

## **The Financial Education Fallacy**

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For presentation at the American Economics Association 2011 Annual Meeting

Session Title: Behavioral Economics and Consumer Regulation

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In the wake of the Great Recession, financial education has received renewed political support. Although it is difficult to believe that mortgage-backed securities investors or Lehman Brothers' top brass would have benefitted from more financial education, apparently the logic is that ordinary consumers would have made better mortgage choices and would have accumulated sufficient precautionary savings to weather the recession if they had received financial education. Objective observers generally admit that research to date does not demonstrate a causal chain from financial education to higher financial literacy to better financial behavior to improved financial outcomes (Shawn Cole and Gauri Kartini Shastri 2008; Ian Hathaway and Sameer Khatiwada 2008; Lauren E. Willis 2009; William G. Gale and Ruth Levine 2010), in part due to biases, heuristics, and other nonrational influences on financial decisions. Yet the search for effective financial education continues.

But it is time to ask whether the entire enterprise is misguided. Do we want to live in a society where ordinary consumers are left to navigate one by one through an ever-changing cornucopia of financial products armed only with education? What would "education" to counteract the nonrational determinants of financial behavior look like? If we could create a society in which financial education functions effectively as financial regulation, would we be better off?

Two reasons we might not want to create such a world are discussed here. First, the time, expense, and invasion of privacy that would be required, if it were possible at all, would be

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enormous. Second, living in such a world would entail, paradoxically, a decrease in individual autonomy. Alternative tools should be explored that could potentially increase household financial welfare and security at lower social and individual expense. A review of the research on financial literacy education reveals a slew of fallacious arguments (Willis 2009), but the fundamental fallacy may be the assumption that this is the path we should take at all.

## **I. The Costs of Effective Financial Education**

I have argued elsewhere that, realistically, we will never find the effective financial education for which many search (Willis 2008), but let us assume here that we can. What would it take to make financial education effective? Studies of existing programs have shown that even semester-long high-school courses (Jump\$tart Coalition 2006, 1; Louis Mandell and Linda Schmid Klein 2009) and eighteen months of adult credit counseling (Jinhee Kim, E. Thomas Garman and Benoit Sorhaindo 2003, 85) have not been enough.

A number of factors would make effective financial education extremely costly. First, there is the abysmal state of most consumers' financial literacy. Over 40% of baby-boomers approaching retirement could not divide lottery winnings among five people and over 80% either did not understand the meaning of compounding or lacked the math skills to calculate compound interest on \$200 over two periods (Annamaria Lusardi and Olivia S. Mitchell 2007). Millions of Americans fall prey to fraudulent credit repair schemes each year (Federal Trade Commission 2005). As a result, effective financial education would need to be very extensive, imparting skills ranging from performing basic math to assessing the reliability of information sources.

A second source of expense is the complexity of financial decisions and the heterogeneity of consumer financial circumstances and values. A rule-of-thumb to spend no more than 28% of monthly income on a mortgage was straightforward to apply when mortgages had payments that

were level. But today consumers face mortgages with variable and uncertain future monthly payments. Further, the “right” answer for one consumer will not be the right answer for another, because households differ dramatically. Paying all bills is welfare-enhancing for some, but defaulting on an underwater mortgage can be financially advantageous. In light of this complexity and heterogeneity, mass public education campaigns would not be effective financial education. Instead, intensive, audience-tailored instruction would be required.

The speed with which product offerings and industry practices change is a third hurdle for financial education. Yesterday’s new product was the option ARM, today it is the medical credit card. It was once “common wisdom” that people should save 10% of their annual income for retirement, but projections about longevity and health care costs indicate that 10% is not enough. The consumer financial marketplace is dynamic, yet major personal finance decisions are episodic, so consumers do not keep up with changes in the ordinary course of walking down the grocery aisle. Due to its short shelf life, financial education would need to be given repeatedly throughout the lifecycle.

Fourth, industry has substantial resources with which it can outmaneuver education. When public education campaigns blasted warnings about predatory mortgages, lenders of every stripe quickly adapted their marketing to proclaim their trustworthiness. Financial services firms engage in so much marketing because it works. Given the ubiquity of advertising, effective education would need to reach people at the point of financial decisionmaking.

The ultimate challenge for financial education is that even those who are financially knowledgeable and skilled make poor financial decisions surprisingly often. Logical decisionmaking can be trumped by a host of biases, heuristics, and emotional states, all of which have been extensively documented in the personal finance realm.

