Against Financial-Literacy Education

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ABSTRACT: The dominant model of regulation in the United States for consumer credit, insurance, and investment products is disclosure and unfettered choice. As these products have become more complex, consumers' inability to understand them has become increasingly apparent, and the consequences of this inability more dire. In response, policymakers have embraced financial-literacy education as a necessary corollary to the disclosure model of regulation. This education is widely believed to turn consumers into "responsible" and "empowered" market players, motivated and competent to make financial decisions that increase their own welfare. The vision created is of educated consumers handling their own credit, insurance, and retirement planning matters by confidently navigating the bountiful unrestricted marketplace.

Although this vision is seductive, promising both a free market and increased consumer welfare, the predicate belief in the effectiveness of financial-literacy education lacks empirical support. Moreover, the belief is implausible, given the velocity of change in the financial marketplace, the gulf between current consumer skills and those needed to understand today's complex nonstandardized financial products, the persistence of biases in financial decisionmaking, and the disparity between educators and financial-services firms in resources with which to reach consumers.

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

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improving ability, leading to worse decisions. When consumers find themselves in dismal financial straits, the regulation-through-education model blames them for their plight, shaming them and deflecting calls for effective market regulation. 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 search for effective financial-literacy education should be replaced by a search for policies more conducive to good consumer financial outcomes.

I. Introduction

Whereas quality personal financial education is essential to ensure that individuals are prepared to manage money, credit, and debt, and to become responsible workers, heads of households, investors, entrepreneurs, business leaders, and citizens;

Whereas increased financial literacy empowers individuals to make wise financial decisions and reduces the confusion caused by the increasingly complex economy of the United States;

Whereas a greater understanding of, and familiarity with, financial markets and institutions will lead to increased economic activity and growth;

. . . .

. . . Now, therefore, be it Resolved, That the Senate . . . designates April 2007 as 'Financial Literacy Month' to raise public awareness about—

(A) the importance of financial education in the United States; and

(B) the serious consequences that may result from a lack of understanding about personal finances . . . .

– United States Senate, March 2007[1]

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 Guide*[2]

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

– President George W. Bush, regarding home-mortgage foreclosure rates, August 2007[3]

Although the cry for financial-literacy education has been audible for decades, the volume has recently increased.[4] Why? Technological advances

1. S. Res. 126, 110th Cong. (2007).

2. NAACP, NAACP FINANCIAL EMPOWERMENT GUIDE 4–5 (2003), http://www.naacp.org/pdfs/finance_fei.pdf.

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

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. The consumer-finance revolution has given Americans more apparent choices and formal control over their financial decisions. But with that choice and control comes added responsibility to make financial decisions well or to face potentially disastrous health and welfare results.

Households today must make more of their own decisions in every personal-finance arena, from credit to insurance to retirement planning. Although defined-benefit pension plans once covered many workers, most retirement plans today, if offered at all, are defined-contribution plans, requiring individuals to decide how much to save and how to invest.[5] Similarly, employer-sponsored health insurance has declined, leaving more Americans to find their own policies.[6] As for credit, lenders once required consumers to show evidence of sufficient income to afford their mortgages, given their other financial obligations. Over the past few years, lenders have offered loans requiring little or no documentation, meaning that borrowers must determine for themselves what payments they can afford, or risk losing their homes.[7]

Largely unfettered consumer choice paired with seller disclosure has been the dominant model of credit, insurance, and investment-product

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, *Next Steps in Consumer Education*, 6 S. ECON. J. 403, 403 (1940) (reviewing INST. FOR CONSUMER EDUC., PROCEEDINGS OF A NATIONAL CONFERENCE ON CONSUMER EDUCATION (1939)). In the last decade, promotion of financial-literacy education has proliferated, both in the United States and abroad. *See* JUMP$TART COAL., FINANCIAL LITERACY: IMPROVING EDUCATION, 2006 NATIONAL JUMP$TART COALITION SURVEY 1 (2006), *available at* http://www.jumpstartcoalition.com/upload/2006%20Executive%20Summary%20Draft%20Final.doc.

5. *See* U.S. GOV'T ACCOUNTABILITY OFFICE, EMPLOYER-SPONSORED HEALTH AND RETIREMENT BENEFITS 28–31, 38 fig.4 (2007) *available at* http://www.gao.gov/new.items/d07355.pdf (describing the move from defined-benefit to defined-contribution plans and noting that employers did not offer 22% of full-time workers and 62% of part-time or seasonal workers employer-sponsored retirement benefits).

6. *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).

7. *Compare, e.g.*, DAVID LISTOKIN ET AL., FANNIE MAE FOUND., THE POTENTIAL AND LIMITATIONS OF MORTGAGE INNOVATION IN FOSTERING HOMEOWNERSHIP IN THE UNITED STATES 27–36, 28–29 tbl.6, 31–33 tbl.7 (2002), *available at* http://www.fanniemaefoundation.org/programs/pdf/fmf_0724_listokin_body.pdf (listing historical loan, borrower, and property underwriting characteristics), *with, e.g.*, *Ending Mortgage Abuse: Safeguarding Homebuyers: Hearing Before the S. Subcomm. on Housing, Transportation, and Community Development of the S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong. 4 (2007) (statement of Michael D. Calhoun, Center for Responsible Lending) (noting that more than a third of loans in a sample of 2007 mortgage-backed-securities offerings lacked documentation of borrower income).

regulation for decades in the United States. As the products have become more complex and the consequences of consumers' inability to understand them more dire, financial-literacy education has become a necessary corollary to the disclosure model. This education is widely believed to turn consumers into active market players, motivated and competent to handle their own credit, insurance, savings, and investment matters. Financial-literacy education is that rare public policy that entices across the political spectrum. Liberals envision an empowered consumer, confidently navigating the marketplace. Conservatives divine a responsible consumer, who understands her decisions and therefore can be held accountable for them. Free-marketers see flourishing innovation and abundant choices.

The vision of financial regulation through education depends on the belief that personal-finance literacy programs not only can improve decisions, but can do so to the degree necessary for individuals to protect and even increase their welfare in the modern financial marketplace.[8] 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-literacy education and are these costs commensurate with the benefits it reasonably can be expected to provide? Is there any alternative but to pursue financial literacy?

My prior work has demonstrated that the belief in the effectiveness of financial-literacy education lacks empirical support.[9] 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—realistically will not 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, financial literacy is not sufficient for good financial decisionmaking; heuristics, biases, and emotional-coping mechanisms that at times 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 sellers enjoy puts firms in a better position to capitalize on

8. 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 that financial education will not help someone propelled into bankruptcy by job loss, medical expenses, or divorce); Katherine Porter & Deborah Thorne, *The Failure of Bankruptcy's Fresh Start*, 92 CORNELL L. REV. 67, 70 (2006) (finding that insufficient income, not financial mismanagement, is the key barrier to long-term financial health).

9. Lauren E. Willis, *Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education*, 46 SAN DIEGO L. REV. (forthcoming May 2009), *available at* http://papers.ssrn.com/abstract=1098270.

decisionmaking biases than educators who seek to train consumers out of them. The confluence of these factors renders financial-literacy instruction dramatically more difficult than education in other life-skills domains, such as language literacy, sex education, or anti-smoking campaigns.[10]

Harboring a belief in the efficacy of financial-literacy education may be innocent, but it is not harmless; the pursuit of financial literacy poses costs that almost certainly swamp any benefits. First, requiring all individuals to act as their own financial experts is inefficient. People are financially illiterate not because they are stupid, but because they have better things to do with their time. The hours of study they would need to invest to attempt to reach literacy are unlikely to generate positive returns. The waste of time and money alone is reason enough not to pursue financial-literacy education. But there appear to be other costs as well. For some, personal-finance classes increase confidence without improving ability, potentially leading to worse decisions. When individuals find themselves in dismal financial straits, the regulation-through-education model blames them for their plight, shaming them and deflecting calls for effective market regulation. Opportunity costs should not be overlooked; a single-minded focus on education inhibits the development 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 personal-finance education. Part V concludes.

II. DOES FINANCIAL-LITERACY EDUCATION WORK?

A. *WHAT IS FINANCIAL-LITERACY EDUCATION?*

Financial-literacy education is education about financial concepts undertaken with the explicit purpose of increasing knowledge and the skills, confidence, and motivation to use it. Although higher education is correlated strongly with increased financial literacy,[11] the regulation-through-education model does not aspire to universal college education. Instead, financial-literacy education is conducted through classroom teaching, self-study materials, informational websites, interactive games, and

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10. This is not to say that the lessons here are entirely inapplicable to other human choices, but that applicability must be assessed through a careful contextual analysis of each domain.

11. *See, e.g.*, Annamaria Lusardi & Olivia S. Mitchell, *Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education Programs*, 42 BUS. ECON. 35, 38 fig.1 (2007) (finding a positive correlation between financial literacy and education level).

the educational component of one-on-one counseling. Programs vary in content, audience, and methodology. But they all aim to achieve financially welfare-enhancing behavior engaged in as the result of acquired financial literacy.

The cognitive components of financial 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 underconfidence nor overconfidence.[13] Individuals' 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 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.[14] Educators consider motivation to use personal-finance knowledge and skills to be a component of financial literacy, and therefore push the claim that future financial happiness depends on exercising good financial behaviors.[15]

Ultimately, people are financially literate only if, given their resource constraints, they have the knowledge, skills, confidence, and motivation to make the decisions and take the actions necessary for financial well-being today.[16] Therefore, the effectiveness of financial-literacy education must be

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12. Jeanne M. Hogarth, *Financial Literacy and Family and Consumer Sciences*, 94 J. FAM. & CONSUMER SCI. 14, 15–16 (2002).

13. *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) (demonstrating that overconfidence leads individual investors to trade excessively, leading to lower returns); LOIS A. VITT ET AL., FANNIE MAE FOUND., PERSONAL FINANCE AND THE RUSH TO COMPETENCE: FINANCIAL LITERACY EDUCATION IN THE U.S. 31 (2000) *available at* http://www.fanniemaefoundation.org/programs/pdf/rep_finliteracy.pdf ("Confidence in one's ability to do a thing successfully increases both the likelihood of undertaking it and the probability of success."). One might call this a "Goldilocks" level of confidence—not too hot and not too cold.

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

15. *See, e.g.*, Lewis Mandell & Linda Schmid Klein, *Motivation and Financial Literacy*, 16 FIN. SERVICES REV. 105, 114 (2007) (suggesting that it is important for teachers to demonstrate to their students that the happiness of their futures can vary dramatically based upon their financial behaviors).

16. *See, e.g.*, NAT'L ENDOWMENT FOR FIN. EDUC., CLOSING THE GAP BETWEEN KNOWLEDGE AND BEHAVIOR: TURNING EDUCATION INTO ACTION (2005), *available at* http://www.afcpe.org/doc/vol1717.pdf (discussing a model for improving personal financial management). Directions for one worksheet from the U.S. Department of Labor booklet *Taking the Mystery out of Retirement Planning* exemplify the government's expectations of consumer proficiency:

measured against the decisions and actions our society and marketplace require. Some of these are simple to understand (even when difficult to implement)—e.g., "absent emergencies, pay bills on time." Others are quite challenging—e.g., do not simply save "something" for retirement, but "save enough and invest it safely yet profitably."

Diagrammed, the financial regulation-through-education policy model appears:

Financial Education → Financial Literacy → Good Financial Decisions & Behavior

B. *WHAT DO WE KNOW ABOUT THE EFFECTIVENESS OF FINANCIAL-LITERACY EDUCATION?*[17]

Although routinely cited by policymakers, industry, literacy advocates, and even academics,[18] studies claimed as support for financial-literacy

> Worksheet C lets you calculate potential growth using a savings growth factor representing 3, 5, or 7 percent rates of return, depending on how much you believe each of the worksheet items will increase in value between now and . . . 10 years [from now]. To get 10-year totals, multiply the amount you believe you will add monthly to IRAs, 401(k)s and other savings instruments by the growth factor you select. The result: the value of your new savings in 10 years.

U.S. DEP'T OF LABOR, TAKING THE MYSTERY OUT OF RETIREMENT PLANNING 47 (2006), *available at* http://www.dol.gov/ebsa/publications/nearretirement.html. How one is to select among a 3, 5, or 7 percent rate of return is left a mystery.

17. This Section summarizes my prior critique of the existing empirical research. *See generally* Willis, *supra* note 9 (detailing the serious weaknesses in studies commonly cited for the proposition that financial-literacy education is effective). Others have recently acknowledged the lack of evidentiary support for financial-education programs. ORG. FOR ECON. CO-OPERATION & DEV., FINANCIAL EDUCATION IN SCHOOLS, UNIVERSITIES AND COLLEGES: ANALYSIS OF SELECTED CURRENT PROGRAMMES AND RECOMMENDATIONS FOR BEST PRACTICE 3 (2008) ("There is, at least as yet, a lack of unambiguous research to demonstrate the effectiveness of financial education programmes for students."); Ian Hathaway & Sameer Khatiwada, *Do Financial Education Programs Work?* 2 (Fed. Reserve Bank of Cleveland, Working Paper No. 08-03, 2008), *available at* http://www.clevelandfed.org/research/workpaper/2008/wp0803.pdf ("[T]he literature does not succeed in establishing the extent of the benefit provided by financial education programs, nor does it provide conclusive support that any benefit at all exists.").

18. *See, e.g.*, A Bill to Promote Youth Financial Education, S. 925, 109th Cong. § 4401(b)(3) (2005) (citing SHARON M. DANES, EVALUATION OF THE NATIONAL ENDOWMENT FOR FINANCIAL EDUCATION HIGH SCHOOL FINANCIAL PLANNING PROGRAM (2004), an evaluation based entirely on participant self-assessments, which are almost certainly biased upward); *Improving Financial Literacy in the United States: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 109th Cong. (2006) (statement of Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System) (citing Michael E. Staten, Gregory Elliehausen & E. Christopher Lundquist, The Impact of Credit Counseling on Subsequent Borrower Credit Usage and Payment Behavior (2003), a monograph in which the authors claimed to have demonstrated empirically that financial education improves credit standing; however, the

education suffer a variety of serious weaknesses. In light of the costs of regulation through education, discussed in detail below, its advocates bear the burden of demonstrating its efficacy. But empirical work to date is weak, the few gains claimed from financial-literacy education have been meager, and some studies report a small negative effect. Financial firms that stand to lose if the programs were effective strongly support them, a position inconsistent with the hypothesis that the education is very effective.

Many studies use data-collection techniques biased toward finding this education to be effective. Most rely on participant self-assessments of whether a course changed their own knowledge, confidence, and behaviors.[19] But people overestimate how much they have learned and how much their future behavior will change.[20] Follow-up surveys suffer from a similar bias because participants are likely, intentionally or unconsciously, to overstate the extent to which they conduct their financial affairs as they were taught they should.[21] High nonrandom nonresponse-rates skew the data in the same direction—those who think they have changed their behavior are more eager to report it, and those who do not are less likely to respond.[22]

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authors now recognize that their data shows no statistically significant effect of financial education on credit outcomes, *see* Gregory Elliehausen, E. Christopher Lundquist & Michael E. Staten, *The Impact of Credit Counseling on Subsequent Borrower Behavior*, 41 J. CONSUMER AFF. 1, 2 (2007) [hereinafter Elliehausen, Lundquist & Staten, *Subsequent Borrower Behavior*]); Howell E. Jackson & Stacy A. Anderson, *Can States Tax National Banks to Educate Consumers About Predatory Lending Practices?*, 30 HARV. J.L. & PUB. POL'Y 831, 844 n.51 (2007) (citing DANNA MOORE, SURVEY OF FINANCIAL LITERACY IN WASHINGTON STATE: KNOWLEDGE, BEHAVIOR, ATTITUDES, AND EXPERIENCES 60–61 (2003), research that found that victims of predatory lenders knew more about mortgages and less about investments than nonvictims, and did not assess any financial-literacy programs). I claim no special insight; I too assumed that financial-literacy education held promise before I examined the research in this area in excruciating detail.

19. For an example of findings based on participant self-assessments, see generally DANES, *supra* note 18 (study of the National Endowment for Financial Education's High School Financial Planning Program).

20. 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 study, employees who reported at the end of a retirement-investing seminar that they would increase their savings generally failed to do so. James J. Choi et al., *Saving for Retirement on the Path of Least Resistance*, *in* BEHAVIORAL PUBLIC FINANCE 304, 335–37 (Edward J. McCaffrey & Joel Slemrod eds., 2006).

21. *See* Roger Tourangeau & Ting Yan, *Sensitive Questions in Surveys*, 133 PSYCHOL. BULL. 859, 863 (2007) (reviewing literature on survey-respondent overreporting of socially desirable behavior). One team of authors who used consumer self-reports to assess financial education 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).

22. *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). For an example of findings based on data strongly suggesting a nonresponse bias, see Richard L. Weiner et al., *Debtor Education, Financial Literacy, and Pending Bankruptcy Legislation*, 23 BEHAV. SCI. & L. 347, 353 (2005) (reporting results from a study in which response rates of the study's two control

Connecting 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.[23]

Second, direct assistance, which often comes bundled with education, could be the cause of positive outcomes rather than education.[24] Assistance can include financial rewards, lowered payments, or special loan programs. 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] Although "[t]he first requirement for credit counseling clients is to cut up all their credit cards and close the accounts,"[26] one frequently cited study claims that a reduction in open accounts is evidence that financial education is effective.[27] Changes in participants' behavior could be due to the programs' noneducative components, all of which are potential policy tools for improving consumer welfare but are not financial-literacy education.

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groups were 56% and 71%, but the rate for the treatment group—the group that received the personal-finance training—was only 34%).

23. For an example of work that relies on respondent recall of exposure to financial education, see Bernheim & Garrett, *supra* note 21, at 1493 ("[B]ecause individuals are presumably more likely to recall (and report) more effective educational efforts, our results may overstate the effects of the average program.").

24. *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, 574–77 (2001) (finding that the positive effect of bankruptcy-debtor education disappeared after controlling for easier repayment plans and other assistance given to the debtors who attended the classes).

For an example of research that does not control for cash assistance, see Mark Schreiner et al., *Asset Accumulation in Low-Resource Households: Evidence from Individual Development Accounts*, *in* CHANGING FINANCIAL MARKETS AND COMMUNITY DEVELOPMENT: A FEDERAL RESERVE SYSTEM COMMUNITY AFFAIRS RESEARCH CONFERENCE 183 (Jackson L. Blanton et al. eds., 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/cca/capubs/homeowner.pdf (suggesting that "the most effective aspect . . . is not the counseling itself but the act of intervention with the lender"); Abdighani Hirad & Peter Zorn, *Prepurchase Homeownership Counseling: A Little Knowledge Is a Good Thing*, *in* LOW-INCOME HOMEOWNERSHIP: EXAMINING THE UNEXAMINED GOAL 146, 148 (Nicolas P. Retsinas & Eric S. Belsky eds., 2002) (comparing classroom homeownership education, which the authors found was effective, to self-study and telephone counseling, which they found were not: "Counseling is specific and tailored to the particular needs of the individual . . . . Classroom counseling also can fall into this category because, although it is administered to a group of borrowers, it too can give borrowers personal attention . . . .").

26. 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).

27. Elliehausen, Lundquist & Staten, *Subsequent Borrower Behavior*, *supra* note 18, at 27.

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 good money management, or may experience less embarrassment or denial stemming from past financial problems.[28] The positive outcomes that participants sometimes experience in financial education could reflect the factors that led these consumers to enroll, factors that would have led them to engage in financial-welfare-enhancing behavior regardless.[29]

Putting aside methodological weaknesses, the improvements claimed have been far shy of the regulation-through-education model's goal. Some investigations report that personal-finance courses increase confidence, but this could reflect overconfidence, not the accurate degree of confidence in one's own knowledge and skills needed for good decisions. Studies employing objective testing of participants attribute less than a single additional correct answer, on average, to participation in financial-literacy education.[30] The questions, moreover, are inadequate to demonstrate whether even a high scorer could make welfare-enhancing financial decisions in today's marketplace. Some questions 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%.[31] Others specify the figures with which calculations must be performed—for example, whether someone with a monthly income of $2000 and expenses of $900 for rent and $150 for groceries who spends another $800 each month would need one,

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28. Recent experimental research documents substantial selection effects. *See, e.g.*, Stephan Meier & Charles Sprenger, *Selection into Financial Literacy Programs: Evidence from a Field Study* 10–13 (Fed. Reserve Bank of Boston, Public Policy Discussion Paper No. 07-5, 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).

29. For an example of research that does not control for self-selection, see E. Thomas Garman et al., *Workplace Financial Education Improves Personal Financial Wellness*, 10 FIN. COUNSELING & PLAN. 79, 84 (1999) (identifying possible self-selection bias in that those who volunteered to participate in the personal-finance workshops already had better budgeting and planning skills than the nonparticipants).

30. *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, 277 (2007); Sharon Tennyson & C. Chau Nguyen, *State Curriculum Mandates and Student Knowledge of Personal Finance*, 35 J. CONSUMER AFF. 241, 253 (2001); Weiner et al., *supra* note 22, at 363.

31. APPLIED RESEARCH & CONSULTING LLC, NASD INVESTOR LITERACY RESEARCH: EXECUTIVE SUMMARY 8 (2003), *available at* http://www.finrafoundation.org/surveyexecsum.pdf (documenting results from the National Association of Securities Dealers investment-knowledge test). The asterisk (*) indicates the answer deemed by the researchers to be correct.

two, three, or four* months to save $600.[32] The policymakers who embrace regulation-through-education expect educated consumers to be able to do far more and to do it in an environment in which the answers are not multiple choice.

A number of reported studies find that personal-financial-management programs have no effect on literacy or behavior and a few find small paradoxical results.[33] 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 personal-finance course "tend to do a little worse . . . than those who do not."[34] Even among students with their own credit cards or who helped pay for car insurance, those who took the courses still performed worse, even on questions about credit cards and car insurance.[35] Longitudinal work comparing a matched sample of former high-school students from a single school district—some of whom had completed a well-regarded, comprehensive, semester-long financial-management course and others who had not—documented similar findings. Between one and five years afterwards, researchers found those who took the course were neither any more financially literate nor any more likely to engage in any better financial behaviors, controlling for age and college attendance, than those who had not.[36]

Education programs for adults also have produced evidence of null or paradoxical effects. A study comparing bankruptcy debtors who received financial training with those who did not found that, once controls for other differences between the groups were added, the training was associated with a small negative effect on outcomes.[37] A program to teach low- and moderate-income consumers about money management and Internet banking ascertained one year afterward that "members of the treatment group were less likely to plan and set future financial goals at follow-up than

32. JUMP$TART COAL., 2008 SURVEY OF PERSONAL FINANCIAL LITERACY AMONG HIGH SCHOOL STUDENTS 2 (2008), *available at* http://www.jumpstart.org/fileindex.cfm (follow "2008 Survey" link). The asterisk (*) indicates the correct answer.

