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From Financial Literacy to Financial Action

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Introduction

More than ever, Americans need to be financially savvy. The past few years have shown that mortgages can be complicated, business-cycle downswings severe, and investing far from obvious. And, for many of us, saving is not easy. Creating a successful financial life takes a high level of know-how and stamina. Not surprisingly, efforts to increase financial literacy among Americans have won wide support.

Getting better financial knowledge may seem like a no-brainer. How can people make good decisions if they don't know the facts?

But new studies show that the relationship between financial literacy and the ability to make and stick with good financial choices is a complicated one. Financial literacy is necessary, but often insufficient. There's frequently a big leap from knowing what to do in principle and actually making it happen in daily life. Making better financial choices is similar to eating healthier or exercising. Good intentions can be side-tracked by common pitfalls.

The good news is that we're beginning to understand those pitfalls much better. More importantly, we're finding workable strategies to help overcome challenges.

The academic research in this area is relatively new, and we draw on recent social science studies to describe a vision for maximizing the effectiveness of financial education by coupling it with steps that turn financial knowledge into effective actions. Some of these additional steps can be taken by individuals, while others require the collaboration of government, businesses, and non-profits.

The idea that we need to expand beyond financial literacy and take into account a broader range of factors that go into decision-making was given an important boost last year when the White House relaunched the President's Advisory Council on Financial Literacy as the President's Advisory Council on Financial *Capability*. Capability—the term of choice for a growing number of practitioners—is defined by the Obama administration as "the capacity, based on knowledge, skills, and access, to manage financial resources effectively."[1]

But having the capacity to do something is not the same as actually doing it. We ask: How can people turn financial aspirations into meaningful actions? What is needed to help people develop and stick to concrete financial plans?

The critical starting point is awareness of one's own limits. Perhaps more than we like to admit, we procrastinate, get distracted, get overwhelmed by technical details, or give in to temptations to spend rather than save. We're human after all.

Studies show that these traits are both common and consequential. Economists describe people who are self-aware as "sophisticated" and those who are not as "naïve."[2] The wording is imperfect, but it captures the basic reality that important possibilities open up once we recognize our limits and start to correct for them. Rather than using the "naïve" vs. "sophisticated" distinction as a way to put different kinds of people in boxes, we instead see the distinction as a starting point for education aimed at building self-awareness and the tools to make better choices.[3]

We argue that the necessary vision has two main elements: (1) Building capacity and (2) Turning ideas into actions. Each of these main elements has multiple elements.

1 From the Presidential Executive Order establishing the President's Advisory Council on Financial Capability (Section 1, page 1). The White House, October 29, 2010.
http://www.whitehouse.gov/sites/default/files/2010financial.eo_.rel_.pdf
2 An example is given by the economic modeling in Ted O'Donoghue and Matthew Rabin, 1999, "Doing It Now or Later," American Economic Review 89 (1): 103-124.
3 The White House captures that broad theme when they say that: "Financial capability empowers individuals to make informed choices, avoid pitfalls, know where to go for help, and take other actions to improve their present and long-term financial well-being." From the Presidential Executive Order establishing the President's Advisory Council on Financial Capability (Section 1, page 1). The White House, October 29, 2010.

1. Building capacity

A) *Knowledge.* Although the goal of financial literacy may be a no-brainer, how to successfully pursue financial education is not. New studies show that traditional approaches to financial education do not always make an impact. Having the right rules of thumb, for example, can sometimes be more helpful than detailed information, and experts argue for the importance of knowing one's legal rights and the kinds of questions to ask of financial providers. We identify three types of knowledge—explicit, heuristic, and soft—all of which play a role in good financial decisions. Curriculum development and testing need to continue.

B) *Access to products.* While empowering individuals is bedrock to the work of financial educators, you can't make good choices if you don't have good options. The second part of building capacity involves expanding access to desirable financial products, with a focus on the features and design of those products.

2. Turning ideas into actions

A) *Self-awareness.* We all make mistakes, and we're all vulnerable to temptation and distraction. Simple self-awareness of our in-built challenges is a first step in making good choices (or avoiding worse ones) and following through on ideas.

B) *Structures.* People may know which course is best for them—and know themselves well enough to appreciate where plans go awry— but still don't manage to follow through. In that case, having reliable structures to implement choices is the key to actually implementing on financial decisions. For many salaried workers, the use of automatic transfers into retirement accounts provides a powerful structure to building savings for later in life. For others, being able to take earned income tax credits (EITC) as a lump-sum payment can help in reaching saving goals. The right pathway might entail something as simple as developing a set of rules to follow, but it's not a trivial element: having a reliable structure to implement plans is a key to turning knowledge into action.

C) *Norms.* Human beings are social creatures, and social norms often act against financial prudence. But norms can also be harnessed to promote better financial decision-making.

The various aspects of building capacity and turning ideas into action typically all work together, although in different financial situations, different elements come to the fore. When deciding how large a house to buy, norms and products play a disproportionate role. When thinking about setting aside money for retirement, having the right structure is often the primary component. But what is consistently clear is that knowledge is not enough: all of these elements surface when we deconstruct successful financial decision-making.

Our goal is to describe how these elements can help ensure that everyone has a decent shot of getting to where they want to go.[4] Financial education can be most powerful, we believe, as part of a package of approaches. We believe that many sorts of people and groups can learn from the evidence we outline—not only financial education providers, but also financial institutions, government officials, the funder community, even individuals themselves.

