# Financial Education: What Do We Know?

Remarks by

Brigitte Madrian, Harvard Kennedy School

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*"Financial Literacy:*
*Empowering Americans to Prevent the Next Financial Crisis"*

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One does not need to search hard to find evidence of poor financial decision-making by U.S. households:

- Individuals do not shop around for financial products and consequently pay far more than necessary for products such as credit cards and home mortgages
- When interest rates are falling, many homeowners fail to refinance and take advantage of lower rates
- Individuals don't understand the factors that should matter most in making investment choices; for example, they chase past returns and pay too little attention to investment fees
- Individuals hold poorly diversified portfolios with heavy exposure to employer stock driven in part by a mistaken belief that employer stock is a less risky investment than a well diversified stock mutual fund
- Individuals neglect to enroll in their 401(k) savings plans even when their employer is offering a generous match and even when they could withdraw their contributions almost immediately and with no penalty and still collect the employer match
- A sizeable fraction of households do not have a rainy day fund to help meet emergency expenses and report that they would have difficult coming up with $2000 from any source in less than 30 days

One also does not need to search hard to find evidence that many U.S. households are not particularly financially literate:

- Individuals do not understand how inflation impacts their purchasing power
- Individuals do not understand how the interest rate environment impacts their investment choices
- Individuals do not understand the power of compound interest
- Individuals do not understand how to diversify against labor market and financial market risks
- Individuals do not understand the salient characteristics of many different financial investments

Unfortunately, there is no evidence that the financial capabilities of U.S. households have been improving over time.

Not surprisingly, there is a correlation between financial literacy and the quality of financial decisions made by individuals. Those who are more financially literate are less likely to make financial mistakes and are more likely to report confidence in their financial decisions. The consequences of limited financial literacy and poor financial decision-making are particularly acute for low income households who have little leeway for coping with financial mistakes.

The positive correlation between financial literacy and the quality of financial decision-making has led many to the conclusion that increasing financial literacy through financial education will improve financial outcomes. But what do we really know about how well financial education works?

The evidence on whether financial education improves financial outcomes is suggestive at best. The most substantial problem in the research on financial education and financial outcomes is that if financial education programs are available but take-up is voluntary, those who receive financial education are likely to be different from those who do not receive financial education. In particular, those who are capable of making better financial decisions in the first place may be those who recognize the value of and invest the time in obtaining financial education. If so, we would likely observe a positive relationship between financial education and better financial outcomes, but it would be unclear what part of that relationship is due to differences in the types of people who do and do not get financial education, and what part is due to the actual provision of financial education. It could be that all of the effect is due to selection—that people who get financial education are fundamentally different and would have had better outcomes with or without the financial education.

From a research standpoint, the ideal approach for ascertaining the effectiveness of financial education would be through randomized controlled trials, the same approach that is used to ascertain the effectiveness of different medical treatments. A population would be randomly assigned to either receive or not receive financial education, and then outcomes for both groups would be followed over time. There have been very few studies that have used this approach to study the impact of financial education. The conclusions of the very small number of studies that have used this approach paint a mixed picture, with some finding no significant differences in financial outcomes for those who do and do not receive financial education, and others finding some evidence that financial education may have (small) beneficial effects on outcomes such as savings and credit utilization.

From a policy standpoint, the biggest current need on the financial education front is a better understanding of whether financial education is effective and, if so, what types of financial education interventions work best. It makes no sense to fund programs that do not work, and yet we know very little about what does and does not work because most financial education interventions have not been implemented in a way that allows for convincing analysis of their efficacy.

Here are the broad questions on which further research would be most valuable:

- What are the basic financial competencies that individuals need? What financial decisions should we expect individuals to successfully make independently, and what decisions are best relegated to an expert?

