediate, unambiguous, and accurate feedback over a series of repeated decisions presented in the same form. In lab experiments, this method has sometimes reduced overconfidence,²⁰³ but not other biases.²⁰⁴ Consumers do not receive immediate and unambiguous feedback about their financial decisions based on experience alone because most outcomes are delayed and causation is ambiguous.²⁰⁵ However, an education program might attempt to employ the strategy by requiring feedback before a financial decision is final or after a consumer has experienced a bad financial outcome. Simulated financial decisionmaking in the classroom could be followed by immediate and unambiguous feedback. All of these have been tried, but with little success.

Credit counseling is now a precondition for filing for bankruptcy²⁰⁶ and, in some states, for obtaining certain high-priced mortgages.²⁰⁷ Fannie Mae and Freddie Mac require homeownership education, with a financial focus, for some of their affordable mortgage programs. In theory, debiasing feedback could be effective at this juncture. However, many consumers already will have shifted from a decisionmaking to an implementation frame of mind. Providers of popular homeownership education programs conducted by phone report that over 80 percent of their participants already have signed a contract to buy a home when they seek the education.²⁰⁸ Once a consumer has committed to a course of action she will be resistant to learning that the decision she just made was poor, particularly because her sunk costs—the efforts she has just put into hiring an attorney and preparing their documents for bankruptcy or into the home purchase or loan application process—will then be for naught.²⁰⁹ Additionally, the consumer usually faces time pressure to close on the home purchase or loan or to file for bankruptcy to stop a foreclosure.²¹⁰ Time and attention needed to learn new financial decisionmaking processes are scarce.

²⁰³ Sarah Lichtenstein & Baruch Fischhoff, *Training for Calibration*, 26 *ORG. BEHAV. & HUMAN PERFORMANCE* 149, 149-50 (1980). *But see* Winston R. Sieck & Hal R. Arkes, *The Recalcitrance of Overconfidence and its Contribution to Decision Aid Neglect*, 18 *J. BEHAV. DEC. MAKING* 29, 31-32 (2005) (discussing studies finding feedback does not decrease biases).

²⁰⁴ For example, this teaching method of repeat play with immediate, unambiguous feedback had little success in teaching subjects to make decisions based on expected value calculations. Jaideep Prabhu & Gerard J. Tellis, *Do Consumers Ever Learn? An Analysis of Segment Behavior in Experimental Markets*, 13 *J. BEHAV. DEC. MAKING* 19, 31 (2000). After 24 rounds of play, the majority of subjects learned nothing, fewer than 7% appeared to learn from the feedback, and 9% learned the wrong lesson leading them to worse decisions with more experience and more feedback. *Id.* at 26.

²⁰⁵ Credit card charges imposed on the heels of late payments are an exception. Card holders generally appear to learn from the imposition of penalty fees, a form of concrete consequential feedback. Much of this learning degrades substantially, although on average not entirely, over about six months. Agarwal, *supra* note __, at 3.

²⁰⁶ Bankruptcy Abuse Prevention and Consumer Protection Act, 109 P.L. 8, § 106 (2005).

²⁰⁷ *E.g.*, *Georgia Fair Lending Act*, Georgia Code Annotated § 7-6A-5 (2002); *North Carolina Predatory Home Lending Act*, General Statutes of North Carolina § 24-1.1E (2000); *South Carolina High-Cost and Consumer Home Loans Act*, § 37-23-10 (2003-04); *Rhode Island Home Loan Protection Act*, R.I. Gen. Laws § 34-25.2-1 et seq.

²⁰⁸ George W. McCarthy & Roberto G. Quercia, *The Evolution of the Homeownership Education and Counseling Industry*, Research Institute for Housing America Report No. 00-01 9 (May 2000).

²⁰⁹ *E.g.*, Hal R. Arkes & Laura Hutzler, *The Role of Probability of Success Estimates in the Sunk Cost Effect*, 13 *J. BEHAV. DEC. MAKING* 295, 301-05 (2000).

²¹⁰ GAO, *BANKRUPTCY REFORM: VALUE OF CREDIT COUNSELING REQUIREMENT IS NOT CLEAR*, GAO-07-203, at 23 (Apr. 2007) (bankruptcy); William Eskridge, *One Hundred Years of Ineptitude*, *U. VA. L. REV.* (home purchase mortgages).

At this juncture, consumers might misinterpret the feedback in a process called motivated reasoning.²¹¹ Once people have developed a judgment, contradictory evidence can create an uncomfortable feeling of cognitive dissonance. Consumers sometimes expend the effort to revise their prior judgments, but frequently misinterpret ambiguous evidence as providing further support for their prior decisions and reject plainly unresponsive evidence.²¹² Although motivated reasoning cannot change the terms of a consumer credit product, for example, the future is uncertain enough to allow consumers to reason that they do not need to worry about future interest rate increases because they will refinance before then.²¹³

Consumers may be more amenable to receiving financial education once a bad financial outcome occurs. A financial education course is required for discharge in bankruptcy, in addition to the required pre-filing credit counseling.²¹⁴ Consumers consistently report that they believe the single most important source of learning about personal finance is a difficult experience.²¹⁵ Like homeowners after a flood, consumers who have experienced a bad financial outcome will judge the probability or the costliness (or both) of that outcome to be higher than if they had visualized the outcome vaguely, as a future uncertain event. But—assuming a better decision could have forestalled the problem—consumers must learn more than that the probability of a costly outcome was high; they must understand specifically what went wrong in the prior decision and how that information applies to future decisions.

In practice, by the time consumers have recovered enough from their bad financial experiences to seek financial education, they are unlikely to recall their prior decision processes accurately, and what they do recall will be shaped by ensuing events.²¹⁶ The process of mentally reconstructing past decisionmaking can increase any bias that affected the decision, because consumers are motivated to justify their past reasoning.²¹⁷ Even with perfect recall, causation will be ambiguous, given that financial troubles are usually attributable to multiple sources. With ambiguous feedback, the overconfidence bias is unlikely to be reduced, because consumers tend to attribute successes to their own abilities and to blame failures on uncontrollable circumstances.²¹⁸ Finally, lessons learned from prior decisions may no longer apply in light of changes in the marketplace.

Educational financial games such as the Money Game, created for the purpose of financial education, also employ immediate, unequivocal, accurate feedback. Assuming the more financially knowledgeable students do not self-select into playing, education through the game appears to lead to a slight increase in knowledge.²¹⁹ Nonetheless, this knowledge does not appear to improve financial behavior; students who play the Money

²¹¹ Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCHOL. BULL. 480 (1990).

²¹² Lee Ross & Craig A. Anderson, *Shortcomings in the Attribution Process: On the Origins and Maintenance of Erroneous Social Assessments*, in JUU, *supra* note __, at 129, 144-52.

²¹³ Christopher K. Hsee, *Elastic Justification*, 62 ORG. BEHAV. & HUM. DECISION PROCESSES 330 (1995). Some consumers will change their decisions as a result of counseling, but learning is not necessarily at work here; a consumer might be following the counselor's instruction without understanding its basis.

²¹⁴ Bankruptcy Abuse Prevention and Consumer Protection Act, 109 P.L. 8, § 105 (2005).

²¹⁵ Marianne A. Hilgert *et al.*, *Household Financial Management: The Connection Between Knowledge and Behavior*, Jul. 2003 FED. RES. BULL. 309.

²¹⁶ See Prabhu & Tellis, *supra* note __, at 21.

²¹⁷ Gavan J. Fitzsimons & Baba Shiv, *Nonconscious and Contaminative Effects of Hypothetical Questions on Subsequent Decision Making*, 28 J. CONSUMER RES. 224, 237 (2001).

²¹⁸ This has been called the self-serving or attribution bias. *E.g.*, Bhandari & Deaves, *supra* note __.

²¹⁹ The average score nationwide on the JumpStart 2002 financial literacy test was 50.2% correct, whereas the average for students who had played the Money Game was 52.4% correct. JumpStart Coalition, *From Bad to Worse: Financial Literacy Drops Further Among 12th Graders* (Apr. 23, 2002). Because the test consists of 30 multiple choice questions, this difference is less than a single correct answer.

Game report poorer financial habits than students who do not.²²⁰ These results are consistent with the findings of studies that advocate feedback as a debiasing tool. In these experiments, debiasing did not transfer to tasks presented in new formats.²²¹ Further, the experiments did not test how long the debiasing effect lasted. Students playing the Money Game probably get better at playing the game, but the most realistic game cannot mirror real-life environments given the possible combinations of conditions in which personal finance decisions are made, the relationships among financial and nonfinancial decisions, and the ever-changing nature of the marketplace.

ii. Consider-the-Opposite. Another debiasing method is to “consider the opposite,” meaning reasons the decision or the assumptions on which it depends might be incorrect, before finalizing a decision.²²² By calling them to mind, alternative assessments become more mentally available, in theory increasing the weight consumers place upon them. Overconfidence and underconfidence have been moderated somewhat in lab experiments using this technique.

Consumer education might teach consumers that they should consider the opposite, yet whether they would or even could follow this instruction is questionable. Subjects in experimental conditions told to write down reasons against their decisions had difficulty doing so, and some even listed no reason at all or wrote down supporting rather than contradicting reasons.²²³ These subjects incurred no opportunity costs in finding an opposite reason; unlike consumers making financial decisions, subjects trapped in a lab could not choose to spend their time doing something more demonstrably useful than considering the opposite.²²⁴

In the real world, no one tells the consumer when and how she should employ the consider-the-opposite strategy. Should she consider the opposite of her plan to keep one credit card account, or of her plan to close her other accounts? Is the opposite of her prediction that stocks will go up five percent each year on average the possibility that stocks might perform worse, or might perform better? Is her acceptance of the defaults her employer has set for life and disability insurance a decision? Although a financial education class could provide examples of points at which to employ the consider-the-opposite strategy, the world is too unpredictable, varied, and dynamic to teach consumers how to apply the strategy in their lives.

Even if a consumer could correctly identify when and how to use the strategy, consider-the-opposite does not tell the consumer how to decide between a planned decision and the opposite. Considering the opposite might lead to paralysis if she can not determine the expected value of the opposite as compared to her prior choice.

Tests of the consider-the-opposite strategy in experiments resembling consumer decisions have repeatedly failed to debias subjects. Asking subjects to generate a list of reasons why a bad outcome might occur had no effect on overoptimism about their own

²²⁰ LEWIS MANDELL, FINANCIAL LITERACY, IMPROVING EDUCATION: 2006 NATIONAL JUMP\$TART SURVEY, EXECUTIVE SUMMARY 9 (2006).

²²¹ Lichtenstein & Fischhoff, *supra* note __, at 167. Years of training can somewhat debias expert decisionmaking about scenarios with which they have become very familiar, but the change does not appear to translate to other contexts, even within their area of expertise. See Jeffrey J. Rachlinski, *Cognitive Errors, Individual Differences, and Paternalism*, 73 U. CHI. L. REV. 207, 219-21 (2006).

²²² Koriat *et al.*, *supra* note __; C. Lord, *et al.*, *Considering the Opposite: A Corrective Strategy for Social Judgment*, 47 J. PERSONALITY & SOC. PSYCHOL. 1231 (1984); Bret G. Bentz *et al.*, *The Debiasing of Pessimistic Judgments Associated with Anxiety*, 26 J. PSYCHOPATHOLOGY & BEHAV. ASSESSMENT 173, 173 (2004).

²²³ Koriat *et al.*, *supra* note __, at 117.

