Investing for Retirement in a Low Returns Environment
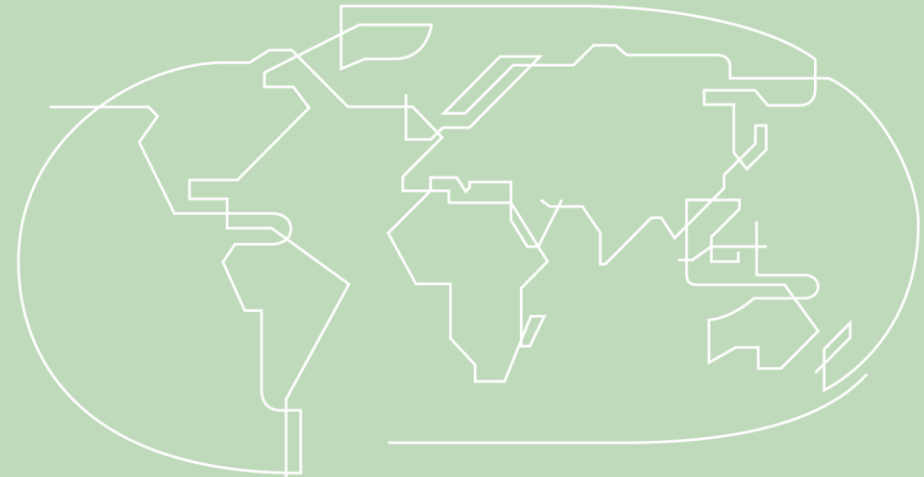
Catherine Reilly, CFA

Alistair J. Byrne, CFA, PhD, IIMR

May 4, 2017

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Investing for Retirement in a Low Returns Environment

- Retirement saving is getting more challenging

- Rising longevity

- Lower expected returns

Boomers: Rising longevity; some exposure to DB; relatively higher realised returns
Millennials: Rising longevity; no DB; relatively lower expected future returns
What plausible actions can millennials take to enjoy retirement security?
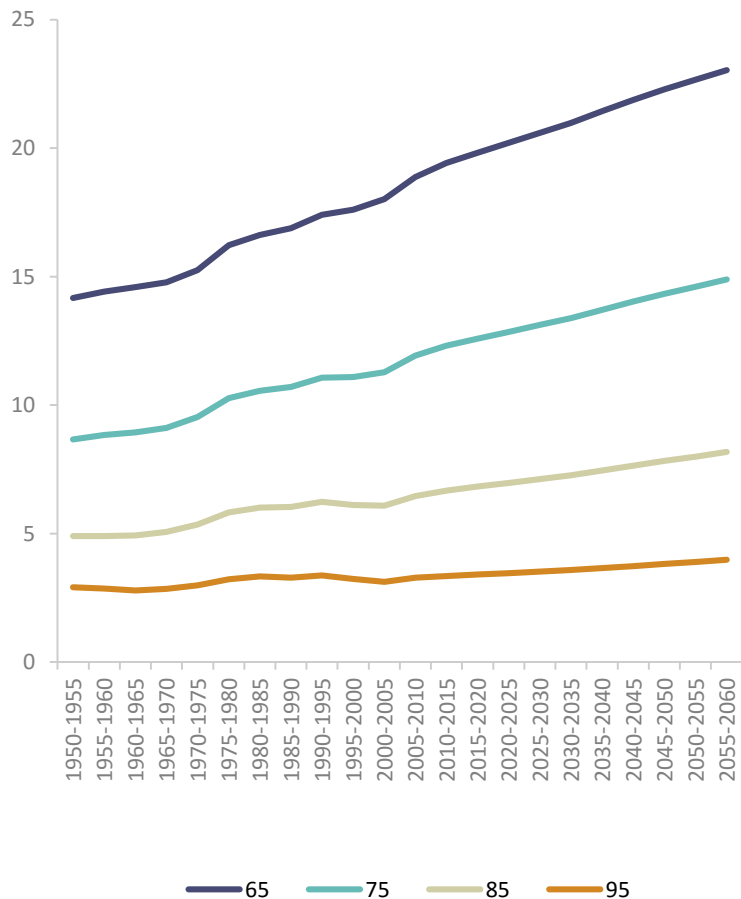**Our analysis:**

