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Annamaria Lusardi, PhD

THE LIFELONG BENEFITS OF IMPROVED FINANCIAL LITERACY

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Annamaria Lusardi is Senior Fellow at the Stanford Institute for Economic Policy Research (SIEPR) and director of the Financial Freedom Initiative, a collaboration between SIEPR, the Graduate School of Business (GSB), and the Economics Department at Stanford University. She is also Professor of Finance (by courtesy) at the GSB. Previously, she was University Professor at The George Washington University and, before that, she was the Joel Z. and Susan Hyatt Professor of Economics at Dartmouth College, where she started her academic career.

Lusardi also has taught at Princeton University, the University of Chicago's Harris School of Public Policy and Booth School of Business, and Columbia Business School. She was also a visiting scholar at Harvard Business School. She earned a PhD in economics from Princeton and an honorary doctorate from the University of Vaasa in Finland.

One of the most cited authors in financial literacy, Lusardi is the founder and academic director of the Global Financial Literacy Excellence Center (GFLEC), which has done pioneering work on personal finance education. She has published close to 100 articles and books, including publications in the American Economic Review *and the* Journal of Political Economy. *She is the founder and inaugural editor of the* Journal of Financial Literacy and Wellbeing, *published by Cambridge University Press.*

Lusardi served as a faculty advisor for the Office of Financial Education at the U.S. Treasury in 2009. From 2017 to 2023, she was the director of the Italian Financial Education Committee in charge of designing and implementing a national strategy for financial literacy in Italy. Her research is featured regularly in media outlets such as the Wall Street Journal, Financial Times, Forbes, *and CNBC.*

In June 2023, Annamaria Lusardi spoke with Robert Powell, CFP®, RMA®, Retirement Management Journal *editor-in-chief, and Betty Meredith, CFA®, CFP®, CRC®, of the Retirement Resource Center, about benchmarking and assessing financial literacy, how it compares globally and why it matters, and providing financial education to improve retirement readiness.*

FOUNDATIONS AND THE BIG THREE

Robert Powell: How did it come to pass that you focused your work on financial literacy and retirement savings as a career?

Annamaria Lusardi: My initial interests were retirement savings and how people make decisions about savings. The data show that people with similar levels of education and income and similar economic circumstances end up with vastly different amounts of wealth at retirement. This made me think that something was missing, particularly in the context of the changes that were taking place in pensions. People were being asked to make complex decisions, for example about retirement planning, and I wondered whether people had the knowledge to make such decisions. There wasn't much data available about how much people know about basic principles of finance. That's why we started collecting data on financial literacy.

Robert Powell: How would you summarize the objective of the body of your work over the past decades?

Annamaria Lusardi: The objective is to understand how people make financial decisions and to try to help them make good decisions. Making good job and career decisions is important, but making good financial decisions is also important. And I don't mean decisions about retirement savings only but also how to manage student loans, the FICO score, and making investment decisions, which are not just investments in the stock market but also investments in education. We have to make so many financial decisions and they are consequential, they affect our well-being.

Robert Powell: And it's become more complicated over the years. We didn't have Roth IRAs [individual retirement accounts] years ago. We didn't have reverse mortgages. When I was in my twenties, I didn't know there was a FICO score.

Annamaria Lusardi: Absolutely. You are right that we are dealing with much more complex financial instruments than in the past. Also, consider the debt side, and how many more opportunities we have to borrow. Debt-related decisions are consequential. In a nutshell, the reason we need financial literacy is that the world has become more complex. In the same way that we, as a society, decided that people needed education in basic skills such as reading and writing, today, people also need to have financial skills because they are necessary to understand the world around us, for full participation in society.

Betty Meredith: How did you and Olivia Mitchell[1] arrive at the "big three" questions? And how has this research been used since you first came up with the questions? What year did you come up with them?

Annamaria Lusardi: It was around 2002 and we were at a dinner at the TIAA Institute. Olivia and I started discussing our common interest in retirement savings and our efforts to try to understand how much people know and understand finance. Literally the next day, Olivia called me and said, "I have an opportunity to add questions to a module in the Health and Retirement Study,"[2] which is a survey that collects data on older people (age 50 and older). This was an opportunity to create a financial literacy module so that we could better understand how people make retirement decisions. We were told that the module could have only a handful of questions, as few as three.

