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2017

## How Persistent Low Returns Will Shape Saving and Retirement

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## How Persistent Low Returns Will Shape Saving and Retirement

### Disciplines

Economics

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The published version of this Working Paper may be found in the 2018 publication: [\*How Persistent Low Returns Will Shape Saving and Retirement\*](#).

## Chapter 1

# **How Persistent Low Returns Will Shape Saving and Retirement**

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*Robert Clark, Raimond Maurer, and Olivia S. Mitchell*

Funded pension systems around the world have long relied on relatively high and predictable long-term capital market returns. Yet pension systems today confront a key challenge: namely, how to deal with what appears to be a persistent low return on bonds and equities. The present economic circumstances can greatly shrink retirement saving accounts: thus a 1 percent lower long-term return can reduce final annual pension amounts by approximately 25 percent. Alternatively, low returns will imply that the costs of paying the pension to employers or governments will increase, if benefits are to remain constant. And for some time, many industrialized countries including Japan, Germany, Sweden, and Switzerland, have experienced negative interest rates even for medium-term bonds. This historically low interest rate environment has prevailed since the financial crisis of 2007–08, when central banks employed monetary policy to support their financial sectors and economies. Though we cannot be sure how long such low interest rates will be with us, Japan offers reason for pessimism as interest rates there have been close to zero percent for over 20 years.

For this reason, it will be prudent, and probably necessary, for insurers, plan sponsors, workers, retirees, and policymakers to take concrete steps to prepare for these lower long-term expected rates of return to retirement wealth. In fact, as we show in this volume, a persistent low-interest-rate economy will compel many to revisit how much they save, how they invest, and how long they can afford to live in retirement. This book explores how we arrived at our current state of affairs and what changes need to be made to achieve adequate retirement incomes for future retirees. Each chapter will interest not only average savers, retirees, and plan sponsors, but also policymakers around the world seeking answers to questions about what the future might bring in terms of investing retirement wealth and how to develop policies so that saving can last throughout retirement for most individuals. In the remainder of the present chapter we offer an overview of the themes and ideas deserving particular attention.

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### **Origins and Consequences of a Persistent Low Return Environment**

To provide an essential understanding of how the persistent low return economy developed, Peter Conti-Brown begins in Chapter 2 with an explanation of how the US Federal Reserve Bank (the Fed) seeks to manage inflation. In particular, he points to how the Fed has traditionally sought to remain protected from politics when undertaking to achieve its three mandates, namely achieving maximum employment, maintaining stable prices, and moderating long-term interest rates. While countries differ in their central bank structures, they all seek to maintain monetary policies that sustain economic growth while allowing individuals and institutions to save without undue inflation worries.

Until recently, the Fed had gained the reputation of being almost omnipotent, a view prompted by a coalition that transcended political parties. Yet the last decade of very low and even negative real returns has raised questions about the central banks' ability to remain independent. In the United States, the Fed was once quite a popular institution, but now it is widely disliked—almost as much as the federal tax collection authority. It is not surprising, then, that several bills in Congress have been put forth intending to control the Fed, limiting its power and independence. Yet it is unsurprising that the Fed has been caught in the cross-hairs, as it must deal with an increasingly global economy and capital markets. Conti-Brown concludes that the Fed is responsible for now educating the public and informing it that the Fed is no longer the 'economic maestro' of interest rates.

Against the backdrop of low returns, several chapters take up the question of how to save and invest in this 'new normal' era. David Blanchett, Michael Finke, and Wade Pfau note that, in the past, people had grown accustomed to equities bailing them out of poor return choices. By contrast, low expected returns combined with longer lifetimes have doubled the cost of generating \$1 of real annual retirement income. Whereas a 25-year old could save 8 percent per annum for retirement in days gone by, 14 percent or more now seems sensible. Another good solution to this retirement saving problem is to work longer and retire later.

The chapter by Daniel W. Wallick, David B. Berkowitz, Andrew S. Clarke, Kevin J. DiCiurcio, and Kimberly A. Stockton argues that three 'levers' may be used, all of which should be taken into account by retirement savers. One is to have people save more; another is to reduce costs associated with portfolio investment; and a third is to take more risk. The chapter then goes on to explore several different approaches to adding risk, including higher allocations to traditional risky assets like global equities; style-factor tilts with an emphasis on equity and fixed-income factors that have historically earned premiums over the broad stock and bond markets; allocations to traditional active equity management; and allocations to alternatives.