33. Due to the file-drawer effect, there may be other studies that have null results but will never be made public. *See* William D. Wells, *The Perils of N = 1*, 28 J. CONSUMER RES. 494, 496 (2001) (defining the file-drawer effect as the biasing effect on the research literature of the fact that researchers often tuck away in a file drawer studies that did not return an expected relationship).

34. JUMP$TART COAL., *supra* note 4, at 1.

35. Lewis Mandell, *Does Just-in-Time Instruction Improve Financial Literacy?*, CREDIT UNION MAG., SAVINGTEEN SUPP., Jan. 2006, at 7A, 8A. For further discussion of this evidence, see *infra* text accompanying notes 258–82.

36. Lewis Mandell & Linda S. Klein, The Impact of Financial Literacy Education on Subsequent Financial Behavior (Feb. 2008) (unpublished manuscript, on file with the Iowa Law Review).

37. Braucher, *supra* note 24, at 578–79.

they were at baselines," and, compared to the control group, the treatment appeared to have no effects.[38] Other researchers, although not keen to admit it, found evidence that eighteen months of participation in credit counseling had no effect on financial behaviors.[39] Analyses of homeownership education have come to mixed and contradictory conclusions, some of which indicate that the programs analyzed did not produce welfare-enhancing financial behavior.[40]

To be clear, none of these results demonstrate that financial-literacy education produces poor decisions.[41] Correlation does not imply causation. Like the research reporting positive outcomes, none of this research produces strong, replicated, peer-reviewed, large-sample-size results. But none of these studies appear to suffer infirmities that would bias their results toward their null or paradoxical findings.

Finally, the financial-services industry uniformly supports financial-literacy initiatives, both rhetorically and with multimillion-dollar donations,[42] even though customers who exercise welfare-enhancing financial behaviors typically are less profitable for industry. Credit card issuers obtain about 80% 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 on accounts that

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38. Lisa J. Servon & Robert Kaestner, *Consumer Financial Literacy and the Impact of Online Banking on the Financial Behavior of Lower-Income Bank Customers*, 42 J. CONSUMER AFF. 271, 291 tbl.4, 292 (2008).

39. Kim et al., *supra* note 26, at 85 (admitting that their evidence shows that "a short-term credit counseling experience and some financial education" is unlikely to improve financial behaviors, but asserting without support that credit counseling "can be most effective when there is continuing counseling and education to improve individuals' financial behaviors").

40. *Compare* Jonathan S. Spader & Roberto G. Quercia, *Does Homeownership Counseling Affect the Prepayment and Default Behavior of Affordable Mortgage Borrowers?*, 27 J. POL'Y ANALYSIS & MGMT. 304, 324 (2008) (finding that counseling did not reduce default rates, but was associated with more welfare-enhancing prepayment behavior in that counseled borrowers were less likely to pay a prepayment penalty), *with* Hirad & Zorn, *supra* note 25, at 166 (finding that some forms of homeownership counseling can reduce borrower delinquency rates), *and* Valentina Hartarska & Claudio Gonzales-Vega, *Credit Counseling and Mortgage Termination by Low-Income Households*, 30 J. REAL EST. FIN. & ECON. 227, 239 (2005) (finding that borrowers who had received counseling were more likely to default strategically (i.e., when their mortgages exceeded the values of their houses), but less likely to prepay strategically (i.e., when interest rates went down)).

41. *See, e.g.*, Servon & Kaestner, *supra* note 38, at 293–99 (discussing ways in which poor course design and implementation may have caused their null results).

42. *See, e.g.*, CONSUMER BANKERS ASS'N, 2005 SURVEY OF BANK-SPONSORED FINANCIAL LITERACY PROGRAMS 11 (2005), *available at* http://www.cbanet.org/files/OtherNoSearch/2005%2520Financial%2520Literacy%2520Survey%2520Report.pdf (documenting that in 2005 JPMorgan Chase allotted $50 million to financial literacy and home-buyer education programs); Allstate National Programs, http://www.allstate.com/foundation/national programs.aspx (last visited Sept. 22, 2008) (describing Allstate's support of financial and economic literacy programs);

produce only merchant fees.[43] When cardholders engage in better financial behavior, the net effect on the issuer is a decrease in profits.[44] Investment firms derive higher profits from the sale of funds that generate higher management fees, although individual investors are better off with indexed or other low-fee funds.[45] Insurers similarly benefit from policies that cost more and cover less.[46] Yet credit card issuers, investment firms, and insurance companies all support personal-finance education. Even payday lenders 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."[47] In addition, some debt collectors have launched an Internet-based financial-management course even though they *only* make money when borrowers fail to pay their debts on time.[48]

The flaws in research claiming that financial-literacy education is effective do not prove the programs are ineffective—"absence of evidence is

43. U.S. GOV'T ACCOUNTABILITY OFFICE, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DISCLOSURES TO CONSUMERS 67 (2006) [hereinafter GAO, CREDIT CARDS], *available at* http://www.gao.gov/new.items/d06929.pdf. In 2004, nearly half of American households were paying off credit card balances in full each month. *Id.* at 32. Today, in 2008, fewer than 20% of Americans are doing so. Kathy Shwiff, *Credit Card Charge-Off, Delinquency Rates Up in Feb*, DOW JONES NEWSWIRES, Apr. 14, 2008. Median revolving credit card debt for those households that do not pay in full has also recently spiked; in 2004 it was $2200. Brian K. Bucks et al., *Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances*, 92 FED. RES. BULL. A1, A31 (2006). Today, it is closer to $6000. *See* Michael McKinstry, *Sweet! Sweet!*, CARDTRAK.COM, Mar. 19, 2008, http://www.cardtrak.com/news/2008/03/19/sweet_sweet.

44. 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. Kimberly Gartner & Richard M. Todd, Effectiveness of Online "Early Intervention" Financial Education for Credit Cardholders (July 2005) (unpublished manuscript), *available at* http://www.chicagofed.org/cedric/files/2005_conf_paper_session3_todd.pdf.

45. *See* Zvi Bodie, *Teaching Financial Literacy: What the Retail Investor Needs to Know*, *in* INNOVATIONS IN INVESTMENT MANAGEMENT 19, 20–22 (H. Gifford Fong ed., 2008) (describing the conflict of interest between sellers of investment vehicles and consumers). Mutual-fund advertisements rarely mention fees. Bruce A. Huhmann & Nalinaksha Bhattacharyya, *Does Mutual Fund Advertising Provide Necessary Investment Information?*, 23 INT'L J. BANK MARKETING 296, 305 (2005).

46. *See* David Dietz & Darrell Preston, *Home Insurers' Secret Tactics Cheat Fire Victims, Hike Profits*, BLOOMBERG.COM, Aug. 3, 2007, http://www.bloomberg.com/apps/news?pid=20601170&refer=home&sid=aIOpZROwhvNI (reporting increasing numbers of coverage exclusions, systematic underpayment, denials and postponements of claim payouts, and record home-insurer profits).

47. Press Release, Coal. for Fin. Choice, Coalition for Financial Choice Advocates for Basic Rights in Financial Services for All Consumers (Jan. 9, 2007), *available at* http://www.coalitionforfinancialchoice.org/pdf/LaunchOfCFC.pdf.

48. David Streitfeld, *As Debts Pile Up, the Collectors Try to Put on a Friendlier Face*, N.Y. TIMES, Mar. 14, 2008, at A1.

not evidence of absence."[49] The few studies showing no or paradoxical effects mean the verdict is still out. However, this state of the research does suggest that ideology rather than evidence is driving the support for financial regulation through education. Industry support suggests that political interests also play a role.[50] Because good financial decisions by consumers are less lucrative for many industry players, these firms' support is likely predicated, if not on a conclusion that financial-literacy programs are ineffective, then on the premise that these programs are less effective than other regulatory policies industry would otherwise face.

III. IS FINANCIAL-LITERACY EDUCATION LIKELY TO WORK?

As explained, researchers have not empirically validated financial-literacy education's effectiveness as a policy tool. One response to this might be that educators merely have not found the right educational method. Perhaps we need to better tailor the courses to different learning styles and financial needs, add financial questions to high-school exit exams, or start these programs in kindergarten. These changes might be helpful at the margins, but is it plausible that financial-literacy programs would work?

For regulation through education to be an effective public policy, the courses would need to be effective for most consumers most of the time. Examining the skills and biases with which most 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. There are at least four intractable barriers here: the informational asymmetry between sellers and consumers created by the complexity of financial products and the speed with which they change; the very low level of computational abilities possessed by most consumers; widespread decisionmaking biases that impair consumer financial behavior; and the disparity in resources with which industry versus educators can reach consumers.

49. I thank Erik Gerding for this nice turn of phrase.

50. A full exposition of the political economy of financial-literacy education is beyond the scope of this Article. For a related inquiry, see 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.

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.[51]

Information asymmetry between sellers and individual buyers is inherent in such a market. Not only do sellers have access to more information and resources to analyze it, but by the time the latest insurance, credit, or investment developments filter through educators to their students, the marketplace may well have changed. Even if the material taught is not obsolete on arrival, it could become so by the time the consumer attempts to use it.

Technological change—specifically, advances in data collection, storage, and processing—has revolutionized the ability of the financial-services industry to model behavior to forecast more accurately each consumer's future profitability and the risks of each transaction.[52] Insurers, lenders, and investment companies now have the capacity to take millions of data points mined from past accounts, 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, life insurers can compensate for an applicant's refusal to undergo a medical examination, which would have led to a per se rejection in the past, by increasing the policy price or decreasing the expected payout.[53] So too, credit card issuers can model late payment behavior and offer a card with a lower interest rate—and lower annual percentage rate ("APR"),

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51. U.S. FIN. LITERACY & EDUC. COMM'N, TAKING OWNERSHIP OF THE FUTURE: THE NATIONAL STRATEGY FOR FINANCIAL LITERACY, at vii (2006).

52. For a fuller explanation, see Lauren E. Willis, *Decisionmaking and the Limits of Disclosure: The Problem of Predatory Lending: Price*, 65 MD. L. REV. 707, 719–21 (2006).

53. *See, e.g.*, Meg Fletcher, *Shifting Markets Demand Cutting-Edge Ideas*, BUS. INS., June 18, 2007, at A18 (discussing various innovations within the insurance industry stemming from changes in information technology); Linda Koco, *Innovation with Riders—and Without*, 109 NAT'L UNDERWRITER: LIFE & HEALTH 37, 37 (2005) (discussing variable universal life policy permitting underwriting without a medical exam).

because APR does not include late fees—to a consumer projected to pay significant late fees. Although these models are far from perfect—witness the recent subprime-mortgage crisis—they will improve.

Computer-driven modeling allows financial firms to develop an array of niche offerings, each consisting of a cocktail of terms. Seniors are offered over fifty Medicare drug plans in almost every state, some so complex that over thirty pages are needed to explain annual changes in costs and benefits.[54] A single defined-contribution retirement plan can contain dozens of investment funds, each requiring its own novella-length prospectus to explain its holdings and operations.[55] Credit cards carry multiple rates for various types of balances, each of these rates can be variable, and issuers can reset each rate monthly.[56] In such an environment, the line between providing consumers with more choice and control and forcing them to make more choices and exercise more control is thin. For example, one lender, Dime Home Mortgage, sold option adjustable-rate mortgages ("ARMs") that allowed—and required—homeowners to choose not only their monthly payments but also whether their interest rates would be tied to the Cost of Savings Index ("COSI"), Cost of Deposit Index ("CODI"), or Monthly Treasury Average Index ("MTA").[57] Given lack of consumer knowledge about these indices, such "choices" seem designed to overload consumers with options while deftly maneuvering them into a position of full responsibility for any poor outcomes.

Each new structure is theoretically responsive to the needs of different consumer segments, yet the complexity and proliferation of new products impairs the ability of individuals to identify which products are appropriate for them. As a result, products are sold outside the niche for which the products were ostensibly developed. For example, loans structured to have low and then much larger monthly payments—called "2/28" or "exploding" ARMs because payments typically spike after a two-year teaser period—are useful for those with incomes scheduled to increase sharply or expenses expected to decrease sharply. A 2/28 ARM could be perfect for a second-year law student with a law-firm job waiting after graduation or a home purchaser who will finish paying for renovations before the monthly

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54. THE HENRY J. KAISER FAMILY FOUND., MEDICARE FACT SHEET: MEDICARE PART D PLAN CHARACTERISTICS, 2007, at 1; Robert Pear, *Drug Plan Companies Failed to Tell of Changes*, N.Y. TIMES, Dec. 27, 2006, at A18.

55. Gur Huberman & Wei Jiang, *Offering Versus Choice by 401(k) Plans: 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 four and fifty-nine and the median number offered was thirteen).

56. *See* GAO, CREDIT CARDS, *supra* note 43, at 14–15.

57. *See* Dime Home Mortgage Corp., PayOption ARM, http://www.dimehomemortgage.com (last visited Oct. 1, 2006) (page from mortgage-company website, on file with the Iowa Law Review).

mortgage payments increase. Nonetheless, as a 2005 article in *American Banker* explained, "mortgages with the potential for severe payment shocks," which were "once considered niche products," are now sold to households that do not expect an income or expense change.[58] In June 2007, federal banking regulators instructed institutions selling these loans to evaluate the repayment ability of consumers with poor credit histories using the higher, future monthly payment, but did not restrict sale of 2/28 ARMs to borrowers whose income or expenses were expected to change after the two years of low monthly payments.[59]

A similar progression has occurred with investments. Consumers today can invest in vehicles developed for sophisticated investors. The latest "in the growing lineup of new investment products"[60] 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.[61] Yet during this same time period, sophisticated investors claimed they did not understand the derivative products they had purchased in the mortgage-backed-securities market.[62]

These niche offerings are ever-changing, with fresh products regularly replacing existing products in the personal-finance version of planned obsolescence. To stay ahead of competitors—and regulators—consumer-finance innovation has become institutionalized as "product lifecycle management."[63] New products can outpace not only consumer-protection regulation but also tax rules, capital-reserves requirements, or insurance-product mandates. For example, in 2007 the mortgage lender Ditech began selling a product that integrates a home mortgage with a home-equity line

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

59. Statement on Subprime Mortgage Lending, 72 Fed. Reg. 37,569 & n.23 (July 10, 2007). This interagency statement suggests that a monthly payment that jumps from $1531 to $2156 for a borrower earning a steady $42,000 per year is perfectly acceptable, so long as the payment change is disclosed. *Id.* Rough calculations show that after the mortgage payment, FICA, and federal and state income taxes (using Iowa's state income tax), a single filer in this hypothetical would be left with about $900 each month to pay for food, clothing, utilities, medical expenses, insurance, retirement savings, transportation, and other expenses. This seems like a recipe for today's foreclosure crisis.

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

61. *Id.*

62. *See* Alan S. Blinder, *Six Fingers of Blame in the Mortgage Mess*, N.Y. TIMES, Sept. 30, 2007, at C34 (quoting investors who claimed not to have understood the products they bought).

63. Fletcher, *supra* note 53, 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 a similar observation about corporate-finance products).

and a credit card account, making household equity almost entirely liquid and allowing consumers to take additional advantage of the deductibility of home-mortgage interest.[64] 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 $5000 of medical debts, with a 9.9% interest rate during the first year and a 23% interest rate for balances then remaining.[65] For a patient who expects delayed reimbursement of medical costs from an insurer, these cards could be crucial. But while these new products give consumers new opportunities, they also have the side effect of making effective financial-literacy education much more difficult.

Insurance products might appear to be less fluid in light of heavy state regulatory authority over policy terms.[66] Nevertheless, the industry's priority today is bringing new products through the regulatory process to market more quickly. The National Association of Insurance Commissioners 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."[67] 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 that companies file for patent protection on them.[68]

Unless consumers take frequent refresher courses, material they once learned can become outdated and misleading. For example, many older Americans appear to have learned about usury laws, but may be unaware that even state constitutional usury limits no longer apply to most credit cards and home mortgages.[69] As recently as five years ago, savvy consumers knew that pulling their own credit reports could damage their credit

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64. Press Release, Ditech, Ditech Real Life Plan Empowers Customers with Package of Home Finance Solutions (May 21, 2007), *available at* http://www.ditech.com/about/releases.html (follow May 21, 2007 link).

65. Daniel Costello, *Hospital Bills—But with Interest*, L.A. TIMES, Dec. 12, 2005, at F1 (discussing the terms of a Kaiser Permanente credit card).

66. 44 C.J.S. *Insurance* § 479 (2008) (describing state insurance commissioner powers to approve or disapprove policies and provisions within policies).

67. NAT'L ASS'N OF INS. COMM'RS, STATE-BASED INSURANCE REGULATION 4 (2005) (on file with the Iowa Law Review).

68. Koco, *supra* note 53, at 37.

69. *See* Willis, *supra* note 52, at 718, 795 (examining public views on usury laws).

scores.[70] Although many Americans do not know it, this is no longer true, and the better practice is for consumers to obtain their credit reports annually without charge from the major credit bureaus and correct any errors.[71] So too the rules have changed for retirement. It was once "common wisdom" that people should save 10% of their annual income for retirement, but today's projections about longevity and healthcare costs indicate that 10% is unlikely to be enough.[72]

The changeable nature of financial products and the episodic nature of major consumer financial decisions distinguish financial-literacy education from other types of life-skills education.[73] For example, the basic information about how to avoid pregnancy and sexually transmitted diseases does not change much between high-school sex education and the times at which people make decisions about sex. Teaching people linguistic literacy is made easier by virtue of the relative stability of the vocabulary, grammar, and syntax of language. Because people use language daily in speaking, reading, and writing, they are continually exposed to language as it slowly evolves and can learn about linguistic changes incrementally in real time. Further, when people are becoming linguistically literate, they have many opportunities to learn from their mistakes. Between the time consumers attend a personal-finance course and the time they make major financial decisions, products on the market and background financial structures (e.g., the presence of defined-benefit retirement plans or employer-sponsored health insurance) may have changed dramatically.

The velocity of change in the marketplace also means regulators perpetually struggle to keep up. "Information lag" 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.[74] In a quickly changing, complicated environment, regulations—once they are vetted politically and have survived notice and comment—are designed for a market gone by. That regulators cannot keep up with a lightly regulated market does not mean it would be impossible for them to keep up with a

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70. *See* Kay Bell, *11 Credit Report Myths*, BANKRATE.COM, June 16, 2008, http://www.bankrate.com/brm/news/debt/debtmanageguide/report-myths1.asp?caret=3d (discussing myths about consumer credit scores).

71. *See, e.g.*, FED. TRADE COMM'N, FTC FACTS FOR CONSUMERS: YOUR ACCESS TO FREE CREDIT REPORTS (2008), *available at* http://www.ftc.gov/bcp/edu/pubs/consumer/credit/cre34.pdf (same); Bell, *supra* note 70 (providing information on credit reports);; myFICO.com, Credit Inquiries: How Credit Checks Affect Your FICO Score, http://www.myfico.com/CreditEducation/CreditInquiries.aspx (last visited Sept. 17, 2008) (same).

72. Walter Updegrave, *Retirement: How Much to Save*, CNNMONEY.COM, Jan. 8, 2007, http://www.money.cnn.com/2007/01/08/pf/expert/expert.moneymag/index.htm.

73. I thank Chris Sanchirico for this point.

74. Hu, *supra* note 63, at 406 (describing admission by an IRS officer that "financial markets have been inventing new products faster than the Internal Revenue Service can keep up with").

regulated market; if financial products had to be pre-approved like medical devices, for example, the market would have to slow down to the regulators' speed. But in the current regulatory scheme, 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.[75] 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.[76] 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.[77] 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 to spike, putting the borrowers into default and foreclosure.[78]

Although lenders developed option ARMs as a cash-management tool, in 2003 the Comptroller of the Currency acknowledged that these mortgages were being "mass marketed as 'affordability products'" to homeowners who, month after month, made only minimum payments.[79] In 2005, a third of U.S. home-mortgage originations were option ARMs.[80] That same year, consumers with option ARMs defaulted at a rate that surprised regulators, lenders, and mortgage-backed-securities investors.[81] Although

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75. *See* Toni Williams, *Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services*, 29 LAW & POL'Y 226, 233, 240 (2007) (suggesting that 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").

76. BD. OF GOVERNORS OF THE FED. RESERVE SYS., INTEREST-ONLY MORTGAGE PAYMENTS AND PAYMENT-OPTION ARMS—ARE THEY FOR YOU? 3–4 (2006) [hereinafter OPTION ARM HANDBOOK].

77. John C. Dugan, Comptroller of the Currency, Remarks Before the Consumer Federation of America 9 (Dec. 1, 2005), *available at* http://www.occ.treas.gov/ftp/release/2005-117a.pdf.

78. Kenneth R. Harney, *To Avoid Reset Shock, Plan Ahead*, WASH. POST, Aug. 19, 2006, at F1.

79. Dugan, *supra* note 77, at 10. On more than 70% of option ARMs outstanding in 2005–2006, homeowners made only the minimum payment. Mara Der Hovanesian, *Nightmare Mortgages*, BUS. WK., Sept. 11, 2006, at 70.

80. Kenneth R. Harney, *Nightmare Mortgages*, WASH. POST, Dec. 10, 2005, at F1.

81. Defaults were so high in 2005 that ratings agencies started requiring credit enhancements for securities backed by option ARMs. *See* Susan Schmidt Bies, Governor, Fed. Reserve Bd., Remarks at the National Bankers Association Annual Convention (Oct. 12, 2005),

using an option ARM and paying the minimum is a good investor strategy under certain economic and legal conditions, the change in monthly payment caught many owner-occupiers unprepared.[82] Thus, federal regulators knew banks were selling the product predominately outside its appropriate niche no later than 2003 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.[83]

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 that "[h]istory says it's very difficult for policy to keep up with innovation."[84] 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."[85] By March 2008, with the economy diving into recession, he admitted that "regulation needs to catch up with innovation."[86]

If the regulators cannot or do not want to keep up, educators are in no position to do so. One investigation uncovered inaccuracies and confusion in the *Medicare Handbook* purporting to explain the new prescription-drug insurance program for seniors.[87] Another investigation discovered erroneous information taught at the financial-education courses that

available at http://www.federalreserve.gov/BoardDocs/Speeches/2005/200510122/default.htm.