1. Building Capacity

A) Knowledge

Traditional ways of imparting financial knowledge—such as classroom instruction—work for some people some of the time. Thanks to government mandates that started in the 1970s, many (but not most) high school students are exposed to financial curricula. The broad evidence is encouraging: Students exposed to the classes accumulated more assets on average relative to those who did not (the analysis focused on high school graduates between 1964 and 1983).[5] Yet it is unclear how far the results can be projected to today's cohorts. A close look at a small group of students who graduated more recently, between 2001 and 2004, showed little lasting effect of financial education courses, and there's a growing sense that general knowledge is less powerful than counseling that targets current choices.[6] Simply exposing people to knowledge doesn't mean that they retain it.

Nor does having knowledge—even robust knowledge—mean that people act differently. Consider the Nobel-prize-winning economist Harry Markowitz, the father of Modern Portfolio Theory, who taught investors to diversify money across asset classes according to how returns on those assets have related to each other historically. Markowitz could do the math— but he couldn't follow his own advice. As he once told an interviewer: "I visualized my grief if the stock market went way up and I wasn't in it—or if it went way down and I was completely in it… So I split my contributions fifty-fifty between bonds and equities."[7] Clearly, even for the most knowledgeable among us, there is no unimpeded link between factual knowledge and action.

But we are not so quick to write off knowledge. To give up on the idea that financial literacy can be taught is giving up on too much—the world provides unending evidence that people of all ages learn, retain, and use new information.

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[4] We focus on financial literacy aimed at adults. Financial education for children is, by its long-term nature, harder to assess, but seems promising and is the subject of new thinking as well.
Bernheim, B. Douglas, Daniel Garrett and Dean Maki, "Education and saving: The long-term effects of high school financial curriculum mandates." *Journal of Public Economics* 80 (2001) 435–465.
[6] Mandell, Lewis and Linda Schmid Klein, "The Impact of Financial Literacy Education on Subsequent Financial Behavior." *Journal of Financial Counseling and Planning* Volume 20, Issue 1, 2009: 15-25. An example of the impact of targeted counseling is B. Douglas Bernheim and Daniel Garrett, "The effects of financial education in the workplace: evidence from a survey of households." *Journal of Public Economics* 87 (2003) 1487–1519.
[7] Zweig, Jason. "Five Investing Lessons from America's Top Pension Fund." *Money*, January 1998, 115-18.

What we do believe is that different situations call for different types of knowledge, and that an exclusive focus on facts alone will often fail to give individuals what they most need to make good decisions. This is one reason that some studies conclude that financial literacy education "doesn't work." Their definition of what needs to be taught is too narrow.

We place knowledge into three categories:

- *Explicit knowledge* is the realm of well-demarcated facts. For example, knowing the difference between stocks and bonds or understanding compounding and annualized interest rates.
- *Heuristic knowledge* derives from experience—both individual and collective—and includes rules of thumb and "common sense."
- *Soft knowledge* describes social understanding and wherewithal. For instance, knowing that a rental agreement is negotiable or that a credit-card charge can be disputed.

Explicit knowledge

At times, explicit knowledge is clearly required. In a recent paper from the Federal Reserve Bank of Atlanta, researchers examined the relationship of mortgage defaults to borrowers' numerical ability. Foreclosure starts were approximately two-thirds lower for the group with the highest measured level of numeracy, compared with the least-numerate group. This held true even after controlling for type of mortgage and socio-demographic variables.[8] Explicitly knowing math mattered.

Heuristic knowledge

But sometimes "heuristics" are what are needed – i.e., rules of thumb and practical tips to find workable solutions. In conjunction with a Dominican Republic microfinance institution, researchers taught one group of randomly assigned micro-entrepreneurs formal accounting, including double-entry bookkeeping, cash and working capital management, and investment decision-making. Another group was taught simple rules of thumb, like "keep personal and business accounts separate" and "write everything down."[9]

The result: people who learned rules of thumb wound up managing their finances more successfully than those who got the more explicit training. Those who learned rules of thumb were about 10% more likely to keep accounting records, calculate monthly revenues, and separate their books for the business and the home. Researchers observed no change for people who received the formal accounting training.

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[8] Gerardi, Kristopher, Lorenz Goette, and Stephan Meier. "Financial Literacy and Subprime Mortgage Delinquency: Evidence from a Survey Matched to Administrative Data." Federal Reserve Bank of Atlanta Working Paper 2010-10, April 2010.

[9] Drexler, Alejandro, Greg Fischer, and Antoinette Schoar. "Keeping it Simple: Financial Literacy and Rules of Thumb" (September 2010). CEPR Discussion Paper No. DP7994.

The result reflects recognition that our attention is limited and that making one big decision and sticking to it (like keeping separate personal and business accounts) can work better than wrestling with a series of more complicated choices.

Soft knowledge

For some situations, imparting the third type of understanding, soft knowledge, is crucial. An OECD study of financial literacy in industrialized nations, including the U.S., found that individuals generally accept financial advice without question.[10] Living in the world's most developed consumer culture, it is easy to assume that people are implicitly good shoppers—that they know to compare prices, ask questions, and feel entitled to decent customer service.

In the realm of personal finance, these can be dangerous assumptions. Knowing when and how to ask questions, and when and how to be skeptical of information being presented, is a crucial type of knowledge. Understanding how to read a credit report is one thing—possessing the capacity for challenging what you think to be a mistake is quite another.