²²⁴ Cf. J.D. Trout, *Paternalism and Cognitive Bias*, 24 L. & PHIL. 393, 419 (2005) (“The decision-maker must also invest effort in generating specific alternative outcomes, and ... to do so they must have the cognitive capacity, attentional focus, and undistracting environment to carry it out. These conditions are seldom jointly available.”).

likelihood of developing a health problem. Even when experimenters provided subjects with data about the prevalence of these risk factors, many subjects interpreted the information as depicting worst case scenarios not applicable to themselves. Only giving subjects information about their personal standing on relevant risk factors as compared to the general population appears to be a promising route for debiasing overoptimism.²²⁵ The rough equivalent in the personal finance context would be individualized financial advice. This is not education.

iii. Consider the Pros and Cons. Listing the arguments for and against a financial decision or a prediction on which a decision is based would seem to be the next debiasing strategy to try, as it would avoid the potential misapplication of the consider-the-opposite strategy. For biased consumers, listing pros and cons could trigger her thinking to negate the availability heuristic's influence on her decision, regardless of whether she is under- or overconfident to begin with. This method has debiased subjects who, in response to negative emotions and stress, selected investments based on payoffs rather than taking probability information into account. When instructed to list the pros and cons of each investment, these subjects chose the investments with the higher expected value regardless of payoff amount.²²⁶

But the process of listing pros and cons focuses attention on factors that the consumer articulates, at the expense of less accessible relevant factors. That is, when the decision is not about a controlled game with few features, but about personal finances, the list of pros and cons is likely to be incomplete, leading to omission neglect, discussed above. If the less articulable attributes are important, listing reasons for a decision can decrease decision quality.²²⁷ For example, subject predictions of their own behavior were less accurate when they listed the reasons why they might or might not engage in the behavior.²²⁸ The accuracy of consumer predictions about their own future behavior is critical in personal financial decisionmaking, given that they steadfastly refuse to use statistical data rather than personally-generated beliefs. If introspection about reasons for future actions leads to less accurate predictions, teaching consumers to carefully consider the reasons their predictions might not come true could lead them to worse decisions.

Further, this debiasing technique is successful only when pros and cons are listed prior to the decision. Having subjects make a choice and then list supporting and contradicting reasons did not reduce overconfidence.²²⁹ Once they had made a decision, the overconfident subjects discounted even self-generated contradicting reasons. To use this debiasing technique, consumers would need to know when they were about to make, but had not yet made, a financial decision. However, decisionmaking involving tradeoffs among costs and benefits does not proceed linearly from perception to a hunt for alternatives to research about each alternative to evaluation to decision. Unless performed using quick heuristic strategy (such as when trying to avoid stress or when in a negative mood, described above), the process is recursive.²³⁰ The fruits of any search are likely to depend on which options are salient in the marketplace or suggested by friends or happenstance. Assessment of alternatives begins during the process of finding them. Consumers' encoding of information about alternatives will depend on their moods and

²²⁵ Weinstein & Klein, *supra* note __, at 137.

²²⁶ Leith & Baumeister, *supra* note __, at 1264.

²²⁷ Timothy D. Wilson & Jonathan W. Schooler, *Thinking Too Much: Introspection Can Reduce the Quality of Preferences and Decisions*, 60 J. PERSONALITY & SOC. PSYCHOL. 181, 191 (1991).

²²⁸ Timothy D. Wilson & Suzanne J. LaFeur, *Effects of Analyzing Reasons on Self-Prediction*, 68 J. PERSONALITY & SOC. PSYCHOL. 21 (1995).

²²⁹ Koriath *et al.*, *supra* note __, at 117.

²³⁰ MARY FRANCES LUCE *ET AL.*, EMOTIONAL DECISIONS: TRADEOFF DIFFICULTY AND COPING IN CONSUMER CHOICE 21-33 (2001).

affective responses to their prior information.²³¹ Once the search stops, they are likely to be inclined toward one option; consumers often “satisfice”—they decide when to stop searching based on their belief that they have found a satisfactory alternative.²³²

If a consumer were to list pros and cons, this might appear to be the point to do so. By now, though, the consumer’s collected choice set of alternatives and information about them is biased. Further, she probably has made an unconscious decision and will resist changing it, even in the face of contrary evidence. Even without new information, the consumer might reinterpret the information she already has in light of her commitment; subjects’ probability of success estimates for an investment are higher after they have chosen one than before, even though the only new information they possess is their own decision.²³³ Before ascertaining all options, a consumer cannot assess the pros and cons of each, yet afterwards, it is too late to use this debiasing strategy.

iv. Construct Preferences Before Shopping. When shopping for some types of products, the evaluability biases, myopic time bias, and manipulation by salespersons or point-of-sale advertising might conceivably be moderated by constructing preferences before entering the marketplace. Because a lack of well-defined preferences increases susceptibility to bias, constructing preferences first, in effect creating a shopping list, might reduce the opportunity for biases to operate. Although this could easily lead to a satisficing strategy, such a result might be better than accepting whatever product the salesperson suggests. This might mitigate the avoidance strategy induced by stress, high stakes, and the unpleasantness of considering the negative aspects of life, in that the consumer could not end her shopping process without obtaining an acceptable product.

One study employed this method to reduce the omission neglect bias discussed above. When subjects rated the importance of a list of product attributes before they started examining the products in the market, they were less likely to neglect any lack of information on a factor they had previously determined to be important.²³⁴ But in personal finance matters, consumers need to know what the market offers to determine what product attributes are possible and at what cost. A consumer knows the grocery store will have apples and chocolate bars, can make a decision between them prior to shopping, and, with sufficient willpower, can implement that decision at the store. Given the velocity of change in the insurance, investment, and mortgage markets, a consumer who lists requirements based on past experience is likely to have difficulty even identifying which products possess those attributes.

In theory, financial literacy education could help consumers construct preferences before shopping by teaching them a checklist of important product features. Many personal finance decision aids do just that, but changes in financial products on the market mean that any list will be quickly out-of-date. Educators might try to keep consumers current through public service announcements about frequently-ignored aspects of financial decisions. However, the number of attributes that consumers need to consider in today’s complex transactions would limit the extent to which education about one or two aspects could improve consumer decisionmaking.²³⁵ Further, education programs may teach “the list” of attributes to look for, but are unlikely to give consumers

²³¹ See, e.g., Brownstein, *supra* note___, at 556-557 (describing studies demonstrating that when subjects examined a set of alternatives attribute by attribute, if one alternative dominated on the first attribute examined, subjects were inclined to favor that alternative on subsequent attributes examined).

²³² HERBERT A. SIMON, *MODELS OF MAN* 270-71 (1957).

²³³ See, e.g., Arkes & Hutzler, *supra* note___, at 301-02 & 303-05. This may reflect the illusion of control—once people make a decision, they have the illusion they can influence the probability of success.

²³⁴ Kardes, *supra* note___, at 790.

²³⁵ Recall that “to compare two ARMs with each other or to compare an ARM with a fixed-rate mortgage, you need to know about indexes, margins, discounts, caps on rates and payments, negative amortization, payment options, and recasting (recalculating) your loan.” *ARM HANDBOOK*, *supra* note___.

a sufficiently deep understanding of the list to feel committed to it. Without commitment to underlying decision rules, lists are easily brushed aside.²³⁶

Additionally, unless a single alternative dominates on all attributes, a list of attributes is insufficient to select a financial product without a way to make tradeoffs among attributes. The thousands of worksheets in financial education materials do not explain how to choose among alternatives once the information is compiled. A short example:²³⁷

Long-Term Care Insurance Policy Comparison Worksheet			
Use the worksheet below to list the cost and features of three different long-term care (LTC) insurance policies. Then compare the three providers to determine the best policy for you.			
LTC Policy Feature	LTC Policy Provider #1	LTC Policy Provider #2	LTC Policy Provider #3
Services covered (e.g., home care, adult day care, custodial care, etc.)			
Amount of daily benefit			
Length of coverage			
Elimination period			
Inflation adjustment			
Requirement for coverage...			
Additional features (e.g., premium waiver after 90 days of coverage)			
Annual/monthly cost			

Without a way to make tradeoffs among policy features, collecting this information is likely to be more frustrating than helpful.

Finally, the list of attributes the consumer must consider can itself cause problems. If asked to compare alternatives along a list of attributes, consumers find it more difficult to make decisions because all options have some pros and cons. Because a list can induce consumers to weigh each attribute evenly even when one or two attributes are more important, all options can appear to be of similar value.²³⁸ Asking consumers to consider every relevant piece of information is also likely to lead to information overload.

v. Time and Space for Deliberation. Some sources of biases in financial decisionmaking can subside over time and psychological distance from the salesperson. For example, stress or negative emotions occupy mental resources and reduce decisionmaking quality, but emotions come and go. Time to deliberate could help a consumer sift through information and choices to reduce overload effects. Trust in a salesperson might decrease when the consumer is no longer in the presence of this newfound “friend.” An obvious method of debiasing would be to teach consumers to take time and space for deliberation: a “chilling out” or “warming up” period.²³⁹

The theoretical literature supports the use of cooling off periods for important, irrevocable decisions,²⁴⁰ but the usefulness of deliberation time depends on what consumers do with this time. They could gather more evidence or reevaluate existing

²³⁶ Amer Cheema & Dilip Soman, *Malleable Mental Accounting: The Effect of Flexibility on the Justification of Attractive Spending and Consumption Decisions*, 16 J. CONSUMER PSYCHOL. 33, 42-43 (2006).

²³⁷ The Financial Aspects of Health and Long-Term Care Insurance in Later Life, Rutgers New Jersey Agricultural Experiment Station, available at <http://njaes.rutgers.edu/healthfinance/insurance-ltc.asp>.

²³⁸ Wilson & Schooler, *supra* note __, at 182.

²³⁹ Willis, *supra* note __, at 214-15. This is a variant on “cooling off” periods permitting consumers to rescind after making the decision. *E.g.*, FTC Door to Door Sales Cooling Off Rule, 16 CFR § 429. Because consumers become psychologically committed to the choices they make, a deliberation period prior to the transaction is preferable.

²⁴⁰ George Loewenstein *et al.*, *Projection Bias in Predicting Future Utility*, 118 Q. REV. ECON 1209, 1239 (2003).

evidence to enhance support for their decisions.²⁴¹ They could consider the opposite or list the pros and cons. Time for deliberation could easily become another excuse for inertia. Time and space from a salesperson could create an opportunity to consult with friends or experts, but giving consumers access to good advice is a policy proscription beyond education.

Although time for deliberation decreases some biases, others appear to increase or remain unchanged. If the initial information received about alternatives was encoded in a biased manner, deliberating about the encoded information will replicate the bias. “Framing” effects of context can increase when the decisionmaker is given more time to perceive and incorporate more information, even when the information should be irrelevant.²⁴² This is particularly true for difficult decisions, whether due to accountability for the decision, ambiguity or uncertainty imbedded within the decision, or incommensurability of attributes among alternatives. For example, with enough time, people faced with incommensurable tradeoffs are more likely to gather and use contextual information such as the nature of the alternatives in the choice set. A common heuristic strategy then employed is to avoid extremes and choose an average alternative.²⁴³ This strategy works well only when the less extreme, average alternative in the choice set is better. Thus, the effectiveness of taking more time to make financial decisions can depend on the consumer’s choice set. But controlling each consumer’s choice set would require regulation, not financial education.

“Teaching” consumers to take time and distance to deliberate may not add anything to what consumers already know. Consumers know they should not make important financial decisions impulsively and that they should not fall prey to sales techniques. The problem is that in the heat of the moment, the consumer’s emotional response overwhelms that knowledge. Financial literacy education has little hope of changing that.

vi. Individual Differences. One could devise other debiasing strategies to try, but every strategy has the potential to backfire because past experiences, socialization, decision context, personality, cognitive abilities, values, and more will differ for every consumer, and can radically affect the outcomes of debiasing techniques.

The operation of the availability heuristic, for example, will depend on what the consumer finds salient based on personal experience, memory, and immediate environment. The representativeness heuristic operates on the consumer’s personal past experience with products or situations which, to this consumer, seem similar to the one at hand. Information overload causes all consumers to reduce most decisions to a small number of salient characteristics, but within this bound, consumers consider different attributes and use different choice strategies.²⁴⁴ The operation of time and uncertainty will differ both across consumers and across situations, depending on the vividness and detail with which each consumer internally visualizes the future uncertain event, such that no one discount rate or myopic preference rate can be applied.²⁴⁵

The variation in overconfidence/overoptimism versus underconfidence/pessimism within the consumer population²⁴⁶ poses a significant hurdle for debiasing. As noted

²⁴¹ Brownstein, *supra* note __, at 561; Dan Simon *et al.*, *The Emergence of Coherence Over the Course of Decision Making*, 27 J. EXPERIMENTAL PSYCHOL. 1250 (2001).

²⁴² Eric R. Igoi & Herbert Bless, *On Undesirable Consequences of Thinking: Framing Effects as a Function of Substantive Processing*, 20 J. BEHAV. DEC. MAKING 125, 137-39 (2007).

²⁴³ Dhar, *supra* note __, at 189.