82. Housing investors in nonrecourse foreclosure states who have little equity in their houses can bet on the housing market using option ARMs or 2/28 ARMs with little risk: if prices go up, the investors can sell before the monthly payments increase, and if prices fall, the investors can walk away from the properties, suffering only transaction costs and a derogatory on their credit records. For households who live in their homes, however, the transaction costs of losing a house are high.

83. *See* Press Release, FDIC, Agencies Provide Consumer Information on Nontraditional Mortgage Loans (Oct. 18, 2006), *available at* http://www.fdic.gov/news/news/press/2006/pr06093.html (announcing the availability of the Option ARM Handbook). 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 76.

84. James Kanter, *Paulson Cautions Against Rush to Regulation in Credit Crisis*, N.Y. TIMES, Sept. 18, 2007, at C3.

85. Henry M. Paulson, Jr., Sec'y of the Treasury, Remarks on Current Housing and Mortgage Market Developments at Georgetown University Law Center (Oct. 16, 2007), *available at* http://www.ustreas.gov/press/releases/hp612.htm.

86. Henry M. Paulson, Jr., Sec'y of the Treasury, Remarks on Recommendations from the President's Working Group on Financial Markets (Mar. 13, 2008), *available at* http://www.ustreas.gov/press/releases/hp872.htm.

87. Robert Pear, *Medicare Will Revise Guide to New Benefits for 2006*, N.Y. TIMES, May 22, 2005, at 26.

consumer debtors who declare bankruptcy must take.[88] The problem is not (or not only) a pro-industry bias or poor course design; the best programs suffer neither.[89] But with industry always at least one step ahead of even cutting-edge personal-finance programs, financial-literacy education is chasing a moving target it will never reach.

B. Insurmountable Knowledge, Comprehension, and Numeric-Skill Limitations

The knowledge, comprehension, and skills necessary to make independent, welfare-enhancing decisions in today's personal-finance product marketplace are prodigious. Decisions about credit, insurance, and investments require 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. Financial-literacy education cannot bridge the gulf between the knowledge, comprehension, and skills of most American adults and those needed in today's market.

Efforts to teach consumers the meaning of APR, for example, have failed spectacularly. For forty years, the law has required creditors to use APR to disclose the cost of credit to help consumers compare credit products' prices through a single metric that incorporates both fees and interest.[90] But only 10% of surveyed consumers who had applied for or obtained home loans in the previous five years understood the concept well enough to answer accurately 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.[91] Although people need not know what APR

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88. DEANNE LOONIN ET AL., NAT'L CONSUMER LAW CTR., NEW BURDENS BUT FEW BENEFITS: AN EXAMINATION OF THE BANKRUPTCY COUNSELING AND EDUCATION REQUIREMENT IN MASSACHUSETTS 37 (2007); *see also* ROBERT LERMAN & ELIZABETH BELL, THE URBAN INST., FINANCIAL LITERACY STRATEGIES: WHERE DO WE GO FROM HERE? OPPORTUNITY AND OWNERSHIP PROJECT REPORT NO. 1, at 8 (2006) (noting that some financial-literacy test "correct answers" appear to be incorrect, a possible indicator that the information taught in the classes is also incorrect).

89. For an example of a program developed independently of industry and employing accurate content and the latest in learning theory, see Weiner et al., *supra* note 22.

90. Truth in Lending Act, Regulation Z, 12 C.F.R. § 226.18(e) (2008). The APR is the price of the loan, including interest and fees, expressed as an annualized rate, with the assumption that the loan is held to term (e.g., for a thirty-year mortgage, the APR represents the annual cost of the loan if every monthly payment is made on time over the entire thirty years).

91. 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). An asterisk (*) indicates the correct answer. Technically, some APRs in a very-low-index-rate environment can be lower than the loan-contract interest rate, due to the way in which the regulations governing the

means to learn a rule of thumb to shop for the lowest APR,[92] 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 would not help them choose between two loans with the same APR and term but different combinations of points, fees, and interest.[93] 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. Although "pension" once meant a defined-benefit plan, now it also includes defined-contribution plans; this may explain why half of plan enrollees either do not know or are mistaken about the plan type in which they are enrolled.[94] Even twenty-five years ago, when financial products were simpler, a review of life-insurance policies found that their technical language and tabular format placed their readability somewhere between *The Wall Street Journal* and

calculation of APR apply to mortgages with a fixed interest rate for a period of time followed by an adjustable rate tied to an index. However, at the time of and before the survey, APRs were consistently higher than loan contract interest rates. For an explanation of how the APR can be lower than the interest rate when indexes are particularly low, see Jack Guttentag, Interest Rate Above APR on Adjustable Rate Mortgage? (Apr. 8, 2004), http://www.mtgprofessor.com/A%20-%20ARMs/rate_above_APR_on_ARM.htm.

92. Many but not all consumers, when provided with the APR, do appear to shop for consumer credit using a lowest-APR rule. *See* Victor Stango & Jonathan Zinman, *Fuzzy Math, Disclosure Regulation and Credit Market Outcomes* 6, 30 (Tuck Sch. of Bus. at Dartmouth, Working Paper No. 2008-42, 2007) (showing that many borrowers did use the lowest-APR rule).

93. Unless the borrower holds the loan to term or the lender collects the loan price entirely through interest, the APR understates the price that the borrower pays. Because the APR is calculated as if a borrower paid a proportionate share of the fees and points each year (so, for a thirty-year loan, the APR represents interest plus 1/30th of the fees and points), a borrower who moves after five years and prepays a thirty-year mortgage has paid a much higher effective APR over those five years (the borrower would have paid only 1/6th of the total interest that the lender would have charged on a loan held thirty years, but all of the points and fees; the effective APR would include 1/5th of the fees and points). As an example, take a $100,000 fixed-rate thirty-year mortgage. If the interest rate is 6.5% and the lender does not charge points or fees, then the APR is 6.5% regardless of how long the borrower holds the loan. If the interest rate is 6% and the borrower pays $4000 in fees and points, then the disclosed APR is 6.39%, but if the borrower prepays the loan after five years, the effective price expressed as an annual rate the borrower has paid is 6.98%. The loan with the 6.39% disclosed APR is more expensive for the borrower who prepays in five years than the loan with the 6.5% disclosed APR. Jack Guttentag, *Making Mandatory Mortgage Disclosure Effective: Some Guidelines*, HOUSING FIN. INT'L, Dec. 2002, at 37, *available at* http://www.housingfinance.org/pdfstorage/hfi/0212_USA.pdf.

94. Alan L. Gustman & Thomas L. Steinmeier, *What People Don't Know About Their Pensions and Social Security* 10–13, 45 tbls.3A, 3B, 3C & 3D (Nat'l Bureau of Econ. Research, Working Paper No. 7368, 1999).

Einstein's *The Meaning of Relativity*.[95] A more recent 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.[96]

Personal-finance decisions routinely require searching for information, much of which must be extracted from text to be useable. Federal regulators, for example, in 2007 issued the following illustration of what sellers of interest-only or payment-option ARMs should provide to "assist consumers in their product selection decisions."[97]

SAMPLE MORTGAGE COMPARISION *(Not actual loans available)*			
Sample Loan Amount $200,000 - 30-Year Term - Interest Rates for Example Purposes Only			
	Traditional Fixed Rate Mortgage (7%)	**5-Year Interest-Only ARM (initial rate 7%; maximum rate 12%)**	**Payment-Option ARM (rate in 1st month 2%; variable rate after 1st month (starting at 7%); maximum rate 12%)**
REQUIRED MONTHLY PAYMENTS			
Years 1 - 5	$1,331	$1,167	$739–$987 (increasing annually)
Year 6 - if rates do not 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

For many Americans, this illustration would not be illuminating. When faced with tables or graphs, people have difficulty understanding the

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

96. GAO, CREDIT CARDS, *supra* note 43, at 38.

97. Illustrations of Consumer Information for Nontraditional Mortgage Products, 72 Fed. Reg. 31,825, 31,826, 31,830 illus.2 (June 8, 2007).

information, extracting figures, and performing implied arithmetic operations.[98] Only a fifth of American adults have the quantitative literacy to, for example, take a label containing the price and number of ounces of a jar of peanut butter and determine the cost per ounce of the peanut butter.[99] Better disclosures could help at the margins, but unless financial products themselves are simplified and standardized, they will inevitably require complex detailed disclosures.

Evaluating financial courses of action often requires multiplication, division, compounding, and amortization calculations. Even with calculating aids, consumers need sufficient understanding of the underlying concepts to know which calculations to make. In a 2006 survey, however, over 80% 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?"[100] Nearly half of the respondents did not understand compounding interest and many others could not multiply and add well enough to calculate 10% interest on $200 over two periods (i.e., $242).

Many personal-finance decisions require facility with fractions and percentages, but people often treat all numerical values as whole positive integers.[101] In an experiment giving subjects investment-returns information in percentage terms (shares that had been $1.00 "experienced a 19 percent decrease") or in dollar terms (shares that had been $1.00 "decreased by $0.19"), subjects were more likely to take action (sell the stock) in response to the percentage information than the dollar format, perhaps responding to the percentage term as if it were a whole integer.[102] Sometimes people ignore fractional amounts entirely, treating a 10% and a 10.8% interest rate as identical even though a $240,000 thirty-year fixed-rate mortgage at 10.8% costs over $50,000 more than the same loan at 10%.[103] Virtually all financial

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98. *See* Iddo Gal, *Systemic Needs in Adult Numeracy Education*, 12 ADULT BASIC EDUC. 20, 23 (2002) (surveying large-scale studies showing that people have difficulty coping effectively with a range of mathematical tasks).

99. IRWIN S. KIRSCH ET AL., NAT'L CTR. FOR EDUC. STATISTICS, ADULT LITERACY IN AMERICA 99 (2002), *available at* http://nces.ed.gov/pubs93/93275.pdf.

100. Lusardi & Mitchell, *supra* note 11, at 37.

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

102. Enrico Rubaltelli et al., *Numerical Information Format and Investment Decisions: Implication for the Disposition Effect and the Status Quo Bias*, 6 J. BEHAV. FIN. 19, 21 tbl.1, 23 (2005).

103. *See* DEHAENE, *supra* note 101, at 80 (discussing how retailers mark price tags at $399 instead of $400 because they know that many customers think of this price as being "about 300 dollars"); Nicholas Wonder et al., *The Financial Rationality of Consumer Loan Choices: Revealed Preferences Concerning Interest Rates, Down Payments, Contract Length, and Rebates*, 42 J. CONSUMER AFF. 243, 267 (2008) (finding evidence that consumers focus on only the *first* digit of monthly payment figures when evaluating loan repayment plans). Calculations performed using

products contain multidimensional price attributes, yet prices not stated as a single, set dollar amount often perplex consumers.[104]

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.[105] At the extreme, someone who easily distinguishes between $250 per month and $300 per month for health insurance could fail to appreciate the difference between a $252,000 and a $259,000 mortgage after a $7000 broker fee is added. Large dollar values can be too big to comprehend for those who rarely encounter them,[106] yet people frequently must make major personal-finance decisions 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 sixty-five.[107]

Important financial decisions require reasonably accurate forecasts based on probabilistic information.[108] 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.[109] They also average probabilities of independent events when they should add.[110] Poor decisions are the unsurprising result. For example, the probability of becoming sick with any particular major illness is usually small, but the collective probability of becoming sick with at least one such illness is much higher.[111] Discounting small risks to zero or averaging across small risks can make the

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Bankrate.com's mortgage calculator. Bankrate.com, Mortgage Calculator, http://www.bankrate.com/brm/calculators/mortgages.asp (last visited Sept. 2, 2008).

104. Hooman Estelami, *Strategic Implications of a Multi-Dimensional Pricing Environment*, 12 J. PRODUCT & BRAND MGMT. 322, 322 (2003).

105. DEHAENE, *supra* note 101, at 76.

106. Amos Tversky & Daniel Kahneman, *Introduction*, *in* JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 3, 3 (Daniel Kahneman et al. eds., 1982).

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

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

109. Baruch Fischhoff & Wändi Bruine de Bruin, *Fifty-Fifty = 50%?*, 12 J. BEHAV. DECISION MAKING 149, 160 (1999).

110. JONATHAN BARON, THINKING AND DECIDING 146, 372 (2008) (citing studies).

111. Neil D. Weinstein, *What Does It Mean to Understand a Risk? Evaluating Risk Comprehension*, 25 J. NAT'L CANCER INST. MONOGRAPHS 15, 17–18 (1999).

collective probability of needing medical care, which most consumers underestimate,[112] 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.[113] 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.[114]

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 sixty-two 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.[115] It is implausible that financial-literacy education could impart the knowledge, comprehension, and skills consumers need to do what society and the marketplace currently demand.

There never was a halcyon day when consumers had more financial knowledge and skills, but there was a time when knowing rules of thumb was sufficient to make many financial decisions. For example, a rule of thumb to spend no more than 28% of monthly income on mortgage payments was not too difficult to apply (once the consumer overcame the hurdle of calculating

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112. 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.

113. Robert N. Mayer et al., *Cues of Credibility and Price Performance of Life Insurance Comparison Web Sites*, 39 J. CONSUMER AFF. 71, 88–89 (2005) (explaining that to use life-insurance comparison-shopping websites, consumers need information not only about the policies offered but also about the credibility of the websites, and finding that cues used by consumers to determine website credibility did not reflect the quality of the life-insurance policies offered).

114. CERTIFIED FIN. PLANNER BD. OF STANDARDS, INC., GUIDE TO CFP® CERTIFICATION 5 (2006).

115. U.S. DEP'T OF LABOR, *supra* note 16, *passim*.

the 28% limit) when mortgages had monthly payments that were either level or did not change very much. To apply such a rule today is significantly more complicated, when consumers face mortgages with variable and uncertain future monthly payments. Similarly, the rule of thumb that during retirement one needs 80% of pre-retirement income applies in a straightforward manner to a defined-benefit plan with a guaranteed monthly payout. But to apply the rule to a defined-contribution plan requires a plethora of information about rates of return on investments over time and compounding calculations that many people find challenging. Even in choosing among government insurance plans, rules of thumb are no longer enough. A Kaiser Family Foundation Report explains:

> [T]here are no obvious "right" choices for Medicare beneficiaries. Spending is often lower in [HMOs], but this is not always the case. Forgoing supplemental coverage could save money—but only if a beneficiary remains healthy. Scope of coverage provided by supplemental insurance is often a more important determinant of total out-of-pocket costs than are premiums, but often difficult for consumers to assess and compare.[116]

Again, financial-literacy education faces some unique challenges here. It is not easy to read, write, and speak English, but we expect people to be able to read the popular press, not medical studies, legal decisions, or accounting ledgers.[117] Basic financial knowledge and skills are not enough to equip Americans to handle their finances today. Even financial behaviors that sound simple to do are often difficult. Teaching consumers not to buy any financial product they do not fully understand, if taken to heart, would mean some consumers would not buy insurance, invest, or borrow at all; this would not be good financial behavior. Consumers who truly followed a message to buy only what they need would bring our economy to its knees. Yet a message to buy prudently or not spend excessively hits a normative wall because we have no social agreement on what prudent and excessive mean in the context of money management.[118] Instructing them never to pay late, exceed their credit limits, or overdraft and to always pay their credit card balance off each month could be a poor lesson in some circumstances. Some emergency expenditures, such as for car repairs or medical care necessary to retain employment, call for a violation of these rules. Further, the mechanics of never spending more money than you have are extremely difficult to

116. RANI E. SNYDER ET AL., THE HENRY J. KAISER FAMILY FOUND., PAYING FOR CHOICE: THE COST IMPLICATIONS OF HEALTH PLAN OPTIONS FOR PEOPLE ON MEDICARE 7 (2003).

117. This is not to say that we are entirely successful here; the median American reads at a ninth-grade level, meaning that many cannot fully understand the popular press. GAO, CREDIT CARDS, *supra* note 43, at 38.

118. *Cf.* Braucher, *supra* note 24, at 563 (describing the lack of consensus about what constitutes appropriate financial behavior); Willis, *supra* note 9, at 14 (same).

implement. In the modern world, it is not possible to track every expense in real time—even turning on heat or lights usually produces an unknown bill.

Public education campaigns work, to the extent they work at all, when the message is similar to a rule of thumb—simple, universal, and clear. Anti-smoking campaigns, for example, can be effective because "do not smoke" is a uniform and easy rule to apply. Simple financial-education slogans such as Freddie Mac's "Don't Borrow Trouble" campaign[119] are useless without a host of additional specific directions, such as how to identify a troublesome mortgage, how to avoid committing to one, and how to obtain one that is not troublesome. "America Saves" may convince some to save more, but it does not help them if they invest the savings poorly.[120] Applying these directions requires more knowledge and skills than financial-literacy education is likely to impart.

C. *THE PREVALENCE OF BIASES IN PERSONAL-FINANCE DECISIONMAKING*

1. The Intangible-Transaction-Costs Schematic

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.[121] Psychologists and behavioral economists have catalogued a host of "biases" apart from skill or information deficits that can interfere with decisionmaking. These include tendencies to overweight or underweight various considerations when making a decision;[122] "heuristics" that reduce complex decision tasks "to simpler judgmental operations";[123] attraction to decisions that superficially appear consistent;[124] coping mechanisms that avoid or limit emotional discomfort during decisionmaking;[125] and visceral drives (hunger, pain, fear) that overwhelm reasoning.[126] Unlike knowledge, comprehension, and skill limitations, these "biases" affect us all—Nobel laureate economists, sophisticated investors,

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119. *See* Freddie Mac, Don't Borrow Trouble: Helping People Avoid Predatory Lending Practices, http://www.dontborrowtrouble.com (last visited Sept. 2, 2008).

120. *Cf.* LERMAN & BELL, *supra* note 88 (making the same point).

121. *Cf.* James A. Fanto, *We're All Capitalists Now: The Importance, Nature, Provision and Regulation of Investor Education*, 49 CASE W. RES. L. REV. 105, 127–30 (1998) (explaining that effective investor education must train people to overcome their biases).

122. Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, *in* CHOICES, VALUES, AND FRAMES 17, 34–38 (Daniel Kahneman & Amos Tversky eds., 2000).

123. Tversky & Kahneman, *supra* note 106, at 1.

124. Eldar Shafir et al., *Reason-Based Choice*, *in* CHOICES, VALUES, AND FRAMES, *supra* note 122, at 597, 600.

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

126. George Loewenstein, *Out of Control: Visceral Influences on Behavior*, 65 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 272, 272 (1996).

and MBA students are not immune.[127] Although biases affect us all, they do not skew our decisions universally, unidirectionally, or uniformly,[128] and so cannot be easily countered with compensating rules of thumb.

What causes these biases? 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.[129] But "intangible transaction costs"[130] 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,[131] and energy required to inhibit visceral drives that would otherwise derail the process. Making financial decisions typically requires both reasoning and self-control. But these appear to be performed by the same area of the brain, which has limited resources. For example, subjects performing a difficult cognitive task on average had less self-control when given an opportunity to select cake or fruit than subjects performing an easy cognitive task at the time.[132] Teaching consumers to engage in cognitively complex financial decisionmaking could ironically reduce willpower, potentially leading to poor consumption decisions about not only calories but also finances.

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127. *See, e.g.*, Donald C. Langevoort, *Selling Hope, Selling Risk: Some Lessons for Law from Behavioral Economics About Stockbrokers and Sophisticated Customers*, 84 CAL. L. REV. 627, 682–85 (1996) (describing ways in which stockbrokers exploit biases of sophisticated investors for gain); Peter G. Gosselin, *Experts Are at a Loss on Investing*, L.A. TIMES, May 11, 2005, at A1 (finding that winners of the Nobel Prize in Economics do not manage their retirement investments well and quoting Nobel Laureate George A. Akerlof, in admitting that he had left retirement funds in money-market accounts, as stating "'I know it's utterly stupid'"); James J. Choi et al., *Why Does the Law of One Price Fail? An Experiment on Index Mutual Funds* 15–18 (Nat'l Bureau of Econ. Research, Working Paper No. 12261, 2006) (reporting experiments, discussed further *infra*, in which MBA students' biases overrode their knowledge and training).

128. *See, e.g.*, Willis, *supra* note 52, at 759–61.

129. *See generally* Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99 (1955) (setting forth the seminal model of decisional processes that includes information search and processing costs); Jeff Sovern, *Toward 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).

130. Willis, *supra* note 52, at 754–59 (offering the intangible-transaction-costs schematic as integrating the heuristics, biases, and emotional-coping decision theories developed by psychologists and economists).

131. Cognitive dissonance is an uncomfortable feeling caused by holding two thoughts sensed to be logically inconsistent. *See generally, e.g.*, LEON FESTINGER, A THEORY OF COGNITIVE DISSONANCE (1957).

132. Colin Camerer et al., *Neuroeconomics: How Neuroscience Can Inform Economics*, 43 J. ECON. LITERATURE 9, 40 (2005). So too, when experimenters manipulated subjects into a cognitively depleted state by having them perform a cognitively difficult task, they exercised less self-control and predicted that they would be less likely to invest in a 401(k) retirement-savings plan. Elizabeth Howlett et al., *The Role of Self-Regulation, Future Orientation, and Financial Knowledge in Long-Term Financial Decisions*, 42 J. CONSUMER AFF. 223, 237 (2008).

Cognitive- and emotional-resource outlays usually are invisible during decisionmaking. People do not make conscious tradeoffs between intangible expenses—for example, the emotional cost of considering one's own mortality when choosing whether and how much life insurance to buy—and tangible benefits—for example, obtaining the best priced 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.[133] People minimize cognitive effort by relying on heuristics and allowing biases to simplify decisionmaking. 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 can be futile, and can even deepen the effects of biases on decisions.

Personal-finance decisionmaking triggers these biases ubiquitously, although their effects on the ultimate decision made vary from consumer to consumer. 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 among 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.

There is no evidence that financial-literacy education can change people's biases, nor evidence of much effort by educators to do so. Even if financial-education programs tried to reduce or eliminate decisionmaking biases, the evidence on debiasing indicates that such an attempt would have little positive effect.