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In turn, Catherine Reilly and Alistair Byrne address the question of what can be done on the investment and public policy side to make things easier for younger cohorts of retirement savers. The authors argue that saving more can be useful, but working longer can help even more. For instance, deferring retirement from 65 to 70 saves money, as people can save more, earn more, and will need to fund a shorter retirement period. Thus even in a low-interest rate environment, younger generations can achieve reasonable outcomes by starting to save early, saving consistently, and retiring at 70. Of course, some people may be unable to work longer and thus will need to develop an alternative strategy for dealing with low returns. The authors also suggest allowing people to defer social security benefits past 70 at an actuarially adjusted rate so the system could be a true longevity backstop.

In their chapter, Antti Ilmanen and Matthew Rauseo offer hope for defined contribution plan investors whose target is to ensure post-retirement consumption, despite the low expected return environment over the next decade. The authors agree that higher saving rates will be required, along with deferred retirement. In addition, they propose to expand the investment ‘toolbox’ by moving away from market cap-weighted portfolios. In addition, they see value in risk parity approaches and also long/short portfolios. Limited additional leverage may also help boost expected returns on defined contribution (DC) portfolios. While such strategies may be nontraditional for conventional individual-account retirement plans, they are likely to be appealing for large institutionally managed DC plans having the necessary management capability.

Workers covered by DC plans must recognize that low returns limit their accumulation of retirement wealth while working, and they also directly affect how much a retiree can expect in terms of monthly benefit payments. Low interest rates also imply that purchasing annuities is expensive: the same \$1 yields a lower monthly payout than in the past. Defined benefit (DB) plan sponsors face a similar problem, in that low rates restrict the growth of reserves and also reduce the ability to convert retirement funds into annual benefits for retirees.

### **Whither Retirement Strategies?**

The chapter by Joseph Quinn and Kevin E. Cahill reports that people are actually working longer today than compared to 50 years ago. This trend is particularly notable for older men, but older women are working longer as well. The process by which people move into retirement is also changing. Rather than being a one-time event, people can transition from full-time career employment to part-time work, often with the same employer. Next, people tend to take a bridge job, or leave the labor force altogether and

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then re-enter at a later date. Bridge jobs are the most common, with 50–60 percent of the US working population transitioning to bridge jobs before quitting work altogether. Policymakers may need to consider additional ways to support continued work later in life, to help mitigate the many challenges that an aging society faces in the decades ahead. The good news is that older workers have been flexible to date, but what is not known is how much more they can continue to adapt. The authors conclude that the low-return environment can alter appetites for risk in order to achieve higher returns.

Vanya Horneff, Raimond Maurer, and Olivia S. Mitchell develop and calibrate a theoretical life cycle model in their chapter, which they use to determine how low interest rates influence household saving within and outside tax-deferred retirement plans. Their approach also integrates income tax rates and devotes particular attention to realistically modeled social security benefits. It is interesting that expected life-cycle profiles generated by the model compare well to actual data on claiming behavior of US retirees. Moreover, the authors show that people tend to save less in times of low interest rates, especially in relatively illiquid tax-qualified plans. Low rates also drive later claiming of Social Security benefits, and longer work lives. Finally, the chapter demonstrates that, in a low return environment, people optimally invest less in tax-qualified plans, and more outside their pensions.

Empirical evidence suggests that older households have responded to the new low interest rate environment in various ways, according to Jason J. Fichtner and Jason S. Seligman. Many of them benefited from strong equity returns in the past, yet some lower-wealth households have already depleted their assets, including home equity. Unfortunately, the bottom 10 percent of retirees exhausts its resources 16 years into retirement, while the bottom quarter runs out in year 18. Overall, low returns have resulted in a negative wealth impact, though some high-wealth households have enjoyed strong equity markets. They conclude that inequality could rise in the future.

A similar lesson applies to DB plan sponsors and national social security programs. If retirement can be deferred, this lowers the length of the pension payout period. Consequently, later retirement ages will help restore traditional pensions to a better footing by reducing the assets needed to finance retirement benefits.

#### **New Designs for Pension Plan Sponsors**

In her chapter, Yvonne Sonsino argues that some firms value older workers, yet many do not. This is, in part, because myths about older workers persist, and she argues that these need to be evaluated more carefully. This is critical

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inasmuch as post-Brexit migration will leave the United Kingdom with a shortage of up to 2.5 million employees. Her recommendation is that employers can take a variety of actions to be age ready, including building age-diverse talented teams in the development pipeline. She also addresses financial wellness concepts, noting that deliberate planning for financial security in old age will be greatly valued.