That's why certain financial literacy programs, especially those aimed at the people without much experience in the financial mainstream, wrap in components that address personal rights and how to assert them. For example, the Neighborhood Economic Development Advocacy Project teaches New York City residents about redlining and how to interact with debt collectors–along with how to create a budget. Knowing what to ask and how to get more information is a major, almost invisible, prerequisite for making and executing good financial decisions. This sort of work is especially important when it comes to populations that may lack the self-confidence, cultural mores, or language skills to stand up for their interests.

Staying relevant

Establishing the three types of knowledge is important. So is understanding how best to impart knowledge.

Here, both practitioners and researchers are increasingly coming to the conclusion that situation-specific and timely education is the education that sticks. For example, a two-day financial education course offered by the Army to soldiers stationed at Fort Bliss in El Paso, Texas, helped young soldiers make better decisions around car-buying—as evidenced by smaller loan amounts and higher down payments—but wasn't a significant factor in determining soldiers' behaviors with respect to managing checking accounts or credit cards, or saving for retirement. A Federal Reserve Board evaluation of the program concluded that many of the soldiers were in a phase of their lives during which buying a car would be a high priority—and that the car-buying lesson stuck because it was perceived as relevant.[11]

Yet there is still much we don't understand.

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[10] OECD. Improving Financial Literacy: Analysis of Issues and Policies. OECD Publishing, 2005, p. 46.
[11] Bell, Catherine, and Jeanne M. Hogarth. "Better deals on wheels: The effects of financial education on car buying." *Community Dividend*. Federal Reserve Bank of Minneapolis, April 2010.

In the realm of homeownership education and counseling—a natural fit for such contextualized learning—Michael Collins and Collin O'Rourke find little rigorous evidence about what works, despite a massive increase in the number of people receiving such education. In a review of studies of pre-purchase programs, Collins and O'Rourke find a statistical correlation between program participation and timely loan repayment, but they worry that the result may mainly arise because people who are most responsible about their finances are also those who are most likely to seek out financial education programs. (As the saying goes, correlation does not imply causation.)[12] While a few randomized studies of homeownership counseling are underway, for the time being, the field lacks such evidence.

There is also little systematic evidence about which types of knowledge are most useful in different situations. While we believe that explicit, heuristic, and soft knowledge are all important to include in a comprehensive approach to financial education, there are certainly times when one sort of knowledge will play a larger role than the others.

Our rough theory is that explicit knowledge is most important when the subject matter underlies a host of financial decisions, that heuristic knowledge is more efficient and just as effective when the decisions are infrequent or complex, and that soft knowledge is most critical when decision-making involves more than minimal interaction with a financial institution. Therefore, numeracy is important explicit knowledge, how much one should spend on rent can be heuristically conveyed through a rule of thumb (e.g., no more than a third of take-home pay), and shopping around for a low-rate credit card takes an underappreciated amount of soft knowledge.

B) Access to Products

In the 21st century, the complexity and importance of financial services and systems is so great that empowering individuals is not enough. We must also pay attention to the nature of choices people have and the systems that create those choices.

Our focus on products is three-pronged:

- *Access* describes what products people have available to them—in practice, not theory.
- *Design* refers to the structure of those products and the extent to which people understand the benefits and possible consequences of using them.
- *Appropriateness* reflects the concern that some financial products may be so hard to fully understand or so vulnerable to failure that access deserves special scrutiny.

[12] Collins, Michael J., and Collin O'Rourke. "Homeownership Education and Counseling: Do We Know What Works?" Research Institute for Housing America, April 2011.

Access

Differential access to financial services is an old story, one that is perhaps most vividly told through the historical practice of redlining, or denying mortgage credit to entire neighborhoods based on group characteristics.

The largest contemporary concern over product access revolves around bank accounts. According to the FDIC, at least 17 million adults have neither a savings nor a checking account, representing some 7.7% of all American households.[13] This disconnection from the most basic of mainstream financial products often goes hand-in-hand with the use of services such as non-bank check cashing, which can prove more costly. What's more, people without a bank account often don't have access to other potentially important services such as direct deposit and account statements.

We believe that the first step in helping people make better product choices is to understand why they are making their current ones. Are they turning away from available banking services due to problems with fees, limited hours, minimum balance restrictions, or other factors? Or do they seek access but lack a convenient institution? It is easy to assume that people simply don't appreciate the value of a bank account, especially among populations, such as certain immigrant groups, with a long history of distrust or discomfort when it comes to big financial institutions. But as research by the Center for Financial Services Innovation and others show,[14] common problems also include account structures that don't meet the needs of people living paycheck to paycheck—like a three-day hold on a deposited check—and punitive overdraft fees. Rational consumer choice is part of what's at play, which means that both individuals and institutions can benefit from education.

One interesting model of expanding access is provided by New York City's Bethex Federal Credit Union, which has partnered with local check cashers—already a draw for the low-income customers Bethex targets— to let credit union members gain access to their accounts at check cashing branches. In San Jose, California, Self-Help's Community Trust Credit Union has done something similar in creating a pilot "micro branch," which has both the extended hours and style of a check-cashing outlet (witness the neon sign out front). The recognition: individuals with busy, complicated lives might be more willing to use formal banking services if the location, hours, and character of those services were more convenient and familiar—or even co-located with the non-traditional services those customers also use.[15]

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[13] FDIC. FDIC Survey of Unbanked and Underbanked Households. December 2009.
[14] Seidman, Ellen, Moez Hababou, and Jennifer Krame. A Financial Services Survey of Low- and ModerateIncome Households. Center for Financial Services Innovation, 2005.
[15] Stegman, Michael A., and Jennifer S. Lobenhofe. "Bringing More Affordable Financial Services to the Inner City: The Strategic Alliance between Bethex Federal Credit Union and RiteCheck Check Cashing, Inc." UNC Center for Community Capitalism, August 2001. More on the San Jose "micro branch" is here: http://www.myctcu.com/microbranch.html Community Trust Credit Union in California is a division of Self-Help Federal Credit Union based in North Carolina.