²⁴⁴ *E.g.*, Alfred S. Boote, *Market Segmentation by Personal Values and Salient Product Attributes*, 21 J. ADVERTISING RES. 29, 30-31, 34-35 (1981); Danielle Timmermans, *The Impact of Task Complexity on Information Use in Multi-Attribute Decision Making*, 6 J. BEHAV. DEC. MAKING 95, 103 Ex. 4 (1993) (showing use of different decisionmaking strategies both inter-subject and intra-subject).

²⁴⁵ Shane Frederick *et al.*, *Time Discounting and Time Preferences*, 40 J. ECON. LIT. 351, 360 (2002).

²⁴⁶ See Joseph W. Alba & J. Wesley Hutchinson, *What Consumers Know and What They Think They Know*, 27 J. CONSUMER RES. 123, 124 & 146 (2000).

above, the consider-the-opposite strategy decreases overconfidence in some but increases underconfidence in others. A debiasing strategy of listing the pros and cons can lead some people to reduce their prior assessments of the probability of negative consequences²⁴⁷—introducing the possibility that this intervention could lead to overoptimism in some consumers.

Financial literacy education programs today attempt to tailor their content for different audiences based on the financial situation and needs of the audience. Perhaps they could hit upon a strategy that would debias some consumers, some of the time. Unfortunately, consumers are not easily sorted by bias-susceptibility type into different personal finance classes.²⁴⁸ Although public education campaigns might be designed to respond to a variety of biases, they risk sending the wrong message to some consumers.

D. Reaching Consumers at Teachable and Vulnerable Moments

Educators resoundingly agree that personal finance should not be taught in the abstract, but instead at a “teachable moment”—“a point when the information seems immediately relevant and applicable.”²⁴⁹ For infrequent decisions, a teachable moment could include the time leading up to the decisions, when people have overcome inertia, are most motivated to learn, have weak pre-existing preferences, and are most likely to integrate their new learning into their existing knowledge. A teachable moment might be when a consumer is buying a first house, obtaining a first credit card, or deciding how to manage money when first earning it. For habitual financial behaviors, such as “overspending” or allowing inertia to take its course (e.g., not budgeting, not signing up for a 401(k)), particular events can cue a teachable moment. A “cueing event” is one that “(1) increases perceptions of personal risk and outcome expectancies, (2) prompts strong affective or emotional responses, [or] (3) redefines self-concept or social role.”²⁵⁰ Close experience with bankruptcy, foreclosure, or the like can increase perceived probability and costs of poor outcomes, motivating behavior change. On the flip side, an event that substantially increases financial resources might prompt a sense of new financial self-efficacy and increase receptivity to learning. Role changes such as becoming part of a couple, having children, or becoming divorced can cue a teachable moment if consumers perceive their responsibility for financial management to increase.²⁵¹

Applying teachable moments theory to financial literacy education seems intuitively sound, but, as discussed above, consumers who participate in financial literacy programs at teachable moments do not appear to become any more financially literate. “Teachable moments” might be merely “reachable” moments. That is, when consumers are facing a new financial decision, have experienced a bad financial outcome, or have changed social roles in ways that make them feel more responsible for financial matters, they are more willing to take part in personal finance programs. At these times, consumers may be more “reachable,” but may not be any more likely to learn about personal finance.

Ironically, to the extent that consumers are open to trying to learn, these “teachable moments” are also vulnerable moments. When making everyday purchases, people are likely to have well-defined preferences (e.g., preferring chocolate to vanilla) or well-developed decision strategies (e.g., choose the most energy-efficient product) honed over

²⁴⁷ Bentz *et al.*, *supra* note __, at 178.

²⁴⁸ Research does indicate that, on average, different racial/ethnic groups respond differently to identical financial education programs, but the heterogeneity of responses within groups is large. Annamaria Lusardi, Financial Education and the Saving Behavior of African-American and Hispanic Households 23-27 (Sep. 2005).

²⁴⁹ National Endowment for Financial Education, The State of Financial Literacy in America—Evolution and Revolutions 4 (Denver, Colorado, Oct. 9-11, 2002) (hereinafter, NEFE 2002), available at <http://www.nefe.org/pages/whitepaper2002symposium.html#body39>.

²⁵⁰ C. M. McBride, *et al.*, *Understanding the Potential of Teachable Moments: the Case of Smoking Cessation*, 18 HEALTH EDUC. RES.: THEORY & PRACTICE 156, 162 (2003) (internal citations omitted).

²⁵¹ See, e.g., NEFE 2002, *supra* note __, at 19-21.

repeated experiences with near-term outcomes. Few such preferences and decisionmaking strategies exist in the personal finance realm, because major financial decisions are infrequent, the consequences of past choices and strategies are murky, and the products and market players are likely to have changed dramatically since consumers' prior decisions. Few consumers have a clear idea of how much they want to save for retirement or a developed strategy about how to allocate it among investments.²⁵² Few know how much and what type of life insurance policy they want, or even what choices exist in the market. Because many consumers develop preferences and strategies during the decision process, their choices can be influenced by those who seek to help them or those who seek to exploit them.²⁵³

The question is who will reach consumers at these vulnerable teachable moments—educators or the financial services industry? Given resource advantages, in the vast majority of cases it will be the latter.

Educator claims that their “[t]argeted promotion and marketing efforts” can “create teachable moments”²⁵⁴ are implausible. Over the course of a seven-year \$20 million national television and radio public service campaign waged recently to encourage consumers to save more, personal savings declined from 4.7 percent to negative 2.0 percent.²⁵⁵ Public education campaigns can even harden attitudes against the information conveyed.²⁵⁶ Voluntary financial education is widely available, yet seldom used.²⁵⁷ College students receiving their first credit card are in a potentially “teachable” moment, but when 78,000 of these new cardholders were offered a 60-minute phone card to complete an online financial course, only 6.6 percent did so.²⁵⁸

When the government acts as educator, it has some additional means at its disposal to reach people. For example, to encourage retirement savings, since 2000 the U.S. government has sent all adults an annual statement regarding how much they should expect to receive from the program, given their federal paycheck deductions to date. However, only 66 percent of adults in a national survey remembered receiving this statement, let alone its contents.²⁵⁹ A number of states require personal finance education in the public schools.²⁶⁰ However, as explained above, this education has not been noticeably effective. Some states have begun requiring “credit counseling” as a condition of consumer purchase of a high-priced mortgage.²⁶¹ But, as explained previously, counseling in this context is unlikely to be educational. The required attendance at a personal finance class prior to bankruptcy discharge, noted above, is also in keeping with

²⁵² See Mitchell & Utkus, *supra* note __, at 14-15.

²⁵³ See, e.g., James R. Bettman *et al.*, *Constructive Consumer Choice Processes*, 25 J. CONSUMER RES. 187, 192 (1998); Dale Griffin *et al.*, *A New Look at Constructed Choice Processes*, 16 MKTG. LETTERS 321, 322-23 (2005); Paul Slovic, *The Construction of Preference*, 50 AM. PSYCHOLOGIST 364, 364 (1995).

²⁵⁴ NEFE 2002, *supra* note __, at 20.

²⁵⁵ TAKING OWNERSHIP, *supra* note __, at 3; Federal Reserve Bd., Flow of Funds Account Data.

²⁵⁶ See, e.g., Robert S. Adler & R. David Pittle, *Cajolery or Command: Are Education Campaigns an Adequate Substitute for Regulation?*, 1 YALE J. ON REG. 159, 167 (1983-84) (examining public health and safety education campaigns).

²⁵⁷ When about 6500 credit card holders were warned that they were at risk of delinquency and offered a free online financial literacy course, only 28 (.4%) attempted to log onto the website, and only 2 (.03%) completed the course. Amy Brown & Kimberly Gartner, *Early Intervention and Credit Cardholders 6-7* (Ctr. for Fin. Services Innovation, Jan. 2007). Even when 42,000 delinquent cardholders were offered the reversal of one late fee for taking the course, not even 1% completed it. *Id.*

²⁵⁸ Brown & Gartner, *supra* note __, at 6 & 8.

²⁵⁹ GAO, SOCIAL SECURITY STATEMENTS: SOCIAL SECURITY ADMINISTRATION SHOULD BETTER EVALUATE WHETHER WORKERS UNDERSTAND THEIR STATEMENTS, GAO-05-192, at 3, 6 (Apr. 2005).

²⁶⁰ Seven states—Georgia, Idaho, Illinois, Louisiana, Missouri, South Dakota, Utah—require students to take a personal finance or similar course. See National Council on Economic Education, *Survey of the States: Economic and Personal Finance Education in Our Nation’s Schools in 2007, A Report Card* (June 13, 2007).

²⁶¹ North Carolina Predatory Home Lending Act 2000; Georgia Fair Lending Act 2002.

the “cueing events” theory. The efficacy of these classes is in considerable doubt; as explained above, a prior bankruptcy debtor education program was found to have a small but statistically significant negative effect on consumer outcomes. Forced financial literacy education thus does not look promising.

Against the marketing and sales efforts of the financial services industry, education provided by nonprofits and the government has no chance. The odds are tremendously greater that industry, and not educators, will reach consumers when they are in teachable vulnerable moments. The insurance industry is projected to spend \$980 million in advertising to consumers on the internet in 2007, and the consumer investment and credit industries combined are projected to spend more than twice that much.²⁶² Credit card issuers spent \$7.9 billion on sending 8 billion solicitations to American families in 2006—over 70 per household.²⁶³ Mortgage lenders have spent over \$3 billion since 2000 on television, radio, and print media advertising.²⁶⁴ Mortgage and insurance brokers spend tremendous resources approaching consumers in person to sell their products. The director of one community organization that provides financial education has testified:

... We have tried a number of efforts to copy what [home mortgage] predators do.... You can buy lists of recently divorced people, so we have done mailings to those folks. We have used automated dialers.... You have to keep doing this time after time, month after month.... We once had a subprime lender tell us ... if you take their total marketing and outreach and apportion [it] to loans closed, it's about \$1,500 apiece. We can't compete with that.²⁶⁵

The Defense Department recently concluded its mandatory financial education programs provide little defense against poor credit decisions by service members:

Although the Department of Defense provides extensive financial training, a significant number of Service members ... still fall victim to easy credit widely available around bases or online. Education does not trump the marketing of these loans and the easy availability of quick cash with few questions asked.²⁶⁶

Financial services firms have little economic incentive to provide *effective* financial literacy education. A seller of an easily-understood product that is better in quality or price than competitors' products has an incentive to educate consumers so as to increase market share. But this sales strategy does not work in the financial products market because the products are largely interchangeable—other sellers could offer the same quality product at the same price and reap the benefits of the education without paying the costs. Financial education is thus a classic public good. If one firm were to provide financial education to consumers, those consumers would not be required to give the teaching firm their business. Instead, they could—and with their newfound education theoretically should—go to rival firms that, not having spent their resources on education, would have lower costs of production and could, therefore, undercut the loan price demanded by the teaching firm. Furthermore, as explained above, firms profit from poor

²⁶² Lisa Phillips, Summary of Insurance Marketing Online: Meeting Customer Expectations?, eMarketer.com (Aug. 2007), <http://www.emarketer.com/SiteSearch.aspx?arg=Health%20Insurance>.

²⁶³ Card Mail, Feb 21, 2007, available at http://www.cardtrak.com/news/2007/2/21/Card_Mail; Orvis Card, Feb. 21, 2007, available at <http://www.cardweb.com/cardtrak/news/2007/february/21a.html>; Elizabeth Warren, *You Are Pre-Approved--8 Billion Times*, Credit Slips (Feb. 27, 2007), available at http://www.creditslips.org/creditslips/2007/02/you_are_preappr.html.

²⁶⁴ See Louise Story & Vikas Bajaj, *As Woes Grow, Mortgage Ads Keep Up Pitch*, N.Y. TIMES, Aug. 25, 2007.

²⁶⁵ Testimony of Mike Shea, Executive Director, ACORN Housing Services at 213-14.

²⁶⁶ U.S. Dept. of Defense, REPORT ON PREDATORY LENDING PRACTICES DIRECTED AT MEMBERS OF THE ARMED FORCES AND THEIR DEPENDENTS 45 (Aug. 2006). The Department ultimately concluded lenders should be prohibited from extending credit to service members and their families at more than 36% APR. *Id.* at 50. In 2006, this price cap was enacted into law. Military Personnel Financial Services Protection Act, Pub. L. No. 109-290, 120 Stat. 1317 (2006).

financial literacy. Far cheaper means exist for grabbing market share than attempting effective financial literacy education.