- Takes account of potential achieved and expected future returns

- Reflects typical pillar one entitlements

- Adjusts for income effects in replacement rates, longevity and social security entitlements
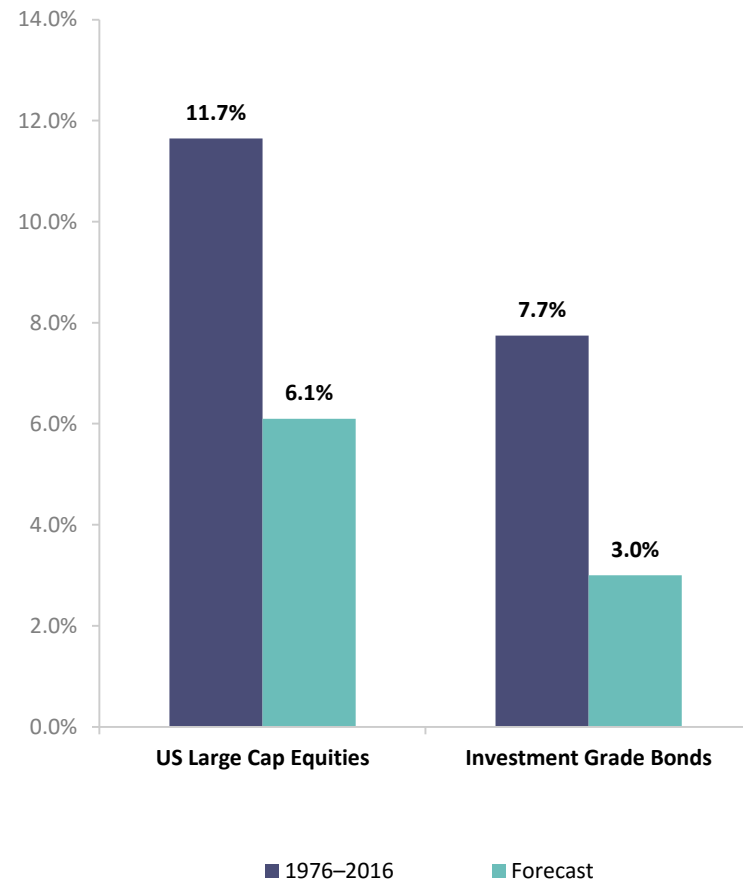
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The Saver's Dilemma — Rising Life Expectancy and Lower Returns

US Life Expectancy at Different Ages

Legend: 65, 75, 85, 95

Historical and Expected Market Returns

US Large Cap Equities: 11.7% (1976–2016), 6.1% (Forecast)

Investment Grade Bonds: 7.7% (1976–2016), 3.0% (Forecast)

Legend: 1976–2016, Forecast

Source: UN Population Projections, historical return data for S&P 500 and Bloomberg Barclays Aggregate Index, forecasts ISG December 2016 Long-term (10+ years) asset class forecasts.

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Impact of Lower Investment Returns => Lower DC Replacement Rates for the Same Savings