2. Overwhelming Information and Choices

Americans today are drowning in financial choices and detailed information about every one of them. Too many choices and too much

133. *See, e.g.*, Camerer et al., *supra* note 132, at 26 (explaining that people interpret their choices as the product of cognitive deliberation even when caused by automatic affective responses); Richard E. Nisbett & Timothy DeCamp Wilson, *Telling More Than We Can Know: Verbal Reports on Mental Processes*, 84 PSYCHOL. REV. 231, 231–32 (1977) (finding that people cannot access their reasoning processes but perceive their post hoc constructions to be based on such access).

information can be as harmful as too few and too little for reasons collectively called "information overload" and "choice overload."[134]

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 are high, consumers frequently do not even attempt to use a rational decisionmaking strategy. For example, increasing the number of retirement-investment-fund choices in a defined-contribution plan 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 the plan at all.[135] When advertising from a small loan lender described a single loan choice rather than a variety of loan sizes and term lengths, individuals were more likely to borrow; the effect of simplifying by describing only a single alternative increased the likelihood of borrowing to the same degree as a 2.3% drop in *monthly* interest rates.[136] 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% of insureds reported considering only a single insurance company and nearly as many allowed the salesperson to select their policy for them. Faced with choice overload, people "*chose not to engage in decision making.*"[137]

134. Sheena S. Iyengar & Mark R. Lepper, *When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?*, 79 J. PERSONALITY & SOC. PSYCHOL. 995, 996 (2000) ("[A]s both the number of options and the information about options increases, people tend to consider fewer choices and to process a smaller fraction of the overall information available regarding their choices . . . ."); Herbert A. Simon, Richard T. Ely Lecture at the Ninetieth Annual Meeting of the American Economic Association: Rationality as Process and as Product of Thought (Dec. 28–30, 1977), *in* 68 AM. ECON. REV. 1, 13 (1978). Even a small amount of information and a few choices can cause overload. In one experiment, consumers given information about eleven attributes of six 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, 64–66 tbls.7 & 8 (2005).

135. *See generally* Sheena Sethi-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 83 (Olivia S. Mitchell & Stephen P. Utkus eds., 2004); 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, 204 (2006).

136. Marianne Bertrand et al., *What's Psychology Worth? A Field Experiment in the Consumer Credit Market* 9–10, 17 (Yale Univ. Econ. Growth Ctr., Working Paper No. 918, 2005), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=770389.

137. Formisano et al., *supra* note 95, at 476–78; *see also* Christopher J. Anderson, *The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion,* 129 PSYCHOL. BULL. 139, 158 (2003) (presenting evidence that decision avoidance is a common consequence of large choice sets).

Even when not deterred from decisionmaking, individuals sometimes lack sufficient mental resources to consider all alternatives and relevant information. People faced with more than three alternatives typically use simplified decision strategies to narrow their choice set quickly.[138] One strategy is to focus on only the best-known alternatives; when new employees were given a choice of fourteen health plans, 83% signed up for one of the two plans with the most well-known insurers.[139] Once a choice set has been narrowed, people routinely consider fewer than five attributes of each alternative.[140] Yet, to make welfare-enhancing personal-finance decisions, consumers must consider 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."[141] Even if consumers understood these attributes, there are too many to make tradeoffs among them.

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

3. High Financial and Emotional Stakes

Financial choices pose the potential for significant negative and significant positive material and emotional outcomes. Minimal substantive regulation not only 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. Individuals 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.[142]

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138. 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).

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

140. *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 app. at 302 (1986) (listing studies showing consumers consider, in addition to price, between one and three attributes when making purchase decisions); David Mechanic, *Consumer Choice Among Health Insurance Options*, 8 HEALTH AFF. 138, 142–43 (1989) (finding that consumers make decisions about healthcare plans by focusing on only a subset of the dimensions of the plans).

141. THE FED. RESERVE BD., CONSUMER HANDBOOK ON ADJUSTABLE-RATE MORTGAGES (2006) [hereinafter, ARM HANDBOOK].

142. While acting as an agent for another can sometimes reduce the influence of biases, *see, e.g.*, Ward Farnsworth, *The Legal Regulation of Self-Serving Bias*, 37 U.C. DAVIS L. REV. 567, 601–02

In addition, people 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.[143] Purchasing a home, enjoying a comfortable retirement, amassing wealth, and passing on that wealth to future generations are all culturally esteemed, while the possibility of failing to meet financial expectations is ego threatening. When society equates financial success and failure with character, the former can lead to ego boosts and positive emotions, and the latter to ego threats and negative emotions.[144]

High stakes typically motivate people to expend more effort in a conscious attempt to engage in systematic rational processing.[145] Ironically, however, high motivation and effort also frequently result in worse performance.[146] 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.[147] Why? Prior to the reasoning process, emotions or the "affect heuristic" can exert great and often subconscious power over preferences, without any cognitive mediation.[148] Someone facing a high-stakes personal-finance decision is

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(2003), it is unlikely to be successful in this context because most financial decisions consumers make affect their own lives even when these decisions also affect others.

143. *See, e.g.*, TERESA A. SULLIVAN ET AL., AS WE FORGIVE OUR DEBTORS: BANKRUPTCY AND CONSUMER CREDIT IN AMERICA 8–9, 32, 139, 337–38 (1989) (noting various instances in which the authors' empirical research indicate that society views financial problems "through a lens of fault" and that consumers view the payment of debts as a moral imperative); Michelle J. White, *Why Don't More Households File for Bankruptcy?*, 14 J.L. ECON. & ORG. 205, 211 (1998) (explaining that social stigma prevents most households that would financially benefit from filing for bankruptcy from doing so); *cf.* Rafael Efrat, *The Evolution of Bankruptcy Stigma*, 7 THEORETICAL INQUIRIES L. 365, 365 (2006) (finding that the stigma associated with bankruptcy has declined but has not been eliminated).

144. Baumeister, *supra* note 125, at 145–46.

145. *E.g.*, Kahn & Baron, *supra* note 138, at 307 (arguing that decisionmakers invest more time when decisions are important); Mary Frances Luce et al., *Choice Processing in Emotionally Difficult Decisions*, 23 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY, & COGNITION 384, 403 (1997).

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

147. 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); Yinlong Zhang & Vikas Mittal, *Decision Difficulty: Effects of Procedural and Outcome Accountability*, 32 J. CONSUMER RES. 465, 469 (2005).

148. *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) (observing that how people feel about an activity alters their risk-benefit perceptions); Andrew Caplin & John Leahy,

likely to have an affective response, the positive or negative valence of which depends 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. As 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."[149]

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, especially when they feel that potential negative consequences of a poor decision are high, search for new data and reinterpret existing data as favoring that choice and disfavoring alternatives.[150] Alternatively, they can truncate the decision process, acting quickly rather than gathering all of the necessary information for making the decision well.[151] Marketers play to these emotional responses; personal-finance software programs advertise that they help consumers make financial decisions "quickly and easily," and even "painlessly."[152]

Indirectly, stress can occupy cognitive and emotional resources, reducing those available for financial decisionmaking.[153] When decisionmakers have less capacity to handle the task at hand, they must take cognitive shortcuts, focusing on only a few salient, tangible, and immediate dimensions of the decision.[154] Personal-finance decisionmaking requires assessing not only costs and benefits but also probable outcomes. However,

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Psychological Expected Utility Theory and Anticipatory Feelings, 116 Q.J. ECON. 55, 57–59 (2001) (discussing the anticipatory effects of anxiety).

149. Dieter Brunner, *The Mistakes Borrowers Make, and How To Avoid Them*, CONSUMERAFFAIRS.COM, June 6, 2006, http://www.consumeraffairs.com/news04/2006/06/mortgage_geek.html.

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

151. Baumeister, *supra* note 125, at 149.

152. CUVillage.com, Financial Calculators, http://cuvsolutions.cu-village.com/files/cucorp/904/file/pdf/products/enhancements/calculators-spreads.pdf (last visited Sept. 18, 2008); ScenarioNow.com, About ScenarioNow, http://www.scenarionow.com/aboutretirenow/aboutsn.htm (last visited Sept. 18, 2008).

153. *See* Giora Keinan, *Decision Making Under Stress: Scanning of Alternatives Under Controllable and Uncontrollable Threats*, 52 J. PERSONALITY & SOC. PSYCHOL. 639, 642 (1987) (concluding that psychological stress causes decisionmakers to scan the alternatives available to them in a disorganized and incomplete manner).

154. *See* 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) (finding that "bad moods impair[] self-regulation, in the sense that people who [are] upset may be less likely to make a rational choice" and thus "may be more likely to yield to an impulse").

stressful thoughts can lead people to ignore probabilities and consider only potential costs. This causes them to avoid low-probability, high-cost alternatives even when the expected value of other alternatives, if they had taken probabilities into consideration, would dictate a different result.[155] As noted above, good financial decisions often require both cognitive skills and self-control, but distressed consumers are more likely to engage in impulsive shopping.[156]

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 do not merely weigh these against expected costs but do truly perceive the costs and the probabilities of those costs to be lower.[157] For example, the positive vision of home ownership could lead households to underweight future costs and the risk of foreclosure when deciding whether to obtain a mortgage and buy a home. Likewise, a positive affective response to imagined wealth could lead to mentally downplaying costs and risks, and could land the consumer in a fraudulent financial scheme. As a Better Business Bureau officer explains, "Consumers often know it's a scam, but 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."[158]

Ironically, the very stakes that motivate people 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 can exacerbate this problem.[159]

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155. 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, emotionally charged stakes). Yuval Rottenstreich & Christopher K. Hsee, *Money, Kisses, and Electric Shocks: On the Affective Psychology of Risk*, 12 PSYCHOL. SCI. 185, 188 (2001).

156. *See* Kathleen D. Vohs & Ronald J. Faber, *Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying*, 33 J. CONSUMER RES. 537, 546 (2007) (noting multiple studies demonstrating that both positive and negative moods trigger episodes of impulse buying).

157. Brownstein, *supra* note 150, at 565 (noting that decisionmakers who are motivated to choose a particular alternative distort attribute information to be more favorable to that alternative and predict that their alternative is more likely to pay off); Slovic et al., *supra* note 148, at 315–16 (finding that if people's "feelings toward an activity are favorable, they are moved toward judging the risks as low and the benefits as high").

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

159. *See* Andrew Caplin & John Leahy, *Behavioral Policy*, *in* 1 THE PSYCHOLOGY OF ECONOMIC DECISIONS: RATIONALITY AND WELL-BEING 73, 84 (Isabelle Brocas & Juan D. Carillo eds., 2003) (finding that retirement financial education produces anxiety and stress).

4. 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, households 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.[160] 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, a person has a reduced capacity for decisionmaking. 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.[161] Households at risk for severe declines in living standards upon the death of a wage-earner could find a lack of this insurance particularly stressful. These families need to have life insurance the most, yet are the least likely to have it.[162]

To avoid the fear and anxiety produced by contemplation of the unpleasant facts of life, some people 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.[163] Of particular relevance to financial decisions is whether people are accurate in

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160. *See, e.g.*, Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionablity*, 70 U. CHI. L. REV. 1203, 1230–31 (2003) (describing how comparisons between dissimilar attributes, such as dollars spent to lives saved, creates "emotion laden" choices).

161. David W. Marnold, *The Challenge of Selling Life Insurance*, 26 LIMRA'S MARKETFACTS Q. 30, 30 (2007) ("Consumers simply don't want to think about buying life insurance because of what it implies about their own mortality."). In addition to an aversion to thinking about death, consumers are confronted with too many choices of insurance policies and fear they will make a poor decision. 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. *Id.* at 32.

162. 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).

163. For example, over 40% claim they pay off their credit-card balances in full every month, but issuer data puts the proportion at less than 20%. Dennis Jacobe, *Nearly One-Third of Credit-Card Owners Hold High Balances*, GALLUP, June 11, 2008, http://www.gallup.com/poll/107833/Nearly-OneThird-Americans-Hold-High-Credit-Balances.aspx; Shwiff, *supra* note 43; *see also* Larry Getlen, *Why We Lie About Money and Debt*, BANKRATE.COM, Apr. 28, 2005, http://www.bankrate.com/brm/news/financial-literacy2004/debt-psychology.asp. 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, at 19 (2003).

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 their expected probability of job loss to be zero. 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 their job-loss probability was high, but waited until they had lost their jobs to do so.[164] This denial may 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, another pervasive bias.[165] 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 how they choose a lottery card.[166] Although education might increase the accuracy of their knowledge about the actuarial probabilities of negative life events, individuals frequently continue to believe their own odds are better so as to minimize thoughts of their personal vulnerability.[167] Giving consumers more information through financial education may only produce the "illusion of knowledge." When people 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.[168]

Overoptimism and overconfidence in personal-finance decisionmaking is widespread.[169] In a 2005 survey, 65% of Americans believed they were "very" or "highly" knowledgeable about personal finance, although they

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164. Melvin Stephens, Jr., *Job Loss Expectations, Realizations, and Household Consumption Behavior*, 86 REV. ECON. & STAT. 253, 264 (2006).

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

166. Ellen J. Langer, *The Illusion of Control*, *in* JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES, *supra* note 106, at 230, 231, 236–37.

167. Paul Slovic et al., *Facts Versus Fears: Understanding Perceived Risk*, *in* JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES, *supra* note 106, at 463, 468–70; Weinstein, *supra* note 111, at 19.

168. Brad M. Barber & Terrance Odean, *The Internet and the Investor*, 15 J. ECON. PERSP. 41, 46 (2001).

169. Although educators generally focus on the need to increase consumer confidence in their ability to handle their financial affairs, evidence comparing consumers' self-assessed credit histories and their actual credit histories has found overconfidence to be much more prevalent than underconfidence. *See* Venessa Gail Perry, *Is Ignorance Bliss? Consumer Accuracy in Judgments About Credit Ratings*, 42 J. CONSUMER AFF. 189, 196–98 (2008) (noting that about 32% of consumers were overconfident and only about 5% were underconfident).

performed abysmally on objective questions about personal finance.[170] Households 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.[171] Although many financial products in the United States come with disclosures about risks—e.g., "past performance is no guarantee of future results," or "you could lose your home, and any money you have put into it, if you do not meet your obligations under the loan"[172]—consumers routinely ignore warnings that are not obviously tailored to their own situation, assuming these warnings are for others.[173] 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.[174] 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."[175]

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 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.[176] For some consumers,

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170. Press Release, Consumer Action, National MoneyWi$e Survey Shows Americans Are Not Financially Fit (Sept. 6, 2005), *available at* http://www.consumer-action.org/press/articles/national_moneywie_survey_shows_americans_are_not_financially_fit.

171. *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).

172. This disclosure is under the Home Ownership and Equity Protection Act of 1994 ("HOEPA"). *See* Willis, *supra* note 52, at 839.

173. 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) (noting that generic disclosures "might add little to general awareness . . . consumers already have").

174. Lois A. Vitt, *Consumers' Financial Decisions and the Psychology of Values*, J. FIN. SERVICE PROF., Nov. 2004, at 68, 69–70 (citing Mathew Greenwald & Assocs., *Retirement Preparedness*, *in* ENCYCLOPEDIA OF RETIREMENT AND FINANCE (Lois A. Vitt ed., 2003)).

175. Sumit Agarwal et al., *Learning in the Credit Card Market* 2 n.5 (Nat'l Bureau of Econ. Research, Working Paper No. 13822, 2008), *available at* http://ssrn.com/abstract=1091623 (quoting a Frontline television program) (internal quotation marks omitted).

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

this helps them take needed actions to address their finances.[177] Paradoxically, financial-literacy programs may increase other consumers' overoptimism about financial risks in the course of educating them about these risks, leading to worse decisions.

5. 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.[178] 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.[179] 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.[180] To take a concrete example, Americans have long been aware that failure to wear a seatbelt increases the probability of severe injury or death in auto accidents. But this knowledge alone was insufficient to propel many of them to wear seatbelts. Once laws were passed that put a clearly defined and more immediate and probable price on failure to wear a seatbelt—a fine—seatbelt use increased.[181]

This phenomenon does not equally affect all future or uncertain consequences of decisions; aspects construed at a high or abstract level are little affected, but lower-level concrete details are weighted more strongly

177. *Cf.* Josh Wiener & Tabitha Doescher, *A Framework for Promoting Retirement Savings*, 42 J. CONSUMER AFF. 137, 141 (2008) (explaining that when people with negative beliefs about their own self-efficacy are given a negative message about the consequences of failing to act, they are less likely to act).

178. *See, e.g.*, ANTIONIO R. DAMASIO, DESCARTES' ERROR: EMOTION, REASON, AND THE HUMAN BRAIN, at xii–xiii (1994); Slovic et al., *supra* note 148, at 314.

179. *See* Yaacov Trope et al., *Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior*, 17 J. CONSUMER PSYCHOL. 83 *passim* (2007).

180. *See* Shane Frederick et al., *Time Discounting and Time Preferences: A Critical Review*, 40 J. ECON. LITERATURE 351, 360 (2002) (reviewing literature); Tversky & Kahneman, *supra* note 106, at 20.

181. *See* Alma Cohen & Liran Einav, *The Effects of Mandatory Seat Belt Laws on Driving Behavior and Traffic Fatalities*, 85 REV. ECON. & STAT. 828, 829 (2003) (finding that mandatory seat-belt laws increased usage, and more so in states where police enforcement powers created a higher probability of receiving a ticket for violation of the seat-belt law).

when made more immediate and certain.[182] For example, regardless of time or uncertainty, households are likely to place the same value on homeownership, an abstract feature of a home-purchase loan. On the other hand, they are likely to attend more carefully to a change in the amount of a monthly loan payment occurring in the immediate future than to a change that is many months away. As a consequence, consumers judge decisions about near-term, certain events by tangible aspects such as feasibility, whereas they judge events that are either long-term or uncertain by the desirability of the broad-brush outcome.

Time and certainty effects can easily influence consumer decisions about credit. 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.[183] Consumers therefore pay higher prices and spend more overall using credit cards than when paying with cash.[184] 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 refinance or switch cards as soon as the teaser ends because when they obtain the credit, they discount the logistical costs of refinancing or switching in the future. When it comes time to refinance or switch, however, these costs loom large, leading to delay.[185] When future costs are uncertain, as with a teaser ARM tied to an index, the uncertainty bias may heighten to this effect.[186] Prepayment penalties, over-the-limit fees, late fees, and finance charges—future expenses that are, from the borrower's perspective, uncertain future costs at the time of mortgage or credit card selection—

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182. Trope et al., *supra* note 179, at 83–87, 89–90, 93.

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

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

185. 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) (discussing results of a study concluding that technology has reduced credit issuers' search and screening costs but that switching costs remain a barrier for customers).

186. *See, e.g.*, Eric Van Dijk & Marcel Zeelenberg, *The Discounting of Ambiguous Information in Economic Decision Making*, 16 J. BEHAV. DECISION MAKING 341, 348 (2003) (discussing results of a study concluding that decisionmakers were less likely to follow through with a plan if faced with ambiguity).

probably do not register any weight on decisionmaking about entering into loan contracts.[187]

Time and uncertainty biases partly account for failure to plan and save adequately for retirement, even among people who know a fair amount about financial planning.[188] 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."[189] Given its importance, people 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 interest, households should save for retirement early, when the benefits are farthest away and the most uncertain. To plan, households must forecast the future, including "lifetime earnings, asset returns, tax rates, family and health status, and longevity."[190] Not only are these matters uncertain, but many of them implicate feasibility questions, such as how much food, shelter, and healthcare 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.[191]

Educating consumers about these biases is unlikely to help. People are aware of their susceptibility to these biases and have developed numerous self-control mechanisms to counteract them. They cut up their credit cards

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187. *E.g.*, GAO, CREDIT CARDS, *supra* note 43, 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).

188. Douglas A. Hershey & John C. Mowen, *Psychological Determinants of Financial Preparedness for Retirement*, 40 GERONTOLOGIST 687, 693 (2000) (finding that 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. SERVICES REV. 331, 339 (2005) (finding that time perspective influences financial planning more strongly than financial knowledge).

189. Ted O'Donoghue & Matthew Rabin, *Procrastination in Preparing for Retirement*, *in* BEHAVIORAL DIMENSIONS OF RETIREMENT ECONOMICS 125, 129 (Henry Aaron ed., 1999).

190. Olivia S. Mitchell & Stephen P. Utkus, *Lessons from Behavioral Finance for Retirement Plan Design*, *in* PENSION DESIGN AND STRUCTURE: NEW LESSONS FROM BEHAVIORAL FINANCE, *supra* note 135, at 3, 5.

191. Mechanic, *supra* note 140, 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) (observing that decisionmakers are more likely to maintain the status quo when planning for low-probability events).

and use automatic withdrawals for retirement plans. They support seatbelt and mandatory insurance-coverage laws and accept mortgage-lender property-insurance requirements. They maintain mental accounts, setting (but not always following) rules allowing themselves to spend only current income, not credit, for nondurables.[192] Creating more and stronger precommitment devices could be helpful, but is not financial-literacy education.

6. Opaque Attributes and Incommensurate Tradeoffs

Financial products typically contain many attributes, each of which can be difficult to evaluate. Even when people 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 bias 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.[193] For example, in a study of healthcare-quality report-card use, the subjects relied almost entirely on the one piece of information on the cards they understood—satisfaction ratings—and ignored information that, while less well understood, was more directly relevant to quality of care.[194] In a follow-up study, giving consumers more information about the report cards reduced decision quality.[195]

A related decisionmaking shortcut that people unconsciously employ when evaluating attributes is the "availability heuristic."[196] The more frequently, recently, vividly, or emotionally laden the experience or observation of an event or its consequences, the more easily people bring the event or consequences to mind. Even when people have the numerical knowledge and skills to use statistical data—which seems dry, abstract, and

192. 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); Richard H. Thaler, *Mental Accounting Matters*, 12 J. BEHAV. DECISION MAKING 183, 184 (1999).

193. Christopher K. Hsee, *The Evaluability Hypothesis: An Explanation for Preference Reversals Between Joint and Separate Evaluations of Alternatives*, 67 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 247, 255–56 (1996).

194. Yaniv Hanoch & Thomas Rice, *Can Limiting Choice Increase Social Welfare? The Elderly and Health Insurance*, 84 MILBANK Q. 37, 42–43 (2006) (surveying the studies).

195. *Id.*

196. *See generally* Christopher K. Hsee & Howard C. Kunreuther, *The Affection Effect in Insurance Decisions*, 20 J. RISK & UNCERTAINTY 141, 141–42, 154 (2000) (reviewing evidence about the relationship between beliefs about costs and judgments about risk); Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, *in* JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES, *supra* note 106, at 163, 174–75 (reviewing evidence about the relationship between beliefs about probability and judgments about risk).

remote—they often ignore such 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. Personal experience influences household-flood-insurance purchase decisions more strongly than objective information about the probability and costs of a future flood.[197] This bias likely also contributes to a 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 few borrowers stay in the home long enough for this to happen.[198] Because society views poor credit outcomes as the product of bad character, families who have lost their homes to foreclosure generally avoid advertising that fact. Unless borrowers have personally experienced or seen close friends experience foreclosure, they are likely to underestimate the risk and costs of foreclosure at the time they take the loan.

