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Interview with Professor Olivia S. Mitchell

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Dr. Olivia S. Mitchell is the International Foundation of Employee Benefit Plans Professor, as well as Professor of Insurance/Risk Management and Business Economics/Policy; Executive Director of the Pension Research Council; and Director of the Boettner Center on Pensions and Retirement Research; all at the Wharton School of the University of Pennsylvania which she joined in 1993. Concurrently Dr. Mitchell serves as a Research Associate at the NBER; Independent Director on the Wells Fargo Fund Boards; Co-Investigator for the Health and Retirement Study at the University of Michigan; Executive Board Member for the Michigan Retirement Research Center; and Senior Scholar at the Singapore Management University. She also advises the Centre for Pensions and Aging Research at UNSW and is Faculty Affiliate of the Wharton Public Policy Initiative. She earned the MA and PhD degrees in Economics from the University of Wisconsin-Madison, and the BA in Economics from Harvard University. She is also a Senior Editor of the Journal of Pension Economics and Finance.

Professor Mitchell's professional interests focus on public and private pensions, insurance and risk management, financial literacy, and public finance. Her research explores how systematic longevity risk and financial crises shape household portfolios and work patterns over the life cycle, the economics and finance of defined contribution pensions, financial literacy and wealth accumulation, and claiming behavior for Social Security benefits.

Dr. Mitchell received the Fidelity Pyramid Prize for research improving lifelong financial well-being; the Carolyn Shaw Bell Award of the Committee on the Status of Women in the Economics Profession; and the Roger F. Murray First Prize from the Institute for Quantitative Research in Finance. She was also honored with the Premio Internazionale Dell'Istituto Nazionale Delle Assicurazioni from the Accademia Nazionale dei Lincei in Rome. Her study of Social Security reform won the Paul Samuelson Award for Outstanding Writing on Lifelong Financial Security from TIAA-CREF. In 2015, she was selected as a "Top 10 Women Economist" by the World Economic Forum, and in 2016, Crain Communications named her a "Top 100 Innovator, Disruptor, and Change-Maker in Business." She has been awarded the Doctor Rerum Publicarum Honoris Causa from the Goethe University of Frankfurt, and the Doctor Oeconomiae Honoris Causa from the University of St. Gallen.

AM: The theme of this special issue is "Financing Longevity." We'll get to talking about your advice to practitioners, but from a research angle, what do you think are perhaps the few most important papers or findings in this space? Are there any topics that you think are understudied?

OSM: Areas offering the most promise and excitement in my fields are behavioral investment and insurance. To date, there has been useful research on how to encourage people to save more, and how to help people better diversify their investments. By contrast, very little work has been conducted on helping people during the decumulation phase of their life cycles. This includes navigating choices regarding regular life annuities and deferred annuities (which I'm especially keen on), and how to help people better understand how to match assets and liabilities in later life.

One of the biggest challenges we face in this arena is explaining longevity risk. Far too often, people go online and enter their age into a retirement calculator. The software then reports back: "you have 19 years left, so plan accordingly." But life expectancies are *averages*, and not what people should insure against. My mission has been trying to help explain the probabilities of survival to very old ages (Brown et al., 2017). I actually began thinking about longevity risk when I observed Britain's Queen Mother living beyond 100 years of age! Particularly for women, the risk of living long is very real.

Nevertheless, late in life, many people have a difficult time making financial decisions – even when they are unaware of this fact. In the Health and Retirement Study, we have followed respondents since 1992, testing their memory and their numerical capability. The evidence is clear: memory and numerical ability decline with age, and yet when people are asked to rank their own cognitive abilities, they report no change (and this evidence excludes people in nursing homes who are

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unable to even take the tests) (Mitchell, 2018).

For this reason, financial institutions, insurance companies, and governments will need to focus more deliberately on ways to protect older people from fraud and being misled on financial matters (DeLiema et al., 2018). Some banks have developed data analytics programs to raise an alarm if they detect unusual behaviors in financial withdrawals.

In terms of insurance, annuities protect against outliving income, but as we know, demand for these products has been low. My work on behavioral insurance suggests that, in the 401(k) world, many suffer from "lump sum illusion:" that is, they feel wealthy when their retirement account amounts to $100,000, but they don't know that such an apparently princely sum would generate only $6,500 per year if it were converted into a lifetime income stream (Brown et al., 2017).