In a prolonged environment of depressed investment returns, younger cohorts may not be able to rely exclusively on returns to do the job for them
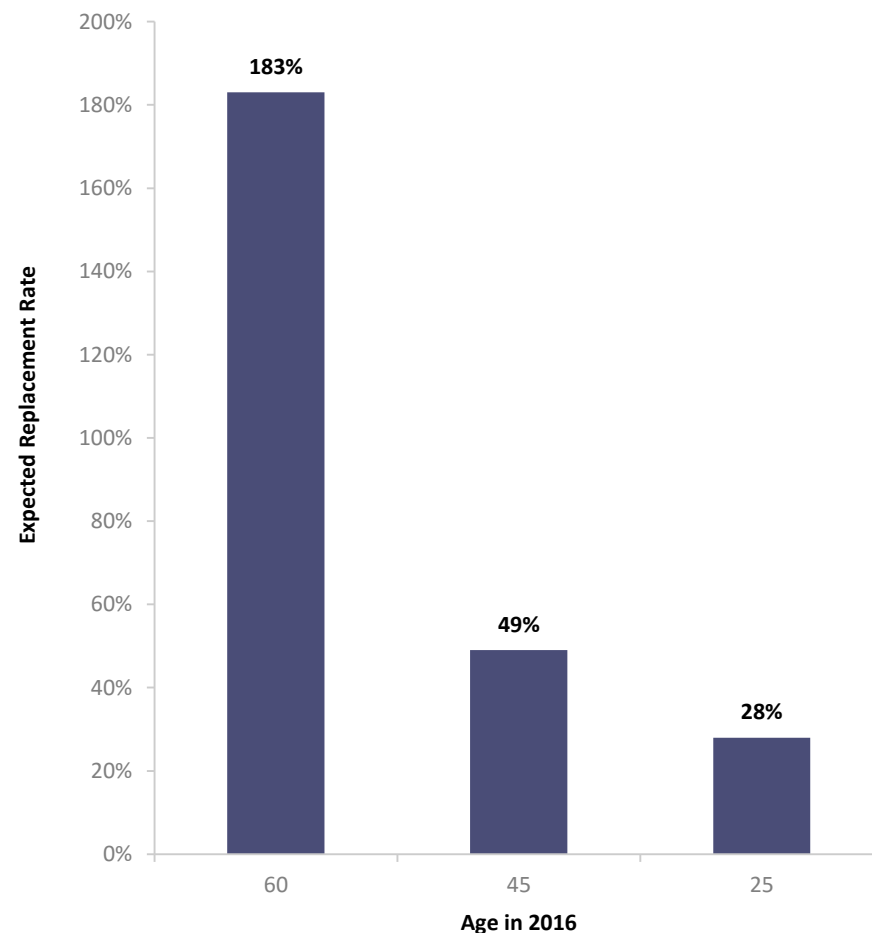
We used identical assumptions regarding:

- Contribution rate: 9% from age 22

- Wage growth: 2%

- Composition of investment portfolio: 80:20*

We use a sustainable drawdown rate based on cohort life expectancy to calculate the replacement rate