The work of William Gale and David John takes up efforts by state governments in the United States to sponsor retirement saving plans for individuals whose employers do not offer a retirement plan. In the United States, employers offer pensions on a voluntary basis, and low pension participation is concentrated among lower-paid, less-educated, Hispanic/black, and part-time workers. In response, over 30 states have taken action since 2012 to expand pension coverage, while five states (California, Connecticut, Illinois, Maryland, and Oregon) have established a variant of an auto-enrollment Individual Retirement Account (IRA) plan. Typically employers are mandated to offer these with some default contribution rate, say, of 3 percent. As yet the jury is still out on how successful these state-run plans are in terms of enhancing retirement security for the lower half of the pay distribution.

In their chapter, Natalia Garabato, Jonathan Gardner, and Steve Nyce argue that healthcare costs are crowding out other benefit costs throughout the developed world, with the most dramatic impact in the United States. In addition, the lack of wage growth has meant that people now need employer-provided benefits more than they did in the past. The authors delve into what employers of the future may offer in terms of benefits, focusing on the change from benefits as a transaction to benefits as an experience. The authors also emphasize how firms are moving from providing employees less choice to more choice. At the same time, benefit costs are becoming more closely tailored to employee health habits; those who smoke will pay more, and those with a healthy lifestyle will pay less. Benefits delivery systems are also changing, in that people seek to elect benefits from an exchange, akin to a shopping basket with decision support. Previously, workers elected core medical and dental insurance, whereas now they are offered products such as pet insurance, child life insurance, identity theft protection, and disability insurance. The challenge will be to manage the tension between offering flexibility and choice, and ensuring adequate retirement funds. With increasing life expectancy, all countries will struggle to provide adequate healthcare as well as pension income for retirees.

### **Conclusion**

McKinsey & Co. (2016) recently argued that the asset management business faces a crossroads because future equity returns are expected to average

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150–400 basis points below those of the past 30 years, and fixed income assets are anticipated to pay 300–500 basis points less than historical rates. Not surprisingly, disappointed retirement savers are becoming increasingly sensitive to investment fees and charges, driving the trend toward lower-cost and passively managed investments. Moreover, the expected low return environment is prompting savers to seek new—and riskier—type of investment, including alternative and less liquid investments. It should also be noted that the digital revolution is becoming an ever-more widespread force for boosting investment efficiency and improving the gains from portfolio management.

These financial market developments, as well as the changes in work and retirement, are certain to reshape conventional approaches to saving, investment, and retirement. Such dramatic changes must also prompt employers to revisit the nature of work, how they hire, train, and retain employees, and what retirement will mean in the future. And clearly policymakers must start planning now for reforms that will allow older people to work longer, and save more, if they are to ensure financial security in retirement. This volume offers lessons toward that end.

## **References**

- Blanchett, D., M. Finke, and W. Pfau (2018). “Low Returns and Optimal Retirement Savings,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Conti-Brown, P. (2018). “Politics, Independence, and Retirees: Long-term Low Interest Rates at the Federal Reserve,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Fichtner, J. J., and J. S. Seligman (2018). “Retirement Saving and Decumulation in a Persistent Low-Return Environment,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Gale, W. G., and D. C. John (2018). “State-sponsored Retirement Savings Plans: New Approaches to Boost Retirement Plan Coverage,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Garabato, N., J. Gardner, and S. Nyce (2018). “Global Developments in Employee Benefits,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Horneff, V., R. Maurer, and O. S. Mitchell (2018). “How Persistent Low Expected Returns Alter Optimal Life Cycle Saving, Investment, and Retirement Behavior,”



## **Persistent Low Returns, Saving, and Retirement 7**

- in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Ilmanen, A., and M. Raueo (2018). “Intelligent Risk Taking: How to Secure Retirement in a Low Expected Return World,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- McKinsey & Co. (2016). ‘Thriving in the New Abnormal: North American Asset Management,’ *McKinsey & Co. Financial Services Practice Report*. Philadelphia, PA: McKinsey & Co.
- Quinn, J. F., and K. E. Cahill (2018). “Challenges and Opportunities of Living and Working Longer,” in R. Clark, R. Maurer, and O. S. Mitchell, (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Reilly, A., and R. Byrne (2018). “Investing for Retirement in a Low Returns Environment: Making the Right Decisions to Make the Money Last,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Sonsino, Y. (2018). “Helping Employers Become Age-Ready,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.
- Wallick, D. W., D. B. Berkowitz, A. S. Clarke, K. J. DiCiurcio, and K. A. Stockton (2018). “Getting More from Less in Defined Benefit Plans: Three Levers for a Low-Return World,” in R. Clark, R. Maurer, and O. S. Mitchell (eds.), *How Persistent Low Returns Will Shape Saving and Retirement*. Oxford, UK: Oxford University Press, pp. xxx–xxx.