New York City's SaveNYC account—which is now being replicated around the country—provides another interesting example of meeting people where they are. Low-income taxpayers who use certain non-profit organizations to help file their returns, are offered a government match to funnel part of their return to a savings account and keep it there for a year. In the initial stages of the program, roughly half of the people who signed up didn't already have a bank account.[16]

Access, though, is about more than bank accounts. Creating a full financial life may also include access to products like 401(k)s—which tend not to come with low-wage jobs—as well as affordable health and automobile insurance, and even the Internet. Bank accounts are often the low-hanging fruit and a natural starting place, but they should only be the beginning of the conversation about access.

Design

The new Consumer Financial Protection Bureau (CFPB) has taken up product design as one of its earliest endeavors. A good example is work on mortgage contracts. Since the Bureau's inception, its staffers have been studying how consumers do (and don't) use mortgage disclosures in an effort to create a disclosure form that actually leads to homebuyers assessing costs and comparing alternatives—financially literate behavior that many people skipped during the housing bubble.[17]

Disclosure, though, can be tricky to translate into behavioral change. Since 1989, credit-card companies have been required to display on all promotional materials a "Schumer Box," which members of Congress designed to be easy to read (the font must be at least 12-point). Among other things, the box must list the card's annual percentage rate of interest, grace period, and transaction fees.

The amount of debt that Americans carry on high-interest credit cards suggests that the Schumer Box hasn't quite met its goals over the past 20 years. Indeed, in 2009, Congress passed another law, the CARD Act, to boost credit-card transparency and fairness. This time, disclosures are intended to do a better job of speaking to how people actually think about their finances. For instance, the CARD Act requires companies to tell people how many years it will take to pay off their balance if they only pay the minimum each month. Side by side are dollar amounts reflecting the total that a person will wind up paying, depending on how long they take to pay off their bill.[18] The premise: years and dollar amounts—not APRs—are how people understand information.

Appropriateness

Importantly, the CARD Act does not only rely on smarter disclosure. The Act, which passed with overwhelming bipartisan support, also bans certain practices—such as raising the interest rate on an outstanding balance and assessing fees worth more than 25% of a person's initial credit limit.

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[16] NYC Department of Consumer Affairs Office of Financial Empowerment. *The SaveNYC Account: Innovation in Asset Building*. Research update, December 2010. http://www.nyc.gov/html/ofe/downloads/pdf/savenyc_research_update_dec2010.pdf

[17] *Building the CFPB: A Progress Report*. Washington D.C.: Consumer Financial Protection Bureau, July 18, 2011.

[18] http://www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm

The premise is that there are some situations in which the deck is so stacked against the consumer that restrictions are called for. While the idea of unilaterally restricting certain products or features may at first blush seem undemocratic, there is, in fact, robust precedent for such restrictions— like the millennia-long history of usury laws. To take a contemporary U.S. example, consider that individuals may only invest in hedge funds if they have a net worth of $1 million or more. The idea is that hedge funds are too complicated and risky for the less financially sophisticated investor to be involved with.

There is a precedent of restricting access to much more everyday products, as well. One of the lessons from the mortgage crisis derives from the relatively low mortgage foreclosure and default rates in Texas. Part of the explanation, consumer advocates argue, rests with rules in the state constitution that limit cash-outs and home-equity loans to no more than 80 percent of a home's appraised value, as well as a mandated 12-day cooling-off period after applying for a mortgage.[19] The existence of simple limits appears to have helped rein in a real estate bubble that might have been far worse.

In the wake of the economic crisis, the legal and ideological underpinnings of protecting individuals from tricky or toxic financial products have developed substantially, most visibly with the creation of the Consumer Financial Protection Bureau.

But there is nothing to say that imposing standards of appropriateness needs to come from national or state government. Before the advent of risk-based pricing and securitization, it was lenders—not government, not investors, and certainly not individual consumers—who carried the burden of deciding how much debt was appropriate for borrowers to take on. The trick to knowing if you could afford a mortgage was not creating a budget or understanding the intricacies of your contract, but of merely seeing if a bank was willing to be on the hook for your loan. Industry, not individuals, was the keeper of financial literacy as it were.

The bottom line is that financial education and financial access often need to be bolstered by regulation and responsible industry norms in order to maximize individuals' chances for financial success.

2. Turning Ideas Into Actions

A) Self-Awareness

Conversations about what knowledge is required for financial literacy are typically outwardly focused. The questions are about what people ought to know about financial products, economic concepts, and the world more broadly.

We believe that internally directed knowledge—that is, understanding one's own behaviors, dispositions, and levels of external knowledge—is also a key part of getting to good financial decision-making. There

[19] Alyssa Katz, "How Texas Escaped the Real Estate Crisis." *The Washington Post* (The Big Money). April 4, 2010. http://www.washingtonpost.com/wpdyn/content/article/2010/04/03/AR2010040304983.html. For a dissenting discussion and data, see *The Economist*: http://www.economist.com/blogs/freeexchange/2010/04/bubble_markets

are two components to this: understanding how one acts financially, and having a true sense of one's financial ability and emotional motivation.