Financial literacy advocates believe that with better marketing they could educate consumers at “teachable” moments through the same methods firms use to sell to consumers at these vulnerable moments. But selling a product requires only that consumers be convinced to buy it, not that they understand it. The seller does not care which cognitive or emotional route the consumer follows to get to the product and therefore can use an array of strategies. In one-on-one selling, as explained above, the salesperson can ascertain which biases the consumer is vulnerable to by trying a variety of sales tactics. One advertisement can play to pro-risk, optimism bias to encourage use of credit card debt by some consumers (“Life Takes Risk. Life Takes VISA®”) and another can play to anxiety or risk-aversion biases to encourage use of credit card debt by other consumers (“With VISA®, You’re Protected.”).²⁶⁷ Ads reach consumer segments through targeted marketing channels tailored to exploit behavioral tendencies. One marketing company uses a vast database of “household level consumer financial behavior” to model the behavior of fifty market segments and then classifies every household in America at the “ZIP+4 level ... as few as five to ten households.” To steer financial product sellers right to the individual consumer, the models are designed to work with data from the three credit repository companies.²⁶⁸

Finally, a seller only needs to convince a consumer to buy a product at a single moment in time, whereas financial education must keep consumers out of trouble all the time. Once a consumer purchases a financial product, penalties, sunk costs, and motivated reasoning kick in, and so any biases the seller must overcome or exploit need only be addressed briefly.²⁶⁹ Financial literacy programs must educate consumers out of their self-defeating biases on a continuous basis, every day, in every situation. But financial literacy education appears to have a very short shelf life. Even consumers who have completed home buyer education can subsequently be “won over by the marketing pitches of subprime lenders.”²⁷⁰ In the contest to reach consumers at teachable vulnerable moments, the deck is stacked in favor of the financial services industry.

* * * * *

Given the foregoing, the failure to find any empirical evidence that the financial literacy education model works is not surprising. In light of the velocity of change in the consumer credit, insurance, and investment marketplace, the innumeracy of much of the population, the prevalence of decisionmaking biases, and the financial advantage held by sellers of financial products, financial literacy education should not be expected to work.

IV. THE COSTS OF FINANCIAL LITERACY EDUCATION

As explained thus far, financial literacy education is not demonstrably effective, and probably never will be an effective solution to consumer finance problems. One reaction might be to ask, even if this education will never be effective, what is the harm in trying? The following sets forth some answers to that question.

A. Paradoxical Effects on Consumer Decisionmaking

A surprising amount of empirical evidence implies that literacy and education can have paradoxical effects—lowering performance on financial tests and increasing

²⁶⁷ See http://www.usa.visa.com/personal/visa_brings_you/advertising/index.html.

²⁶⁸ <http://www.claritas.com/claritas/Default.jsp>.

²⁶⁹ When consumers develop preferences in the course of making a decision (as explained above, a common feature of decisionmaking for financial products), those preferences can be remarkably transient, dissipating in a week or even more quickly. Dan Simon *et al.*, *The Transience of Constructed Preferences*, 21 J. BEHAV. DEC. MAKING 1, 11 (2007).

²⁷⁰ Joint Ctr. for Housing Studies, Harvard Univ., Credit, Capital and Communities (Mar. 9, 2004) at 75.

welfare-impairing financial behaviors. Yet the belief that financial literacy education is effective runs so deep, even well-respected researchers who discover contrary evidence repeatedly misinterpret it as providing support for the value of the education.

For example, the National Association of Securities Dealers found elderly consumer fraud victims to be more financially literate, on average, than elderly nonvictims:

A major hypothesis going into the survey was that investment fraud victims do not know as much about investing concepts as non-victims and would therefore score lower on financial literacy questions. In fact, the study found the exact opposite: investment fraud victims scored higher than non-victims on eight financial literacy questions.²⁷¹

Rather than the conclusion supported by the data, that financial literacy is positively associated with the incidence of fraud, the study asserts “[t]his finding suggests that financial literacy programs are necessary but probably not sufficient to prevent fraud.”²⁷²

A survey commissioned by the State of Washington to study the financial literacy of victims of predatory home lending shows the same pattern. The study tested borrowers who had taken loans from a predatory home lender against a general population sample. As compared to the general population, the predatory lending victims knew more about home mortgages, but less about investments. The author surmises that the group who had taken loans with the predatory lender had “lower financial knowledge” and would benefit from a literacy program.²⁷³ But if these borrowers are already more knowledgeable about mortgages, teaching them more is unlikely to protect them. The results probably reflect financial literacy gained by victims through the “school of hard knocks,” but tell us nothing about how literacy affects the likelihood of victimization.

Studies of education over a longer period of time show no better results. In one, eighteen months of participation in credit counseling had no effect on financial behaviors. The authors admit that “a short-term credit counseling experience and some financial education” is unlikely to improve financial behaviors, but assert without support that credit counseling “can be most effective when there is continuing counseling and education to improve individuals’ financial behaviors.”²⁷⁴ Another study comparing bankruptcy debtors who received financial training with those who did not found, once controls for other differences between the groups were added, the training to have a small negative effect on outcomes.²⁷⁵ Data from the Jump\$tart nationwide survey of high school seniors has consistently shown that financial education does not increase financial knowledge among high school students and that students who take a semester-long personal finance course “tend to do a little worse ... than those who do not.”²⁷⁶

None of these results demonstrate that financial literacy education produces poor decisions. But that more education *could* lead to worse financial behavior is not implausible. Emphasizing the importance of financial literacy may backfire by increasing the stakes and thus, as explained above, mistakes. Because education alerts consumers to the availability of even more financial information and choices, it could

²⁷¹ NAT’L ASS’N OF SEC. DEALERS, NASD FOUNDATION FRAUD STUDY FINAL REPORT 5 (2006).

²⁷² *Id.*

²⁷³ DANA MOORE, SURVEY OF FINANCIAL LITERACY IN WASHINGTON STATE: KNOWLEDGE, BEHAVIOR, ATTITUDES, AND EXPERIENCES 60-61 (Wash. State Univ., Soc. & Econ. Scis. Research Ctr. Technical Report 03-39, 2003).

²⁷⁴ Kim *et al.*, *supra* note __, at 85.

²⁷⁵ Braucher, *supra* note __ [Eds: *Empirical*].

²⁷⁶ Mandell, *supra* note __, at 1. result does not appear to be driven by pre-existing differences in literacy levels between those who do and do not enroll in the courses. See Lewis Mandell & Linda Schmid Klein, *Motivation and Financial Literacy*, 16 FIN. SERVS. REV. 105, 107 (2007) (citing study finding that a well-regarded financial literacy program did not improve student financial behaviors from one to five years after taking the course).

increase information overload, choice overload, and the illusion of knowledge, and thereby decrease decision quality.

Financial literacy programs are not only premised on the idea that consumers can control their financial situation, but promote this belief through their curricula.²⁷⁷ In reality, this education may do no more than increase overoptimism and the illusion of being able to control financial risks. Participants in these programs consistently self-assess as having learned a great deal and having gained confidence,²⁷⁸ but their poor performance on literacy exams indicates that their confidence is misplaced. For example, when well-educated consumers approaching retirement age were given three to five hours of financial training in one-on-one or small group settings, they became more confident in their ability to handle their own retirement planning. However, their performance of financial planning tasks did not improve at a statistically significant level; after the training, they made errors equal to between four and seven years of retirement income. The authors of the study conclude: “These ... findings suggest that commercial financial training seminars may do more harm than good—individuals may feel confident that the quality of their financial planning efforts are sound, despite clear objective evidence to the contrary.”²⁷⁹ With added confidence, consumers are more likely to make decisions for which they lack sufficient expertise, rather than seeking professional financial advice.

Higher financial literacy itself can lead to overconfidence. The National Association of Securities Dealers study finding fraud victims to be more financially literate also found that the victims were more likely to agree with the statement “I rely on my own experience and knowledge to make financial decisions.”²⁸⁰ Other studies have also found that investor fraud victims have a higher than average internal locus of control, meaning that they believe that they have a great deal of control over their own lives.²⁸¹

However, confidence is not a measure of literacy; some of the least knowledgeable consumers appear to be the most confident. Research shows that consumers with high financial literacy exam scores generally correctly perceive their knowledge levels as high, but those with lower literacy exam scores are significantly more confident in their own knowledge than they should be.²⁸² In the index fund investment study described above, the MBAs who reported being “very knowledgeable” about investing made worse investment decisions than all but the MBAs who were least confident.²⁸³ Similarly, high school students who describe themselves as “very thrifty” have lower average financial literacy scores, even on questions about saving.²⁸⁴ In another large sample of consumers, half of the respondents who reported that their financial literacy was at the highest end of the scale did not objectively test within the highest quartile of the sample, and over 15 percent were in the bottom quartile.²⁸⁵ As mentioned above, the portfolios of consumers who are sufficiently confident in their investing acumen to trade frequently underperform the market by much more than the average investor.

²⁷⁷ See, e.g., Stokes & Polansky, *supra* note __, *passim*.

²⁷⁸ See, e.g., U.S. Dep’t of Agric., *supra* note __ (quoting a consumer just finishing a course: “It is amazing how a few changes made me feel empowered. I made a ‘to do’ list and I am determined to get them all checked off.”).

²⁷⁹ Hershey *et al.*, *supra* note __, at 467-68. See also Jason J. Kilborn, *Behavioral Economics, Overindebtedness, and Comparative Consumer Bankruptcy: Searching for Causes and Evaluating Solutions*, 22 BANK. DEV. J. 13, 23 (2005) (“Current ‘debtor education’ programs that focus on money-management skills seem more likely to ... enhance the illusion of control that leads to overconfidence in future borrowing.”).

²⁸⁰ NAT’L ASS’N OF SEC. DEALERS, *supra* note __, at 7.

²⁸¹ AARP FOUNDATION, OFF THE HOOK: REDUCING PARTICIPATION IN TELEMARKETING FRAUD A-11, Fig. C-14 (2003).

²⁸² Agnew & Szykman, *supra* note __, at 62-63, 69.

²⁸³ Choi *et al.*, *supra* note __, at 18.

²⁸⁴ Mandell, *supra* note __, at 5.

²⁸⁵ Lusardi & Mitchell, *supra* note __.

Another widespread problem appears to be consumer misinterpretation of the material taught, leading to worse decisions. For example, some consumers taught to diversify simply divide their retirement savings evenly over a menu of investment choices, regardless of whether these investments are from the same sector.²⁸⁶ Even when their choices are index funds holding approximately the same portfolio of stocks, many will divide their investments evenly among the choices.²⁸⁷ In a number of studies, giving consumers accurate statistical information about health risks led to increased overoptimism.²⁸⁸ Apparently the information became more fodder for the bias.

Finally, inaccurate assumptions can occasionally lead to better outcomes than truth. For example, knowledge about the quality of one's own credit report and score is widely believed to be crucial for personal financial literacy. Congress charged the Financial Literacy and Education Commission with increasing consumer "awareness of the availability and significance of credit reports and credit scores in obtaining credit, ... their effect on credit terms, and the effect common financial decisions may have on credit scores."²⁸⁹ However, borrowers who overestimate their creditworthiness as compared to their credit scores appear to receive better prices on home mortgages than those whose self-assessments are closer to their credit scores.²⁹⁰ Although this could reflect accurate self-assessments of information not accounted for in credit scores, it could also be that overconfidence about credit score leads to increased persistence in shopping and thus to lower prices. A little bit of knowledge may not always be such a good thing.

B. Blaming the Consumer

*Sean Moyer, ... a National Merit Scholar, signed up for a credit card his freshman year at the University of Texas. With a part-time job, he could afford the debt on this card. But without his parents' knowledge, he accumulated a Visa, two MasterCard, and nine other store and gas cards. His parents did not learn that he owed \$10,000 until he moved home to save money and work off his debts. A week before his suicide in 1998, he told his mother that he had no idea how to get out of his financial mess and did not see much of a future for himself.*²⁹¹

Financial literacy advocates, members of Congress, and academics have cited this story, and others like it, as evidence in support of personal finance education.²⁹² But is ignorance of financial topics truly to blame for the suicides and myriad of other problems suffered by over-indebted consumers?²⁹³ Or is the financial literacy policy model part of the problem, not the solution?