Financial decisions can be strongly affected by even transitory emotions related to nothing more than the weather. But the decisions themselves also present triggers for nonrational responses. The number of product choices and amount of information needed to fully assess each are overwhelming, leading some consumers to oversimplified decision strategies and others to paralysis. The stakes involved produce stress, and stress occupies mental resources, for many people resulting in a failure to consider all pertinent dimensions of the decision. Financial decisions require an assessment of the probabilities, timing, and costs of a host of misfortunes, from job loss to health problems, to which some consumers respond with either denial or overoptimism. The consequences of financial behaviors today often will not be known or felt for many years, but in making decisions people often place too little weight on delayed or uncertain outcomes, although at widely varying discount rates. Willpower is also taxed, as choices producing immediate gratification often have long-term financial costs, but willpower and cognitive effort consume the same finite resource in the brain; if one is being exercised, the capacity for the other goes down. Many financial products are sold in one-on-one settings, and consumers frequently place too much trust in salespeople. Finally, some consumers are plagued by overconfidence in their own abilities, and others by underconfidence. In one study, over 16% of respondents who assessed their own financial literacy as being at the highest level objectively tested in the bottom quartile, and over 8% who self-assessed their literacy at the lowest level tested in the top quartile (Annamaria Lusardi and Olivia S. Mitchell 2007, 23).

Attempts to train people so as to “debias” decisionmaking have largely failed, but provide clues about what would be needed to do so. Several techniques to reduce overconfidence have been tried. Having subjects consider reasons a decision or the assumptions on which it depends might be incorrect sometimes reduces overconfidence, but only for subjects who can easily bring

many such reasons to mind (Norbert Schwarz, Lawrence J. Sanna, Ian Skurnik and Carolyn Yoon 2007, 135-137). Financial education would need to frequently and vividly remind consumers of reasons that their assumptions could be incorrect to ensure that these reasons would be brought easily to mind. Giving subjects immediate, unambiguous, and accurate feedback over a series of repeated games has been found helpful in reducing overconfidence, but only overconfidence about making decisions taking the same form as the game. Because educators could never predict and simulate every form of major financial decision a consumer could face, to use this debiasing technique educators would need to intercede at the point of actual decisions and engage in repeat play simulating the decision at hand.

Alternatively, financial education might train consumers to engage in practices aimed at reducing triggers for nonrational decisionmaking. Using psychotherapy, people might be trained in techniques to distance themselves from their emotions or reduce stress when making financial decisions. For time and uncertainty discounting, visualizing future or uncertain outcomes as if occurring in the present might increase the decision weight placed on them.

Heterogeneity as to whether or when people experience nonrational influences means that debiasing techniques cannot be applied uniformly throughout the population. Trying to reduce overconfidence in an underconfident consumer could impair financial behavior. Asking some consumers to visualize uncertain future events – job loss or medical expenses, for example – could lead to paralysis rather than accurate weighting. Educators would need to analyze each individual's psychology to know which biases are present and to what degree, adapt the training session accordingly, and then engage in one-on-one training.

Collectively, these realities mean that effective financial education would need to be extensive, frequent, and personalized for each consumer. The government money and time

required would outstrip any public education campaign ever attempted. The price to individuals in time spent on education – rather than, for example, earning more income – would be enormous, such that on net, financial education might decrease wealth. For the government to behaviorally track consumers so as to match industry’s influence would not only be expensive, but also invasive. Even more invasive would be the psychological analyses needed to individualize debiasing measures. Are these costs we are willing to bear?

## **II. Paradoxical Effects on Autonomy**

Financial education is often advocated over other methods of regulation on autonomy grounds. However, effective financial education would require substantial incursions on individual autonomy.

First, many people do not want to spend their time or effort on receiving financial instruction. Voluntary financial education is widely available today, yet seldom used. In one study where credit card issuers warned thousands of credit card holders that they were at risk of delinquency and offered them a free online financial literacy course, only .4% attempted to log onto the website, and only .03% completed the course (Amy Brown and Kimberly Gartner 2007). Ironically, those who participate voluntarily already have more financial knowledge, better budgeting and planning skills, and more patience conducive to good money management than those who decline. Therefore, effective financial education would need to be mandatory, forcing those who would not have autonomously chosen to participate to do so. This imposition on people’s lives would not be trivial, given the extensiveness and frequency of the education that would be required.

Second, the effectiveness of many debiasing techniques hinges on changing people’s thought processes, feelings, motivations, and ultimately their values. Overconfident people must

be trained to be less confident, and underconfident to be more. Impatient people must have their discount rates altered. Trusting people must be made less trusting. The emerging field of financial therapy, in which financial professionals and licensed mental health professionals counsel individuals together, is premised on the idea that changing financial behavior requires changing people's emotional responses to money. Changing people in these ways may be good for them, but for mandatory financial education to require people to engage in this sort of therapy intrudes upon their autonomy.