Knowing the facts about your spending

People can be mysteries even to themselves. The first advice to a person looking to lose weight is often to write down everything the would-be dieter eats during the course of a day. Being faced with a full tally can be a shock. Similarly, the first step in financial counseling is often to write down a list of everything a family spends money on and to create a budget. In a certain sense, people already know how they earn, save, and spend money, but this knowledge is often disparate and unprocessed.

In the quest to help people make better financial decisions, it is hard to overestimate the importance of tools that reveal financial patterns. The appeal of a holistic view is demonstrated by financial self-starters: witness the popularity of software like Quicken and web sites like Mint.com, which draw together various accounts to present a cohesive financial picture.

Even when people don't actively seek out patterns of their own financial behavior, knowing about them can be transformative. In a study of Medicare Part D, researchers found that when seniors were sent information about plan prices based on their own prior use of prescription drugs, the rate of plan switching went up by 20 percent and the amount of money seniors spent went down by at least 14 percent per switcher.[20] The seniors were capable of making better financial decisions once the information they needed was revealed and presented in an understandable way.

Such information about one's habits, though, isn't always easy to come by. Classic budgets don't capture financial behavior at its full depth. It is easy to know how much you spend each time you buy a candy bar. It is significantly more difficult to know how much you spend each time you use a credit card, talk on your cell phone, or go to a doctor and pay with insurance.

In their 2008 book *Nudge*, economist Richard Thaler and legal scholar Cass Sunstein propose a solution to this problem: requiring companies whose prices depend on consumer use to tell customers about their usage patterns.[21] In other words, they recommend pushing self-awareness upon individuals. Implementing that idea is tricky since it doesn't work without the involvement of regulators, or firms to process all of the raw data. But, unlike other sorts of regulations which also rest on the judgment of regulators, here the notion is that individuals *can* make better decisions—if only they understand more about themselves.

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[20] Kling, Jeffrey, Sendhil Mullainathan, Eldar Shafir, Lee Vermuelen, and Marian Wroble. "Comparison Friction: Experimental Evidence from Medicare Drug Plans." Quarterly Journal of Economics, forthcoming. Related theoretical ideas are in Kamenica, Emir, Sendhil Mullainathan, and Richard Thaler. 2011. "Helping Consumers Know Themselves." *American Economic Review*, 101(3): 417–22.

[21] Thaler, Richard H., and Cass R. Sunstein. *Nudge: Improving Decisions About Health, Wealth, and Happiness.* New Haven: Yale University Press, 2008.

A related element is understanding the chances of certain events transpiring in one's life. The financial crisis of 2007-8 was a reminder that we often don't put enough weight on low-probability events that could be catastrophic. Similarly, people who get trapped in debt seldom imagine it coming, instead thinking that bad luck will turn and that a path to success will open up. Having a realistic sense of risks is a key to navigating uncertainties.

Knowing your nature

The second component of self-awareness extends beyond objectively observable patterns of behavior. Having a realistic grasp of one's own abilities and emotions is a vastly overlooked element of successful decision-making.

The fields of psychology and behavioral economics have much to say about how people fool themselves. A big part of self-awareness is knowing what you don't know. In a study of financial literacy, economists Annamaria Lusardi and Olivia Mitchell found that more than 16% of people who thought they scored in the top category on a test of financial literacy actually scored in the bottom one.[22] False confidence can be a dangerous thing, especially when that false confidence applies to decision-making about what sort of mortgage to buy and how much money a person needs to set aside each year for a comfortable retirement. In a national survey commissioned by the Financial Industry Regulatory Authority, close to half of respondents with credit cards and checking accounts gave themselves the top score on a seven-point scale when asked how good they were at dealing with day-to-day financial matters. And yet nearly a quarter of those people made decisions that generated fees or high costs, such as using a credit card for a cash advance or overdrawing a checking account.[23]

But knowing what you do know is critical as well. Being able to make good decisions in the face of peer pressure and corporate advertising that can work against what's best for particular individuals is no easy task.

Finally, self-awareness involves understanding one's emotional wherewithal and motivations. As economists Hersh Shefrin and Richard Thaler once wrote, "A model of saving that omits temptation is misspecified."[24] Consider the story of one client of the Maryland Cash Campaign, a coalition dedicated to helping low-income families build savings and assets. The single mother had amassed $60,000 in credit card debt. Under sympathetic probing, she revealed that she often bought things to please her children—going into debt was in her mind part of being a good mother.[25] A recent study by Yale's Justine Hastings and the University of Pennsylvania's Olivia Mitchell finds that impatience is a stronger predictor of

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[22] Lusardi, Annamaria, and Olivia S. Mitchell. "Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel." Michigan Retirement Research Center Research Paper No. WP 2007-157, October 2007.

[23] Lusardi, Annamaria. "Americans' Financial Capability." NBER Working Paper 17103, June 2011.

[24] Shefrin, Hersh M., and Richard H. Thaler. "Mental Accounting, Saving, and Self-Control." In *Choice Over Time*. Loewenstein, George, and Jon Elster, eds. New York: Russell Sage Foundation, 1992, p. 289.

[25] AP. "Social workers boost expertise on money woes." *USAToday*, November 9, 2008. Accessed from: http://www.usatoday.com/money/perfi/2008-11-09-financial-social-work_N.htm

wealth and investment decisions than is financial literacy.[26] Yet even realizing things about oneself may not be enough to change. A person who realizes his spending is emotional and decides to pay down a credit-card balance month after month but never does so may need to realize that he most likely never will. The point is not to be fatalistic. The point is to realistically understand what a person is capable of on his own—and, as we outline in our next section, to introduce structures when a person needs a bridge between his capabilities and his goals.