We initially thought that three questions would not allow us to measure financial literacy. However, what we thought was a big constraint turned out to be a great opportunity. Many surveys ended up having space for three questions. And we had to think very, very hard about what to ask. We decided to focus on the concepts that are the basis of most financial decisions. To do this, we designed a question that assesses whether people can do simple calculations in the context of interest rates—with this, we were aiming to measure knowledge of interest compounding, but the question we designed was, in fact, even simpler. And because every financial decision has to do with time, we designed a question that assesses understanding of inflation. The third question was about knowledge of risk diversification. It took us between six months and a year to design those three questions.

What we ended up with was very different from what we started with. We consulted a lot of experts along the way, and each modification we made was basically a step in simplifying the questions further—so much so that when the questions were ready, many academics told us that we couldn't ask these questions because they were too simple. It was quite challenging to design these questions because they were the first ones, and we knew we had to get them just right.

Betty Meredith: No pressure.

Annamaria Lusardi: Exactly. The reason I think these three questions have become so relevant is because they measure knowledge of basic and fundamental concepts. They also assess knowledge of the language of finance. For example, people hear about inflation or stocks and stock mutual funds, but they don't necessarily know what they are.

In retrospect, I'm happy we were limited to developing just three questions, because it is easy to add three questions to a survey, and we have added these questions to almost every survey in the United States and many surveys in countries around the world. We discovered that, even in countries with sophisticated financial markets, people are not financially literate.

Robert Powell: I think back to my career as a personal finance journalist, and I think for all our efforts to educate people about money, whether it's Jump$tart or the Council on Economic Education or the National Endowment for Financial Education or you name the organization, and it sometimes feels like we haven't moved the needle.

Annamaria Lusardi: The needle has moved: More than 80 countries are now implementing or have implemented a national strategy for financial literacy. There has been recognition at the policy level and at the academic level that this is an important topic. I am proud to tell you that financial literacy has become an official field of research with its own Journal of Economic Literature code, which is G53. But to your point, to make progress we need to take bolder steps. Let's imagine we can go back 100 or more years, to when people were illiterate, meaning they were not able to read or write.

If education had not been mandated in school (in the United States, by 1918 every state required students to complete elementary education), how much do you think people's ability to read and write would've improved? Similarly, people just don't become financially literate by watching the world around them. It's very hard to understand how interest compounding works simply by reading your credit card statement each month. Financial jargon can be daunting and some topics are not intuitive. Financial instruments have become very complex and some are so new that we cannot learn, for example, from our parents. They did not grow up with DC [defined contribution] pensions; they didn't have crypto assets; they did not have the student loans we have now.

And because financial literacy is important to understand the complex world around us, we need to do what we did many years ago, which is to make financial literacy compulsory in school. Otherwise, the group of people who are financially literate will remain a small and privileged group.

Robert Powell: More states are now mandating personal finance education, right?

Annamaria Lusardi: Yes, and it is a good result, but only about half the states are doing so. All young people are going to face complex financial decisions in their future, everything from taking out personal loans to planning for retirement.

We need to democratize financial literacy. If you look at the very small group of young people who are financially literate, it's disproportionately those from college-educated families. We need to provide access to financial education to everyone.

Clearly, there is a need for financial education and the more we can address that need, the better.

MOVING THE NEEDLE WITH FINANCIAL LITERACY

Betty Meredith: When Bob and I were preparing for this discussion, we discussed how the average person doesn't learn something unless they're required to through work or if it's a pain point. When my mom fell and hit her head, I found out I didn't know what help was needed. Suddenly it became important to learn.

I was reading your 2016 report with the Federal Reserve Office of Employee Benefits [Clark et al. 2017]. In particular, you were able to tie the results of education to behavior because they gave you access to the administrative side to see plan data after people had taken some education.

What has worked well with increasing financial literacy over the past 30 years? What aren't we doing or what should we be doing more of to improve literacy levels?

Annamaria Lusardi: The study you cite is important, but I would argue it's not as rigorous as we would have liked it to be. We couldn't do a randomized controlled trial study, in which we had a control and a treatment group. But more recently, we did a meta-analysis of financial education programs. We considered all of the studies on financial education programs but chose to focus on the most rigorous ones [Kaiser et al. 2022]. We covered programs in as many as 33 countries in six continents. Our analysis found an effect of financial education on behavior indicating that financial education works, and it affects both knowledge and behavior. In other words, financial education works and it works well everywhere. I believe this is the most important lesson we have learned.