- Low return expectations mean that identical savings behaviour provides younger cohorts with much less generous replacement rates at retirement
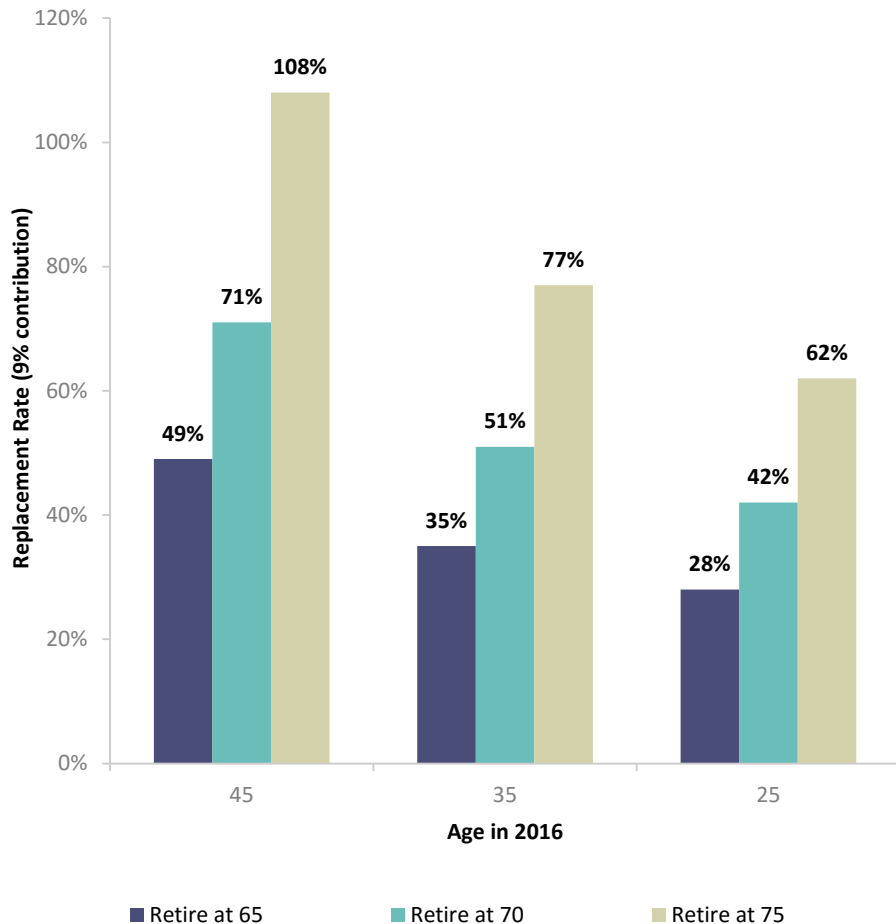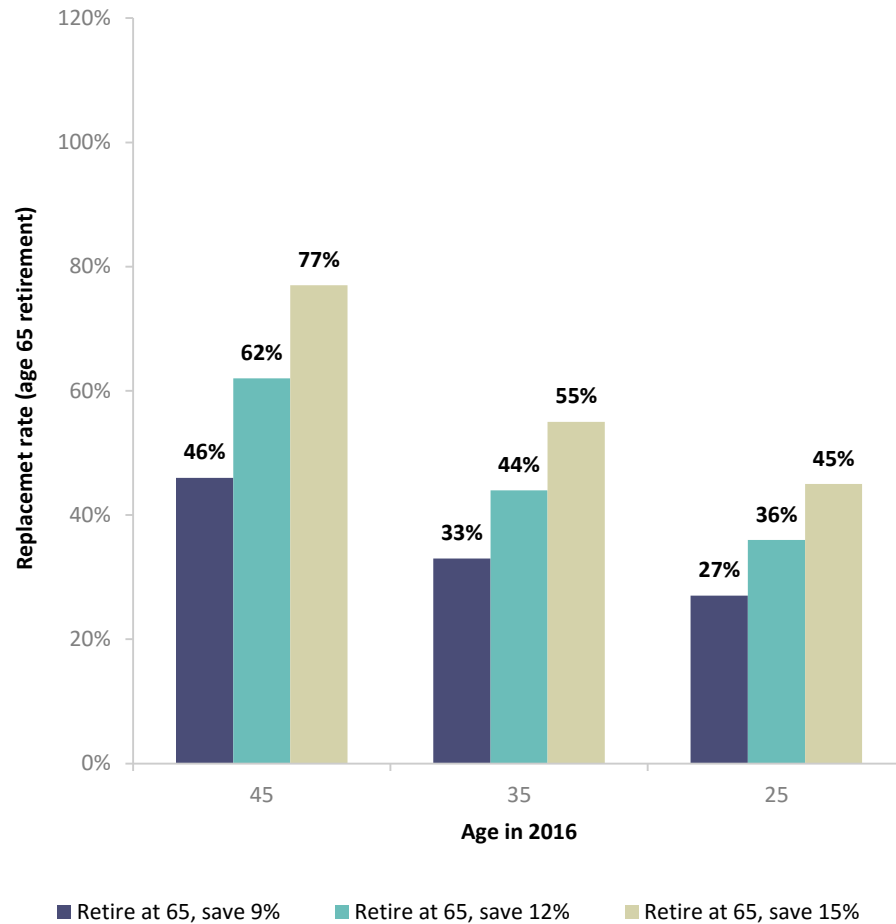
Expected Replacement Rate at Age 65

Bar chart — Expected Replacement Rate vs. Age in 2016:
- Age 60: 183%
- Age 45: 49%
- Age 25: 28%

Source: SSGA calculations based on realized investment returns and ISG long term asset class forecasts and UN population projections https://esa.un.org/unpd/wpp/Download/Standard/Population/. For illustrative purposes only. * The hypothetical portfolio we use for this illustration allocates 80% to the S&P500 Index as a proxy for US Large Cap Equity, and 20% to the Barclays Bloomberg Aggregate Index as a proxy for Investment Grade bonds. Consequently, the hypothetical portfolio uses the market return forecasts illustrated on the previous slide.

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Younger Cohorts would have to Work Longer and Save More

Working longer has a powerful impact

Replacement Rate (9% contribution) vs Age in 2016

- 45: Retire at 65 = 49%, Retire at 70 = 71%, Retire at 75 = 108%
- 35: Retire at 65 = 35%, Retire at 70 = 51%, Retire at 75 = 77%
- 25: Retire at 65 = 28%, Retire at 70 = 42%, Retire at 75 = 62%

Legend: ■ Retire at 65 ■ Retire at 70 ■ Retire at 75

Saving more helps too — but not as much!

