Don't Know Much About Financial Literacy

In this classroom, the right choice may be (d) all of the above

BY TIM SABLIK

Suppose you had $100 in a savings account with an interest rate of 2 percent. After five years, how much would you have in the account if you left the money to grow?

This was one of three questions asked of adults participating in a recent financial literacy study. They were given three answers to choose from: more than $102, exactly $102, or less than $102.The good news: About 68 percent of respondents answered the question correctly. The depressing news: The other 32 percent either answered wrong or could not answer the question.

Troubling evidence about Americans' financial literacy abounds. In a 2003 survey of investors administered by the National Association of Securities Dealers (now merged into the Financial Industry Regulatory Authority), only 35 percent of participants received a passing grade. Many thought that stock market losses were insured. Among high school students surveyed by Jump$tart.org, a nonprofit organization that promotes financial literacy training for students, about half believed either that sales tax was set nationally at 6 percent or that the federal government deducted it from paychecks.

The events of the 2007-09 recession and its aftermath have brought the need for financial knowledge sharply into focus. Even prior to the crisis, the Federal Deposit Insurance Corporation observed that "the extraordinary transformation of consumer financial markets over the past decade has made financial literacy nothing less than an essential survival tool."

Financial literacy can encompass many different traits, but the National Financial Educators Council defines it as "possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual's personal, family, and global community goals." As surveys indicate, financial skills and knowledge among many Americans seem to be lacking.

In response, federal, state, and private organizations have put a number of initiatives in place to improve financial literacy levels. In 2010, President Barack Obama declared April as National Financial Literacy Month and announced the creation of MyMoney.gov, a website designed to provide free financial resources and guidance. The Federal Reserve banks, including the Richmond Fed, also conduct economic and financial education programs, both independently and in cooperation with other nonprofit organizations.

PHOTOGRAPHY: JUNIOR ACHIEVEMENT USA®

Students participating in Junior Achievement's Finance Park simulation budget their assigned salary around typical household expenses, taxes, mortgages, insurance, and savings.

According to the 2009 "Survey of the States" by the Council for Economic Education, 13 states mandate a course in personal finance as a high school graduation requirement, up from just seven states in 2007. In the Fifth District, Virginia signed into law a requirement that high school students take a class in economics or financial literacy in order to graduate. Maryland passed a similar requirement in May.

Starting Early: Can High School Classes Shape Future Behavior?

Financial literacy programs aren't free, however. The Maryland high school program, for example, is expected to cost $15.6 million in salaries, textbooks, and other materials. With a significant amount of money being invested in financial education for young students, there are important questions to ask: Does it work? Do students who participate in financial education programs end up with better financial skills? Although research on the topic of financial literacy is still in early stages, a few studies provide some clues.

Researchers Bruce Ian Carlin of the University of California at Los Angeles and David Robinson of Duke University studied data from a Junior Achievement Finance Park activity in California. Students between the ages of 13 and 19 were asked to make a budget by visiting various stations that handled house loan decisions, health insurance purchases, and savings accounts, among other things. Prior

Although high school and college-age consumers performed poorly on an objective test of financial literacy, they were also more aware of their limitations than any other age group.

to the event, some of the students took part in 19 hours of classroom instruction on financial literacy.

According to John Box, Junior Achievement's senior vice president of education, the curriculum is designed to teach students how to budget around four key categories: spending, saving, investing, and giving.

"We're really trying to get young people to understand that there is a balance," says Box. "Regardless of how much money they make, they should be thinking about, certainly, spending some, because they need to pay their bills and cover their expenses. But they also need to be saving for more immediate needs, they ought to be investing for more long-term needs, and they ought to be giving back."

Carlin and Robinson found that both the students who received training and those who did not allocated roughly the same portions of income at the different stations and had comparable completion rates. Seemingly, then, the training did not make a difference. The authors noted, however, that the schools that opted out of financial literacy training had better academic performance records and served less economically challenged populations. After controlling for these school effects, the authors found that the students who received the training were about 35 percent more likely to complete the activity with a balanced budget.

There were some signs that the training did not always affect students' behavior in the way the instructors might have hoped. When it came to choosing health insurance, students with the classroom training were more likely to economize on monthly costs by choosing insurance plans with lower premiums, even if those plans left them open to higher and more volatile future costs in the event of an emergency.

This illustrates one of the problems in identifying effective financial training: The soundness of many financial decisions is highly specific to the individual. Although lower-premium health care packages are not necessarily a bad financial choice depending on individual circumstances, the researchers classified some of these students as "underinsured" based on the family size they had been told to assume. Grey areas like these make it that much more difficult to teach a general set of "best practices."

Box says Junior Achievement's programs do encourage students not to spend more than they make. However, he recognizes that in reality students will need to weigh financial decisions based on individual circumstances, and financial education can help them at least make informed decisions. "Regardless of what decision you're making, you ought to at least have that baseline of understanding. Whether it's loans, insurance, buying a car, or buying a house, there's a body of knowledge that's economically and financially solid that kids should understand."

The students themselves recognize that they lack this baseline knowledge. Annamaria Lusardi of George Washington University and Olivia Mitchell of the University of Pennsylvania found in a recent working paper that although high school and college-age consumers performed poorly on an objective test of financial literacy (which included the question on interest rates with which this article started), they were also more aware of their limitations than any other age group. In self-assessment tests, they rated their level of financial knowledge the lowest on average of all surveyed age groups.

