### **Annamaria Lusardi**

On financial literacy, seniors versus scammers, and learning from the mistakes of NFL players

nnamaria Lusardi "fell in love" with economics, she says, thanks to a macroeconomics course she took as an undergraduate at Bocconi University in her native Italy. But her career has been focused on a quite different topic — she's a leading researcher in personal finance. How good are the skills and information that individuals bring to their financial decisions? And how can institutions provide them with the skills to make better decisions? These are the questions that have been preoccupying her for the past several decades, most recently as University Professor at George Washington University in Washington, D.C. She is also the academic director of the university's Global Financial Literacy Excellence Center, a research center she founded in 2011.

Lusardi's research has appeared in numerous academic journals, including the *American Economic Review* and the *Journal of Political Economy*. She is the editor or co-editor of several books on financial education and on retirement savings and is working on a textbook on personal finance for Oxford University Press.

David A. Price interviewed Lusardi by phone in January 2023.



EF: Your work has been focused on financial literacy and retirement savings. What drew you to these areas?

**Lusardi:** When I was working on my Ph.D. at Princeton, I was a student of Angus Deaton, so my work was very much related to studying savings and consumption behavior with microdata. As I worked more and tried to understand what shapes individuals' decisions about savings, I could see that people who might be similar in terms of lifetime income and other characteristics would end up later on with vastly different amounts of wealth. This told me there was potentially something important missing in the models.

At the same time, my work looking at savings for retirement led me to consider that people needed to have quite a bit of knowledge to plan for retirement — that you needed to be skilled in making complex calculations, that you had to collect quite a bit of data, that you had to be aware of concepts like interest compounding, the effect of inflation, and so on. I wondered whether people have this knowledge. And I realized that I couldn't answer these questions because there wasn't data on how much people knew.

I was also influenced by a course I took at Princeton with Alan Blinder. He asked similar questions for macro: Do people know, for example, the interest rate in an economy? Do they know the level of inflation?

All this led me to designing measures of financial literacy. And those original measures that I worked on back in 2004 have now become the measures that people normally use to assess financial literacy.

Another reason why I did so is because we have witnessed a highly important change in the United States and around the world, which is that more and more, we have shifted the responsibility to save for retirement from the employer to workers. I am talking about the shift from defined benefit pensions to defined contribution pensions, such as individual

retirement accounts and 401(k) plans. In the past, it was the employer who had to manage the pension of the employees; the wealth was managed by a CFO or by other financial experts. Now we ask individuals to make these decisions about their wealth. So even more than when I was an assistant professor, there's the question of whether people have the skill to manage their money.

#### EF: You and Olivia Mitchell created three survey questions on financial literacy that are often called the "big three." How did you arrive at them?

Lusardi: When Olivia Mitchell at the University of Pennsylvania and I tried to design those questions, we first asked what does financial literacy mean? What are we trying to measure when we measure financial literacy? What we decided to do is to look at knowledge of the basic but fundamental concepts for making financial decisions.

We were told we could have only a handful of questions to be added to a survey, and having only three turned out to be a big advantage as it is easy to add three questions to many surveys. We thought that what is very important is that people can understand and do simple calculations in the context of interest rates. In particular, we wanted to measure knowledge of interest compounding. That is because almost every decision has to do with shifting resources over time. We also asked about inflation and the workings of inflation. And finally, we asked about risk and risk diversification. (See box.)

These questions are intended to measure very basic knowledge. We're not asking people to price bonds. We are asking them, can you do a 2 percent calculation in the context of interest rates, do you know the effect of inflation, do you know how risk diversification works. These are three fundamental concepts in financial decision-making.

The questions have been now used

everywhere. Many countries have been adding these questions in their national surveys.

## EF: How does financial literacy in the United States compare with that in other countries?

Lusardi: Together with a team at the World Bank, I eventually designed questions similar to the big three that were applied to a sample of more than 140 countries. I would say there are several interesting findings. One is that even though the U.S. is the country with the most advanced financial markets, it actually doesn't score very high in terms of financial literacy. And this has been true in other surveys, as well.