Replacemet rate (age 65 retirement) vs Age in 2016

- 45: Retire at 65, save 9% = 46%, Retire at 65, save 12% = 62%, Retire at 65, save 15% = 77%
- 35: Retire at 65, save 9% = 33%, Retire at 65, save 12% = 44%, Retire at 65, save 15% = 55%
- 25: Retire at 65, save 9% = 27%, Retire at 65, save 12% = 36%, Retire at 65, save 15% = 45%

Legend: ■ Retire at 65, save 9% ■ Retire at 65, save 12% ■ Retire at 65, save 15%

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Income Effects — Required Replacement Rates versus Social Security

Low income earners have higher replacement rates from Social Security

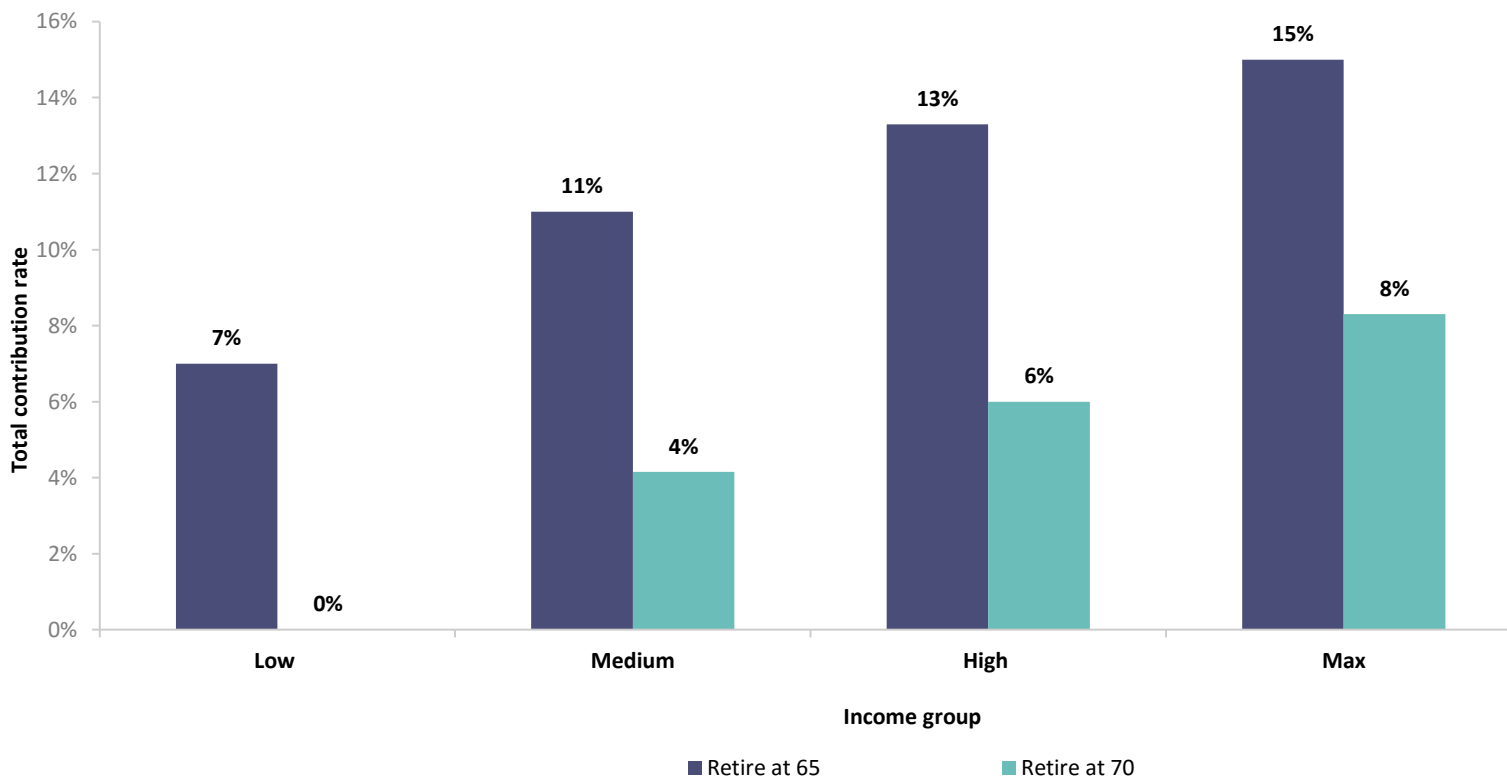## Retirement challenges differ by income cohort

Low income earners:

+ High replacement rate from social security

- May need close to 100% replacement rate to survive

+ Have lower life expectancy (fewer years in retirement to finance)