Of course, thinking about longevity also entails thinking about getting old and eventually dying, and many people don't wish to contemplate such eventualities. Research by Hershfield et al. (2011) took photographs of people and then used software to show them how they would look years hence. This proved to spur more retirement saving, in exchange for lowering current spending. To do this on your own, the free app AgingBooth can help you visualize yourself in the future.

AM. What are examples of research that has significantly impacted policy? Are there specific examples of policy reforms or countries that you would cite as taking a pro-active approach to financing longer lives?

OSM: Around the world, most policymakers have imposed very young retirement ages, but today, greater longevity clearly requires that most of us work far longer. Yet when I have suggest this, protests often ensue!

For example, in Chile, women are encouraged to retire at age 55 and men at age 60: this is problematic because the defined-contribution plan pays lower benefits to younger retirees. Additionally, since women tend to earn less and live longer, their retirement benefits can be very low. Yet when I proposed that women's retirement age be increased, I was branded in the press as "anti-female"! The argument was that women do all the home production, so society shouldn't punish them by requiring them to remain employed longer. My response was that earlier retirement ages for women lead employers to discriminate against hiring and training them, as the payback period for skills investment is shorter. Moreover, old-age penury results when women are induced to claim benefits early. I would argue that my position is actually pro-female.

If we are to keep pace with rising longevity, falling morbidity, and jobs that are less-physically demanding, our societies must delay, and even reinvent, retirement. Most importantly, people will need to continue investing in their physical and mental skills to make them employable into older ages. While disability will keep some from working longer, so insurance against this frailty is critical, early retirement cannot a right. Indeed, in the early 1900's, people simply could not retire. They lived in multigenerational homes, and when they grew too frail to plough the fields, they would wash the clothes, mind the children, and cook the meals. People of all ages had important roles to play.

Later came the Golden Age of retirement, which characterized the US between about 1940 and 2010. My own mother's generation enjoyed generous company-provided defined benefit and retiree medical care plans, Social Security and Medicare coverage, and a long-term runup in housing prices. Unfortunately, that Golden Age is now over. Looking ahead, the population is facing insolvent Social Security and Medicare programs, decades of very low investment returns, and rising as well as unpredictable medical care costs (Horneff et al., 2018). There is no avoiding the conclusion: the good news is we get to live longer, but to pay for this we'll need to work much longer.

(AM: What type of jobs do you think older people can expect? There is so much technological change, it seems hard to plan for such a long period of employment.)

In every country I've visited, including Japan, China, Australia, and Chile, people tend to worry that retirement should be encouraged to make way for the young. I disagree with that conclusion. Many jobs that low-skilled people used to do will disappear with technological change, as driverless trains, cars, buses, and robo-finance take over. Yet this will occur regardless of the ageing of the population, and for many it will enhance life by eliminating undesirable and dirty jobs. Forcing or encouraging early retirement simply raises the tax burden imposed on the young, and such a policy tends to undermine economic growth.

(AM: As people stay in the workforce while technology changes, do you think we will see more interim degrees or training that people may do later in life?)

Institutions of higher learning are very much challenged by the advent of new approaches to skills training. Some of them are slow to take off: for instance, when I asked my Wharton class about which students had completed MOOCs (massive open online courses), very few of them had done so. Yet all over the world, workers seeking to learn something specific find the online approach quite useful. Computer coding, language acquisition, and a myriad of other options including certificate and degree programs are opening doors to students of all ages and from all over the world. For instance, Knowledge@ Wharton High School offers 300 free courses on business topics to teachers and students seeking to learn finance, marketing, and much more.

The online format won't replace universities completely, because so much else goes on in students' lives – including learning teamwork, public speaking, and networking. Nevertheless, people will need to continually reinforce their skills after leaving school. In fact, the Wharton School encourages graduates to return for a free course every seven years after leaving us.

AM: Please discuss a point you have made before, that "savings must be made more fun."

Economists are fond of saying that people like to spend, since that's what makes many them happy. By contrast, saving is not usually much fun, as it involves postponing consumption to a future date. One response to this conundrum is to find ways to make saving fun. For instance, the British instituted a prize-linked savings program, whereby people putting more money in their bank accounts earn "lottery tickets" giving them a chance at a large payout (Tufano, 2008). The winners are the subject of media attention and their gains celebrated. On average, the bank pays back a little to everyone while a few people get a lot.