Sellers of financial products routinely exploit the availability heuristic. 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 individual investors chase returns.[199] In an experiment in which MBA students chose among several index funds, they consistently ranked fees as the most important factor in their decision.[200] 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 that returns data had on their decisions.[201] 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.[202] That is,

197. Hsee & Kunreuther, *supra* note 196, at 141–42.

198. 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*, REALTYTRAC, July 25, 2007, http://www.realtytrac.com/ContentManagement/RealtyTracLibrary.aspx?&ItemID=2909&accnt=64953.

199. Mitchell & Utkus, *supra* note 190, at 20–23.

200. Choi et al., *supra* note 127, at 16.

201. *Id.* at 17.

202. Tversky & Kahneman, *supra* note 106, at 4–7.

consumers take one product as representative of another along more than the dimensions the products share. Individual investors chase investment returns in part because they believe past performance is representative of future performance, regardless of how many times they are told otherwise.[203] The representativeness heuristic can make experience a poor teacher, particularly in the quickly changing financial market. Experience can lull consumers into a false sense of security when they assume their knowledge of an earlier product applies to a new product of the same type.[204] For example, many believe "that a lender would not provide credit to a consumer who did not have the capacity to repay."[205] When lenders engaged in credit rationing, this assumption was reasonable because creditors made loans based on projections that borrowers could afford payments. As homeowners are slowly discovering, that is no longer true now that today's lending models, with varying degrees of success, can price default risk.[206]

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."[207] For example, "losing one's job" could be too vague to bring an available image to mind, causing an employee to underestimate its probability. The detail in the mental picture of component events that could cause job loss—losing one's job because of disability or factory closure, for example—can increase probability assessments of each, so that their assessed probabilities sum to a larger, more accurate figure.[208] The representativeness heuristic could also

203. *See* Mitchell & Utkus, *supra* note 190, at 20–21 (explaining the representativeness heuristic in the context of investment decisionmaking).

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

205. Federal Reserve Truth in Lending, 73 Fed. Reg. 1672, 1687 (proposed Jan. 9, 2008) (to be codified at 12 C.F.R. pt. 226) (explaining findings on consumer attitudes about mortgage lenders); *see also Preserving the American Dream: Predatory Lending Practices and Home Foreclosure: Hearing Before S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong. (2007) (testimony of consumer Delores King), *available at* http://banking.senate.gov/public/_files/king.pdf ("I surely did not know that a Bank would make a loan to someone without checking to see if the person could afford the loan."); Eugene M. Bland et al., *A Comparison of Perceptions: Students and Bankruptcy Filers on Causes of Financial Distress*, 5 J. BUS. & ECON. RES. 53, 56 (2007) (describing consumer attitudes regarding credit-card issuers).

206. *See* Willis, *supra* note 52, at 720–21 (explaining how technological advances and the elimination of legal restrictions enabled lenders to price mortgages based on risk rather than having to ration credit).

207. 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.*

208. *Cf.* Craig R. Fox & Richard Birke, *Forecasting Trial Outcomes: Lawyers Assign Higher Probability to Possibilities That Are Described in Greater Detail*, 26 LAW & HUM. BEHAV. 159, 159 (2002) (explaining the subadditivity effect in the context of attorney decisionmaking). Failing

cause subadditivity. Workers may estimate the probability not of job loss, but rather the most likely cause of job loss, and then extrapolate this as representative of the broader category of job loss. They might try to account for other causes of job loss by increasing their probability estimates somewhat, but due to anchoring effects as discussed below, are unlikely to adjust their estimates enough to account for all causes.[209] This subadditivity effect can derail good personal-finance decisions based on forecasts about income and employment, such as how much debt to incur, how much to save for retirement, or how much to save for a rainy day.

In addition to being opaque and difficult to evaluate, many financial-product attributes are incommensurate, making tradeoffs difficult. The plethora of worksheets in financial-education materials do not explain how to choose among alternatives once a list of attributes is compiled. A short example:[210]

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 (e.g., number of ADLs)[211]			
Additional features (e.g., premium waiver after 90 days of coverage)			
Annual/monthly cost			

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* JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES, *supra* note 106, at 414, 415.

209. Kahneman & Tversky, *supra* note 208, at 415.

210. Rutgers New Jersey Agricultural Experiment Station, The Financial Aspects of Health and Long-Term Care Insurance in Later Life, http://njaes.rutgers.edu/healthfinance/insurance-ltc.asp (last visited Sept. 19, 2008).

211. The accompanying glossary explains that ADL means "Activities of Daily Living (ADLs)" defined as "[c]ommon daily tasks (e.g., eating) that, when they are unable to be performed, can serve as a 'trigger' to obtain benefits from a long-term care insurance policy." *Id.*

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.[212] For example, using the above worksheet, a consumer might compare the amount of daily coverage and the annual cost of various long-term-care insurance policies; however, if only one policy has an elimination period, a consumer might ignore that feature rather than calculating its worth in a common currency with daily coverage and annual cost. 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.[213] In one experiment, subjects choosing among three retirement investments with given associated risk levels tended to select the middle-ranked option, regardless of the absolute risk level of the investments presented.[214] 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, neglect that fact.[215] 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.[216] 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.[217] 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.[218]

People do not want to make financial decisions based on impoverished evaluations of impoverished choice sets. If given sufficient time, they try to make tradeoffs among incommensurate traits and to pay adequate

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212. *See* Brownstein, *supra* note 150, at 555 (citing several sources that discuss consumers' tendencies to ignore features of alternatives when other alternatives they are considering lack that feature); *see also* Dedre Gentner & Arthur B. Markman, *Structural Alignment in Comparison: No Difference Without Similarity*, 5 PSYCHOL. SCI. 152, 152 (1994) (providing empirical evidence that consumers avoid tradeoffs among incommensurable traits).

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

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

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

216. McLaughlin, *supra* note 139, at 46.

217. Kardes et al., *supra* note 215, at 786.

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

consideration to traits that are difficult to evaluate.[219] 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% of Americans said that it is important to comparison shop for insurance. But consumers find themselves unable to put the personal-finance principles they know into practice—only 39% of respondents said they comparison shopped for their own insurance.[220]

7. 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 decisionmaker's own needs would dictate a position far from the anchor.[221] Individual "decisions" about healthcare plans appear to be strongly affected by these biases. Once policyholders initially choose a plan, they are very unlikely to change, regardless of changes in their healthcare needs that would make switching to another plan beneficial.[222] Over a ten-year period, only 15% of federal-government employees, who have a large number of health plans to choose from, report even considering changing plans.[223] 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

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219. Dhar et al., *supra* note 213, at 190–91, 197–98.

220. Holden Lewis, *Financial Literacy Survey Finds Gap Between Attitude, Action*, BANKRATE.COM, Mar. 16, 2003, http://www.bankrate.com/brm/news/financial-literacy/gap-home.asp; *cf. Bankrate Survey: Americans Nearly Flunk Financial Literacy*, BANKRATE.COM, Apr. 6, 2004, http://www.bankrate.com/brm/news/financial-literacy2004/grade-home.asp. The key findings of the Bankrate survey included the following:

> Though they know what they should do, their actions often don't follow suit. . . . For example, 71 percent of the respondents say that keeping an emergency fund is "very important," but just 44 percent say they always have one at hand—a gap of 27 points. The gap is even bigger for preparing a will and shopping around for the best insurance quotes and coverage. In every case, Americans are well aware that these are important for financial well-being—but significant numbers don't follow through.

Id.

221. Daniel Kahneman & Amos Tversky, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1128–30 (1974).

222. Mechanic, *supra* note 140, at 138.

223. McLaughlin, *supra* note 139, at 45 (citing a study of federal-employee health-insurance decisions).

that allocation, despite widespread advice to shift from higher to lower risk investments as retirement draws nearer.[224]

Even when making an initial "decision," people frequently accept options chosen by others. The classic study here involves 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 but limited the insured's right to sue. In New Jersey the default was the new plan, and in Pennsylvania it was the old plan. In New Jersey, over 80% of residents "selected" the new plan, but 75% of Pennsylvanians "selected" the old plan, evidence that many people did not select their plan at all, but simply accepted the default.[225] 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% or 6%, a majority of employee contributions appear to mirror the default. This does not reflect differences in retirement needs between workforces at different companies; 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.[226]

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, people 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, exonerates them from staying with the default.[227] Actions are salient, available in thought, and therefore likely to be judged, whereas omissions are not salient and are ignored. By maintaining passivity, consumers can avoid future regret about having made a poor decision.[228]

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224. Mitchell & Utkus, *supra* note 190, 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, 20–21 (Olivia S. Mitchell & Kent Smetters eds., 2003) (explaining why the widespread advice to shift from higher to lower risk investments over time is incorrect).

225. Eric J. Johnson et al., *Framing, Probability Distortions, and Insurance Decisions,* 7 J. RISK & UNCERTAINTY 35, 48–50 (1993).

226. Choi et al., *supra* note 20, at 313 fig.11.2.

227. Jonathan Baron & Ilana Ritov, *Omission Bias, Individual Differences, and Normality,* 94 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 74, 83 (2004).

228. *See generally* Richard G. Frank, *Behavioral Economics and Health Economics, in* BEHAVIORAL ECONOMICS AND ITS APPLICATIONS 195, 217 (Peter Diamond & Hannu Vartiainen eds., 2007) (reporting that a majority of consumers with cancer prefer their treating physician to make the treatment decision and positing that regret avoidance may motivate this preference). Regret avoidance may also explain the popularity of (near) first-dollar health insurance coverage even when plans with deductibles are dramatically more cost-effective; by purchasing the former,

Market participants who have an interest in deciding how consumers should arrange their financial affairs abet consumer passivity. 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.[229] Unfortunately, consumers have difficulty selecting advisors who possess sufficient expertise and incentives to act in the consumers' best interests. Once a consumer has selected an advisor, reliance on the advisor can become another form of passivity in that consumers do not always sufficiently monitor the advisor's performance.[230]

Households fail to employ expert financial advisors for more tangible reasons as well. Even if they 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.[231] This is an informational problem, too; before implementing an expert's advice, a consumer has little means to determine whether the benefits of the advice outweigh the costs of obtaining it. 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 is as familiar as a salesperson with the latest financial products.[232] This "free" advice can have a price. Among other things, yield-spread premiums for selling borrowers higher-cost mortgages than those for which they qualify, and soft-dollar payments to investment brokers for favoring particular funds, can place the financial interests of mortgage and investment brokers at odds with their clients.[233]

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consumers avoid having to make decisions about whether to pay the deductible for particular medical tests, procedures, etc. over the course of the plan. That is, they pay a premium not to have to make choices that could lead to regret. Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 J. ECON. BEHAV. & ORG. 39, 51–54 (1980).

229. *See, e.g.*, James N. Druckman, *Using Credible Advice to Overcome Framing Effects*, 17 J.L. ECON. & ORG. 62, 77 (2001) (arguing that advice can decrease or even eliminate biases).

230. However, consumers who pay financial experts a fee for advice tend to be less passive and engage in more information searching than consumers who rely on the advice of "free" experts or nonexperts. 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).

231. *Id.* at 117.

232. *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).

233. *See, e.g.*, *Predatory Mortgage Lending Practices: Abusive Uses of Yield Spread Premiums: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 107th Cong. 55–56 (2002) (statement of Howell E. Jackson, Professor of Law, Harvard Law School) (discussing mortgage-

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.[234] 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, 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. For example, a former mortgage broker explains that rather than focusing on the affordability of the monthly payment, he would ask the borrower in great detail about her plans for the loan proceeds. If her plan was to build a purple-painted bedroom for her daughter, then throughout the mortgage purchase process he would invoke the vivid image of her daughter enjoying the new purple room.[235] 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."[236]

Certainly not all attempts to maneuver consumer biases are effective; significant variability in susceptibility to any particular bias exists not only among people, but also 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."[237]

8. The Difficulty of Debiasing Personal-Finance Decisionmaking

Biases are resistant to change. Telling consumers they must think more carefully before making a financial decision has no effect on unconscious biases. Consumers might increase their conscious attention and effort, but

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broker kickbacks); Choi et al., *supra* note 127, at 6 & n.4 (discussing investment-broker kickbacks).

234. ROBERT B. CIALDINI, INFLUENCE: SCIENCE AND PRACTICE 20–50 (4th ed. 2001).

235. Brunner, *supra* note 149.

236. 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).

237. *See, e.g.*, Bernheim et al., *supra* note 162, 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); A.P. Woodward, *The Disability Insurance Policy*, 70 ANNALS AM. ACAD. POL. & SOC. SCI.: MODERN INS. PROBS. 227, 236 (1917) (disability insurance); Daniel Bergstresser et al., *Assessing the Costs and Benefits of Brokers in the Mutual Fund Industry* 34 (HBS Fin. Working Paper No. 616981, 2007), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=616981 (mutual-fund investments); Walter Updegrave, *Annuity Options in a Retirement Plan*, CNNMONEY.COM, Feb. 20 2007, http://money.cnn.com/2007/02/20/pf/expert/expert.moneymag/index.htm (annuities).

they do so in the same biased way.[238] People are often unable to recognize their biases and prevent the effects of these biases on their decisions, even when taught about them.[239] Particular conditions can and do 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.

a. Poor Conditions for Debiasing

Research on debiasing is as yet in its nascence, and so the discussion here is tentative.[240] However, while debiasing looks promising in some arenas, the circumstances surrounding significant personal-finance decisions today are not conducive to the use of these strategies.

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.[241] In the real world, consumers rarely receive immediate and unambiguous feedback about their financial decisions based on experience because most outcomes are delayed and causation is ambiguous. That is, people rarely learn from their financial

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238. *E.g.*, Nicholas Epley & Thomas Gilovich, *When Effortful Thinking Influences Judgmental Anchoring: Differential Effects of Forewarning and Incentives on Self-Generated and Externally Provided Anchors*, 18 J. BEHAV. DECISION MAKING 199, 209 (2005) (noting that consumers can reduce biases that occur through a conscious, effortful process by thinking harder, but cannot reduce unconscious biases in the same way).

239. Asher Koriat et al., *Reasons for Confidence*, 6 J. EXPERIMENTAL PSYCHOL.: HUM. LEARNING & MEMORY 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 by multiplying costs and benefits by probabilities, people's biases frequently take over when they reach real-world decisions. *E.g.*, Kahn & Baron, *supra* note 138, at 309.

240. This discussion also is not exhaustive. A complete treatment of debiasing is beyond the scope of this Article. Further, this discussion takes techniques that the psychology and behavioralism literature describes as debiasing strategies to be appropriately so categorized. Given the field's early state, the very definition of debiasing has not yet been clearly established, nor has a typology of debiasing strategies been developed.

241. Sarah Lichtenstein & Baruch Fischhoff, *Training for Calibration*, 26 ORG. BEHAV. & HUM. PERFORMANCE 149, 149–50 (1980). However, these results have not been uniformly replicated. *See* Winston R. Sieck & Hal R. Arkes, *The Recalcitrance of Overconfidence and Its Contribution to Decision Aid Neglect*, 18 J. BEHAV. DECISION MAKING 29, 31–32 (2005) (discussing studies finding that feedback does not decrease biases). Further, the method has had little success in other contexts, such as teaching subjects to make decisions based on expected-value calculations. *See* Jaideep Prabhu & Gerard J. Tellis, *Do Consumers Ever Learn? Analysis of Segment Behavior in Experimental Markets*, 13 J. BEHAV. DECISION MAKING 19, 26 (2000) (reporting results of an experiment in which after twenty-four 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).

mistakes or successes.[242] Financial-literacy classes are not structured to occur immediately after financial decisions; bankruptcy-debtor education, for example, is near in time to the decision to declare bankruptcy, but is long after the series of decisions and life events that led to the decision to declare bankruptcy.

Educational financial games such as the Money Game, created for the purpose of financial education, attempt to 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.[243] Nonetheless, this knowledge does not appear to improve financial behavior; students who play the Money Game report poorer financial habits than students who do not.[244] 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.[245] 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.

Another debiasing method is to "consider the opposite," meaning reasons a decision or the assumptions on which it depends might be incorrect, before finalizing a decision.[246] By calling these reasons to mind, alternative assessments become more mentally available, in theory increasing the weight consumers place upon them. Litigant overoptimism has been

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242. Because credit-card late fees are charged close on the heels of late payments, are unambiguously caused by the lateness of the payments, and are concrete and certain, card holders generally do appear to learn from the imposition of these fees. Much of this learning degrades between five and ten months. Agarwal et al., *supra* note 175, at 3.

243. The average score nationwide on the Jump$tart 2002 financial-literacy test was 50.2% correct, whereas the average for students who had played the Money Game was 52.4% correct. Press Release, Jump$tart Coal., From Bad to Worse: Financial Literacy Drops Further Among 12th Graders (Apr. 23, 2002), *available at* http://www.jumpstartcoalition.org/upload/news.cfm?recordid=99. Because the test consists of thirty multiple-choice questions, this difference is less than a single correct answer.

244. Lewis Mandell, Financial Literacy—Does It Matter? 7 (Apr. 8, 2005), http://www.jumpstartcoalition.org/upload/Mandell%20Paper%20April%202005.doc.

245. Lichtenstein & Fischhoff, *supra* note 241, at 167. Experts' years of training can somewhat debias their decisionmaking about scenarios with which they have become very familiar, but the improvement 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).

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

moderated somewhat using this technique, facilitating settlement.[247] But the strategy requires the direction of the effects of the bias to be clear and uniform. In litigation, parties are almost uniformly overoptimistic about their likelihood of courtroom success, and so the "opposite" is the reasons the judge or jury could find against them. Financial decisions, however, do not have obvious opposites. Is the opposite of taking out a mortgage not taking one, or taking a different one? Is the opposite of the assumption that one will live to age eighty-five that one will die sooner, or later? The world is too unpredictable, varied, and dynamic to teach consumers how to apply this strategy in their financial lives.

Listing the pros and cons might avoid the potential misapplication of the consider-the-opposite strategy. 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.[248] But 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, containing only the obvious factors that are known with certainty. If the less articulable attributes are important, listing reasons for a decision can decrease decision quality because the omitted factors are neglected.[249] In one experiment, subject predictions of their own behavior were less accurate when they listed the reasons why they might or might not engage in the behavior.[250] The accuracy of consumer predictions about their own future behavior is critical in personal-finance 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 consider carefully the reasons their predictions might not come true could lead them to worse decisions.

Teaching people to follow rules of thumb could be classified as a form of debiasing; if the consumer follows the rule of thumb without calculating or independently determining that the decision is correct, biases have little

247. *See generally* Linda Babcock et al., *Creating Convergence: Debiasing Biased Litigants*, 22 LAW & SOC. INQUIRY 913 (1997). On the other hand, asking subjects to generate a list of reasons why a bad outcome might occur had no effect on overoptimism about their own 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. Weinstein & Klein, *supra* note 165, at 137.

248. Leith & Baumeister, *supra* note 154, at 1264.

249. 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).

250. Timothy D. Wilson & Suzanne J. LaFeur, *Knowing What You'll Do: Effects of Analyzing Reasons on Self-Prediction*, 68 J. PERSONALITY & SOC. PSYCHOL. 21, 21 (1995).

opportunity to operate. Applying a rule to select the product with the lowest APR, for example, where the APR is known and differences in APRs reflect differing prices of credit well, is effective even for consumers who otherwise have displayed strong welfare-impairing biases in financial decisionmaking.[251] But, as previously discussed, rules of thumb only work when it is easy for the consumer to apply the rule, and many financial decisions with which consumers are faced today are too complex for that.

b. Individual Differences

One could devise other debiasing strategies, but every strategy has the potential to backfire for some consumers. Past experiences, socialization, decision context, personality, cognitive abilities, values, and other attributes differ for every consumer and can radically affect the outcomes of debiasing techniques.

The operation of the availability heuristic, for example, depends on what the consumer finds salient based on personal experience, memory, and immediate environment. The representativeness heuristic operates on personal past experience with products or situations that, 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.[252] The operation of time and uncertainty differs both across consumers and across situations, depending on both personality and 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.[253]

Some biases that impede good financial decisionmaking are too personal to be addressed in a generic fashion and may require individualized psychotherapy.[254] For an individual whose self-worth is tied to

251. *See* Stango & Zinman, *supra* note 92, at 3–4, 30 (reporting finding that although most consumers underestimate interest rates when provided with loan amount, loan length, and monthly payment amount, their misperceptions do not lead to paying more for loans when APR-disclosure laws are enforced).

252. *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. DECISION MAKING 95, 103 ex.4 (1993) (showing the use of different decisionmaking strategies both inter-subject and intra-subject).

253. Shane Frederick et al., *Time Discounting and Time Preferences*, 40 J. ECON. LITERATURE 351, 360 (2002) (explaining that people have different discount rates); Philip G. Zimbardo & John N. Boyd, *Putting Time in Perspective: A Valid, Reliable Individual-Differences Metric*, 77 J. PERSONALITY & SOC. PSYCHOL. 1271, 1272 (1999) (demonstrating that discount rates are a fairly stable personality trait and therefore not easily influenced by education).

254. *See e.g.*, Russell N. James III, *Consumer Satisfaction and the Dual-Self Economic Model: Why Consumer Education Can Be Both Informative and Transformative*, 13 FORUM FOR FAM. & CONSUMER ISSUES 1 (2008), http://ncsu.edu/ffci/publications/2008/v13-n1-2008-spring/

materially keeping up with his or her social group, but whose spending to reach this goal outstrips financial resources, a lack of financial information, skills, confidence, or motivation is not the problem. But psychotherapy is not what policymakers mean when they talk about financial education.

Variation in overconfidence/overoptimism versus underconfidence/pessimism within the consumer population[255] poses a significant hurdle for debiasing. As noted 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 consequences[256]—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.[257] 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 "teachable moments—the points at which an individual is motivated to learn."[258] 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 preexisting preferences, and are most likely to integrate their new learning into their existing knowledge. A teachable moment might be when a consumer buys a first house, obtains a first credit card, or decides how to

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James.php (explaining that consumer education can transform students and alter their time preferences through techniques such as visualization).

255. *See* Joseph W. Alba & J. Wesley Hutchinson, *What Consumers Know and What They Think They Know*, 27 J. CONSUMER RES. 123, 124, 146 (2000); Perry, *supra* note 169, at 196–98 (finding that about 60% of consumers roughly estimated their own credit ratings accurately, about 33% overestimated their creditworthiness, and about 5% underestimated their credit histories).