The latter question should be taken seriously. As previously noted, American culture has long viewed personal finance decisions as reflecting character traits of responsibility,

²⁸⁶ Shlomo Benartzi & Richard Thaler, *Naive Diversification Strategies in Defined Contribution Savings Plans*, 91 AM. ECON. REV. 79, 96 (2001).

²⁸⁷ *Id.*; Choi *et al.*, *supra* note __, at 15.

²⁸⁸ Weinstein & Klein, *supra* note __, at 138-39.

²⁸⁹ Fair and Accurate Credit Transaction Act of 2003, H.R. 2622, 108th Cong. (2003).

²⁹⁰ Marsha J. Courchane *et al.*, *Consumer Credit Literacy: What Price Perception?*, 60 J. ECON. & BUS. 125, 137 (2008).

²⁹¹ ROBERT MANNING, CREDIT CARDS ON CAMPUS: COSTS AND CONSEQUENCES OF STUDENT DEBT 3 (Consumer Fed'n of Am. 1999). For similar stories, *see, e.g., id.* (story of Mitzi Pool); SCURLOCK, *supra* note __, at 20, 134 (story of Yvonne Pavey).

²⁹² *E.g.*, 147 Cong. Rec. S2184 (daily ed. Mar. 13, 2001) (statement of Sen. Dodd); 147 CONG. REC. S4957 (daily ed. May 15, 2001) (statement of Sen. Dodd); Creola Johnson, *Maxed Out College Students: A Call to Limit Credit Card Solicitations on College Campuses*, 8 N.Y.U. J. LEGIS. & PUB. POL'Y 191, 268-76 (2005).

²⁹³ *See, e.g.,* Sarah Brown *et al.*, *Debt and Distress: Evaluating the Psychological Costs of Credit*, 26 ECON. PSYCHOL. 642, 657-58 (2005) (finding high non-mortgage consumer debt associated with low psychological well-being, and some evidence causality runs from debt to increased psychological distress); James A. Roberts & Eli Jones, *Money Attitudes, Credit Card Use, and Compulsive Buying Among American College Students*, 35 J. CONSUMER AFF. 213, 232 (2001) ("Students with high consumer debt earn poorer grades, drop out of school, suffer from depression, file for bankruptcy, and work more hours to pay their bills.").

trustworthiness, self-control, industry, frugality, and wisdom.²⁹⁴ Consumers are believed to have sufficient control over their financial well-being through their decisions and behavior to be held in moral disapprobation when they are experiencing poor financial outcomes. Financial decisions are either “good” or “bad.” Financial behavior is either “responsible” or “irresponsible,” “healthy” or “unhealthy.” Consumers with late payments, like juveniles who commit crimes, are “delinquent.” Poor financial behavior is seen by some as reflecting mental instability.²⁹⁵

Now that financial products are so complex and fluid that few can understand them well, financial literacy education is a necessary detour on the path to moral blameworthiness. Given the vagaries of the stock market, a consumer’s losing investment strategy would be difficult to characterize as a direct result of her irresponsibility, laziness, greed, or abject stupidity. But with the education model, she can be blamed for failing to become sufficiently expert to handle her retirement savings. Financial literacy education as a policy tool blames the consumer for her own plight, but shifts from an indictment of raw moral character traits to the consumer’s “choice” about whether to attend classes and use the information and skills purportedly taught.

The language used to talk about educating consumers to be financially literate is replete with morally-charged language of responsibility and blame. For example, Freddie Mac’s “CreditSmart” course asserts that “[g]ood credit terms and interest rates are earned.”²⁹⁶ In fact, good credit terms and interest rates are largely a product of wealth, and wealth is largely inherited, either directly or through educational and job opportunities that wealth and class can buy. The materials define credit as:

The ability of a person to borrow money, or obtain goods with payments over time, as a consequence of the favorable opinion held by a lender as to the person’s financial situation and reliability.²⁹⁷

But lenders do not lend on the basis of “favorable opinions” about consumers; they lend because they believe they will make a profit from the transaction. One lending business model is to seek out consumers who are *unreliable* in making regular payments and are, therefore, likely candidates for incurring late fees, over-the-limit fees, and interest charges at high default rates.²⁹⁸

Although many financial education classes are delivered in an encouraging and understanding style, some promote a blame-the-consumer mentality. “There’s right and wrong—you owe it, you should pay it,” as one bankruptcy trustee involved in debtor education explains the philosophy.²⁹⁹ The arguably more financially savvy approach to debt, however, is to weigh the costs and benefits of repayment; one study finding that borrowers who had received counseling were more likely to default strategically (i.e., when their mortgages exceeded the values of their houses), explains that this behavior is costlier for the lender but optimal for the borrower.³⁰⁰

²⁹⁴ American culture is by no means unique in this respect. See, e.g., Mark D. West, *Dying to Get Out of Debt: Consumer Insolvency Law and Suicide in Japan*; U. Rantakeisu, et al., *Unemployment, Shame and Ill Health — An Exploratory Study*, 6 INT’L J. SOC. WELFARE 13 (1997).

²⁹⁵ Gary S. Becker & Casey B. Mulligan, *Deadweight Costs and the Size of Government*, 46 J.L. & ECON 293 (2003) (“Most financial problems are a result of underlying mental health problems...”).

²⁹⁶ FREDDIE MAC, *Module 1: About Credit*, CREDIT SMART CURRICULUM, available at <http://www.freddiemac.com/creditsmart/credit/about.html>.

²⁹⁷ *Id.*

²⁹⁸ See Katherine M. Porter, *Bankrupt Profits: The Credit Industry’s Business Model for Postbankruptcy Lending*, U. Iowa Legal Studies Research Paper No. 07-26 (2007); Caroline E. Mayer, *Bankrupt and Swamped With Credit Offers*, WASH. POST, Apr. 15, 2005, at A1.

²⁹⁹ Braucher, *supra* note __ [Eds: Perspective] at 324 (internal citation omitted).

³⁰⁰ Valentina Hartarska & Claudio Gonzales-Vega, *Credit Counseling and Mortgage Termination by Low-Income Households*, 30 J. REAL ESTATE FIN. & ECON. 227, 239 (2005).

Some programs take a “tough love” approach, teaching consumers to hold themselves responsible for their financial circumstances as a piece with having confidence in their financial self-efficacy. Materials in one of the courses that consumers are required to take as a condition of discharge in bankruptcy state:

[C]onsumers can blame lenders if they want, and those that engage in these practices should be blamed, but “... the fact is that if you are a victim, you have no one to blame but yourself.”...

[A] lender is not doing anything illegal if it “... does all the right things and still charges you interest rates and fees that are higher than you should be paying given your credit history.” ... [T]he lender is “... simply getting you to pay more than you have to. It is no different than shopping for a car and paying more than you would if you bothered to negotiate a lower price.”³⁰¹

With its focus on the responsibility and efficacy of the individual consumer, the financial literacy model absolves financial services firms and policymakers and deflects inquiry away from systemic societal and market failures.³⁰²

Another financial education program used prior to the new bankruptcy law aimed to change debtor “attitudes toward irresponsible spending.”³⁰³ When academics attempted to evaluate this program, those debtors who participated were less likely to respond to follow-up surveys than control group debtors who did not receive the education. The high participant nonresponse rate suggests that despite educators’ intentions to the contrary, the program reinforced participants’ shame about their financial behaviors.

President Bush recently attributed the rising foreclosure rates of 2007 to consumer failure to read the “fine print” on their mortgages, and concluded that “[t]here needs to be financial education measures in place.”³⁰⁴ Defaulting mortgagors surveyed identify job loss, other income reduction, injury and medical problems, home repairs, death in the family, divorce, and credit card mismanagement,³⁰⁵ not failure to read loan documents or lack of financial education, as the cause of their defaults. But financial services firms know consumers fear that society will blame them for their plight. Numerous websites offer to save consumers’ “dignity,”³⁰⁶ by helping them avoid the “stigma and public humiliation” of foreclosure³⁰⁷ and preventing the “embarrassment of ... foreclosure information posted in the local newspaper for friends, family and co-workers to see.”³⁰⁸

Consumers understand the financial literacy education model of consumer protection to mean that they have only themselves to blame for their financial woes.³⁰⁹ Stigma leads them to keep their problems to themselves, rather than seeking help. As one consumer said when explaining her reaction to discovering that a home mortgage lender had slipped a 26 percent origination fee into her loan at closing: “I felt so stupid . . . I couldn’t tell

³⁰¹ LOONIN *ET AL.*, *supra* note __, at 38.

³⁰² See Braucher, *supra* note __ [Eds: *Perspective*] at 330 & n.49.

³⁰³ Weiner *et al.*, *supra* note __, at 351 & 353.

³⁰⁴ Note 2, *supra*.

³⁰⁵ Home Ownership Preservation Initiative, *Partnership Lessons and Results* 24 (Neighborhood Hous. Svcs. of Chi. 2006) [hereinafter, HOPI].

³⁰⁶ Quality Real Estate Investments, LLC, http://qbuyhomes.com/foreclosure___hush___ (last visited Nov. 16, 2007).

³⁰⁷ The Property Solutions Group, http://www.thepropertysolutionsgroup.com/stn01_02_11.php (last visited Nov. 16, 2007).

³⁰⁸ Foreclosure LMS, <http://www.foreclosurelms.com/> (last visited Nov. 16, 2007).

³⁰⁹ In one study of urban suicides over a several year period, about 10% were associated with economic issues, particularly loss of social markers of financial competence such as homeownership and employment. These losses generally would not have impoverished the victims, meaning that humiliation rather than anticipation of material deprivation was the causal link. Steven Stack & Ira Wasserman, *Economic Strain and Suicide Risk: A Qualitative Analysis*, 37 *SUICIDE & LIFE-THREATENING BEHAV.* 103 (2007).

anybody.”³¹⁰ The Defense Department’s credit counseling program is confidential so that service members will not be deterred from participation by public embarrassment or fear that superiors will treat credit problems as evidence of unworthiness for career advancement.³¹¹ Even when financial literacy is irrelevant, the education model makes consumers feel disgraced by poor financial outcomes. One consumer who bought a comprehensive health insurance policy, as any financial education course would have suggested, developed cancer and was charged personally for thousands of dollars of medical expenses her policy should have covered. She was driven into bankruptcy through no fault of her own, but she still felt “devastated and embarrassed.”³¹²

Many consumers who become delinquent on their home mortgage loans do not contact their lender to try to work out some alternative payment plan. More than a third of such consumers responding to one survey reported that the reason they did not contact their lender was because they were embarrassed.³¹³ The media deride “jingle mail”—homeowners who can not afford their mortgages sending the house keys to the lender and moving out—as evidence of insouciance toward homeownership—easy come, easy go.³¹⁴ But if that were true, jingle mail more often would be sent from investment properties, not owner-occupied housing. Contacting the lender to arrange a short sale or deed-in-lieu would be better than a foreclosure for homeowners’ credit reports, but shame leads them to send jingle mail instead.

The reaction of the late Sean Moyer’s parents when he told them about his financial problems reveals these cultural beliefs. Sean’s mother explained that when he told his parents about his financial problems: “His father and I were appalled that he had gotten into so much debt, but we didn’t have an extra \$10,000.”³¹⁵ The “appall” is at the consumer, not at the creditor for extending a full-time college student, without rich parents to support him, \$10,000 in credit. Through the lens of the education model, every consumer financial problem looks like the result of poor decisions by the consumer.

Societal approbation and shame are not only consequences of poor financial straits, they also contribute to poor financial decisions. Although very brief cash-flow problems might be handled wisely using credit cards, Americans are known to try to hide unemployment or other serious, long-term financial woes by keeping themselves afloat on credit card debt that can quickly snowball through high interest rates.³¹⁶

This blame is socially pernicious for a number of reasons. First, it provides a convenient excuse for society to refrain from assisting consumers who are experiencing poor financial outcomes.³¹⁷ As a community affairs officer involved in a financial education program put it:

³¹⁰ Transcript of Record at Day 4, Vol. I, p. 45, *Official Joint Borrowers Comm. v. Lehman Commercial Paper, Inc.*, No. SACV 01-0971-DOC (C.D. Cal. Mar. 2, 2003) (testimony of Velda Durney).

³¹¹ U.S. Dept. of Defense, *supra* note __, at 36.

³¹² Mike Stuckey, *When Staying Alive Means Going Bankrupt*, MSNBC.COM, Aug. 15, 2007, <http://www.msnbc.msn.com/id/20201807/page/2/>.