B) Structures

As the story of the economist and emotional investor Harry Markowitz illustrates, knowing and doing are often two distinct things.

Here is where the next component plays a crucial role. People need structures, or pathways, in order to move from desire to action. Sometimes they are what psychologist Kurt Lewin termed "channel factors"— situational forces that either facilitate or hinder a particular human behavior.[27] These pathways can also be internal forces, like self-restraint.

The need for structures is well-documented. In innumerable ways, people work against their self-described long-term goals. Economists describe the major part of this problem as "multiple selves." The classic example: in the evening you set your alarm clock and genuinely want to arise at 6 a.m. the next morning, but by the time day rolls around and your alarm goes off, you hit the snooze button half a dozen times—your morning self feels the pain of awakening in a way your evening self couldn't, and the desire to get up early has decidedly passed.

It is one thing to make a budget. It is another thing altogether to stick to it.

In the realm of financial decision-making, much loftier issues arise, such as paying off credit-card debt, saving enough money for college or retirement, and choosing a mortgage with affordable payments. In each of these activities there is an underlying tension between acting in a way that promotes reaching long-term financial goals and acting in a way that maximizes current consumption and happiness.

People are hardly powerless in the face of temptation. Social psychologists have spent decades documenting the mechanisms that people employ to stick to the behavior they know is necessary to reach their goals. These mechanisms include planning (e.g., deciding in advance to save money), self-instruction (e.g., telling oneself to forgo store-bought coffee), and self-distraction (e.g., taking a different route to work to avoid driving by Starbucks). To be successful, financial literacy programs need to

[26] Hastings, Justine S., and Olivia S. Mitchell. "How Financial Literacy and Impatience Shape Retirement Wealth and Investment Behaviors." NBER Working Paper 16740, 2011.
[27] Lewin, Kurt. *Field Theory in Social Science*. New York: Harper and Row, 1951.

recognize the importance of internal mechanisms.[28] In practice, this might mean anything from writing out a budget to visualizing in advance how a financial decision will be handled.

Yet since we don't always possess well-developed internal mechanisms, and even those of us who do have access to internal mechanisms don't consistently use them, external structures can play an important role. If you're trying to get out of bed at 6 a.m., you might try Clocky, an MIT graduate student's invention. Hit the snooze button on this alarm clock, and it starts to roll away— you have to get out of bed to turn it off. Clocky provides a pathway for letting the person you are in the evening make a decision on behalf of your morning self.

The stakes in people's financial lives are of course much higher than simply oversleeping. A generation of destitute elderly prompted the United States to create Social Security in the 1930s—a method of forced retirement contributions that provides future income for even the most impatient or near-sighted individuals.

In recent years, mechanisms that operate closer to the level of the individual have blossomed. The classic example: auto-enrollment retirement plans that ask people to opt out should they not want to save, as opposed to asking them to opt in if they do. An influential study of a large company in the health care and insurance industry found that while 86% of workers who were automatically placed into a 401(k) stayed there, only 37% of comparable workers signed up for the plan prior to auto-enrollment.[29] By instituting such a mechanism, companies harness people's tendency to *not* act—what behavioral economists call inertia—and use it for their employees' benefit.[30]

Of course, not everyone has a job that comes with a 401(k). It's often easy for better-off Americans to take for granted access to useful structures to help discipline their lives. Indeed, there is great potential to extend external mechanisms across the socio-economic spectrum. One example: individual development accounts, which help low- and moderate-income families save for goals such as homeownership or starting a business. These accounts, which typically involve partnerships between financial institutions and non-profits, have grown dramatically over the past decade. Importantly, they involve active goal-setting at the start of the savings process, and an IDA sponsor giving the green light before the money is spent.

External pathways bring another advantage: while consumer demand for financial literacy education is often weak, there seems to be robust demand for structures that help people reach their financial goals.

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[28] Hilgert, Marianne A., Jeanne M . Hogarth, and Sondra G. Beverly. "Household Financial Management: The Connection Between Knowledge and Behavior." Federal Reserve Bulletin, Col. 89, Issue 7, pp. 309-322, 2003.
[29] Brigitte Madrian and Dennis Shea, 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics* 116(4): 1149-1187, November.
[30] However, that study of 401(k) usage also underscores how important it is for mechanisms to be well-designed. As it turns out, many employees wind up saving less money in auto-enrollment 401(k)s than they would otherwise. The reason: firms often set the default level of saving too low. Your employer might automatically enroll you with 3% of your paycheck going into your 401(k)— if you had been forced to choose, you may have chosen 10%.

Consider the earned-income tax credit (EITC), a wage support for low-income workers that is paid as a lump sum at tax time. EITC recipients used to be able to opt to be paid slowly in advance, over the course of the year— an option that, in theory, would be useful for families struggling to make ends meet on a monthly basis.

But few families ever signed up for the advance option. In an ethnographic study, researchers found that recipients preferred the lump-sum payment, seeing it as a chance to make large purchases—in other words, to use the EITC as a way to force themselves to save up for things they wanted to buy.[31]

The demand for structure is perhaps nowhere more apparent than in the implementation of Save More Tomorrow (SMarT), a 401(k) add-on designed by economists Shlomo Benartzi and Richard Thaler. The program asks people if they'd like to commit in advance to saving a greater percentage of their paycheck upon getting a raise. The insight: that people will be more likely to agree to save more if they are asked far enough in advance of the additional money becoming tangible.