- What type of financial education content works best and for whom? The content of financial education can be abstract and principles-based (e.g., how to calculate interest compounding) or oriented more around rules of thumb (e.g., divide 72 by the interest rate, and that will give you roughly the number of years it takes for an investment to double in value). The content can also be broad, covering many topics, or specific, focusing on a single issue. Which type of content has the greatest impact on financial outcomes and for whom? Some of the emerging literature suggests that actionable, rule-of-thumb based financial education may be more effective than principles-based content, at least for certain groups.

- What type of financial education delivery works best and for whom? There are many ways to deliver the educational content that could improve financial decision-making: personal lectures or courses, internet-based instruction, podcasts, web sites, games, apps, printed material. How effective are these different delivery mechanisms, and are some better-suited to some groups of individuals or types of problems than others?

- How do we induce the people who most need financial education to get it? School-based financial education programs have the advantage that, while in school, students are a captive audience. But schools can only teach so much. Many of the financial decisions that individuals will face in their adult lives have little relevance to a 17-year-old high school student: purchasing life insurance, picking a fixed vs. an adjustable rate mortgage, choosing an asset allocation in a retirement savings account, whether to file for bankruptcy. How do we deliver financial education to adults before they make financial mistakes when we don't have a captive audience and financial education is one of many things competing for their time and attention?

- When should individuals be targeted for financial education? Should financial education be ongoing? Episodic? Or just-in-time?

- How much financial education do individuals need? Is a course of a few hours length enough, or do we need to think more expansively about integrated approaches to financial education over the lifecycle? Or, on the other extreme, should financial education be more focused and narrowly targeted to coincide with the making of specific financial decisions?

- Taking a driver's education course or passing a driver's education test is a prerequisite for getting a drivers license. Should certain financial transactions be predicated on the demonstration of an adequate level of financial literacy? If so, for what types of financial decisions would such a licensing approach make most sense? And how should financial education be provided in this context?

- How does financial education interact with the characteristics of financial products, the institutional environment, and the financial decisions at hand?

- Should financial education be coupled with practical assistance and/or advice, and if so, how?

These are all important questions. Unfortunately, we have very little concrete evidence to provide answers. We have a pressing need for more and better research to inform the design of financial education interventions and to prioritize where financial education resources can be best spent. To achieve this, funding for financial education needs to be coupled with funding for evaluation, and the design and implementation of financial education interventions needs to be done in a way that facilitates rigorous evaluation.

Let me conclude with some thoughts on what we are trying to achieve.

What is the goal? If the goal is to improve financial literacy, then the only way to achieve that goal is through financial education. The policy questions then become:

- What level of financial literacy is necessary or desirable?

- What is the most cost effective way to deliver financial education in order to increase financial literacy?

- What is the appropriate role of government in either directly providing or funding the private provision of financial education?

If the goal is to improve financial outcomes, then the policy questions are slightly different:

- What are the tools available to improve financial outcomes? This might include financial education, but it might also include better financial market regulation, different approaches to changing institutional framework for individual and household financial decision-making, or incentives for innovation to create products that improve financial outcomes.

- Which tools are most cost effective at improving financial outcomes? For some outcomes, the most cost effective tool might be financial education, but for other outcomes, different tools might be more effective. For example, financial education programs have had only modest success in increasing participation in and contributions to employer-sponsored savings plans; in contrast, automatic enrollment and automatic contribution escalation lead to dramatic increases in savings plan participation and contributions. Moreover, automatic enrollment and contribution escalation are less expensive to implement than financial education programs. What approaches to changing financial behavior will have the biggest bang for the buck, and how does financial education compare to other levers that can be used to change outcomes?

- What is the appropriate role of government in identifying and promoting the various tools that can improve financial outcomes?

Despite the dearth of evidence on the effectiveness of financial education, financial literacy is in short supply and increasing the financial capabilities of the population is a desirable and socially beneficial goal. I believe that well designed and well executed financial education initiatives can have an effect. But to design cost effective financial education programs, we need better research on what does and does not work. We also should not lose sight of the larger goal—financial education is a tool, one of many, for improving financial outcomes. Financial education programs that don't improve financial outcomes can hardly be considered a success.