We did a project more recently with a Fortune 25 firm and found that the more targeted the financial education program is, meaning the more it addresses an identified need, the better it is. Effective financial education programs start by listening to the needs of people and addressing their concerns and problems. The more one can do that, the more effective a program can be.

Financial education programs can benefit employers as well. In a recent survey, we asked people how many hours they spend dealing with and worrying about personal finance issues and how many of those hours are at work. We were shocked by the result. In 2022, people told us that they spent seven hours per week dealing with personal finance issues and three of those hours were at work. By 2023, when we repeated the survey, this had increased by one hour: eight hours dealing with finances, four of which were at work. If we multiply these hours by the average wage, the cost of providing financial education to employees easily may be less than what employers are losing in productivity by having workers deal with their personal finance issues at work. Clearly, there is a need for financial education and the more we can address that need, the better.

And note that we can help people save more for their retirements by addressing other problems they may have, for example, credit card debt. Interest rates on credit cards tend to be high, and if people's credit card balances become large and they do not pay on time, their FICO score may suffer; that may have consequences in both the short and long term and, for example, affect retirement savings. Thus, it is useful to use a holistic approach. It works best.

Betty Meredith: Agreed.

Robert Powell: Anna, you've talked about numeracy being critical for financial literacy. I recently had the occasion to listen to Jo Boaler,[3] also at Stanford, talk about how to teach numeracy in schools where a preponderance of people sometimes say, "Oh, I'm no good at math." There may be a need to teach numeracy in different and better ways.

Annamaria Lusardi: In my personal finance course, I have tried to make the math as simple as possible, because we need to address the fact that people are afraid of numbers and they are afraid that financial literacy is just math, but that is not the case.

There are no prerequisites for the course and every student is invited and welcome, not just students from economics or from the sciences. But we do need to do calculations to be able to make decisions.

Betty Meredith: How do we embed financial literacy into society? You spoke about making it compulsory in the school system, but let's talk about that length of time. Is this a 30-year project? Is it a generation?

Annamaria Lusardi: Yes, it's a long-term project and we should not wait any longer to get started. We should have financial education in school and do it as soon as possible. Each year that goes by without it, we have a generation entering the market without having that important knowledge. By making it

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mandatory in school, we provide access to financial education to all young people. And by providing it in schools, adults also can be reached. Particularly in low-income families, parents often learn from their children.

To accelerate embedding financial literacy into society, it's also critical to offer financial education in the workplace; this is how we can reach the adults. And we need to make sure that every employer, not just the big ones, has the capacity to provide workplace education because employees now face much more complex financial decisions than in the past. Employers will benefit from having workers who are financially fit.

FINANCIAL WELLNESS IN THE WORKPLACE

Betty Meredith: That ties into our next question about workplace financial wellness programs. Back in the day, a course would be presented several times by a 401(k) provider or by the employee benefits department for a fixed period of time as a one-size-fits-all event and then it stopped. You're talking about making education available on an ongoing basis, because new people are hired or employees move through life stages, in order for general workplace financial literacy programs to be part of workplace fabric. What are you seeing today?

Annamaria Lusardi: As I've mentioned, we see holistic programs. Workplace financial wellness programs are not just about retirement savings, but also precautionary savings. Precautionary savings are very important. People need to have a savings buffer to face shocks, because otherwise, they may have to tap into retirement savings.

We also need to consider that the population is very heterogeneous. People have different needs and different ways of learning. For example, millennials want things at their fingertips. For them, financial education needs to involve technology and information needs to be available when they want it.

Because financial illiteracy is like a silent illness, financial checkups that begin when people start working and are repeated at regular intervals also can be useful. These checkups can identify where problems are and what can be done about them. Financial checkups are one strategy, but there are other methods—everything from deadlines to incentives that motivate people to get things done. In the same way that we take care of our health, we need to make sure that we are also taking good care of our finances.

THE PERSONAL FINANCE INDEX

Betty Meredith: Tell us about the personal finance index. When did it start?

Annamaria Lusardi: We started the data collection in December 2016 and January 2017. Since then, we have collected the data each year in January. Currently, we have seven years of data on personal finance knowledge in the United States. The index includes as many as 28 questions to help us figure out what people know and do not know when it comes to personal finance, how this knowledge changes over time, who the vulnerable groups are, and whether and how much knowledge matters for financial behavior.