The second thing is that overall financial literacy is not high in other countries, either. Overall, the level of financial literacy globally is really low; only one-third of people around the world are financially literate.

And third, we have also found that the topic that people know the least and this is true around the world, not just in the U.S. - is risk and risk management. Clearly, this is much more difficult, but it is also a knowledge that we need so much more now that the world has become more uncertain. One of the questions we ask is whether people know whether a single stock is safer than a stock mutual fund. In other words, we are asking people whether they know that putting all of your eggs in one basket is a risky proposition. This is the concept that people grasp the least.

# EF: What are the main points about financial behavior that you wish more people knew?

**Lusardi:** First of all, it's important to understand finance applies to everybody. We all need today to take good care of our finances — because we have to take care of decisions that in the past were taken care of by others or were different. I'm thinking of

### THE "BIG THREE" FINANCIAL LITERACY SURVEY QUESTIONS

- 1. Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?
- More than \$102
- Exactly \$102
- Less than \$102
- · Do not know/Refuse to answer
- 2. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
- More than today
- Exactly the same
- Less than today
- Do not know/Refuse to answer
- 3. Please tell me whether this statement is true or false. "Buying a single company's stock usually provides a safer return than a stock mutual fund."
- True
- False
- Do not know/Refuse to answer

NOTE: Correct answers are (1) "More than \$102," (2) "Less than today," and (3) False.
SOURCE: Annamaria Lusardi and Olivia S. Mitchell

pensions; I'm thinking of health care, of the cost of education. I'm thinking of even, for example, taking care of aging parents because of demographic changes.

As a result, we need to democratize financial literacy. What my research shows is that the small group of people who are financially literate are disproportionately white males from college-educated families. But each of us needs to know the basics to make good financial decisions.

We can all do it well. We can all, if we use this knowledge, arrive at

financial decisions that will make us financially resilient. Resilience in engineering means you bend, but you don't break when facing a shock.

EF: You've talked about how financial literacy can make a difference. Does it in fact make a difference? Does having the knowledge seem to translate into better decisions?

**Lusardi:** I can say a resounding yes now. This has been, in a sense, a battle because a lot of studies were trying to argue that financial literacy didn't matter. So what we did recently - and it took us a good many years to do this project — is a meta-analysis of financial education programs. A meta-analysis means trying to analyze the existing literature, in this case on financial literacy and financial education. We had to do so because the literature has grown so much and so wide. Because the literature was so extensive, we then decided to concentrate on the most rigorous evaluations. So we looked at only the randomized control trials. In other words, we looked at the financial education programs that were evaluated like you do in the sciences, meaning you have a control group and one or more treatment groups. So you expose a group to financial education; you don't expose the other, similar group: and then you compare what happened to the group you treated.

What we found, looking at the evidence in as many as 33 countries, is that financial education works and works well — meaning it does translate into higher knowledge and also better behavior in savings and managing credit and in other areas, including insurance and money transfers. And we also found that it is cost effective. This is due to the fact that many educational programs do not cost very much.

There has been some skepticism on financial education. It's something I've always been puzzled by. We have universities, we value education highly, but then we are skeptical that it works in this context. I always felt that giving

#### Annamaria Lusardi

#### ■ PRESENT POSITIONS

University Professor of Economics and Accountancy, The George Washington University

Founder and Academic Director, Global Financial Literacy Excellence Center

#### ■ SELECTED ADDITIONAL AFFILIATIONS

Director, Italian Committee for Financial Education; Research Associate, National Bureau of Economic Research; Research Fellow, Centre for Economic Policy Research

#### ■ FDUCATION

Ph.D. (1992), Princeton University; B.A. (1986), Bocconi University

people education as we do, for example at the universities, in every field — engineering, music, whatever education it is — is really powerful. Why should financial literacy be different?