256. Bentz et al., *supra* note 246, at 178.

257. 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 (Sept. 2005) (unpublished manuscript), *available at* http://www.dartmouth.edu/~alusardi/Papers/Education_African&Hispanic.pdf.

258. NAT'L ENDOWMENT FOR FIN. EDUC., FINANCIAL LITERACY IN AMERICA: INDIVIDUAL CHOICES, NATIONAL CONSEQUENCES 5 (2002) [hereinafter NEFE 2002], *available at* http://www.nefe.org/tabid/86/default.aspx (follow "Strength in Numbers: Tackling Financial Literacy Together" link).

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."[259] 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 divorcing can cue a teachable moment if consumers perceive their responsibility for financial management to increase.[260]

Applying teachable-moments theory to financial-literacy education seems intuitively sound, but consumers who participate in financial-literacy programs at teachable moments do not appear to become any more financially literate. Using data from the Jump$tart national test of high-school seniors, researchers isolated the scores of students for whom particular financial topics should have been relevant to their lives and found that taking a course had no better effect on them than on the other students. For example, among students who paid for car insurance, those who took a financial-literacy course performed worse on questions about auto insurance than those who did not take the course.[261] So too, students who had credit cards in their own names were not demonstrably helped in understanding credit by taking a class.[262] Teachable moments may be merely reachable moments. That is, when consumers face a new financial decision, experience a bad financial outcome, or change 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.,

259. K.M. Emmons, I.M. Lipkins & Colleen M. McBride, *Understanding the Potential of Teachable Moments: The Case of Smoking Cessation*, 18 HEALTH EDUC. RES. 156, 162 (2003) (citations omitted).

260. *See, e.g.*, NEFE 2002, *supra* note 258, at 19–22 (discussing the timing of teachable moments).

261. Mandell, *supra* note 35, at 8A; *see also id.* at 9A ("There is no evidence that courses in financial management, as currently taught in high school, would become more effective in improving financial literacy if they focused on decisions that were more immediately relevant to the students.").

262. *Id.* at 9A.

preferring chocolate to vanilla) or well-developed decision strategies (e.g., choosing the most energy-efficient product) honed over 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 households have a clear idea of how much they want to save for retirement or a developed strategy about how to allocate funds among investments.[263] Few know how much and what type of life-insurance policies they want, or even what choices exist in the market. Because consumers frequently 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.[264]

The question is, who reaches consumers at these vulnerable teachable moments—educators or the financial-services industry? Given resource advantages, in the vast majority of cases it is be the latter.[265]

Educators' claims that their "[t]argeted promotion and marketing efforts" can "create teachable moments"[266] are implausible. A $20 million

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263. *See* Mitchell & Utkus, *supra* note 190, at 14–15 (discussing the failure of most U.S. households to diversify their investment holdings properly).

264. *See, e.g.*, James R. Bettman et al., *Constructive Consumer Choice Processes*, 25 J. CONSUMER RES. 187, 192 (1998) (noting that consumers' decisions are susceptible to influences present during the decision process because consumers form preferences and decision strategies in the course of decisionmaking); Dale Griffin et al., *A New Look at Constructed Choice Processes*, 16 MARKETING LETTERS 321, 322–23 (2005) (discussing the "standard constructed choice model" of consumer decisions); Paul Slovic, *The Construction of Preference*, 50 AM. PSYCHOLOGIST 364, 364 (1995) (concluding that consumer preferences are often constructed during decisionmaking).

265. *Cf.* Colin Camerer, The Behavioral Challenge to Economics: Understanding Normal People 28–29 (June 4, 2003) (unpublished manuscript), *available at* http://www.bos.frb.org/economic/conf/conf48/papers/camerer.pdf. Camerer states:

> [B]ehavior in markets is a kind of intellectual and financial arms race in which forces punishing mistakes, or offering advice to those who make mistakes, are matched (or overmatched) by forces that exploit mistakes. Education, rehabilitation, advice markets, and so forth probably do improve the ability of people to save and spend wisely, and resist temptation; but the incentive of individuals to create corporations which pool knowledge about mistakes and exploit them may be even greater. Which force wins out depends on the relative profitability of selling mistake-correction and exploiting mistakes, as well as scale and scope economies in creating organizations that provide corrective and exploitative services.

Id.

266. NEFE 2002, *supra* note 258, at 20. Although some of these social-marketing suggestions are sophisticated, industry is likely to deploy many more resources using equally sophisticated means. *See, e.g.*, Josh Wiener & Tabitha Doescher, *A Framework for Promoting Retirement Savings*, 42 J. CONSUMER AFF. 137, 157–60 (2008) (theorizing five persuasive marketing themes to encourage wise long-term investing through a message that (1) is positive

national television and radio public-service campaign waged between 1997 and the early 2000s encouraged all Americans to save more.[267] The personal savings rate declined during this time period, from a mid-1990s average of 4.6% to negative 1.1% by the mid-2000s.[268] Public education campaigns can even harden attitudes against the information conveyed.[269] Voluntary financial education is widely available, yet seldom used.[270]

When the government acts as educator, it has some additional means at its disposal to reach people. To encourage retirement savings, the U.S. government since 2000 has sent all adults an annual statement of how much they should expect to receive from Social Security given their federal paycheck-deduction history. However, only 66% of adults in a national survey remembered receiving this statement, let alone its contents.[271] A number of states require financial-management education in the public schools.[272] However, this education has not been noticeably effective. Some states have begun requiring "credit counseling" as a condition for a high-priced home mortgage.[273] Counseling in this context would likely consist of advising potential borrowers not to take the mortgage and would be unlikely to increase their financial knowledge or skills more generally. The required

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and motivating; (2) is rich in imagery and detail; (3) does not go beyond the practical limits of the abilities of average consumers; (4) emphasizes the social-normative benefits of saving; and (5) is tailored to each specific segmented group of decisionmakers).

267. U.S. FIN. LITERACY & EDUC. COMM'N, *supra* note 51, at 3. Granted, in the financial-literacy area the government often sends mixed messages, pushing consumers to spend money to assist the economy while exalting the importance of saving more and spending less.

268. Charles Steindel, *How Worrisome Is a Negative Saving Rate?*, CURRENT ISSUES IN ECON. & FIN., May 2007, at 1. Although it is impossible to know whether the personal savings rate would have dropped even more without the public-service campaign, it is clear that educators' marketing did not reverse the savings decline.

269. *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 (1984) (examining public-health and safety-education campaigns).

270. When credit-card issuers warned about 6500 credit-card holders that they were at risk of delinquency and offered a free online financial-literacy course, only twenty-eight (.4%) attempted to log onto the website, and only two (.03%) completed the course. AMY BROWN & KIMBERLY GARTNER, CTR. FOR FIN. SERVS. INNOVATION, EARLY INTERVENTION AND CREDIT CARDHOLDERS 6–7 (2007). When credit-card issuers offered 42,000 delinquent cardholders the reversal of one late fee for taking the course, not even 1% completed it. *Id.* In these "teachable moments" of bad financial experience, few consumers were even reachable.

271. U.S. GOV'T ACCOUNTABLITY OFFICE, SOCIAL SECURITY STATEMENTS: SOCIAL SECURITY ADMINISTRATION SHOULD BETTER EVALUATE WHETHER WORKERS UNDERSTAND THEIR STATEMENTS 3, 6 (2005), *available at* http://www.gao.gov/highlights/d05192high.pdf.

272. *See generally* NAT'L COUNCIL ON ECON. EDUC., SURVEY OF THE STATES: ECONOMIC, PERSONAL FINANCE AND ENTREPRENEURSHIP EDUCATION IN OUR NATION'S SCHOOLS IN 2007 (2007), *available at* http://www.ncee.net/about/Survey2007/NCEESurvey2007.pdf (noting that seven states—Georgia, Idaho, Illinois, Louisiana, Missouri, South Dakota, and Utah—require students to take a personal-finance or similar course).

273. FLA. STAT. § 420.5088 (2007); GA. CODE ANN. § 7-6A (2007); N.C. GEN. STAT. ANN. § 24-1.1E (West 2007).

attendance at a personal-finance class prior to bankruptcy discharge is another application of the "cueing events" theory. The efficacy of these classes is in considerable doubt; research found a prior-bankruptcy-debtor education program to have a small but statistically significant negative effect on consumer outcomes.[274] 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 that industry, and not educators, reaches consumers when they are in teachable, vulnerable moments. The insurance industry spent about $980 million on Internet advertising in 2007, and the consumer investment and credit industries combined spent more than twice that much.[275] Credit card issuers spent $7.9 billion to send eight billion solicitations to American families in 2006—over seventy per household.[276] Mortgage and insurance brokers spend tremendous resources approaching consumers personally 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 a piece. We can't compete with that.[277]

Not only do financial-literacy educators have fewer resources, but their job is much bigger than that of firms selling financial products. 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. To encourage use of credit card debt, one advertisement can play

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274. Braucher, *supra* note 24.

275. EMarketer.com, Insurance Marketing Online: Meeting Customer Expectations?, http://www.emarketer.com/reports/all/Emarketer-999424.aspx?src=report_head_info_Search (last visited Sept. 2, 2008).

276. CardTrack.com, Orvis Card (Feb. 21, 2007), http://www.cardweb.com/cardtrak/news/2007/february/21a.html; Julia Spencer, Cardtrak.com, Card Mail (Feb. 21, 2007), http://www.cardtrak.com/news/2007/2/21/Card_Mail; Posting of Elizabeth Warren to Credit Slips: A Discussion on Credit and Bankruptcy, http://www.creditslips.org/creditslips/2007/02/you_are_preappr.html (Feb. 27, 2007, 9:46 a.m.).

277. Michael Shea, Executive Dir., ACORN Hous. Servs., Remarks at the Building Sustainable Homeownership: Responsible Lending and Informed Consumer Choice Public Meeting 212–13 (June 7, 2006), http://www.federalreserve.gov/events/publichearings/hoepa/2006/20060607/transcript.pdf.

to the pro-risk, optimism bias of risk seekers ("Life Takes Risk. Life Takes VISA®.") and another can play to the anxiety or risk-aversion biases of the risk averse ("With VISA®, You're Protected.").[278] Further, a seller only needs to convince a consumer to buy a product at a single moment in time,[279] 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, deterring consumers from rescinding the transaction. Financial-literacy programs must educate people out of their self-defeating biases on a continuous basis, every day, in every situation.

But financial-literacy education, if it works at all, appears to have a very short shelf life. Even borrowers who have completed home-buyer education can subsequently be "won over by the marketing pitches of subprime lenders."[280] The Defense Department recently concluded that its mandatory financial-education programs for all recruits provide little defense against poor credit decisions by service members, noting that "[a]lthough 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."[281] In the contest to reach consumers, the deck is stacked in favor of the financial-services industry.

Again, financial-literacy education faces an atypical challenge not encountered in other consumer or life-skills education. For a product that has desirable features or qualities not available from all competitors, a firm can increase market share by helping consumers accurately understand how the firm's products are superior to its competitors' products. For example, a firm selling energy-efficient light bulbs might advertise how much money its light bulbs will save the average consumer. Government enforcement of laws

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278. *See* Visa.com, Advertising, http://www.usa.visa.com/personal/visa_brings_you/advertising/index.html (last visited Sept. 2, 2008) (providing an overview of Visa's advertising campaigns).

279. 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. DECISION MAKING 1, 11 (2007).

280. JOINT CTR. FOR HOUS. STUDIES, HARVARD UNIV., CREDIT, CAPITAL AND COMMUNITIES: THE IMPLICATIONS OF THE CHANGING MORTGAGE BANKING INDUSTRY FOR COMMUNITY BASED ORGANIZATIONS 75 (2004).

281. U.S. DEP'T OF DEF., REPORT ON PREDATORY LENDING PRACTICES DIRECTED AT MEMBERS OF THE ARMED FORCES AND THEIR DEPENDENTS 45 (2006). The Department ultimately concluded that lenders should be prohibited from extending credit to service members and their families at more than 36% APR. *Id.* at 50. In 2006, Congress enacted this price cap into law. Military Personnel Financial Services Protection Act, Pub. L. No. 109-290, 120 Stat. 1317 (2006).

against false advertising, competitor counter-advertising, or consumer experience with the product are likely to correct inaccurate statements.

Financial-services firms, on the other hand, have little economic incentive to provide *effective* financial-literacy education for at least three reasons. First, the cost of effective education, to the extent it is even possible, would be exorbitant, outstripping expected returns. Although firm-sponsored money-management programs and "public" service announcements increase business by gaining consumer trust and brand recognition,[282] inexpensive programs can probably achieve these marketing goals. That is, all firms can sponsor ineffective literacy programs and no firm can credibly signal that its literacy programs are better than others, so no firm has an incentive to spend the resources that would be needed to seriously attempt to teach consumers about financial products. Far cheaper means exist for grabbing market share than attempting effective financial education.

Second, if the education were effective, it would be a public good. So long as the light-bulb seller is offering a more efficient product than competitors, its efforts at education will not inure to the benefit of its competitors. In contrast, if one financial-services firm were to provide effective education to consumers, nothing would require the recipients 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 overhead and could, therefore, undercut the price demanded by the teaching firm for a financial product with identical terms.

Third, sellers of consumer financial products often profit from poor financial literacy through resultant late fees, debt-collection business, etc. In contrast, no one has an interest in preventing language-literacy programs from teaching people to be effective readers, writers, and speakers of language. Although many industries use sexual messages to sell products, they do not have an interest in encouraging consumers to have unprotected sex. The tobacco industry does have an interest in seeing that people do not follow the message of anti-smoking campaigns, but the government actively restricts tobacco advertising efforts. The "this is your brain on drugs" campaign may or may not have been effective in reducing illegal drug use, but unlike sellers of financial services, illegal drug dealers are not permitted to advertise at all. At even the highest plausible level of funding, financial-literacy education would be overwhelmed by the consumer-finance industry's lightly regulated advertising.

282. As a *Federal Reserve Bulletin* article puts it: "Many banks consider their engagement in [the financial-literacy] area a way to expand their customer base." Sandra Braunstein & Carolyn Welch, *Financial Literacy: An Overview of Practice, Research, and Policy*, 88 FED. RES. BULL. 445, 448 (2002).

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The failure to find any empirical evidence that the regulation-through-education model works is not surprising. Even if we responded to the velocity of marketplace changes by placing consumers in frequent refresher classes, the innumeracy of much of the population would stand as a barrier. Even if we could overcome innumeracy, the prevalence of decisionmaking biases would derail consumer financial decisions. And even if we could debias consumers, the financial advantage held by sellers of financial products would overwhelm any amount of resources we realistically would (or should) devote to the project of regulation through education. 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. It is not that it is impossible; if we can put someone on the moon, we can bring most people to the level of financial literacy they need to navigate today's lightly regulated marketplace. This would be a gargantuan undertaking, requiring mandated coursework for children and adults, refresher classes to keep us all up-to-date, and outreach so extensive and quick that it gets to consumers before financial product sales pitches. If we think that a nation unwilling to fund public schools at a sufficient level to consistently produce high-school graduates that read above an eighth-grade level[283] will ever spend the necessary resources to produce a financially literate population, we are kidding ourselves.

One reaction might be to ask, even if the personal-finance programs we are willing to fund will never be effective, what is the harm in trying? First, pursuing financial literacy for all consumers is costly and inefficient, and for this reason alone we should not pursue it. Second, the focus on financial education diverts policymaker and regulatory attention from the pursuit of potentially effective consumer-finance policies. More speculatively, these courses may have paradoxical effects on some consumers' financial behavior. It is also likely that the regulation-through-education policy model reinforces a culture of financial self-blame, and that this self-blame harms the psychological and physical health of many consumers. In light of these costs, not only are we kidding ourselves if we think we will ever seriously pursue financial literacy, but our choice not to do so is the right one.[284]

283. Nearly half of the adult population cannot read beyond an eighth-grade level. GAO, CREDIT CARDS, *supra* note 43, at 38.

284. Henry Hu has made the same point regarding consumer literacy and individual decisionmaking about investments. Henry T.C. Hu, *Illiteracy and Intervention: Wholesale Derivatives, Retail Mutual Funds and the Matter of Asset Class*, 84 GEO. L.J. 2319, 2379 (1996) ("[U]niversal asset class literacy and universal investment decisionmaking are neither attainable nor even socially desirable.").

A. *TIME, EXPENSE, AND INEFFICIENT DIVISION OF LABOR*

The costs in time, effort, and expense of widely effective financial education would be enormous. Given the meager plausible returns on financial education, current resources devoted to the project waste millions of hours and dollars every year.[285] 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.[286] In 2005, NCEE spent $3.5 million directly on its domestic programs.[287] Although $3.5 million is a significant sum, it equates to only $50 per school, 50¢ per student, and $30 per teacher reached.[288] The program requires not only money but time. The fifteen to twenty-two classroom lessons needed to teach NCEE's Financial Fitness for Life program is time diverted from other subjects.[289]

The federal government promotes financial literacy by developing and disseminating educational materials and distributing millions of grant dollars to fund private-sector financial-literacy programs.[290] The states promote financial literacy primarily through the schools. Financial education is mandatory in some states and school districts and elective in others.[291] 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 of materials, administrative

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285. *Cf.* Dickerson, *supra* note 8, 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.").

286. National Council on Economic Education, About NCEE: Who We Are, http://www.ncee.net/about (last visited Sept. 2, 2008).

287. 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.*

288. NCEE reports that its financial-literacy programs annually reach over 120,000 teachers and over 7 million students in more than 70,000 schools around the United States. *See* Press Release, Nat'l Council on Econ. Educ., Bank of America Wins Prestigious National Award for Underwriting NCEE's New Financial Fitness for Life Curriculum (Apr. 26, 2002), *available at* http://www.ncee.net/news/pdf/8_PR_020426.pdf.

289. National Council on Economic Education, Financial Fitness for Life, http://fffl.ncee.net (last visited Sept. 2, 2008).

290. Mymoney.gov, Financial Education Grants, http://www.mymoney.gov/grants.shtml (last visited Sept. 2, 2008).

291. COLO. REV. STAT. § 22-32-135 (2007); 105 ILL. COMP. STAT. ANN. 5/27-12.1 (LexisNexis 2005); LA. REV. STAT. ANN. § 17:282.3 (2001); MICH. COMP. LAWS SERV. § 380.1165 (LexisNexis 2001); N.C. GEN. STAT. § 115C-81 (2007); UTAH CODE ANN. § 53A-13-108 (2006); VA. CODE ANN. § 22.1-200.03 (2007).

overhead, and student time that otherwise would be spent on other subjects.[292]

Whether required or voluntary, most adult financial-education courses are either free or inexpensive. 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 that takes only one-and-a-half hours to complete.[293] 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.[294] The financial counseling required by some states as a condition of taking on a high-cost loan can range from a two-hour one-on-one session to a series of group classes.[295] On the other hand, while the courses are usually brief and inexpensive, participants must also spend time and money traveling to and from the classes, obtaining child care, etc. Moreover, in the aggregate, the costs are substantial. In 2006, Americans who declared bankruptcy collectively spent approximately three million hours and $100 million on credit counseling and financial education, which are required by the bankruptcy laws.[296]

Lack of resources and information can lead people to a rational decision not to participate in voluntary financial-literacy programs. Before attending a class, an individual has little means to determine whether its benefits 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.[297] Opportunity costs of

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292. COMM. ON LEGISLATIVE RESEARCH OVERSIGHT DIV., FISCAL NOTE 3 (2006), *available at* http://www.moga.mo.gov/oversight/OVER06/fispdf/3898-01N.org.PDF.

293. University of Minnesota, Take the Road to Financial Security in Later Life, http://cehd.umn.edu/projects/fsll/home.htm (last visited Sept. 2, 2008).

294. Federal Deposit Insurance Corporation, Money Smart—An Adult Education Program, http://www.fdic.gov/consumers/consumer/moneysmart/overview.html (last visited Sept. 2, 2008).

295. Consumer Credit Counseling Service, Services, http://www.cccs-wga.com/services.html (last visited Sept. 2, 2008); *see* ACORN Housing, ACORN Housing HomeBuyer Program, http://acornhousing.org/TEXT/homebuying1.php (last visited Sept. 2, 2008).

296. On average, debtors spend about three hours and $100 each on required financial counseling and education, and about a million consumers declared bankruptcy in 2006. U.S. GOV'T ACCOUNTABILITY OFFICE, BANKRUPTCY REFORM: VALUE OF CREDIT COUNSELING REQUIREMENT IS NOT CLEAR 26, 30 (2007), *available at* http://www.gao.gov/new.items/d07203.pdf; LOONIN ET AL., *supra* note 88, at 15 tbl.2.

297. *See generally* John Karl Scholz & Ananth Seshadri, The Assets and Liabilities Held by Low-Income Families (Oct. 2007) (unpublished manuscript, on file with the Iowa Law Review) (analyzing low-income American households and concluding that reducing consumption to save is not always in their best interests); Shannon Van Zandt, *Racial/Ethnic Differences in Housing Outcomes for First-Time, Low-Income Home Buyers*, 18 HOUSING POL'Y DEBATE 431 (2007) (following

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.[298] Participation in voluntary programs—unless high-school credit, a reduced mortgage interest rate, a computer, or some other perk is awarded—is therefore predictably low.[299]

The foregoing describes the quantity of time and money spent on programs today; effective financial-literacy courses 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.[300] As researchers at the Federal Reserve Board explain, "[i]n an ideal world, financial educators would analyze each individual's needs and provide customized training based on that assessment," but "such one-on-one interaction is time- and resource-intensive."[301] 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 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 individualized expert advice, equivalent to providing every consumer with a financial planner.

Even if every consumer could become her own expert financial advisor, providing free financial advisors would be far less expensive. 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. Experts have the time and resources to make better financial decisions; for example, the average rates of return for professionally managed defined-benefit plans are higher than for employee-directed defined-contribution plans.[302] People generally do not serve as

participants in a national homeownership education program and concluding that conditions in the neighborhoods where the participants were able to purchase homes were inferior to conditions in the neighborhoods where the participants had been renting).

298. *See* Marianne A. Hilgert et al., *Household Financial Management: The Connection Between Knowledge and Behavior*, 89 FED. RES. BULL. 309, 319 (2003); Servon & Kaestner, *supra* note 38, at 275, 278.

299. *See, e.g.*, Braucher, *supra* note 50, at 327–28, 334.