³¹³ HOPI, *supra* note __, at 25 fig.7. In a Freddie Mac study, about 30% of borrowers who missed a payment admitted they did not contact their lender. Although few identified embarrassment as a causal factor, 11% of delinquent consumers would not admit that they had any difficulty paying their mortgage, perhaps evidence of more extreme embarrassment. FREDDIE MAC, FORECLOSURE AVOIDANCE RESEARCH 6-7 (2005).

³¹⁴ John Leland, *Facing Default, Some Walk Out on New Homes*, N.Y. TIMES, Feb. 29, 2008.

³¹⁵ Margaret Mannix, *The Credit Card Binge: College Students are Engaging in Some Risky Spending*, U.S. NEWS & WORLD REP., Aug. 29, 1999.

³¹⁶ See MANNING, *supra* note __, at 2-3 & 22.

³¹⁷ Karen Gross explains how the education approach “leads to a ‘blame the victim’ type mentality by erroneously assuming that individual knowledge acquisition alone will produce fundamental change in the consumer financial markets, an approach that absolves a wide range of other entities, public and private, from responsibility.” Karen Gross, *Financial Education: Panacea, Palliative, or Something Worse?*, 24 ST. LOUIS U. PUB. L. REV. 307, 307 (2005). But she also concludes that “[a]n educated consumer will, more often than not, make better financial choices,” *id.* at 311, despite lack of good evidence this is true.

What is driving this financial education movement?... Is it the poverty gap in this country?... [W]hat we're asking people ... who make \$20,000 or less is: "Absent us raising your wages in this country, we're asking you to build wealth... We're asking you to save the little amount of money you're making. We're asking you to reduce your debt burden, learn how to manage your money, and clean up your credit history with the little amount of money you're working with."³¹⁸

The financial literacy policy model is also socially pernicious because even as it blames lower wealth consumers and their communities for their financial plight, any benefits of financial education are likely to flow disproportionately to higher wealth consumers. Although supporters claim commitment to the ideal that financial literacy education will raise all boats, middle and high income children have learning environments more likely to teach financial skills effectively.³¹⁹ As public schools have begun offering, and even requiring, personal finance classes, Jump\$tart has reported an overall decline in literacy, but an increase for socially-advantaged subgroups.³²⁰ Those with more income and wealth to begin with can increase their wealth through financial strategies because they have sufficient resources to take high risk-high reward gambles while maintaining a personal safety net.

Even when they are not the population targeted, where a personal finance program is available to all, higher income consumers more frequently enroll in and finish it than lower income consumers. For example, people voluntarily attending an all-day financial education conference sponsored by Money 2000, a federal savings education program, had more income and more education than the national averages.³²¹ When credit card companies offered online education programs to college students, those who participated were wealthier, more educated, and more creditworthy, on average, than the students who declined to take the course.³²² One study of nonprofit agency personnel who learned to teach financial skills suggested that teachers gained more from the program than students because the teachers' prior financial problems were due to a lack of financial management skills, whereas the students' were due to poverty.³²³

At the same time, even if—and especially if—financial literacy education is largely ineffective, higher income groups do not need to suffer from their ignorance.³²⁴ They have resources to hire professional experts such as investment advisors and financial planners to make financial decisions for them. The financial education model paradoxically requires those least equipped for the task to make a host of personal financial decisions, and credits those with higher incomes with "responsible financial behavior" even when they hire professionals to manage their financial decisions for them.

When higher socioeconomic level consumers find themselves in financial difficulty, the assumption that consumers are to blame for their financial problems does not always follow. Tellingly, while blaming consumers facing foreclosure for failing to read their loan documents, the President never mentioned that investors in mortgage-backed securities had failed to read the prospectuses for the billion dollars of mortgage backed securities they bought. These prospectuses provide clear warning to investors about the

³¹⁸ Lyons *et al.*, *supra* note __, at 232 (internal quotation marks omitted).

³¹⁹ Cf., George J. Stigler, *Director's Law of Public Income Distribution*, 13 J. L. & ECON. 1, 1-2 (1970) (explaining how public education primarily benefits the middle class).

³²⁰ Mandell, *supra* note __, at 1.

³²¹ Barbara O'Neil *et al.*, *MONEY 2000 Participants: Who are They?*, 37 J. EXTENSION, Dec. 1999.

³²² Gartner & Todd, *supra* note __.

³²³ Lyons *et al.*, *supra* note __, at 41.

³²⁴ Cf. Braucher, *supra* note __ [Eds: *Perspective*] at 334 ("Those with higher incomes ... may never use budgeting, tracking [income and expenses], ... or other techniques recommended by financial management courses, and yet avoid debt problems.").

risk of foreclosure, even as the borrowers themselves were not warned.³²⁵ The financial educations of investors probably would have helped them understand the warnings in the prospectuses, but their MBAs did not make them any more likely to read or heed them.

C. Time, Expense, and Inefficient Division of Labor

Even if the barriers described above could be overcome, the costs in time, effort, and expense of widely effective financial education would be enormous. In the context of home ownership education and counseling, but applicable to financial literacy programs more broadly, a recent review remarks: “A system that imposes itself to the extent that [this] does on the lives of its beneficiaries should be able to show in compelling fashion that the benefits it provides are commensurate with the level of intrusion and the time and energy devoted by both counselors and participants.”³²⁶ Given the meager plausible returns on financial education, current resources devoted to the project waste millions of hours and dollars every year.³²⁷ Yet, given the magnitude of what the education policy model aims to achieve, these hours and dollars are pitifully few.

Nonprofits that fund and operate financial literacy programs range from national organizations to small local groups. The most well-established is the National Council on Economic Education (NCEE), founded in 1949 with a mission to bring personal finance education to teachers and students.³²⁸ In 2005, NCEE spent \$ 3.5 million directly on its domestic programs.³²⁹ Although \$3.5 million is a significant sum, it equates to only \$50 per school, 50¢ per student, and \$30 per teacher reached. NCEE’s financial fitness for life program is taught in 15 to 22 classroom lessons,³³⁰ time diverted from other subjects.

The federal government promotes financial literacy directly through developing and disseminating educational materials, and distributes millions of grant dollars to fund private-sector financial literacy programs.³³¹ The states promote it primarily through the schools. Personal financial literacy education for public school students is mandatory in some states and school districts and elective in others.³³² Missouri, which requires all high school students to take a personal finance course, pegs the cost in teacher time at approximately \$65.6 million annually, in addition to the cost in student time that would otherwise be spent on other subjects, the cost of materials, and administrative overhead such as classroom expenses.³³³

³²⁵ For example, a 2001 publicly-available securities prospectus acknowledged that loans in its pool “include a teaser rate, i.e., an initial interest rate significantly below the fully indexed interest rate at origination.” As these loans “are underwritten at the teaser rate,” the document warned, “[h]igher risks of delinquency may result” because borrowers who could manage payments at the teaser rate “may not be able to afford the monthly payments when the payment amount increases.” Supplement to Prospectus, Aames Mortgage Trust 2001-4 Mortgage Pass-Through Certificates, Series 2001-4, at S-11 (Nov. 30, 2001), <http://sec.edgar-online.com/2005/09/30/0000911420-05-000433/Section14.asp>.

³²⁶ Mallach, *supra* note __, at 29.

³²⁷ Cf. Dickerson, *supra* note __, at 948 (“[I]t is likely that the cost of mandating and paying for credit-based education for all debtors will substantially outweigh any benefits society receives...”).

³²⁸ NCEE, About NCEE: Who We Are, <http://www.ncee.net/about/> (last visited Nov. 16, 2007).

³²⁹ GRANT THORNTON, REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS 3 (2006), *available at* http://www.ncee.net/about/2005/NCEE_FY_2005_Audit_Report.pdf. NCEE also spent money on overhead, development, and marketing. *Id.*

³³⁰ NCEE, Financial Fitness for Life, <http://fffl.ncee.net/> (additional time is spent on homework) (last visited Nov. 16, 2007).

³³¹ U.S. Financial Literacy & Education Commission, <http://mymoney.gov/>; Financial Education Grants, <http://www.mymoney.gov/grants.shtml> (last visited Nov. 16, 2007).

³³² COLO. REV. STAT. § 22-32-135 (2006); 105 ILL. COMP. STAT. ANN. 5/27-12.1 (2006); LA. REV. STAT. ANN. § 17:282.3 (2006); MICH. COMP. LAWS SERV. § 380.1165 (2006); N.C. GEN. STAT. § 115C-81 (2006); UTAH CODE ANN. § 53A-13-108 (2006); VA. CODE ANN. § 22.1-200.03 (2007).

³³³ COMMITTEE ON LEGISLATIVE RESEARCH OVERSIGHT DIVISION, FISCAL NOTE 3 (2006), *available at* <http://www.moga.mo.gov/oversight/OVER06/fispdf/3898-01N.ORG.PDF>.

Under certain circumstances, adults may also be required to take a financial education course. In 2006, consumers spent approximately three million hours and \$100 million on credit counseling required to file for bankruptcy and financial education required to receive a discharge, three hours and \$100 per debtor.³³⁴ In an effort to circumvent predatory home lending, some states now require education or counseling as a condition of taking on a high-cost loan. For example, Georgia’s Fair Lending Act requires consumers to complete counseling before they can receive a high-cost loan.³³⁵ Typically, the counseling requirement is satisfied by a free, two-hour one-on-one session, although some programs involve a series of group classes.³³⁶

Many financial literacy education programs do not charge a fee, but participants must spend hours in classes, doing homework, traveling to and from the program, etc. Different programs take widely varying amounts of class and homework time. The Department of Agriculture’s Financial Security in Later Life program provides a free, online self-study course which takes only one and a half hours to complete.³³⁷ The Federal Deposit Insurance Corporation’s Money Smart program for adults consists of ten modules, each of which takes one or two hours of classroom time.³³⁸

Similar to the reasons for not hiring an expert financial advisor explained above, lack of resources and information can lead to a rational decision not to participate in voluntary financial literacy programs. Before attending a class, a consumer has little means to determine whether its benefits will outweigh its costs. The literacy programs that advocate increasing savings or homeownership warrant skepticism, given evidence that for low-income families, reducing current consumption to accumulate savings may do more harm than good and moving from renting to homeownership may place them in poorer neighborhood conditions.³³⁹ Opportunity costs of attending “free” personal finance programs are highest for those who have the least money and time to spare, and so they are likely to choose to use that time to work more hours to meet financial needs.³⁴⁰ Participation in voluntary programs, unless high school credit, a lower mortgage interest rate, or some other perk is awarded, is therefore predictably low.³⁴¹

The foregoing describes the quantity of time and money spent on programs today; effective financial literacy education, if it were possible, would require exponentially greater resources. The consensus of those who have taken a hard look at the field is that only long-term, individually-tailored and responsive programs delivered in small classrooms and one-on-one settings might possibly be effective. A Freddie Mac study found home loan education delivered through a series of in-person classes had positive effects, but self-study and telephone counseling were ineffective.³⁴² A Federal Reserve Board Bulletin article surveys the many “challenges for policymakers and educators in designing and delivering financial literacy education to meet the needs of all groups” and concludes that “in an ideal world, financial educators would analyze each individual’s

³³⁴ GAO, *supra* note __, at 26, 30; LOONIN *ET AL.*, *supra* note __, at 15 tbls.2 & 21.

³³⁵ GA. CODE ANN. § 7-6A-5 (2007). Other states have similar requirements. *See, e.g.*, N.C. GEN. STAT. § 24-1.1E (2007) and FLA. STAT. § 420.5088 (2007).

³³⁶ Consumer Credit Counseling Service, Services, <http://www.cccs-wga.com/services.html> (last visited Nov. 16, 2007); *See* ACORN Housing HomeBuyer Program, <http://acornhousing.org/TEXT/homebuying1.php> (last visited Nov. 16, 2007).

³³⁷ University of Minnesota, Take the Road to Financial Security in Later Life, <http://education.umn.edu/projects/fssl/home.htm> (last visited Nov. 16, 2007).

³³⁸ Federal Deposit Insurance Corp., Money Smart—An Adult Education Program, <http://www.fdic.gov/consumers/consumer/moneysmart/overview.html> (last visited Nov. 16, 2007).