We could do more in the US to enhance the appeal of saving, as well. For instance, some companies have competitions as to which work teams get the most health checks, lose the most weight, or give most to charity. In that same spirit of fun, we could harness the power of peers to boost retirement saving.

AM: Do you have any comments on this year's economics Nobel prize winner and "Save More Tomorrow" or other nudges regarding financing longevity?

When I taught at Cornell, I ran across Dick Thaler, and I greatly admire his impact. He's amazingly good at identifying peculiar behaviors and posing questions about why people do them. He has clearly spurred a new generation of researchers to explain behavior anomalies in a wide range of circumstances.

My own work has been greatly inspired by the research undertaken by Thaler, Kahneman, Tversky, and Laibson. For example, my study on ambiguity aversion (Dimmock et al., 2016) asked why people don't invest in the stock market, but when they do, they tend to hold one stock – for example, Apple or Nike. This cannot be explained by risk aversion, but it can by ambiguity aversion. What's going on is that people know that stocks are risky, but they don't know the probability distribution of returns. Accordingly, ambiguity aversion either leads people to not invest at all, or to select the stock of a firm they think they know well – including their own companies. This of course is risky as well! Our tests for ambiguity aversion do a good job predicting investment patterns.

Another area I study is 401(k) plans (Horneff et al., 2017). Much of

Thaler's work has succeeded in getting people to default into saving and into target date funds. The problem comes at the retirement date, since there is typically no default mechanism to decumulate one's retirement assets. Very often, retirees are persuaded by financial advisors to take their money out of their retirement plans, roll it over to an IRA, and let the financial advisor manage it. Unfortunately, this is often an expensive approach, and it does not protect people against running out of money.

So what I am now working on is a plan to take advantage of default mechanisms at the point of retirement, so as to protect people from outliving their assets. Instead of defaulting people entirely into lifetime income products called annuities, we propose annuitizing 10% of people's retirement nest eggs at age 65 as long as they have at least $65,000 in their plan. This would provide a deferred annuity which will start paying only at age 85. Since people average about $120,000 in their 401(k) plans at age 65, this product is likely to be appealing to many older persons, not just the rich.

The beauty of this plan is that the premium for the deferred annuity earns returns for 20 years, and the plan also takes advantage of the survivor credit. Accordingly, the lifetime benefit beginning at age 85 is true longevity protection.

AM: Much of your work has shown the importance of financial literacy in decision-making, and the financing longevity question impacts both developed and developing countries. Financial literacy needs improvement everywhere, but what do you foresee as the biggest challenges for broadening financial literacy in developing countries? Are the challenges different from those in developed countries?

Much of my research has focused on financial illiteracy in developed countries. We see fairly low levels of financial literacy in the U.S.; the patterns are similar in Italy, Spain, and Portugal. Germany and Scandinavia tend to be strong performers, while Russia performs among the worst on our Big Three questions.

Some of these differences are due to the fact that access to financial markets has only been recent, as in China and Russia. Nevertheless, the advent of online banking, cellphone credit, and other software-driven financial products is helping people in poor countries become better integrated into financial markets very quickly. Of course this could lead to financial scams and fraud, but better internet penetration can also help people in poor countries access highly useful products such as rainfall insurance, health insurance, and micropensions.

AM: To what extent do you think the behavior-inspired designs can substitute financial literacy? Of course, it can never be a substitute – but I'm curious as to your perspective, knowing how low financial literacy is among the general population.

I believe financial literacy and behavioral nudges are complementary: there's room for both. For example, when people are automatically enrolled in retirement plans, they are typically enrolled into very low contribution rates which are entirely inadequate. If people don't learn that 3 percent of income is insufficient to save in a retirement plan, they may not realize that they will end up in penury in old age.

More generally, we must focus on teachable moments. It's true that auto enrollment and auto escalation are useful. Nevertheless, people who are financially uninformed will take as advice what employers use as the defaults and never think about their saving plans again. Also training people about interest rates, diversification, and inflation can be invaluable across the board. Knowledge can not only help people save more for retirement, but it can also help inform them about retirement planning, why they should pay down their credit cards, why not to take expensive payday loans, and why they should pay off the mortgage (Lusardi and Mitchell, 2014).

AM: Agreed wholeheartedly. Thank you for sharing these insights!

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