300. A Freddie Mac study found that home-loan education delivered through a series of in-person classes had positive effects, but self-study and telephone counseling were ineffective. Hirad & Zorn, *supra* note 25, at 146–47.

301. Braunstein & Welch, *supra* note 282, at 456.

302. AM. FED'N OF STATE, COUNTY & MUN. EMPLOYEES, THE TRUTH ABOUT PUBLIC EMPLOYEE RETIREMENT PLANS 3 (2007), *available at* http://www.afscme.org/docs/07pensions.pdf. With the prospect of impoverished public-employee retirees who would need to rely on

their own doctors and lawyers and, for reasons of efficient division of labor alone, generally should not serve as their own financial experts. As a vice president of Fidelity Investments explained of his own firm's attempts to give consumers all of the relevant information about retirement investments, "'it was like we were trying to create a nation of Warren Buffetts.'"[303] The decision of households with sufficient means to rely on financial advisors is rational and efficient.[304] For those with less means, seeking financial literacy in place of advisors would be irrational and inefficient. The enormous amount of time and effort necessary for someone of average literacy to seriously strive to become her own financial expert could easily yield a higher welfare return when invested in gainful employment, enjoyable leisure, social commitments, or civic engagement.

B. 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 more 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. This tool also side-steps the politically formidable task of enacting substantive regulation—which even when it makes many consumers better off nearly always makes some consumers and financial-services firms worse off. Financial-literacy education creates the illusion of regulation without the costs of regulation.[305]

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 service members leaving for the Iraq war was publicized, Senators Hillary Clinton and Susan Collins quickly sponsored bipartisan legislation not outlawing these welfare-reducing policies, but providing service members with financial education

state assistance, Nebraska's state government switched from a defined-contribution system back to a defined-benefit system, a more efficient use of taxpayer dollars. *Id.*

303. Ron Lieber, *A Primer for Young People Starting Their First Job*, N.Y. TIMES, June 16, 2008, http://www.nytimes.com/2008/06/14/business/yourmoney/14money.html (quoting Michael Doshier, vice president for marketing for Fidelity's retirement services division).

304. *See* Mariko Lin Chang, *With a Little Help from My Friends (and My Financial Planner)*, 83 SOC. FORCES 1469, 1478 (2005) (observing that households with more wealth are more likely to consult financial advisors).

305. *Cf.* Daylian M. Cain et al., *The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest*, 34 J. LEGAL STUD. 1, 3, 20 (2005) (making the similar point that requiring financial advisors to disclose conflicts of interest "diminishes . . . [policy makers'] responsibility for adverse outcomes" and "can often forestall more substantial institutional change").

and counseling.[306] Even when legislators introduce substantive reform legislation, it languishes in subcommittee while financial-literacy initiatives sail through. In 2003, for example, legislators proposed consumer financial-services reforms through bills protecting homebuyers from predatory mortgage-lending practices[307] and capping the price of payday loans;[308] after referral to subcommittee, 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.[309]

Promoting financial literacy is politically expedient, allowing legislators to both please the financial-services industry and campaign as protectors of consumers. The history of one bill regarding home-mortgage escrow accounts tells a story of how substantive regulation was watered down into 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 overcharged 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 accounting,"[310] first introduced legislation on the topic, it included substantive provisions prohibiting overcharges and requiring lenders to pay consumers interest on their escrow balances. After the banking industry lobbied against the bill, Bennett introduced a version requiring only that consumers receive an annual explanation of inflows and outflows from escrow accounts, to educate them about potential problems.[311] The Mortgage Bankers Association of American 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 can mean forgoing 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

306. *See* Press Release, Senator Susan Collins, Senators Clinton, Collins Announce Senate Passage of Measure to Educate Men and Women in Uniform on Insurance and Other Financial Services (Dec. 22, 2005), *available at* http://collins.senate.gov/public/continue.cfm?FuseAction=PressRoom.PressReleases&ContentRecord_id=afc8b497-802a-23ad-458c-f8310eeb9a06&Region_id=&Issue_id=&CFID=30719&CFTOKEN=27936316.

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

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

309. Fair and Accurate Credit Transactions Act of 2003, Pub. L. No. 108-159, 117 Stat. 1952 (codified at 15 U.S.C. §§ 1601, 1681 (2000)); H.R. REP. NO. 108-263, pt. 2, at 1–3 (2003); 149 CONG. REC. D979–80 (daily ed. Sept. 10, 2003).

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

311. *Id.*

that dwarf the credit they provide, making them financially welfare-reducing 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 issuer approves the card, it charges $281 in fees to the account. In sum, consumers pay $360 and have a credit line of $19 when they receive the card.[312] Because few consumers read the fine print, they are unaware how little credit they have and soon rack up over-the-limit fees.[313] 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.[314] Although the issuer charged off $728 million that consumers never paid, these debts were mostly the issuer's own fees on cards consumers received and then thought better of using.[315] The federal government's response has been to publish consumer education materials, rather than banning these cards.[316]

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, and profiting from the facilitation of telemarketing fraud.[317] Again, counterfactuals are

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312. Lucy Lazarony, *Rotten Deals Target Those with Damaged Credit*, BANKRATE.COM, June 10, 2002, http://www.bankrate.com/brm/news/cc/20020610a.asp.

313. *Id.* (paraphrasing Jeanne Hogarth of the Federal Reserve).

314. RICK JURGENS & CHI CHI WU, NAT'L CONSUMER LAW CTR., FEE-HARVESTERS: LOW-CREDIT HIGH-COST CARDS BLEED CONSUMERS 10 (2007).

315. *Id.*

316. *See, e.g.*, FED. TRADE COMM'N, STRAIGHT TALK ABOUT TELEMARKETING 3 (2007), *available at* http://www.ftc.gov/bcp/edu/pubs/ consumer/telemarketing/tel15.pdf (informing consumers that "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 has held that a fee-harvester card "offers value to the consumer" in the form of a small amount of credit. Perry v. First Nat'l Bank, 459 F.3d 816, 826 (7th Cir. 2006).

317. United States v. Long Beach Mortgage Co., CV-96-6159 (C.D. Cal. Sept. 5, 1996), *available at* http://www.usdoj.gov/crt/housing/documents/longbeachsettle.htm (agreeing, as part of settlement of charges of discrimination in mortgage lending, to contribute $1 million to consumer education programs); Charles Duhigg, *Big Fine Set for Wachovia to End Case*, N.Y. TIMES, Apr. 26, 2008, at C1 (Wachovia agreed to pay, e.g., $8.9 million for consumer education to settle claims that it allowed telemarketers to use its customers' accounts to steal millions of dollars, so that the bank could collect millions of dollars of fees); Stephen Labaton, *10 Wall St. Firms Reach Settlement in Analyst Inquiry*, N.Y. TIMES, Apr. 29, 2003, at A6 (listing $80 million for investor education as among the settlement terms agreed to by investment firms); *Met Life to Pay Fine For a Sales Practice*, N.Y. TIMES, Oct. 21, 1998, at B7 (describing settlement of deceptive life insurance sale tactics claims as including money for consumer education); Press Release, Attorney Gen. of Pa., Attorney General Corbett Announces $200,000 Settlement 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

speculative, but the consumer-welfare returns on these literacy programs may well be lower than what could be generated from defendants' expertise and businesses if used to help develop and experimentally test potential new procedural or substantive regulations. So too, regulator acceptance of firm sponsorship of financial-education programs for purposes of meeting obligations under the Community Reinvestment Act, analogous state laws, or state licensing schemes,[318] comes at the price of other activities that the credit, insurance, and investment industries could be doing to improve consumer welfare.

What sorts of alternative public policies could we pursue if we were to move beyond the search for financial literacy? At least four possibilities are ripe for experimentation: (1) substantively regulating financial products; (2) increasing the resources with which consumers approach the market; (3) framing financial choices so as to invoke good decisions; and (4) aligning incentives of sellers with needs of consumers.[319] All of these pose uncertain costs and benefits, the challenging assessment of which has been ignored in reliance on the myth of the efficacy of financial-literacy programs.

Substantive regulation could take the form of prohibitions or mandates. Prohibiting the sale of financial products with particular risky or outright harmful components would be justified even when a few consumers benefit from the product, if many others are significantly harmed.[320] Products that

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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."); Press 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/press/pdf /2006/nr0601.pdf (announcing as part of settlement of predatory-mortgage-lending charges, $30 million that states could use for financial-literacy education).

318. 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 282, at 448. An analogous Connecticut law requires state-chartered financial institutions to serve their communities or be prohibited from accepting state or municipal deposits. CONN. GEN. STAT. ANN. §§ 36a-30 et seq. (West 2008). A Health Maintenance Organization applying for a license to sell insurance in West Virginia must submit its "plans for community education and public relations." State of West Virginia Insurance Commissioner, Application Guidelines and Checklist for Certificate of Authority, http://www.wvinsurance.gov/forms/company/hmo-foreign-application.pdf (last visited Sept. 14, 2008).

319. Neither an exhaustive list nor a complete analysis of the alternatives presented is possible here; the point is simply that we have alternatives to explore. *See also* Elizabeth Warren, *Unsafe at Any Rate*, 5 DEMOCRACY 1 (2007) (proposing a Financial Product Safety Commission that could study, test, and implement alternative forms of regulation).

320. For example, the Federal Reserve Board recently found that the benefit to some mortgage borrowers of a price reduction associated with prepayment penalties was outweighed by the injury to many subprime mortgage borrowers who paid prepayment penalties. Therefore, the Board has banned prepayment penalties on subprime home loans when the monthly loan payment can change within the first four years of the loan term and has limited

send homeowners to foreclosure, credit card users to bankruptcy, the underinsured to emergency rooms, and senior citizens to welfare programs produce social costs calling for substantive prohibitions. The U.S. military determined that service member use of payday, auto-title, and other high-interest loans created a national-security externality: "Predatory lending undermines military readiness, harms the morale of troops and their families, and adds to the cost of fielding an all volunteer fighting force."[321] The government already mandates participation in social security's retirement and disability-insurance programs and state unemployment insurance schemes for wage-earners, but the government could explore more extensive mandates.

At the other end of the spectrum are public policies that would strengthen consumers without directly affecting seller duties or product attributes. For example, rather than attempting to impart financial literacy, market-savvy education could teach consumers how little they know, how quickly products change, how influential sales and marketing tactics can be,[322] and how commission structures give salespeople a financial interest at odds with their own.[323] Consumer protection training could teach decisionmaking strategies such as taking time and space for deliberation—time to sleep on it without the psychological pressure created by the presence of the salesperson. Personal-awareness development could help consumers identify and address conditions that reduce their financial decision and behavior quality.[324] For example, rather than relieving negative mood states by spending money they do not have on things they later realize they do not need, people could practice other mechanisms to address a negative mood. Personal-finance support groups could provide emotional

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the duration of prepayment penalties to the first two years of any other subprime loan. Truth in Lending, 73 Fed. Reg. 44,522, 44, 551 (July 30, 2008) (to be codified at 12 C.F.R. pt. 226).

321. *See* U.S. DEP'T OF DEF., *supra* note 281, at 53.

322. *See generally* TED JANUSZ, KICKBACK: CONFESSIONS OF A MORTGAGE SALESMAN (2006) (recounting the sales ploys used by the author when he was a mortgage broker); CIALDINI, *supra* note 234, *passim* (explaining why sales and marketing techniques are successful); ARTHUR ALLEN LEFF, SWINDLING AND SELLING (1976) (exploring the commonalities between fraud and sales techniques).

323. The Institute for Financial Services in Hamburg, Germany operates such a program of education in its "Schuelerbanking" curriculum. Udo Reifner, Working to Achieve Responsible Credit, (Mar. 28, 2007), http://www.responsible-credit.net/media.php?t=media&f=file&id=2475.

324. One bankruptcy-debtor education program attempted to do this, but in a single three-hour group training. Weiner et al., *supra* note 22, at 350–52. Multiple sessions and individual psychotherapy might be required to reflect on how to apply these lessons to one's own financial decisions. *See, e.g.*, Tahira K. Hira & Olive M. Mugenda, *The Relationships Between Self-Worth and Financial Beliefs, Behavior, and Satisfaction*, 91 J. FAM. & CONSUMER SCI. 76, 81–82 (1999) (finding preliminary evidence that a person's perceived financial situation shapes feelings of self-worth, which in turn shape financial behaviors).

support for financial decisions that produce long-term rather than short-term benefits.[325]

Consumers often know what is best for them and can explain, in functional terms, what they want—a home loan they can afford, an insurance plan that covers their needs, etc.—but in today's financial marketplace they cannot discern which loan is the one they can afford or which plan covers their needs. Affordable expert advice[326] provided through a publicly funded, accessible system of neutral, financially trained intermediaries, akin to pro bono legal advice, could equalize the positions of consumers and sellers and reduce consumer anxiety about financial decisions.[327] A number of measures would complement expert advice, including basic financial and market-savvy education to help consumers identify when they need expert advice, locate competent and trustworthy advisors, and follow expert instructions.[328] Strict regulation of experts would increase the probability that they would possess competence and refrain from self-dealing. Mandatory "warming up periods" would give consumers time to seek professional advice before decisions would be final.[329]

Other tools to bolster consumers in the financial-services market include precommitment devices that could reduce the effects of time-bias and protect against decisions that might otherwise be made under the

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325. I thank Regina Austin for pointing out the support-group and information-sharing functions that programs that call themselves financial-literacy education can serve.

326. *See, e.g.*, Lee & Cho, *supra* note 230, at 118 (advocating subsidized "information intermediaries" to assist consumers with financial decisions); LESLIE PARRISH & LISA SERVON, NEW AM. FOUND., POLICY OPTIONS TO IMPROVE FINANCIAL EDUCATION: EQUIPPING FAMILIES FOR THEIR FINANCIAL FUTURES 11 (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.* Financial Information Service Centres of Ireland, http://www.citizensinformationboard.ie (last visited Sept. 20, 2008) (website of Ireland's public financial-advice service); Money Advice and Budgeting Service of Ireland, http://www.mabs.ie (last visited Sept. 20, 2008) (website providing "a national, free, confidential and independent service for [Irish] people in debt or in danger or getting into debt").

327. Thorne and Porter have suggested that the "financial-education" courses currently mandated for consumer-bankruptcy debtors might be most helpful if, instead of education, they provided tailored advice about where and how to obtain financial assistance to meet the housing and insurance needs with which these debtors struggle post-bankruptcy. Deborah Thorne & Katherine M. Porter, *Financial Education for Bankrupt Families: Attitudes and Needs* 6–7 (Univ. of Iowa Legal Studies Research Paper No. 08-03, 2008), *available at* http://ssrn.com/abstract=1032968.

328. I thank Jennifer Arlen for this point. *Cf.* Fanto, *supra* note 121, at 133–36 (advocating education to enable investors to avoid fraud and monitor professional advisors).

329. In prior work, I have suggested mandatory "warming up" periods in the context of home mortgages. Willis, *supra* note 52, at 823–24. This is a variant on "cooling off" periods that permit consumers to rescind the loan after making the decision. *E.g.*, FTC Door to Door Sales Cooling Off Rule, 16 C.F.R. § 429 (2008). Because consumers become psychologically committed to the choices they make, a deliberation period prior to the transaction is preferable.

influence of stress or persuasive sales tactics.[330] Many such devices already exist—consumers have their employers over-withhold taxes, they cut up their credit cards or freeze them in ice, or they budget and use savings vehicles that are costly to access (e.g., CDs, retirement funds, home-equity build-up, piggybanks).[331] Regulation could assist in the creation of more, particularly systems through which consumers could elect to have their income flows closely match expense flows for necessities such as rent, mortgage, or utility payments.

A third regulatory approach is to frame financial choices to lead to good decisions by altering what has been dubbed the "choice architecture"[332] of financial decisions. Mild versions include setting defaults that place consumers in retirement, credit, and insurance positions that are welfare-enhancing for the average consumer.[333] For example, as now permitted but not required by the Pension Protection Act of 2006,[334] default rules could place consumers into relatively high retirement-savings rates to exploit procrastination in financial planning. Other defaults could include credit cards or bank accounts that cut off credit or funds once consumers reach certain limits. Another form of framing regulation would be to require that sellers always offer a standardized product option or two.[335] For example, whenever a seller offers a consumer any "nonstandard" mortgage, the law could require the seller to offer the consumer a "standard" mortgage simultaneously—a thirty-year, fixed-rate, fully amortizing, plain-vanilla mortgage—with the same principal amount as the other offer(s). "Standard" product offerings would vary only in price—a price with only one or two dimensions that a consumer could easily compare to other seller offers.

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330. *See generally* 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) (proposing a program for elders to protect themselves against predatory lending by recording an instrument in advance that limits loan terms); Richard H. Thaler & Shlomo Benartzi, *Save More Tomorrow™: Using Behavioral Economics to Increase Employee Saving*, 112 J. POL. ECON. S164 (2004) (proposing a savings program where participants dedicate in advance a portion of future salary increases to retirement savings).

331. *See generally, e.g.*, Michael S. Barr & Jane K. Dokko, *Paying to Save: Tax Withholding and Asset Allocation Among Low- and Moderate-Income Taxpayers* (Fed. Reserve Bd. Fin. & Econ. Discussion Series, Working Paper No. 2008-11, 2007), *available at* http://www.federalreserve.gov/Pubs/feds/2008/200811/200811pap.pdf (discussing use of voluntary over-withholding of taxes as a spending self-control device); Elisabeth Leamy, *Curing a Credit Card Hangover*, ABCNEWS.COM, Dec. 12, 2006, http://abcnews.go.com/Business/PersonalFinance/Story?id=1521979 (advocating cutting up all credit cards or freezing one card in ice for emergencies).

332. RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 3 (2008) (introducing the concept of "choice architecture").

333. *See generally, e.g.*, Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199 (2006); Cass R. Sunstein, *Switching the Default Rule*, 77 N.Y.U. L. REV. 106 (2002).

334. Pension Protection Act of 2006, Pub. L. No. 109-280, 120 Stat. 780 (2006).

335. *See generally, e.g.*, Ian Ayres, *Menus Matter*, 73 U. CHI. L. REV. 3 (2006). I thank Ethan Stone for drawing my attention to this regulatory mechanism.

Stronger methods of framing so that consumers could make personal-finance decisions based on an accurate understanding of their choices would entail some degree of substantive regulation. Although policymakers today actively search for that holy grail of disclosures—disclosures that consumers understand—as long as the products are complex and nonstandardized, disclosures that include all relevant product terms will inevitably be confusing.[336] True transparency would require simplifying and standardizing products available so that comprehensible disclosures would be possible. The variety, complexity, and sheer number of products available in the marketplace would need to be reduced.[337] 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. Personal-finance education in such a context might be useful, because most people can be taught rules of thumb. If financial products were structured such that consumers could apply rules of thumb correctly, the quality of decisions could rise.

Finally, policymakers could bring the incentives of sellers of consumer financial products into closer alignment with consumers' best interests. To prevent conflicts of interest between consumers and salespeople, the latter's salaries could be paid on a flat-fee basis.[338] Price structures that reflect investment performance over time could give sellers of investments an interest in the investor's long term well-being. Policymakers might change the incentives of mortgage sellers and investors by banning all prepayment penalties and up-front fees that inhibit borrowers from refinancing with other lenders, requiring sellers or holders to compensate communities for

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336. Willis, *supra* note 52, at 768. Governor Kroszner of the U.S. Federal Reserve Board recently described that agency's extensive consumer testing of a multitude of possible disclosures. Governor Randall S. Kroszner, Protecting Consumers in the Credit Marketplace (June 11, 2008), http://www.federalreserve.gov/newsevents/speech/kroszner20080611a.htm. For credit cards, the Board tried many different methods of disclosing the two-cycle balance computation billing method (also called "double-cycle billing") used by some card issuers, but could not find a way of explaining this complicated billing method such that ordinary people could understand it. The Board also found that double-cycle billing did not benefit consumers. It therefore has proposed regulations that would prohibit double-cycle billing. *Id.*

337. *See* Hanoch & Rice, *supra* note 194, at 62–65 (advocating regulatory changes to reduce the number of Medicare insurance plans and the number of firms offering plans); Barry Schwartz, *Navigating the Paradox of Choice*, 6 ECRJ.: INT'L COM. REV. 43, 50 (2006) ("[W]e need a framework of strong regulation within which perhaps individuals can choose from among a small number of clearly differentiated choices that really matter, and that reflect well-understood personal priority differences."); Willis, *supra* note 52, at 821–23 (suggesting product simplification to achieve transparency in the mortgage market).

338. *Cf.* Bodie, *supra* note 45, at 25 (describing the conflicts of interest between sellers of investment vehicles and consumers); Jack Guttentag, What Is an Upfront Mortgage Broker?, (Nov. 8, 2006), http://www.mtgprofessor.com/A%20-%20Upfront%20Mortgage%20Brokers/what_is_an_upfront_mortgage_broker.htm (describing the conflicts of interest between mortgage brokers and consumers).

the externalities of foreclosure, or abrogating the holder-in-due-course doctrine. Regulators could also move insurer incentives 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 could be aligned through detailed regulations tailored for particular products and sales channels, through a broad standard requiring industry to determine how to align incentives,[339] or through common-law development of financial-products liability principles.[340] All of these alternative policies have administrative and enforcement costs. Some, such as pro bono financial advisors, have program costs. Substantive regulation of financial products carries the cost of eliminating some welfare-enhancing transactions, because there is always some consumer in some situation in which the prohibited product would be helpful. Even roughly estimating the costs and the benefits of any public policy is not easy, and implementation of any new policy is itself costly. A society that believes that financial-literacy education will solve consumer financial problems has an all-too-convenient excuse not to engage in the difficult task of finding better consumer-finance public policies.

C. *PARADOXICAL EFFECTS ON CONSUMER DECISIONMAKING*

Although the tangible and opportunity costs of regulation through financial-literacy education are reason enough not to pursue it, some empirical evidence also points to possible paradoxical effects. In some studies, personal-finance classes were associated with lower performance on financial tests and an increase in welfare-impairing financial behaviors. None of these studies produced strong, replicated, peer-reviewed, large-sample-size paradoxical results, but the finding that more education *could* lead to worse financial behavior is not implausible. There are a number of mechanisms through which this could occur, overconfidence and overoptimism chief among them.

Financial-literacy programs are not only premised on the idea that consumers can control their financial situation, but also promote this belief through their curricula to motivate participants.[341] In reality, this education may do no more than increase overoptimism and the illusion of being able

339. *Cf.* 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, 1471 (2005) (arguing for recontextualization of the relationship between mortgage brokers and borrowers in order to combat predatory lending).