Evaluations of SMarT also show that people stick with the program, even after the money becomes real. In one of the first roll-outs of SMarT, at a midsize manufacturing company, 78% of workers signed up for SMarT, and 80% remained with it through four pays raises (the duration of the study). By deciding ahead of time to stash raises into savings instead additional spending, the average savings rate for participants rose from 3.5% to 13.6% over the course of 40 months.[32]

Even much simpler mechanisms—like reminder telephone calls or texts—can take people a long way. In 2003, the financial services arm of the retailer Target set out to see if it could reduce credit-card defaults by offering customers on the verge of delinquency an online course in credit education. Target reached more than 6,400 borrowers, a large majority of whom were happy about the call. Yet only 684 agreed to receive an email about the online course, and a measly 28 logged onto the education site. Nonetheless, bill payment for the group got better, when compared to that of a control group. Target's conclusion: the phone call itself got people to pay their bills.[33] Other evidence comes from overseas: studies in India and the Philippines shows how reminder telephone calls substantially increased savings rates relative to control groups that did not get reminders—keeping all else the same.[34]

The bottom line: even simple structures can help move people from the right idea to the right action.

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[31] Romich, Jennifer, and Thomas Weisner. "How families view and use the EITC: Advance payment versus lump sum delivery," *National Tax Journal*, Dec 2000, 53, 4, pp. 1245-1265.
[32] Benartzi, Shlomo, and Richard H. Thaler. 2004. "Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy*, vol. 112, no. 1, pt. 2.
[33] Gartner, Kimberly, Richard M. Todd. 2005. "Effectiveness of Online 'Early Intervention' Financial Education for Credit Cardholders." *Proceedings*, Federal Reserve Bank of Chicago, issue Apr.
[34] Dean Karlan, Margaret McConnell, Sendhil Mullainathan, and Jonathan Zinman. 2010. "Getting to the top of the Mind: How reminders increase saving." Working paper, Yale Dept of Economics.

C) Norms

Even as financial literacy educators work to disseminate knowledge, self-awareness, and the importance of appropriate structures, they will still often have to fight to be heard. The challenge for educators is to actively wrest people's attention away from a world full of competing messages, many of which actively promote spending and consumption. These messages come from a national consumer culture—from TV, movies, music, the news media, and the Internet—but also from smaller social units like workplaces, schools, churches, and families.

Trying to change financial behavior without acknowledging the social aspects of individual decision-making is the road to frustration. Adhering to social norms is a powerful, survival-oriented force. As psychologist Harry Helson explained half a century ago, the way we experience and understand the world crucially depends on our surroundings.[35] A 60-degree day is warm to residents of Moscow but chilly to those of Miami.

Overconsumption—to take an example from personal finance—does not simply derive from not understanding the perils of debt, failing to appreciate one's own profligate ways, and lacking adequate pathways to savings. Social situations also play a substantial role. To a large extent, we learn from our peers the appropriate ways to earn, save, and spend money. Buying a house with a three-car garage might not appeal unless everyone around you is doing it.

Contemporary America reveres the primacy of the individual, and much financial literacy education is focused at this level, with courses and counseling directed at people one by one. But Madison Avenue never underestimates the power of social cues, and nor should financial educators.

Here, the world of public health education offers lessons. Advocates and policymakers have decades of experience deploying mass media campaigns to get people to do everything from quitting smoking to eating better to practicing safe sex. One review of public health campaigns concludes that what works is a simple, straightforward messages delivered through multiple channels and which clearly indicate an easy-to-follow path for behavioral change.[36]

The Spanish-language soap opera *Nuestro Barrio* offers reason to think that mass messaging might work in the realm of financial literacy. *Nuestro Barrio* is a telenovela created by the Community Reinvestment Association of North Carolina that has aired on commercial networks in cities including Albuquerque, Chicago, Miami, and New York. The show is as dramatic as any soap opera—but with related financial lessons targeted to the show's Latino immigrant audience. A devastating business fire leads one uninsured entrepreneur to have a conversation with an insurance agent about his coverage options. A robbery leads another character to finally realize he should be keeping his money in a bank.

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[35] Helson, Harry. *Adaptation-level theory*. Oxford, England: Harper & Row, 1964.
[36] Randolph, Whitney, and K. Viswanath. "Lesson Learned from Public Health Mass Media Campaigns: Marketing Health in a Crowded MediaWorld." *Annual Review of Public Health* 2004. 25:419–37.

An evaluation by the University of North Carolina's Center for Community Capital found that *Nuestro Barrio* viewers suggests that this approach may be able to improve financial outcomes, though the UNC study was small-scale and only sometimes found statistically significant differences.[37]

Wrangling social norms is not just about blasting messages over the airwaves. Many of our day-to-day decisions, and much of what we believe about how we should act, come from significantly smaller groups. Here social networks and interactions hold the key to influencing norms in favor of better financial decision-making.

In one compelling example, researchers were able to boost retirement plan participation by inviting people's colleagues—but not the people themselves—to a benefits fair.

In a randomized study involving 6,200 non-faculty university employees eligible to participate in a 403(b) tax-advantaged retirement plan, economists Esther Duflo and Emmanuel Saez sent a letter to some workers in some departments encouraging them to attend a benefits fair to learn about the plan. People who received letters wound up participating in the plan at a higher rate, unsurprisingly. Yet people who did not receive letters but simply worked in departments with people who had received letters *also* wound up participating at a higher rate. In fact, within treated departments, there was little difference in participation rate between those who had received a letter and those who hadn't.[38]

An efficient way to change the behavior of a group of people, then, is to think about how reaching individuals together may help reinforce messages within groups. The key is to understanding the structure of social networks and how information and influence can be expected to flow through them.