The key to approaching high school financial literacy, says Lusardi, is laying a foundation. "I always make this analogy: Financial literacy is no different than English," says Lusardi. "We don't teach English so that you can go and write *War and Peace*. We teach English so that you can appreciate a good book. And the same should be done for financial literacy. You learn the basics: demand and supply, interest compounding, risk diversification. This is something upon which you can build."

Financial Literacy and Retirement Planning

While laying a foundation for kids today may help them navigate financial waters in the future, what about working adults?

One of the arguments made by advocates of financial literacy is that workers approaching retirement are woefully underprepared. In the same study that surveyed high school and college-age consumers, Lusardi and Mitchell found that the disparity between self-described financial literacy and actual financial literacy among retirement-age persons is striking. Those over age 50 rated themselves, on average, well above the median in terms of financial literacy. Yet less than half of those between 51 and 65 correctly answered three simple financial literacy questions; for those older than 65, that amount dropped to slightly more than a quarter.

Lusardi and Mitchell found that after controlling for a variety of factors, such as education and income, financial literacy did have a significantly positive effect on retirement planning. Those who could correctly answer the three literacy questions were about 10 percent more likely to plan for retirement. The researchers noted, "those who do not plan reach retirement with half the wealth of those who do." Interestingly, they also found that those who had suffered a significant income shock had a similar boost to their planning behavior. It could be that learning from the "school of hard knocks" is as effective in changing behavior as taking formal classes in financial literacy. Or perhaps the traditional classroom is not the best way to reach adults. Lusardi says it's unrealistic to expect adults to take time from their busy schedules to attend financial literacy classes.

"We have to add financial literacy where it matters for people," she says. "Adults are not in the classroom, and it's very hard to bring them to the classroom, and it's not obvious that that's the best way that people really want to receive the education."

She argues that educators must be more creative in how they reach out to working adults. Part of the problem with current studies, Lusardi says, is that some researchers are testing the effectiveness of training regimens which are not likely to work from the start.

The challenge of finding evidence-based approaches to financial literacy training is recognized by other researchers as well. In a summary of existing studies of financial literacy education, William Gale and Ruth Levine of the Brookings Institution wrote in October 2010 that no approach "has generated unambiguous evidence that financial literacy efforts have had positive and substantial impacts."

Nevertheless, there are studies that point to areas of knowledge which have a measurable impact on financial decisionmaking. A study by Kristopher Gerardi of the Federal Reserve Bank of Atlanta, Lorenz Goette of the University of Lausanne, and Stephan Meier of Columbia University surveyed subprime mortgage borrowers to find out if their level of financial literacy influenced their loan decisions or likelihood of delinquency and default. They found that the aspect of financial literacy that had the most significant relationship with delinquency rates was numerical ability — the person's ability to perform math calculations. Those in the bottom quartile of numerical ability were about 18 percent more likely to suffer foreclosure than those in the top quartile.

An experiment under way in India adds evidence to the claim that mathematical ability, not just financial knowledge, plays a major role in financial behavior. Researchers Fenella Carpena and Bilal Zia with the World Bank, Shawn Cole of Harvard University, and Jeremy Shapiro of Yale University presented their preliminary findings of an experiment in which they randomly selected participants to take part in a video financial literacy curriculum.

They found that not only is mathematical ability positively correlated with financial literacy, but also those with higher mathematical ability are much more likely to contribute to a savings program. Of course, this doesn't necessarily mean that greater financial knowledge is imparted by training in mathematics, but perhaps that those who are more comfortable with math have an easier time calculating the results of financial decisions or at least looking at them methodically.

Such findings bolster the importance of teaching fundamentals — early and often. Lusardi says many people who think about teaching financial literacy are thinking about teaching the wrong things. Rather than teaching the finer points of mortgages or other financial instruments, which are always changing, instructors should be providing students with a framework to make sound financial decisions.

"For example, take interest compounding," she says. "It's very hard to make financial decisions if you don't know interest and interest compounding. People understand what the law of gravity is. And interest compounding is the same as the law of gravity — it applies everywhere. If you borrow at a high interest rate, you're going to pretty quickly double your debt — it's a law. And people need to know this law when they are making financial decisions."

Where Should Financial Literacy Go from Here?

There is a general consensus that a substantial number of Americans have limited financial knowledge, but the best way to increase an understanding of financial issues and decisions is a point still widely debated. Reaching out to students in the classroom, while not without some shortcomings, at least targets the younger population where they spend much of their time.

With regard to adults, the evidence suggests that financial literacy training does raise awareness of opportunities to save and invest for the future. For example, the researchers in India found that adult financial literacy training had a large and positive effect on basic financial knowledge and also made participants significantly more aware of some of the financial options available to them and more likely to suggest them to co-workers. While it is probably unwise to attempt to impose one "correct" model of savings and spending, financial literacy training seems likely to benefit adults as they make some of the most significant decisions of their lifetimes.

"We are not going to go back to a world of defined benefit pensions," Lusardi says. "Every country is facing this problem of shifting responsibility to the individual, and everyone is facing the problem of making decisions in a world that is more complex." **RF**

Readings

Carlin, Bruce Ian, and David T. Robinson. "What Does Financial Literacy Training Teach Us?" National Bureau of Economic Research Working Paper No. 16271, August 2010.

Carpena, Fenella, Shawn Cole, Jeremy Shapiro, and Bilal Zia. "The ABCs of Financial Literacy — Experimental Evidence on Attitudes, Behavior and Cognitive Biases." Paper presented at the annual meeting of the Allied Social Science Associations, Denver, Co., January 2011.

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.

Lusardi, Annamaria, and Olivia S. Mitchell. "Financial Literacy and Retirement Planning in the United States." National Bureau of Economic Research Working Paper no. 17108, June 2011.