Betty Meredith: There are 28 questions in the personal finance index. Do you change the questions a little each year? Do some come off the table?

Annamaria Lusardi: We keep the 28 questions the same so that we can measure progress over time. As I have mentioned before, we now have many years of data. Unfortunately, we don't see financial literacy improving, in the aggregate.

In addition to the 28 questions, we add questions that are of topical interest. For example, this year we added questions to help understand whether inflation had affected people's ability to save for retirement. We also have added questions about longevity and questions that help us better understand financial behavior.

Betty Meredith: Is Gen Z more financially literate because they have access to all kinds of information that we didn't back in the day? Twenty years ago, we had to subscribe to *Money* magazine or buy a book in order to read about personal finance. Is Gen Z more financially literate because they have access to YouTube, follow personal finance personalities on social media, podcasts, and apps to make more informed decisions at their fingertips? Also, does it matter whether they engage in a course versus self-selecting articles and topics that interest them? Are they able to connect the dots between different information sources?

Annamaria Lusardi: As you can imagine, this is really complicated; the problem is that so much information is available. When you type "retirement planning" into your browser, you get so many websites. The question is, where can people go for rigorous unbiased information? We have to be careful about the quality of information.

Even with artificial intelligence, the fact that it can provide information doesn't mean that it's the best information or that it is providing rigorous and unbiased information. More than ever, people need to have basic knowledge and skills to be able to access and process information. Informal education can even be counterproductive.

FINANCIAL LITERACY IN THE UNITED STATES

Robert Powell: Anna, you mentioned earlier that our financial literacy here in the United States is lower than in other countries. I'm curious, what are other countries doing differently than we are that they're so much better?

Annamaria Lusardi: This is almost by construct, Bob, in the sense that the United States is a very large and heterogeneous country. If you look at the demographics and wealth and income inequality in the United States, it is not surprising that financial literacy is low, given that financial literacy is very connected with economic status.

More than 80 countries have or are implementing national strategies for financial literacy. Most countries have a national education system, so the curriculum doesn't depend so much on the state or the local system. And countries, such as Portugal, have made financial education mandatory in school; this happened in 2018, well before the financial crisis. Many other countries are doing the same, but in the United States, only half of the states have required financial education in school.

More than 80 countries have or are implementing national strategies for financial literacy. Most countries have a national education system, so the curriculum doesn't depend so much on the state or the local system.

Robert Powell: The Obama administration organized a White House council on financial education, but not much has come of it really, right?

Annamaria Lusardi: The President's Advisory Council on Financial Literacy started with President George W. Bush, so it goes back a while.[4] People overall have underestimated how important these initiatives can be, but it is important to have a council at the national level that can coordinate and promote financial literacy. Most countries have such initiatives.

Robert Powell: What role does behavioral finance play in financial literacy?

Annamaria Lusardi: I think behavioral finance and financial literacy are complements. We need to nudge people, but nudging is not enough. We need to automatically enroll people into pensions, but auto-enrollment is not enough. We need to use all of the instruments in our toolkit to help people make good financial decisions. Overall, I have seen professionals using behavioral economics a lot but financial literacy very little. I think we need to add financial literacy to the behavioral economics tools. One size doesn't fit all.

I also think that many of the biases emphasized by behavioral finance can be cured or unraveled if financial education is taught early on. If we increase knowledge, we can prevent some of these biases from arising. That's why I think financial education is so important in schools.

Betty Meredith: Financial service providers of retirement plans have a vested interest in people saving more and investing better, but they are given limited time to cover a lot of content. What can they be doing better?

Annamaria Lusardi: Ted Beck, the former CEO [chief executive officer] of the National Endowment for Financial Education, always said, "I'm pretty sure that if you talk to CEOs, they will tell you a story of having to fire an employee because they had money problems and made bad decisions." There is a benefit to the employer of providing financial education. Doing so is not charity, not just a good thing to do, it is a necessary thing to do in the workplace today. So, I hope employers will be demanding more from retirement plan providers.

Also, financial education is a lifelong process. I teach a personal finance course to both undergraduate and graduate students that is 14 weeks long and that is probably not even long enough. We do not want everyone to take a course, but financial education is more important than ever. That's why I think we need to have a greater variety of programs. They need to be targeted to the different needs of people and ideally, they would be designed as preventative measures. Education can be provided, for example, when people are first hired and then when they get promoted or at the end of each year; in the same way that we do regular checkups for our cars or our health, we should do checkups of our finances.