One approach is to explicitly ask people to reveal those networks upfront and then to enlist network members as a source of peer pressure or support. The model is classic Weight Watchers. Knowing you'll be weighed in front of a crowd changes your eating behavior during the week. A new breed of (typically web-based) programs asks individuals to sign up friends and family members to keep them on the path to reaching their financial goals. SmartyPig lets users share savings goals with friends and family, and PiggyMojo will go as far as to send a text message to your wife every time you move $15 into the savings account instead of buying another DVD—ostensibly engendering her praise, and perhaps even a transfer into the savings account of her own.

Financial education has long been seen as a way to empower individuals, and the language of financial capability continues that theme. But much more can be done by also taking into account the social environment in which people live and work.

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[37] UNC Center for Community Capital. The Bold and the Bankable: How the Nuestro Barrio Soap Opera Effectively Delivers Financial Education to Latino Immigrants." December 2007.
[38] Duflo, Esther, and Emmanuel Saez. 2003. "The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment." *The Quarterly Journal of Economics*, 118(3): 815-842

Conclusions

In today's complicated economic world, financial literacy is clearly important. But turning financial education into financial literacy is harder than experts imagine. And turning financial literacy into reliable financial actions poses an extra set of hurdles.

To make financial education as powerful as possible, we need to focus on knowledge that is made up of more than just financial facts. Knowing basic rules of thumb and being aware of legal rights and recourses matter too.

Beyond that, practitioners of financial literacy education must broaden their worldview to take into account the extent to which individuals possess self-awareness, feel support from broader social norms, can access reliable financial products, and have available workable structures to implement ideas.

Studies show that financial literacy training aimed at adults has yielded a mixed bag of outcomes, and it's time for more experimentation and evaluation. Maximizing the effectiveness of financial training is not just a matter of better use of classrooms and better development of training materials, but also of re-envisioning what financial literacy education can be.

Just as importantly, in the 21st century—a time in which wrangling personal finances requires increasing levels of sophistication—helping people make better financial decisions must go beyond improving individual knowledge.

Summary Box

In the 21st century, individuals and organizations interested in helping people make better financial decisions need to:

- **Realize it takes a multi-pronged approach**. To help people make good financial decisions, sometimes it makes sense to go after individuals with knowledge, sometimes it makes sense to go after groups by influencing norms, and sometimes it makes sense to go after systems by addressing issues of access and available pathways. There are roles here for educators, regulators, businesses, and non-profit service providers. No one person, just as no one approach, can do it all.

- **Teach multiple types of knowledge**. While it is crucial to convey knowledge in all of its forms, explicit knowledge is most important when the subject matter underlies a host of financial decisions, heuristic knowledge is more efficient and just as effective when the decisions are infrequent or complex, and soft knowledge is most critical when decision-making involves more than minimal interaction with institutions.

- **Help individuals know themselves**. Awareness of one's tendencies, patterns, and shortcomings, is an often overlooked aspect of financial empowerment. Technology holds an incredible amount of promise for better understanding one's behavior, but helping individuals know themselves goes well beyond expense-tracking and budget-writing. Getting a firm grasp on one's own abilities and emotional motivations may seem like it belongs in the realm of social work rather than in financial literacy education, but without delving into how and why people act as they do, behavior will be significantly harder to change and maintain. Financial educators need to listen, as well as talk.

- **Find ways to turn desires into actions**. Having reliable structures to implement choices is crucial to carrying through with financial decisions. The right pathway might entail something as simple as developing a set of rules to follow, but it's not a trivial element: having a reliable structure to implement plans is a key to turning knowledge into action. In a related way, when governments or employers set up reasonable default options (such as auto-enrollment into a retirement plan), consumers tend to end up with better outcomes. Financial knowledge allows consumers to then change to a different plan if they wish, but the default structures at least start them off along a decent path.

- **Take environment into account**. People don't make financial decisions in a vacuum. A necessary part of making quality financial decisions is having access to the right products and services—and sometimes being kept from deleterious ones. Environment also includes social influences. Human beings are social creatures, and to ignore the influence of friends, family members, and work colleagues is to not fully grasp why people behave the way they do. Social norms often act against financial prudence, but norms can also be harnessed to promote better financial decision-making.

- **Meet people where they are**. The field of financial literacy education arguably has a demand problem—even when people want to make better financial decisions, they aren't generally running out to sign up for financial literacy classes. But people seek information when it matters most—at tax time, for example, or when buying a new car. Taking advantage of those windows can allow focused engagement around critical choices.

- **Innovate and test new approaches**. The past 30 years have seen a surge in quantitatively rigorous policy and program evaluation, but when financial literacy programs are evaluated, the mark of success is often along the lines of the number of program participants or amount of material distributed—not effectiveness[39]. More programs should be subject to rigorous evaluations, and with credible comparison groups. Too often, studies are vulnerable to bias since those who seek financial education tend to be self-motivated in the first place and far-sighted in ways that make them different from their neighbors who do not. Well-designed evaluations are asking not only "does it work?" but also "for whom does it work," and "how can we make it work better?" Funders interested in financial education can play a crucial role, since providers themselves often lack the resources to run comprehensive evaluations.

About the Authors

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[39] Lyons, Angela C., Lance Palmer, Koralalage S. U. Jayaratne, and Erik Scherpf. "Are We Making the Grade? A National Overview of Financial Education and Program Evaluation." *Journal of Consumer Affairs*, Vol. 40, No. 2, 2006.