By the way, business schools like mine teach corporate finance, so we teach prospective CFOs to manage the money of the firm, and nobody's asking whether that education is effective. No firms would hire people who do not know about finance to manage their money. We can apply that as well to individuals: You need to have some basic knowledge to manage money — it is that simple.

EF: The news media occasionally reports on professional athletes who make extraordinary amounts of money and then end up bankrupt in middle age. Why does that happen? And is there anything we can learn from their experiences?

**Lusardi:** Yes, definitely. I co-authored a paper about this, specifically on NFL players, in the *American Economic Review*.

Professional football players are incredibly rich. According to our research, in the short career of the football player — no matter their position in the game — they basically earn

what a person with a college degree would earn in a lifetime. Yet there were statistics reported in newspapers that 78 percent of football players go bankrupt.

These statistics didn't really make sense; the proportion was too high. So what we did in our work was follow a cohort of professional football players. Matching their salaries with other data, we looked at what we consider the most dramatic negative outcomes — not just losing wealth but declaring bankruptcy. Our reason was that we could get information on that.

What we found is that in a 12-year span after they stopped playing, 15 percent of the players declared bankruptcy. Some players were losing all of their wealth right away as they stopped playing. So it didn't take a long time for them to deplete their money to the point of declaring bankruptcy — even though they likely started with the wealth to not have to work again in their lifetimes.

This outcome yet again speaks of the importance of financial literacy among the young. If someone who doesn't know anything about finance receives millions of dollars, it is not necessarily going to go well. And these players were disproportionately from low-income families. That's another predictor of having low financial literacy and also of not having an informed network to rely on.

Also, anecdotal evidence shows that even players who were using financial planners or a financial advisor were going bankrupt; in fact, it was that that led to the bankruptcy. They mostly were relying on financial advisors who were taking advantage of them.

Around the time I was working on the paper, my business school designed a program called STAR EMBA, which was a program for people of this type, meaning professional athletes or celebrities who often had a short career. The class was mostly composed of football players. We wanted to provide professional help in building their next career. My role was to design a course on financial literacy and personal finance. It was fantastic to be involved in this project because these people are extremely talented, as you can imagine. But they don't know at all about finance! It was important to fill that gap.

One of the things they told us a lot is how their advisors, rather than helping them, often were proposing highly risky schemes or were charging very high fees. As I always say: A financial advisor is not a substitute for financial literacy. It's a complement, as you need to be financially savvy to choose a good

one, and that's certainly true in the case of these wealthy young people.

EF: Let's turn from young people to seniors. You've studied the effects of debt on the well-being of people near retirement. What did you find out about it? Presumably lots of debt near retirement is bad.

**Lusardi:** The simple life-cycle model is arguing that when you get close to retirement, you should have the highest

amount of wealth. But what we found is that many people who are close to retirement didn't seem to have much wealth and, if anything, they were carrying high-cost debt, such as credit card debt or other unsecured debt. In one of our recent works, we found that a sizable proportion of people close to retirement were even being contacted by debt collectors. And people were carrying — certainly compared to previous generations — more debt into retirement.

You could argue, well, that's probably what we should expect because of the lower interest rate on debt. But it was surprising to us to see just how much debt was brought close to retirement and into retirement; so much so that in retirement, people have to not just spend down wealth, but also service their debt, something different than in the past.

EF: Anecdotally, one hears a lot about scammers preying on elderly retirees. Does this seem to be a significant issue? If so, what should the elderly and their family members be doing?

Lusardi: Unfortunately, the elderly are an ideal target for scams. Overall, our data show an inverted U-shaped profile of financial knowledge over time: Financial knowledge is quite low later in life. We don't know whether it is just an age effect — that when you are

"Unfortunately, the elderly are an ideal target for scams. Overall, our data shows an inverted U-shaped profile of financial knowledge over time: Financial knowledge is quite low later in life. We don't know whether it is just an age effect — that when you are older, your cognitive ability changes — or a generational effect, that the older people now didn't have to make as many financial decisions so they didn't build a lot of financial literacy."

older, your cognitive ability changes — or a generational effect, that the older people now didn't have to make as many financial decisions so they didn't build a lot of financial literacy.

