Can’t Do The Math

By Kerry Pechter *Wed, Dec 23, 2009*

You knew it all along, but now there's evidence. Most Americans are financially illiterate. Experts wonder how the millions who don't understand compound interest can possibly fashion successful retirements.

The global financial crisis and the analyses of its causes and effects have helped expose the embarrassing fact that Americans don’t know nearly as much about economics, finance or investments as they should.

Leaving aside the revelation that bankers, regulators and even Treasury Secretaries blundered, the crisis highlighted a growing body of evidence that most people can’t answer simple questions about compound interest or investment diversification.

For some researchers, that evidence helps explain why so many Americans fall victim to balloon mortgages and high-interest credit. Even more seriously, it implies that many Boomers aren’t financially competent to plan for their own retirement.

“We find strikingly low levels of debt literacy across the U.S. population,” said a December 2008 paper by Anna Lusardi of Dartmouth and Harvard’s Peter Tufano. “It is particularly severe among women, the elderly, minorities, and those who are divorced and separated.”

And financial ignorance isn’t bliss; it’s expensive. Lusardi estimates that about a third of the $11.2 billion spent in 2008 on late fees and other avoidable credit card charges alone was rung up by “the less knowledgeable,” who pay “46% higher fees than do the more knowledgeable.”

Often mocked by economists as too trivial for serious attention, financial literacy is now getting some respect. Indeed, the federal government this fall funded a $3 million Financial Literacy Center at Dartmouth and the Wharton School, with Lusardi as director. Still, financial literacy experts wonder if Boomers will succeed in building up their math skills before they make fatal errors with their savings.

Three questions

Lusardi, author of “Overcoming the Savings Slump: How to Increase the Effectiveness of Financial Education and Saving Programs” (University of Chicago Press, 2009), has spent much of the last eight years working with Olivia Mitchell, director of the Wharton’s Pension Research Council, to design survey questions to measure financial literacy in the U.S.

Here are some of the questions she’s asked, and that most people get wrong:

1. Suppose you owe $1,000 on your credit card and the interest rate you are charged is 20% per year compounded annually. If you didn’t pay anything off, at this interest rate, how many years would it take for the amount you owe to double?

2. You owe $3,000 on your credit card. You pay a minimum payment of $30 each month. At an Annual

Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges?

3. You purchase an appliance, which costs $1,000. To pay for this appliance, you are given the following two options: a) Pay 12 monthly installments of $100 each; b) Borrow at a 20% annual interest rate and pay back $1,200 a year from now. Which is the more advantageous offer?

For the first question, fewer than 36% of those surveyed knew that it would take more than two but less than five years. In the second question, about 35% knew that you could never get out of debt that way. Only about seven percent identified “b” as the correct answer to the third question.

Dire consequences
Those best equipped for success in America—young, white, married, college-educated men—tend to be the most financially literate. Others—those over age 50, the 70% without a college degree, women, African Americans, Hispanics, the divorced and separated—tend to be less so. Among high school students, Lusardi found widespread financial illiteracy, except among white males whose parents are college-educated.

Besides paying higher credit card fees, people who lack financial literacy are less likely to use mutual funds with lower fees, more likely to avoid stocks (especially foreign stocks), less likely to refinance their mortgage when advantageous and less likely to plan for retirement.

It’s not so much that Americans are falling behind in financial literacy, says Lusardi; it’s that the world has become more financially demanding of everyone. In particular, millions of Boomers are not equipped to handle the responsibilities that come from having a defined contribution retirement plan instead of a traditional pension—including the responsibility to know how to take distributions in retirement.

“What worries me is that making the wrong decision late in life can have dire consequences, because you don’t have time to catch up,” Lusardi told RIJ. “If you make a wrong decision about when to draw Social Security, or whether to annuitize your wealth, you might not be able to afford a comfortable retirement.”

The fallout from subprime mortgage crisis showed that all of us suffer when the financially illiterate make mistakes. Taxpayers often have to bail out or rescue people—CEOs and commoners alike—who get themselves into personal or system-threatening financial jams.

What to do about it
Historically, financial literacy has had a low priority among economists. Economic theory rested on the assumption that participants in the marketplace acted rationally and in their own best interest. Even if disadvantaged people lacked financial literacy, some experts felt, that was probably among the least of their problems.

But Lusardi, Mitchell, and a few others give financial literacy much higher priority in the hierarchy of human needs. If you teach people the rudiments of investing, they say, you can equip them to solve their bigger problems—or at least prevent them from sliding into debt, bankruptcy and dependency.

This belief relies on two assumptions, however. First, it assumes that the financially challenged are willing and able to learn. Second, it assumes that people make foolish choices with their money out of ignorance and not because circumstances force them to.

One of the more paternalistic responses to financial illiteracy in the retirement savings arena has been to auto-enroll employees in employer-sponsored plans, to provide default investments such as target-date funds and to automatically hike employees' contribution rates.

For financial literacy champions, however, these are band-aid solutions that boost assets-under-management without addressing the real problem. For instance, these measures doesn't show people how to balance their need to save for retirement with their need to save for a down payment on a home or educate their children.

"My view is that many 'nudge-type' structures can and probably should be implemented, but they will not be sufficient," Wharton's Olivia Mitchell told RIJ in an e-mail. "They don't teach people to become financial adults, to learn to make their own decisions when the easy answers don't suffice.

"For instance, we can prohibit frequent trading to combat overconfidence but people will find a way around such restrictions. Or we could rule out certain types of financial transactions—for example, adjustable rate mortgages—but this doesn't give people the tools to decipher and decide on some as-yet-undiscovered financial instrument.

"We can also enhance disclosure—of credit card interest, etc.—but this won't stop kids from running up credit when they get card applications in the mail," she added. "And when things get suddenly complex—when the market tanks and there is 10% joblessness—people need to have thought about how to protect against these eventualities while they still have time to plan ahead."