³³⁹ John Karl Scholz & Ananth Seshadri, *The Assets and Liabilities Held by Low-Income Families*, Nat’l Poverty Ctr. Conf. (Ann Arbor, MI, Sept. 2007); Shannon Van Zandt, *Racial/Ethnic Differences in Housing Outcomes for First-Time, Low-Income Home Buyers*, 18 HOUS. POL’Y DEBATE 431 (2007).

³⁴⁰ *See* Hilgert *et al.*, *supra* note __, at 319.

³⁴¹ *See, e.g.*, Braucher, *supra* note __ [Eds: *Perspective*] at 327-28 & 334.

³⁴² Hirad & Zorn, *supra* note __, at 323-24.

needs and provide customized training based on that assessment.” But, the authors admit, “such one-on-one interaction is time- and resource-intensive.”³⁴³

One-on-one “education” is not only wildly expensive, it also undermines the case for financial literacy education. The likely reason one-on-one “education”—commonly called counseling or advice—is “effective” is not because it increases financial literacy, but rather because, as explained above, the counselor intervenes on behalf of the consumer or provides specific instructions the consumer can follow without being financially literate. In effect, one-on-one “financial literacy education” is really individualized expert advice, equivalent to providing every consumer with a financial planner. If society is willing to pay for this time- and resource-intensive “education,” it would be better to call it personal financial advice, and avoid the other costs of the financial literacy education model.

Even if every consumer could become her own expert financial advisor, providing consumers free financial advisors would be far less expensive.³⁴⁴ Human capital resources are most efficiently used when, to some optimal degree, people perform those tasks for which they are best suited, whether through training or predilection. Consumers generally do not serve as their own doctors and lawyers and for reasons of efficient division of labor alone, generally should not serve as their own financial experts. The decision of consumers with sufficient means to rely on financial advisors is rational and efficient.³⁴⁵ Consumers with less means might also be acting rationally in deciding not to attempt to become financially literate.³⁴⁶ The gargantuan amount of time and effort necessary for a consumer of average financial literacy to become her own financial expert might yield a lower return when invested in financial education rather than gainful employment.

D. Regulatory Opportunity Costs

The pursuit of financial literacy education has opportunity costs, and not only in the time, money, attention, and effort of consumers and teachers directly involved. Government authorities frequently pull financial literacy education out of their policymaking, regulatory, and enforcement toolboxes. Using this tool can become an excuse for not engaging in the practically formidable task of developing procedural regulation that would effectively match products in the fast-moving financial market with the consumers for which they are appropriate. Rather than offering regulations that would be effective on their own, Governor Mishkin recently explained that the Federal Reserve Board supports financial literacy programs because “[i]mproving consumers’ economic decision making will enhance the effectiveness of new rules and regulations.”³⁴⁷ This tool also side-steps the politically formidable task of enacting substantive regulation likely to make many consumers better off but at the price of making some consumers and much of industry worse off. Financial literacy education creates the illusion of regulation without the costs of regulation.

Counterfactuals are only speculative, but a look at how policymakers have reacted to news of problematic consumer financial products is instructive. For example, when the marketing of expensive life insurance policies that would provide few, if any, benefits to

³⁴³ Sandra Braunstein & Carolyn Welch, *Financial Literacy: An Overview of Practice, Research and Policy*, FED. RES. BULL. 445, 456 (Nov. 2002).

³⁴⁴ Henry Hu has made the same point regarding consumer literacy and individual decisionmaking about investments. Henry T.C. Hu, *Illiteracy and Intervention*, 84 GEO. L. J. 2319, 2326 (1986) (“[E]ven assuming universal literacy is attainable, universal decisionmaking—compelling every individual to gather, process, and act on information over various existing probabilistic asset classes—would be questionable.”).

³⁴⁵ See, e.g., Mariko Lin Chang, *With a Little Help from My Friends (and My Financial Planner)*, 83 SOCIAL FORCES 1469 (2005).

³⁴⁶ Cf. Mandell & Klein, *supra* note __ (finding that students who have goals and beliefs that would tend to make financial literacy less important are less financially literate).

³⁴⁷ Mishkin, *supra* note __.

servicemembers leaving for the Iraq war was publicized, Senators Hillary Clinton and Susan Collins quickly sponsored bipartisan legislation not outlawing these welfare-decreasing policies, but providing servicemembers with financial education and counseling.³⁴⁸ Even when substantive reform legislation is introduced, it languishes in subcommittee while financial literacy initiatives sail through. In 2003, for example, bills proposing consumer financial services reforms, from protecting homebuyers from predatory mortgage lending practices³⁴⁹ to capping payday loans at 36 percent,³⁵⁰ were introduced and referred to subcommittee, but none received a hearing. Conversely, the bill establishing the Financial Literacy and Education Commission moved through both houses to become law in less than three months, including Congress's August recess.³⁵¹

Promoting financial literacy is politically expedient, allowing legislators to both please the financial services industry and campaign as protectors of consumers. One bill regarding home-mortgage escrow accounts tells a story of the watering-down of substantive regulation into consumer protection through educational information. These accounts are monies collected from borrowers by lenders to pay periodic bills for taxes and insurance. In the late 1980s, it came to light that lenders were overcharging borrowers, holding far larger amounts than necessary for escrow, and then keeping the interest earned on the accounts. When Congressman Charles Bennett, then "Congress' leading advocate of tough new consumer protection against lender abuses in home mortgage escrow accounts,"³⁵² first introduced legislation on the topic, it included substantive provisions prohibiting overcharges and requiring lenders to pay consumers interest on their escrow balances. But after the banking industry lobbied against the bill, Bennett introduced a version requiring only that consumers be given an annual explanation of inflows and outflows from escrow accounts, to educate them about potential problems.³⁵³ The Mortgage Bankers Association of America promptly endorsed the new bill, and the Congressman could report back to his constituents that he was sponsoring legislation to protect them.

Regulator reliance on financial literacy education also may come at the cost of effective regulation. For example, one product that has been on the market for at least a decade is the fee-harvesting credit card. These cards carry fees that dwarf the credit they provide, making them financially welfare-decreasing for most if not all consumers. One VISA card with a \$300 credit limit, for example, requires payment of a \$79 application fee, and then, once the card is approved, \$281 in fees are charged to the account. In sum, consumers pay \$360 and have a credit line of \$19 when they receive the card.³⁵⁴ Because few consumers read the fine print, they are unaware how little credit they have and soon rack up over-the-limit fees.³⁵⁵ The business model is lucrative; one issuer charged \$444 million in fees on these cards in 2006 and made a net profit of \$107 million. Although the issuer charged off \$728 million consumers never paid, these debts were mostly the issuer's own fees on cards consumers received and then thought better of using.³⁵⁶ The

³⁴⁸ See Press Release, Senator Susan Collins, Senators Clinton, Collins Announce Senate Passage of Measure to Educate Men, Women in Uniform on Insurance, Other Financial Services (Dec. 22, 2005).

³⁴⁹ Predatory Mortgage Lending Practices Reduction Act, H.R. 1663, 108th Cong. (2003).

³⁵⁰ Payday Borrower Protection Act of 2003, H.R. 2407, 108th Cong. (2003).

³⁵¹ H.R. REP. NO. 108-263, pt. 2, at 1-3 (2003); 149 CONG. REC. 979, 980 (daily ed. Sept. 10, 2003); Fair and Accurate Credit Transactions Act of 2003, Pub. L. No. 108-159, 117 Stat. 1952 (codified at 15 U.S.C. §§ 1601, 1681).

³⁵² Kenneth Harney, *Compromise Reached on Escrow Accounting*, WASH. POST, Aug. 12, 1989 at E1.

³⁵³ *Id.*

³⁵⁴ Lucy Lazarony, *Rotten Deals Target those with Damaged Credit*, BANKRATE.COM, June 10, 2002.

³⁵⁵ *Id.* (quoting Jeanne Hogarth of the Federal Reserve).

³⁵⁶ RICK JURGENS & CHI CHI WU, FEE-HARVESTERS: LOW-CREDIT HIGH-COST CARDS BLEED CONSUMERS 10 (Nat'l Consumer L. Ctr. Rpt., Nov. 2007).

federal government’s response has been to publish consumer education materials, rather than banning these cards.³⁵⁷

Financial literacy education programs have also become a popular component of litigation settlements between firms and government enforcement agencies. Funding for these programs has been accepted as consideration in exchange for settlement in cases alleging discriminatory mortgage lending, fraudulent student loans, deceptive insurance sale tactics, predatory mortgage lending, fraudulent investment advice, etc.³⁵⁸ Again, counterfactuals are speculative, but the consumer welfare returns on these literacy programs might well be lower than the returns that would be generated by using the defendants’ expertise to help develop and/or the defendants’ businesses to experimentally test potential new procedural or substantive regulations. So too, regulator acceptance of firm sponsorship of financial literacy programs for purposes of meeting obligations under the Community Reinvestment Act, analogous state laws, or state licensing schemes,³⁵⁹ comes at the price of other activities that the credit, insurance, and investment industries could be doing to improve consumer welfare in personal finance transactions.

V. CONCLUSION

Financial education can be compared to a road map to the American Dream. I believe that we need to teach all Americans the necessary tools to read that map, so that they can reach the Dream.

— Secretary of the Treasury Paul O’Neill³⁶⁰

The financial literacy education policy model locates the problem of and solution to poor financial outcomes in the consumer, but these might as easily be conceptualized as

³⁵⁷ See, e.g., FEDERAL TRADE COMMISSION, STRAIGHT TALK ABOUT TELEMARKETING 3 (Nov. 2007). (informing consumers “most” advance-fee credit card offers are “scams”). The Commission has pursued issuers of fee-harvester cards for misrepresentations, such as taking application money without issuing any cards (for most consumers, ironically, a better outcome than receiving a card and all of its associated fees). The Seventh Circuit decided a fee-harvester card “offers value to the consumer” in the form of a small amount of credit. *Perry v. First National Bank*, 459 F.3d 816 (7th Cir. 2006).

³⁵⁸ Settlement Agreement and Order Thereon, *U.S. v. Long Beach Mortgage Company*, CV-96-6159 (C.D. Cal. Sept. 5, 1996) (agreeing, as part of settlement of charges of discrimination in mortgage lending, to contribute one million dollars to consumer education programs); Attorney General of Pennsylvania, Press Release in Lehigh Valley College Probe, Feb. 20, 2008, available at <http://www.attorneygeneral.gov/press.aspx?id=3417> (“[T]he civil penalties and costs included in this settlement will be used to help launch a new statewide education program about consumer credit, helping every Pennsylvania family make wise choices about college financing, credit cards, home loans and other financial issues.”); *Met Life to Pay Fine For a Sales Practice*, N.Y. TIMES, Oct. 21, 1998 (describing settlement of deceptive life insurance sale tactics claims as including money for consumer education); News Release, California Department of Corporations Announces Ameriquest Mortgage to Pay \$325 Million and Undertake Compliance Reforms to Settle States’ Investigations, Jan. 23, 2006, available at <http://www.corp.ca.gov/pressrel/06/corp/nr0601.pdf> (announcing as part of settlement of predatory mortgage lending charges, \$30 million that States could use for, e.g., consumer education); Stephen Labaton, *10 Wall St. Firms Reach Settlement in Analyst Inquiry*, N.Y. TIMES, Apr. 29, 2003 (listing \$80 million for investor education as among the settlement terms agreed to by investment firms).

³⁵⁹ A number of examples: For financial institutions subject to the statute, “[financial literacy] activities are often given favorable consideration in examinations for compliance with the Community Reinvestment Act”. Braunstein & Welch, *supra* note ___, at 448. An analogous Connecticut law requires state-chartered financial institutions to serve their communities or be prohibited from accepting state or municipal deposits. §§ 36a-30 *et seq.*, Conn. Gen. Stats. A Health Maintenance Organization applying for a license to sell insurance in West Virginia must submit its “plans for community education and public relations.” <http://www.wvinsurance.gov/forms/company/hmo-foreign-application.pdf>.