Unfortunately, older people often are not aware of their limited knowledge. So when you ask people how much they think they know, this is where we see one of the biggest mismatches between what people think they know and what they actually know. And that makes someone vulnerable.

And third, it's mostly the older people who have wealth because they are in the stage of the life cycle where they should have the highest level of it. For all these reasons, the elderly are vulnerable. Their knowledge is low. They don't know they have this low knowledge. And they normally carry more wealth than people in other stages of the life cycle.

I do think that this is an important problem, and it might become with time even more relevant given the aging of the population. What we should do, as in many other financial decisions, is try to do prevention and also plan for that stage of life where we anticipate that we might not be able or we might be more vulnerable. We should try to set up a structure and a framework so that either the financial planner or the other people we're relying on can detect potentially when there are problems. Also, we want to decide earlier how to

assign some of these financial decisions, because sometimes family members are not necessarily the best for the task. So it takes some planning to try to minimize or avoid being in difficult situations later on.

## EF: What should policymakers be taking away from your work?

**Lusardi:** There are clear implications for policy from my research. One is that we need to promote financial literacy. The levels are too low

for people to make good decisions. And if many people make potentially expensive mistakes, then society as a whole may be asked to pay for it. We saw this in the mortgage defaults in the financial crisis, for example.

And we can think of many others, from inadequate saving for retirement to not being able to pay student loans to not insuring for small and big shocks. I think it's important that we educate people so those types of behaviors can be as limited as possible.

But there are also implications for inequality. In many contexts in finance, we can have transfers literally from the poor to the rich. For example, the people who refinance their mortgages are disproportionately the high-income people, who can get even better rates because many others, poorer households, do not refinance when interest rates come down. High-income people

may have the knowledge and liquidity to be able to take advantage of the tax benefit of investing in 401(k) plans and IRAs. And the more vulnerable groups in society can be even more vulnerable when it comes to financial decision-making. So it's important that we try to give access to financial education to everyone. And in fact, 80 countries or more are now implementing a national strategy for financial literacy.

One of my recommendations is that we add financial literacy to the national statistics: Report on the population's financial literacy along with GDP, saving, productivity, and all the rest. It's a good indicator of how well the citizens in the country are doing.

#### EF: What are you working on now?

Lusardi: I'm working on three things. First, I've just started as the editor of a new academic journal on financial

literacy that I proposed a few years ago and that started this year. It's called the Journal of Financial Literacy and Wellbeing. It's published by the Cambridge University Press. Financial literacy has now become a field of study, one with its own Journal of Economic Literature code — it's G53 - and we also now have an academic journal dedicated to this field. I hope that this is a way to foster a lot of research in this area, because we certainly need to know more about how we can improve the level of financial literacy around the world and help people make savvy financial decisions.

The second thing is I continue to collect data on financial literacy. Since 2016, we have been doing a project with the TIAA Institute, measuring financial literacy with as many as 28 questions. So we went from the big three to 28 questions. We call that measure the Personal Finance Index

or P-Fin Index. So we have a detailed, rich set of information on the type of knowledge and information that people would need to make their financial decisions. We collect this data each year, and each year we also try to focus either on one demographic group or one topic. For example, the most recent data was focused on longevity literacy: Do people know how long they are going to live, and do they plan accordingly?

And third, I'm continuing to do my policy work, in particular in my native Italy, where I chair the Financial Education Committee in charge of designing and implementing a national strategy for financial literacy. I'm very proud of that work. My mother lives in Italy; I have two sisters and a lot of nieces in Italy. Trying to do the best I can to improve financial literacy in Italy is my small contribution to my native country. EF

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