Third, the education programs would need to decide what lessons to teach against a background in which we lack technical and normative consensus on what constitutes correct financial behavior. For example, saving and investing for retirement today require predictions about which experts routinely disagree, such as the returns that can reasonably be expected on various investments over various future time periods. Like most financial decisions, selecting investments also requires tradeoffs between risk and return that present a normative question: how much financial risk should an individual or household take on? Financial education cannot be effective if it sidesteps these issues. Although the Department of Labor's retirement planning guide instructs consumers to "select" a rate of return on each of their assets "depending on how much you believe each ... will increase in value," (U.S. Department of Labor 2010, 47), a consumer who can choose her rate of return has not been given sufficient tools to plan for retirement. Telling a consumer that as her mortgage debt-to-income ratio goes up her risk of foreclosure also increases, and then leaving her to decide what mortgage payment and risk of foreclosure to take on, is not helpful. Most educators know this, and routinely teach students what mix of investment products to select and what percentage of income to spend on a mortgage. These lessons might be the right ones, but their selection reflects technical judgments

and normative decisions. Students who behave as taught are not exercising autonomy, but are held accountable for outcomes as if they were.

Most fundamentally, financial regulation through education is premised on the idea that forcing each individual to make each financial decision in life for herself is autonomy-enhancing. But many people do not enjoy financial planning and believe it takes too much time and effort (Employee Benefit Research Institute 2009, 10). They fear regret if their choices turn out badly and would rather not bear the responsibility of doing it themselves. Left to their own devices, many consumers choose not to choose. Some avoid it by hiring financial advisors, others by relying on advice from friends, family, and colleagues (Mariko Lin Chang 2005), and others by doing nothing at all, sticking with the status quo. To enhance true autonomy, to give people more ownership and control over their own daily lives and ultimate destinies, requires regulatory interventions that support consumers' desire not to make all of their own financial choices.

### **III. Alternatives to Financial Education**

Financial education advocates may respond that their aim is not to create a world in which financial education supplants regulation, but merely to provide some help to consumers at the margins. But if the aim is merely to increase retirement savings and improve the manner in which these savings are invested, it is unclear why financial education is the lowest cost path to this result. Beefing up social security could produce the same result less expensively, and with greater certainty. If the aim is to increase the likelihood that consumers would select mortgages they will be able to afford, the cheaper path is likely to be regulation that aligns mortgage seller incentives with long-run mortgage affordability. Even improving basic math skills might be achieved more efficiently through prenatal nutrition or adult physical exercise programs than by using mandatory financial education to repeat math instruction throughout adulthood. For each

goal, the costs of reaching that goal via financial education versus alternative paths should be examined. Once the true time, money, privacy, and autonomy costs of financial education are examined, alternatives are likely to look preferable.

What are some alternatives to using financial education to regulate the consumer financial market? One is to provide consumers with pro bono professional assistance to help them navigate the market. Given that effective education would need to be individually-tailored and given in a one-on-one setting, replacing the educators with professional advisors seems a more cost-effective route. Regulating professional advisors well would be expensive, but regulating financial educators well would be no less expensive. We do not ask people to be their own doctors, lawyers, auto mechanics, food safety inspectors, etc., and, given the current marketplace, we should not ask them to be their own financial advisors.

Another possibility is to abandon trying to change people and instead harness their biases to work in favor of welfare-enhancing financial “decisions.” Retirement savings defaults have been more effective than retirement savings education and cost little to put in place. Exploiting consumer preferences not to make decisions might be expanded to other realms, although ensuring that firms do not undermine these defaults may prove difficult in many contexts.

Substantive prohibitions (for example, on investing a 401(k) in the employer’s stock) or mandates (for example, requiring consumers to buy health insurance) would reduce consumer choice, but it is unclear that having the option to invest this way or to fail to buy insurance provides any welfare benefits to consumers. Substantive regulation will sometimes ban products that would help some consumers or require actions that do not benefit some consumers, but these costs must be weighed against the costs of effective financial education.

Regulation of sales incentives so as to align seller and consumer interests is another possibility. Doing so well would require intrusion into the internal affairs of firms, but this seems less problematic than the degree to which effective education would intrude into the personal lives of consumers.

#### **IV. Conclusion**

The final salvo of financial education promoters is usually that education is the only politically feasible path to improving consumers' financial lives. Once the true costs are considered, however, effective financial education looks much less politically palatable. A society that is unwilling to pay for a K-12 education system that produces a populace that can perform basic math is not going to pay for one that can do this and far more. Mandated adult financial education has been unpopular; opposition quickly shut down an Illinois program to require high-foreclosure-risk mortgage applicants to engage in counseling prior to borrowing. The type of psychological counseling that would be required to debias consumers to enable them to use financial knowledge and skills effectively is almost certainly a political nonstarter.

One clue that financial education is not the only politically feasible path is the amount of money that industry spends on advocating for and funding financial education programs, even though consumers who exercise welfare-enhancing personal financial behaviors typically are less profitable for industry. Firms sometimes support these programs so as to use them as marketing opportunities. But firms also support programs when they have no control over the content. Why? Firms fear the other forms of regulation they believe they would face if they could not point to financial education as the cure for consumer financial woes. But if the inefficacy of current programs were known and the costs of effective financial education were truly understood, other forms of regulation would move to the fore.

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