340. *Cf.* John A.E. Pottow, *Private Liability for Reckless Consumer Lending*, 2007 U. ILL. L. REV. 405, 405 (arguing for the imposition of private liability on lenders responsible for borrower defaults).

341. *See, e.g.*, Stokes & Polansky, *supra* note 176, *passim* (finding that participants in one three-hour financial planning course believed themselves to be more in control of their financial futures as a result of the course).

to control financial risks. Participants consistently self-assess as having learned a great deal and having gained confidence,[342] 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 that would have led to depletion of all their assets and income between four and seven years before the ends of their predicted life spans. 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."[343] With added confidence, consumers are more likely to make decisions for which they lack sufficient expertise, rather than seeking professional financial advice.

Higher financial knowledge levels have a positive association with better financial behavior in many studies, but others find a negative association. When higher literacy is associated with worse outcomes, overconfidence is a likely mediator. 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.[344]

Because the authors did not expect this result, they did not seek to determine the reason why victims were more literate. It could be that the victims learned from their experience of being defrauded. But it may also be

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342. *See generally, e.g.*, U.S. DEP'T OF AGRIC., COOP. STATE RESEARCH, EDUC., & EXTENSION SERV., FINANCIAL SECURITY IN LATER LIFE IMPACT REPORT (2006), *available at* http://www.csrees.usda.gov/nea/economics/pdfs/fsll_impacts_jan06.pdf. This report quotes 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.'" *Id.*

343. Hershey et al., *supra* note 20, at 467–68; *see also* Jason J. Kilborn, *Behavioral Economics, Overindebtedness, and Comparative Consumer Bankruptcy: Searching for Causes and Evaluating Solutions*, 22 BANKR. DEV. J. 13, 23 (2005) (describing how "debtor education" programs which teach money-management skills "enhance the illusion of control that leads to overconfidence in future borrowing").

344. THE CONSUMER FRAUD RESEARCH GROUP, NASD INVESTOR EDUC. FOUND., INVESTOR FRAUD STUDY FINAL REPORT 5 (2006).

that a little bit of knowledge is a dangerous thing. That is, it may be that the nonvictims knew little and knew they knew little, and therefore did not attempt to engage in the investments proposed to them for fear of being defrauded, whereas the victims knew just enough to think, erroneously, that they had sufficient financial literacy to distinguish a good investment proposal from a fraudulent one. Tellingly, the victims were more likely to agree with the statement, "'I rely on my own experience and knowledge to make financial decisions.'"[345] 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.[346]

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 average and low scores are significantly more confident in their own knowledge than they should be.[347] 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.[348] Similarly, high-school students who describe themselves as "very thrifty" have lower average financial-literacy scores, even on questions about saving.[349] In another large sample of consumers, half of the respondents who reported that their financial literacy was "very high" did not objectively test within the highest quartile of the sample, and over 15% were in the bottom quartile.[350] The portfolios of individual investors who are sufficiently confident in their acumen to trade frequently under-perform the market by more than the average investor.[351]

Another widespread problem is misinterpretation of the material taught. For example, some employees 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.[352] Even when their choices are index funds holding approximately the same portfolio of

345. *Id.* at 7.

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

347. Agnew & Szykman, *supra* note 134, at 62–63, 69.

348. Choi et al., *supra* note 127, at 18.

349. Mandell, *supra* note 244, at 5.

350. Annamaria Lusardi & Olivia Mitchell, *Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel* 13 tbl.4 (Mich. Ret. Research Ctr., Research Paper No. WP 2007-157, 2007), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1095869.

351. Barber & Odean, *supra* note 13, at 793.

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

stocks, many divide their investments evenly among the choices.[353] In a number of studies, teaching people accurate statistical information about health risks led to increased overoptimism.[354] The misinterpreted information apparently became more fodder for the bias.

More speculatively, emphasizing the importance of financial literacy could backfire by increasing the stakes and thus mistakes. Because education alerts consumers to the availability of more financial information and choices, it could increase information and choice overload, and thereby decrease decision quality. To the extent that sponsoring personal-finance programs achieves industry marketing objectives, it could increase the amount of trust consumers place in firms,[355] trust that can lead to deference to salespeople and inferior consumer-welfare outcomes.

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 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."[356] 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.[357] Although this could reflect accurate self-assessments of information not accounted for in credit scores, it could also be that overconfidence about credit scores leads to increased persistence in shopping and, in turn, to lower prices. A little bit of knowledge may not always be such a good thing.

D. *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'

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353. *Id.*; Choi et al., *supra* note 127, at 16.

354. Weinstein & Klein, *supra* note 165, at 138–39.

355. *See, e.g.*, Rose Curtis, *Doing the Right Thing for the Latino Community*, HISPANIC CAREER WORLD, Winter/Spring 2005, at 41, 43, *available at* http://web.archive.org/web/20070820070251/http://eop.com/samplehcw.html ("Financial institutions find that effective educational and community programs such as literacy seminars . . . targeting the Hispanic community translate into lucrative business opportunities. Emerging trends with home ownership, retirement planning, and asset management show that long-standing mistrust of financial institutions is fading.").

356. Fair and Accurate Credit Transaction Act of 2003, H.R. 2622, 108th Cong. § 514(a) (2003).

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

knowledge, he accumulated a Visa, two MasterCards, 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.[358]

Financial-literacy advocates, members of Congress, and academics have cited this story, and others like it, as evidence in support of personal-finance education.[359] Recent polls have found evidence that high levels of debt stress are associated with dramatically increased rates of severe depression and anxiety, migraines, back pain, and even heart attacks.[360] A shocking proportion of Americans believe that bankruptcy is an acceptable reason for suicide.[361] Is ignorance of financial topics truly to blame for the myriad of problems suffered by over-indebted Americans?[362] Or is the financial-literacy policy model part of the problem, not the solution?

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358. Press Release, Consumer Fed'n of Am., Credit Card Debt Imposes Huge Costs on Many College Students (June 8, 1999), *available at* http://www.consumerfed.org/pdfs/ccstudent.pdf (announcing findings from Robert Manning's study on student credit card debt). For similar stories, see, for example, *id.* (story of Mitzi Pool); JAMES D. SCURLOCK, MAXED OUT 20, 134 (2007) (story of Yvonne Pavey); *see also* Jim Wasserman, *Prime Time for Evictions: A Local Sheriff's Deputy Finds Himself on the Front Lines of Foreclosure Crisis*, SACRAMENTO BEE, July 7, 2008, at 1A, *available at* http://www.sacbee.com/101/story/1064184.html (reporting a Sheriff Deputy's experiences of having former homeowners commit suicide as he approached their foreclosed-upon homes to evict them).

359. *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) (article by noted legal scholar pointing to Sean Moyer's story as support for legislation requiring universities to provide financial education to students).

360. Jeannine Aversa, *AP-AOL Poll: Debt Hurts Your Body, Too*, USA TODAY, June 9, 2008, http://www.usatoday.com/money/economy/2008-06-09-2944256361_x.htm (citing Associated Press-AOL poll findings that Americans with high debt-stress had rates of severe depression and anxiety five to six times higher than those with low debt-stress, tripled rates of migraines, doubled rates of heart attacks, and almost doubled rates of back pain); *see also* Sarah Brown et al., *Debt and Distress: Evaluating the Psychological Costs of Credit*, 26 ECON. PSYCHOL. 642, 657–58 (2005) (finding high nonmortgage 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."). For a discussion of the importance of taking emotional costs and benefits into account in policymaking, see generally Peter Huang, *Emotional Impact Analysis in Financial Regulation: Going Beyond Cost-Benefit Analysis* (Temple Univ. Legal Studies Research Paper Series, Research Paper No. 2006-21, 2006), *available at* http://ssrn.com/abstract=870453.

361. Efrat, *supra* note 143, at 379 n.66 (reporting national survey data that over the last three decades, between 4.4% and 9.6% of Americans told interviewers that they believe bankruptcy is an acceptable reason for suicide).

362. 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

Policymakers and researchers should take the latter question seriously. American culture has long viewed personal-finance decisions as reflecting character traits of responsibility, trustworthiness, self-control, industry, frugality, and wisdom. Most adults are believed to have sufficient control over their financial well-being through their decisions and behavior to be held in moral disapprobation when they experience poor financial outcomes. Financial decisions are either "good" or "bad." Financial behavior is either "responsible" or "irresponsible," "healthy" or "unhealthy." Debtors with late payments, like juveniles who commit crimes, are "delinquent." Some see poor financial behavior as reflecting mental illness.[363]

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 losing investment strategy would be difficult to characterize as a direct result of irresponsibility, laziness, greed, or abject stupidity. But with the education model, the consumer can be blamed for failing to become sufficiently literate to handle her retirement savings. Financial-literacy education blames the consumer for her own plight, but shifts from an indictment of raw moral character traits to the "choice" about whether to attend classes and use the information and skills taught (but not necessarily learned). Shifting public policy away from financial-literacy education would not eliminate cultural attitudes about personal responsibility and blameworthiness for financial condition, but it could remove some of the fuel that feeds these attitudes.

Although a few financial-education classes actively and overtly promote a blame-the-consumer mentality,[364] most seek to create a supportive and

homeownership and employment. These losses generally would not have impoverished the victims, suggesting 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, 110 (2007). American culture is by no means unique in this respect. *See generally* U. Rantakeisu et al., *Unemployment, Shame and Ill Health—An Exploratory Study*, 6 SCANDINAVIAN J. OF SOC. WELFARE 13, 21 (1997) (finding evidence of a causal relationship between unemployment and shame in Swedish society and describing the historical development of the beliefs that "failure in business was something to be ashamed of" and, for some, that in the face of financial failure, suicide would "save the honor of both themselves and that of their family"); Mark D. West, *Dying to Get Out of Debt: Consumer Insolvency Law and Suicide in Japan* (Univ. of Mich. Law Sch. Pub. Law & Legal Theory Research Paper Series, Research Paper 37, 2003) (exploring the relationship between suicide and bankruptcy in Japan).

363. Edie Milligan, *How Employee Assistance Counselors Can Become More Comfortable Helping Clients with Financial Problems*, 2 PERSONAL FINANCES & WORKER PRODUCTIVITY 56, 56 (1998) ("[M]ost financial problems are a result of underlying mental health problems . . . .").

364. Materials in one of the courses that consumers are required to take as a condition of discharge in bankruptcy state: "the fact is that if you are a victim, you have no one to blame but yourself." LOONIN ET AL., *supra* note 88, at 38. A bankruptcy trustee involved in debtor education explains his own "tough love" philosophy: "'There's right and wrong—you owe it, you should pay it.'" Braucher, *supra* note 50, at 324 (internal citation omitted). 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

accepting environment. Yet they can not help but feed into the societal norm of blame. The language used to talk about educating consumers to be financially literate is replete with morally charged language. For example, Freddie Mac's "CreditSmart" course asserts that "[g]ood credit terms and interest rates are earned."[365] 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. "CreditSmart" defines 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.[366]

But lenders do not lend on the basis of "favorable opinions" about borrowers; they lend because they believe they will make a profit from the transaction. One lending business model is to seek out people 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.[367]

The architects of one bankruptcy-debtor financial-education program used the latest knowledge of experts in the psychology of money to develop their curriculum and were particularly careful to key the program to the participants own attitudes and goals.[368] The educators attempted to evaluate this program by comparing the responses of participants and debtors who did not receive the education to survey questions about their financial knowledge and behaviors before the training date and three months later. Only 34% of those debtors who received the training responded to the follow-up survey, whereas 56% of debtors who did not participate in the program responded.[369] The high participant nonresponse rate may suggest that despite educators' best efforts to the contrary, the program reinforced participants' shame about their financial behaviors.

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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. Hartarska & Gonzales-Vega, *supra* note 40, at 239.

365. Freddie Mac, CreditSmart: About Credit, http://web.archive.org/web/20060110051607/http://www.freddiemac.com/creditsmart/credit/about.html (last visited Sept. 2, 2008).

366. *Id.*

367. *See* Katherine M. Porter, *Bankrupt Profits: The Credit Industry's Business Model for Postbankruptcy Lending*, 93 IOWA L. REV. 1369, 1400 (2008) (researching the relationship between consumer credit and consumer bankruptcy filings); Caroline E. Mayer, *Bankrupt and Swamped With Credit Offers*, WASH. POST, Apr. 15, 2005, at A1 (reporting on credit-card companies' eagerness to open accounts for bankrupt consumers).

368. Weiner et al., *supra* note 22, at 350.

369. *Id.* at 353.

Consumers understand the regulation-through-education model to mean that they have only themselves to blame for their financial woes. Stigma leads them to keep their problems to themselves, rather than seeking help.[370] As one borrower said when explaining her reaction to discovering that a home-mortgage lender had slipped a 26% origination fee into her loan at closing: "I felt so stupid . . . I couldn't tell anybody."[371] 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 can 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.[372]

Financial-services firms know consumers fear that society blames them for their plight. Numerous websites offer to save homeowners' "dignity"[373] by helping them avoid the "stigma and public humiliation" of foreclosure[374] and preventing the "embarrassment of . . . [having their] foreclosure information posted in the local newspaper for friends, family and co-workers to see."[375] Many borrowers 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 those responding to one survey reported that the reason they did not contact their lender was because they were embarrassed.[376] Even when financial literacy is irrelevant, the education

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370. The Defense Department's credit-counseling program is confidential so that embarrassment or fear that superiors will treat credit problems as evidence of unworthiness for career advancement will not deter service members from participation. U.S. DEP'T OF DEF., *supra* note 281, at 36.

371. Transcript of Record at 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) (on file with the Iowa Law Review).

372. *See* ROBERT MANNING, CREDIT CARDS ON CAMPUS: COSTS AND CONSEQUENCES OF STUDENT DEBT 2–3, 22 (1999).

373. Quality Real Estate Investments, LLC, http://qbuyhomes.com/home (last visited Sept. 20, 2008).

374. The Property Solutions Group, http://www.thepropertysolutionsgroup.com/stn01_02_11.php (last visited Sept. 20, 2008).

375. Foreclosure LMS, http://www.foreclosurelms.com (last visited Sept. 20, 2008).

376. NEIGHBORHOOD HOUS. SERVS. OF CHI., HOME OWNERSHIP PRES. INITIATIVE, PARTNERSHIP LESSONS AND RESULTS 25 fig.7 (2006). In a Freddie Mac study, about 30% of borrowers who missed a payment admitted they did not contact their lender. FREDDIE MAC, FORECLOSURE AVOIDANCE RESEARCH 6–7 (2005), http://www.freddiemac.com/service/msp/pdf/foreclosure_avoidance_dec2005.pdf. 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. *Id.* The media deride "jingle mail"—homeowners who cannot afford their mortgages, send the house keys to the lender, and move out—as evidence of insouciance toward homeownership. John Leland, *Facing Default, Some Walk Out on New Homes*, N.Y. TIMES, Feb. 29, 2008, at A1. A more plausible explanation for jingle mail is that the emotional toll of foreclosure is so great that borrowers cannot bear to

model makes consumers feel disgraced by poor financial outcomes. One consumer who bought a comprehensive health-insurance policy, as any personal-finance course would have suggested, developed cancer and was charged personally for thousands of dollars of medical expenses that her policy should have covered. She was driven into bankruptcy through no fault of her own, but she still felt "devastated and embarrassed."[377]

The reaction of the late Sean Moyer's parents when Sean told them about his financial problems reflects these cultural beliefs. Sean's mother explained that when Sean told them about his financial problems, "[h]is father and I were appalled that he had gotten into so much debt, but we didn't have an extra $10,000."[378] 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.

This blame is socially pernicious for a number of reasons. First, it provides a convenient excuse for society to refrain from assisting consumers who experience poor financial outcomes.[379] As a community-affairs officer involved in a financial-education program put it:

> What is driving this financial education movement? . . . Is it reducing 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 with 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."[380]

With its focus on the responsibility and efficacy of the individual, the financial-literacy model absolves financial-services firms and policymakers and deflects inquiry away from systemic societal and market failures.[381]

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contact their lenders to arrange for a resolution that would take less of a long-term financial toll on the borrower's credit score, such as a short sale or deed-in-lieu.

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

378. Margaret Mannix, *The Credit Card Binge: College Students Are Engaging in Some Risky Spending*, U.S. NEWS & WORLD REP., Aug. 29, 1999, at 89.

379. 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," despite lack of good evidence this is true. *Id.* at 311–12.

380. Lyons et al., *supra* note 22, at 232 (internal quotation marks omitted).

381. *See* Braucher, *supra* note 50, at 330 & n.49.

The financial-literacy policy model is also socially pernicious because even as it blames low-wealth consumers and their communities for their financial plight, any benefits of financial education are likely to flow disproportionately to the financially better-off. 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.[382] 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.[383] 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, those with higher incomes more frequently enroll in and finish it than those who earn less. 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.[384] 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.[385] 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.[386]

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. A household living paycheck-to-paycheck must precisely track income and expenses; overdrawing a bank account by a dollar results in an overdraft fee of about thirty-five dollars. Keeping a record of withdrawals and deposits is unlikely to prevent all overdraft fees because at some point all mortals forget or misremember an expense,

382. *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).

383. JUMP$TART COAL., *supra* note 4.

384. Barbara O'Neill et al., *MONEY 2000 Participants: Who Are They?*, 37 J. EXTENSION 6 (1999), http://www.joe.org/joe/1999december/a3.html.

385. Gartner & Todd, *supra* note 44, at 9.

386. Angela C. Lyons et al., *Translating Financial Education into Behavior Change for Low-Income Populations*, 17 FIN. COUNSELING & PLAN. 27, 41 (2006).

transpose two digits when writing an entry, or fail to communicate a withdrawal to another household member. Teaching these households more about overdraft fees, math, and budgeting is likely to be more insulting than helpful. Households with more financial resources have the luxury of being able to budget vaguely, if they budget at all.[387] Low-wage consumers need the literacy to shop for insurance and retirement-savings vehicles on the open market, without the expertise or bargaining power of a human-resources department. In addition to employee benefits, higher-wealth consumers have resources to hire professional experts such as investment advisors and financial planners. The financial-education model paradoxically requires those least equipped for the task to make a host of very difficult decisions, and credits those with higher incomes with "responsible financial behavior" even when others have made 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. President Bush attributed the rising foreclosure rates of 2007 to homeowner failure to understand the "fine print" on their mortgages, and he concluded that "[t]here needs to be financial education measures in place."[388] Tellingly, the President never mentioned that investors had failed to read the prospectuses for the billion dollars of mortgage-backed securities they bought. These prospectuses provided clear warning to the sophisticated investors permitted to buy the mortgage-backed securities about the risk of foreclosure, even as the borrowers themselves were not warned.[389] These investors' financial educations 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.

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387. I have yet to find a law professor who hews closely to a budget or tracks daily expenses. *See* Braucher, *supra* note 50, at 334 ("Those with higher incomes . . . may never use budgeting, tracking [income and expenses] . . . or other techniques recommended in financial-management courses, and yet avoid debt problems.").

388. Remarks by the President, *supra* note 3.

389. For example, a publicly available securities prospectus from 2001 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." Aames Capital Corp., Prospectus Supplement, Aames Mortgage Trust 2001-4 Mortgage Pass-Through Certificates, Series 2001-4, at S-11 (Nov. 30, 2001), *available at* http://www.secinfo.com/dsvrn.4FAAe.htm#j0q. 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." *Id.*

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'Neill[390]

The financial-literacy education policy model locates the problem of and the solution to poor financial outcomes in the consumer, but these can be conceptualized just as easily as part of the choice architecture of personal-finance decisions. Because changing the consumer does not look promising, consumer financial woes are more tractably understood as the result of a government that fails to regulate, an industry that hawks inappropriate products, and a deluge of complex products that change quickly. Nothing is inherently wrong with consumers or the modern marketplace, but the largely deregulated interaction between the two creates welfare-reducing outcomes.

Potential general approaches to improve that interaction include substantive prohibitions and mandates, enhancing the resources with which consumers approach the market, changing consumer financial-decision environments, or bringing seller incentives in line with consumer needs.[391] Without regulation through education, all is not lost for public policy to improve consumer finances—we do have alternatives, and we should explore them. Nearly every promising public policy to improve consumer credit, insurance, and retirement investment behaviors would limit "choice" in some respect, yet all have the potential to enhance both consumers' financial outcomes and consumers' functional autonomy, in terms of reflecting the individual's own goals and values and providing her with a sense of 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 people more ownership and control over their own daily lives and ultimate destinies, requires regulatory interventions in that marketplace that limit formal choice.

A stark example is the recent drop in the U.S. homeownership rate. The Federal Reserve Board's decision not to regulate the subprime-mortgage market allowed consumers to obtain mortgages they could not

390. *The State of Financial Literacy and Education in America: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 107th Cong. (2002) (testimony of Paul O'Neill, Secretary of the U.S. Department of the Treasury).

391. For a more-detailed description of some of these alternative public policies, see the discussion of the regulatory opportunity costs of the regulation-through-education model, *supra* Part IV.B.

afford, leading to a net loss of homeownership among users of subprime loans.[392] Giving borrowers apparent control over whether, how much, and on what terms they could borrow against their homes has sent many of them to bankruptcy and turned others into renters, with substantially less control over their financial lives and living environment than they had before they obtained these loans. Ultimately, to 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, while at the same time taking care not to hinder marketplace changes that would enhance consumer welfare. All approaches have costs and benefits that must be investigated before wholesale implementation. 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 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 citizens of the ownership society could flourish, and more rather than less education would be desirable. Regulation through education in such a world promises a free market and increased consumer welfare, seducing conservatives and liberals alike. 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.[393]

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,

392. *See generally, e.g.*, Alan M. White, *The Case for Banning Subprime Mortgages*, 77 U. CIN. L. REV. (forthcoming 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1133609.

393. *See generally* R.G. Lipsey & Kelvin Lancaster, *The General Theory of the Second Best*, 24 REV. ECON. STUD. 11 (1956–1957) (describing and applying the "second best" theory).

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.[394] 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.

394. For example, one report describes kindergarten financial-education programs that include activities such as "simulated shopping for toys or for household goods," advocated by experts who believe that the "best prospect of influencing future behaviour is to reach children while their minds are most open to new concepts." ORG. FOR ECON. CO-OPERATION & DEV., *supra* note 17, at 16. Teaching children to shop for toys implicitly endorses a market culture rather than one centered on creatively making one's own toys. *Cf.* Braucher, *supra* note 50, at 333 (discussing the ideological messages implicit in bankruptcy-debtor education programs).