³⁶⁰ *The State of Financial Literacy and Education in America: Hrg. Before the S. Comm. on Banking, Housing, & Urban Affairs*, 107th Cong. (2002) (testimony of Paul O’Neil, Secretary of the U.S. Dept. of the Treasury).

part of the “choice architecture”³⁶¹ of consumer financial decisions. Nothing is inherently wrong with either consumers or the modern, complex, and ever-changing financial services marketplace, but the interaction between the two creates welfare-impairing outcomes. Potential general approaches to improve that interaction include enhancing the resources with which consumers approach the market, changing the financial decision environment, or bringing seller incentives in line with consumer incentives. For example:

1. *Affordable Expert Advice*.³⁶² One way to increase the resources with which consumers face the market would be to establish a system of trustworthy expert intermediaries to advise consumers on welfare-enhancing financial products and services, akin to pro bono legal advice. Affordable expert advice might be provided through a publicly-funded, accessible system of neutral financially-trained intermediaries who would advise consumers on financial products and services. Expert financial advice not only would allow consumers to piggyback off of the financial literacy of a professional, creating the societal efficiencies inherent in specialization, but also would reduce consumer anxiety about making financial decisions on their own, alleviating stress and freeing up more mental resources to use to make the decisions well. Expert advice would narrow the choice set presented to individual consumers, simultaneously conserving consumer decisionmaking resources.

Certainly subsidized experts would be costly to the public fisc, and either adding a new intermediary or professionalizing the financial product sales force will add costs to all sales transactions. Yet these measures might well be less expensive than even theoretically effective universal financial literacy education.

2. *Welfare-Enhancing Defaults*.³⁶³ Defaults could be set such that when consumers fail to make personal financial decisions, the retirement, credit, and insurance positions they are left in would be welfare-enhancing for the average consumer. For example, as now permitted but not required by the Pension Protection Act of 2006,³⁶⁴ default rules could place consumers into relatively high retirement savings rates to exploit consumer procrastination in financial planning, one of the effects of mental discounting of tangible costs and benefits over time and uncertainty.

Strong defaults, although not a formal denial of choice, would burden consumer choice with the costs of opting out, but today’s market-set defaults pose the same burden. Welfare-enhancing defaults as opposed to market-set defaults would be more likely to further autonomy, however, because the market will always have an incentive to set defaults that transfer wealth from consumers to sellers, and a decrease in wealth diminishes autonomy.

3. *True Transparency*.³⁶⁵ Financial products could be changed so as to make it easier for consumers to choose among them well. True transparency would require simplifying the financial products available so that costs and benefits would be clear to consumers, despite their decisionmaking biases and low financial literacy levels. The variety, complexity, and sheer number of products available in the marketplace would

³⁶¹ Shlomo Benartzi *et al.*, *Choice Architecture and Retirement Saving Plans* (July 2007).

³⁶² See, e.g., Leslie Parrish & Lisa Servon, *Policy Options to Improve Financial Education: Equipping Families for their Financial Futures*, New America Foundation Issue Brief 11 (June 2006) (“A “Financial Service Corps” of financial and tax advisors, similar in structure to the Army Corps of Engineers or AmeriCorps, should be created to ensure that all Americans have access to financial planning services.”). Cf. Money Advice and Budgeting Service of Ireland, <http://www.mabs.ie/>; Financial Information Service Centres of Ireland, http://www.citizensinformationboard.ie/providers/providers_centres.html (website of Ireland’s public financial advice service).

³⁶³ See, e.g., Cass Sunstein, *Switching the Default Rule*, 77 N.Y.U. L. REV. 106 (2002); Thaler & Benartzi, *supra* note ____.

³⁶⁴ Pension Protection Act of 2006, Pub. L. No. 109-289, 120 Stat. 780 (2006).

³⁶⁵ See, e.g., Willis, *supra* note ____, at 821-23.

need to be reduced. Personal finance education in such a context might be useful, because it does appear that most people can be effectively taught rules-of-thumb. If the products were structured such that a consumer would be able to apply the rule of thumb correctly, the resulting decisions could be good ones. Simplifying the market this way would not be a solution—consumers who do not understand the reasoning behind the rule might be fairly easily swayed by salespeople and their own biases to abandon it—but simplification would be an improvement.

Limiting the ways in which credit arrangements, insurance plans, or investment vehicles could be structured would avoid information and choice overload, giving consumers a realistic opportunity to compare the costs and benefits of the available options. This intervention in the market would reduce consumer choice, yet only decisions made under transparent conditions can be truly autonomous. Moreover, price, term, and quality competition among sellers can only be effectuated by consumers who understand the products' prices, terms, and quality well enough to comparison shop. Absent competition, the market inevitably will function inefficiently.

4. *Aligning Incentives.*³⁶⁶ There are a number of ways in which the incentives of sellers of consumer financial products might be brought into closer alignment with consumers' best interests. For example, sellers might be charged with fiduciary duties to consumers, enforceable through a licensing scheme requiring sellers to be bonded or insured in amounts that might depend on claims history. To prevent conflicts of interest between consumers and salespeople, the latter's salaries might be paid on a flat fee basis. Sellers of investments might be given an interest in the investor's long term well-being through price structures that reflect investment performance over time. The incentives of mortgage sellers, investors, and servicers might be changed by banning prepayment penalties and up-front fees that inhibit borrowers from refinancing with other lenders, allowing borrowers to select their own loan servicers, requiring sellers or holders to compensate communities for the externalities of foreclosure, and abrogating the holder-in-due course doctrine. Insurer incentives might be moved toward insureds' interests by requiring insurers to maintain high policy member satisfaction ratings to continue doing business in a state from year to year.

Incentives might be aligned through detailed regulations tailored for particular products and sales channels or through a broad standard requiring industry to determine how to align incentives. Whether the government could keep up with the market well enough to keep such incentives in place through detailed regulations, and whether consumers could cost-effectively enforce a broad standard, are both open questions. But current vague, difficult-to-enforce fiduciary duties on financial product sellers have not truly tested the potential for aligning incentives.

5. *Products Liability.*³⁶⁷ Seller actions that harm consumer financial welfare could be deterred by imposing liability on sellers when their products cause consumer injury. Financial products, like other consumer products, could be governed by a negligence standard, leaving courts to decide whether the burden of preventing financial injury to the consumer exceeds the magnitude of that injury multiplied by its likelihood of occurring. Strict liability might be imposed on providers of financial products when their products' defects cause consumer injury.

Under this policy model, causation would be difficult to prove, given the host of contributors to any consumer financial injury, but pure comparative negligence principles might be tweaked to limit firms' liability to their proportionate contribution to the damages. This policy response also depends on the ability of consumers to bring actions

³⁶⁶ See, e.g., Lloyd T. Wilson, Jr., *Effecting Responsibility in the Mortgage Broker-Borrower Relationship: A Role for Agency Principles in Predatory Lending Regulation*, 73 U. CIN. L. REV. 1471 (2005); Kurt Eggert, *Limiting Abuse and Opportunism by Mortgage Servicers*, 15 Hous. POL'Y DEBATE 753 (2004).

³⁶⁷ See, e.g., John A.E. Pottow, *Private Liability for Reckless Consumer Lending*, 2007 U. ILL. L. REV. 405.

cost-effectively (perhaps through attorney fees provisions) and often at a time when the consumer is already overwhelmed by financial distress. But products liability principles might prove easier for courts to apply than vague fiduciary duties.

6. *Self-Control Devices*.³⁶⁸ Another possibility is to create more devices through which consumers could control their own to future financial actions, thereby avoiding the effects of time-bias and perhaps protecting themselves against future decisions that might otherwise be made under the influence of stress or persuasive sales tactics. Many such devices already exist—consumers commit to life-insurance and long-term-care insurance policies by putting all their past contributions to these policies at risk if they stop making payments, they have their employers over-withhold taxes, they cut up their credit cards or freeze them in ice, they budget and use savings vehicles that are costly to open (CDs, retirement funds, home equity build-up, piggybanks that must be broken to open), etc. Of course, these devices are optional, and consumers can usually evade their own prior commitments, at a price.

Regulation currently assists or incentivizes consumers to use some of these devices. For example, taxes on retirement funds and home equity savings are deferred and the government collects and distributes over-withheld taxes. But policymakers might design and make available more of these devices to more consumers. For example, rather than giving consumers, particularly those with no other source of income, social security and disability payments in monthly lump sums, the social security administration could pay landlords and utility companies directly with the remainder distributed to beneficiaries on a weekly basis. More generally, the government might create systems through which income flows from employment or pensions more closely matched expense flows for rent or mortgage payments, utility payments, etc. To the extent that funds could be directly moved from income sources to expense creditors, the transaction costs of going through individuals' accounts would be reduced, although to the extent that income sources or expense creditors would need to engage in more transactions, their costs would increase. It appears that little attention has been paid to how regulation might provide consumers with self-control devices, so much more thinking needs to be done here.

7. *Substantive Regulation*.³⁶⁹ Prohibiting the sale of financial products with particular risky or outright harmful components would reduce consumer choice most directly. Because even the most esoteric of financial product structures have some consumers for whom they are appropriate, the cost of that reduced choice would be borne by these consumers. Nevertheless, a marketplace of substantively unregulated financial products also has a price, one currently borne by those consumers who receive financial products that are inappropriate for their needs, and, in some instances, borne by these consumers' communities. Even consumers who purchase good financial products today would be spared the cost of searching through the multitude of poor products currently on the market if substantive regulation were employed.

Each of these approaches would limit “consumer choice” in some respect, yet enhance both consumer financial outcomes and functional autonomy, in terms of reflecting the consumer's own goals and values and providing the consumer with a sense of personal control over her decisions, actions, environment, and life path. These limits on individual choice present the central paradox of the ownership society in the modern marketplace of consumer financial services: to enhance true consumer autonomy, to give consumers more ownership and control over their own daily lives and ultimate destinies,

³⁶⁸ See, e.g., Thaler & Benartzi, *supra* note __ [Eds: *Save More*]; Kurt Eggert, *Lashed to the Mast and Crying for Help: How Self-Limitation of Autonomy Can Protect Elders from Predatory Lending*, 36 LOY. L.A. L. REV. 693 (2003).

³⁶⁹ E.g., Kathleen C. Engel & Patricia A. McCoy, *A Tale of Three Markets: The Law and Economics of Predatory Lending*, 80 TEX. L. REV. 1255, 1260 (May 2002) (proposing suitability requirement for home mortgages); Elizabeth Warren, *Unsafe at Any Rate*, 5 DEMOCRACY 1 (2007).

requires regulatory interventions in that marketplace that limit formal choice. To ultimately have true control over their lives, consumers need to have less formal control over some decisions in their lives.

The failed social policy of financial literacy education denies this paradox, and diverts attention from more creative approaches to improve consumer financial transactions. The challenge now is to develop and implement policies and legal rules that will reshape the consumer financial services market into a landscape conducive to good consumer decisions and outcomes. Such regulatory interventions must navigate the heterogeneity of consumer knowledge, skills, and behavioral traits, taking care not hinder marketplace changes that would enhance consumer welfare. To be successful, each legal intervention will undoubtedly need to be both context-specific and amenable to change as the market evolves. This is a delicate, challenging, time-intensive and costly task, requiring requisition of the resources currently spent on financial education and more.

In an idealized first-best world, where all people are far above average, education would train every consumer to be financially literate and would motivate every consumer to use that literacy to make good choices. The costs of the education model would be low enough and the benefits high enough that empowered citizens of the ownership society could flourish, and more rather than less education would be desirable. Unfortunately, such an education is not possible, or, if it were possible, the price of such an education would be so high as to reduce social welfare. In the real, second-best world, less rather than more financial literacy education may be better.³⁷⁰

The financial literacy education model is premised on the promise of consumer sovereignty, that consumers can be taught to make welfare-enhancing choices in the insurance, credit, and investment marketplace, trained to read and travel “the road map to the American Dream.” Ironically, the model ensures instead the sovereignty of the market. Overtly, the model is an attempt at social engineering, trying to change not only consumers’ skills, but their thought processes, feelings, motivations, and ultimately their values. In the world that financial literacy education advocates, consumers are but wealth maximizers, looking out for their own financial interests rather than shared societal and civic goals. Covertly, the model dupes consumers into thinking they can master the financial services market, while placing blame upon them for their failure to do so, deflecting political pressure for change. But changing the personal finance market or the manner in which consumers must maneuver in it—making the map easier to read and follow, giving them a guide, or building more direct routes to the American Dream—is likely to be more efficacious, and at a lower cost. Consumers can make welfare-enhancing choices, but to be truly autonomous, those choices must be made in a context that consumers can navigate.

³⁷⁰ See generally R.G. Lipsey & Kelvin Lancaster, *The General Theory of the Second Best*, 24 REV. ECON. STUDIES 11 (1956-57).