Robert Powell: Is there something that we didn't ask that we should have, Anna?

Annamaria Lusardi: I would like to tell you about what I'm doing now. I am doing three things. First, I am continuing to do research, and I am also the editor of a new journal. We finally have an academic journal devoted to financial literacy, and I'm very proud of that and working hard to grow that journal.[5] I hope it becomes the place where policy-makers and others can get the information they need to create effective policies and programs.

Second, I taught personal finance for 10 years at George Washington University and I am continuing to teach that course at Stanford University. In the same way that at business schools we teach corporate finance because CFOs [chief financial officers] need financial knowledge to manage a firm's finances, people also should be taught to manage their own money—they are their own CFO. I am also trying to promote the teaching of personal finance at other universities. We need to start early, for example in elementary school, but we need to provide it in college as well.

The third thing I am doing is continuing my policy work and promoting financial literacy around the world. I am working on a couple of initiatives. First, to add financial literacy to the national statistics. In the same way policy-makers look at GDP [gross domestic product], inflation, and so on, they also should look at the level of financial literacy because it's a good indicator of how well they are doing. Second, I am continuing to work on national strategies for financial literacy and what we can do to make them more effective.

Betty Meredith: It's great that you've made it to the international policy level.

Annamaria Lusardi: We saw this getting interest everywhere. The OECD [Organisation for Economic Co-operation and Development] had promoted this topic early on. The European Commission also has embraced it and many central banks around the world are now engaged in promoting financial literacy. With high inflation, both central bankers and policy-makers realized how important it is for the population to be financially literate.

Robert Powell: I think I want to audit your class, Anna.

Annamaria Lusardi: It's a lot of fun. I've taught Money and Banking, Macro, Economics 1, and other courses in my 30-year career, but it was only when I taught Personal Finance that I started getting so many thank-you notes from my students.

I've incorporated the learning from my research into the personal finance course. Students often identify personal finance with investing. In fact, as I tell my students, this course is a "happiness project." It provides young people with the tools they need to make good decisions that will affect their well-being.

Betty Meredith: Yes, I bet.

Annamaria Lusardi: I've also learned from the data that people are afraid of this topic. And I can tell you, in my 10 years of teaching, not a single student is from the humanities.

Robert Powell: Really?

Annamaria Lusardi: Yes. By the way, so many students write in the teaching evaluations that everybody should take this course. They discover the value, but not until after they have taken it.

Robert Powell: We have to ask the last question, which is, obviously, you're not anywhere near retirement, but what are your plans when you get to that point?

Annamaria Lusardi: I think I will never retire completely, meaning that I will continue to do some research and writing. For sure, I will continue to work in the field of financial literacy and personal finance, maybe writing books that are accessible to everybody.

Robert Powell: Not for many years though?

Betty Meredith: Well, she might phase in, right?

Annamaria Lusardi: Exactly. I think one needs to slow down somehow, but I would love to continue to write.

Robert Powell: I'm so grateful, Anna.

Betty Meredith: Such a pleasure. It was a lot of fun.

Annamaria Lusardi: A lot of fun for me too, thanks!

ENDNOTES

1. Olivia S. Mitchell is Professor of Insurance/Risk Management & Business Economics/Policy at The Wharton School of the University of Pennsylvania.
2. The Health and Retirement Study is a survey conducted by the University of Michigan that observes a representative sample of approximately 20,000 Americans. It is supported by the National Institute on Aging and the Social Security Administration. https://hrs.isr.umich.edu/about.
3. Jo Boaler is a professor in the Graduate School of Education at Stanford University.
4. See George W. Bush, "Remarks on the President's Council on Financial Literacy" (January 22, 2008), https://www.presidency.ucsb.edu/documents/remarks-the-presidents-advisory-council-financial-literacy.
5. *The Journal of Financial Literacy and Wellbeing* aims to publish rigorous research on financial literacy and financial well-being, inform public policies as well as public, private, and civil society strategies and activities, with the ultimate objective of improving the financial literacy, resilience, and well-being of individuals and micro and small entrepreneurs, https://www.cambridge.org/core/journals/journal-of-financial-literacy-and-wellbeing.

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5619 DTC Parkway, Suite 600
Greenwood Village, CO 80111
Phone: +1 303-770-3377
Fax: +1 303-770-1812
www.investmentsandwealth.org