- May have less capacity for later life work

- Fewer other financial assets

Starting Early and Saving Consistently are Key to Successful Saving

Even in a low returns environment, younger generations can achieve reasonable outcomes by starting early, saving consistently and retiring at 70

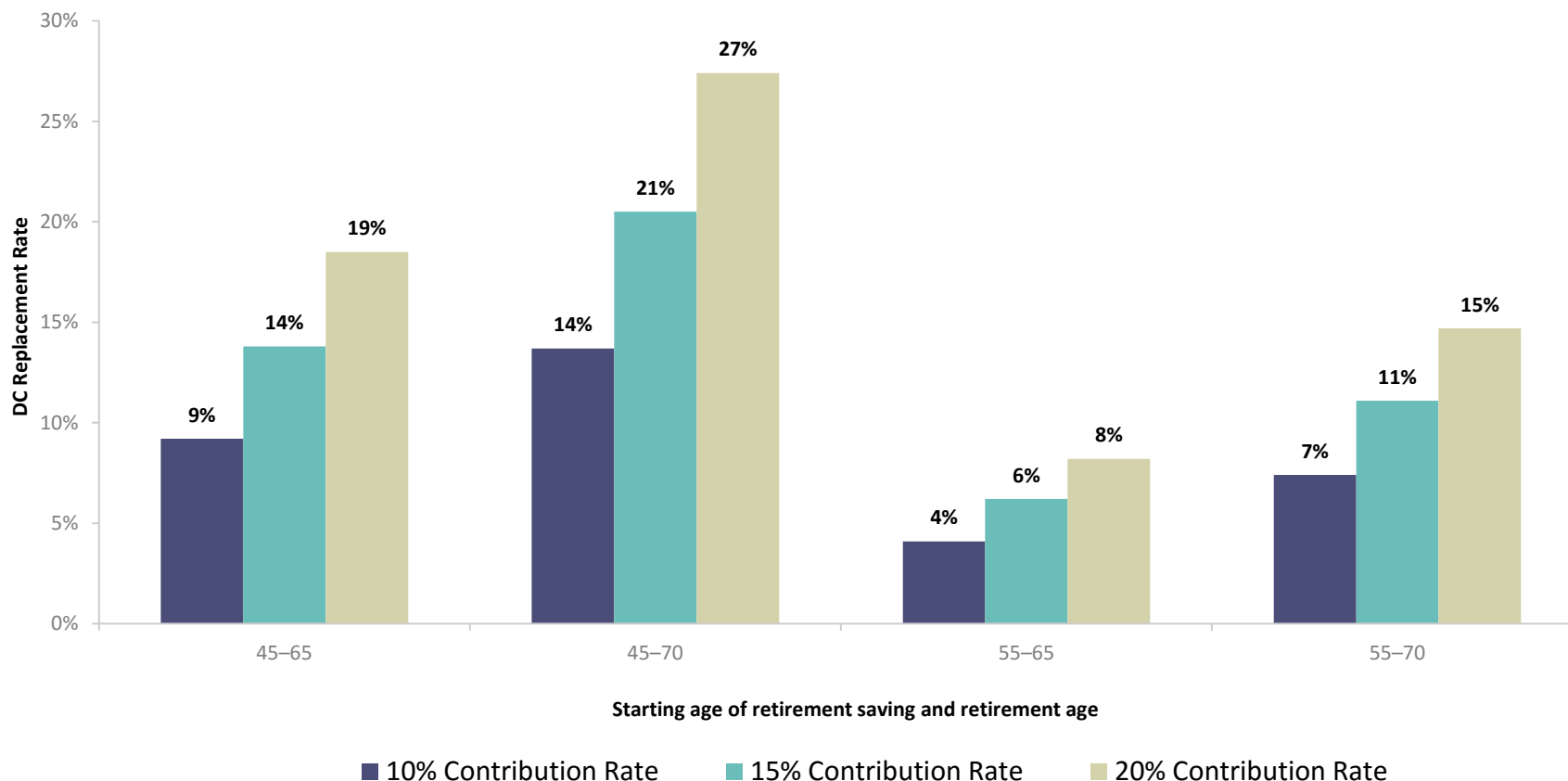**Required total contribution rate for a 25-year-old to achieve a 70% replacement rate (including SS) at retirement by income group**

Chart: Total contribution rate (y-axis) by Income group (x-axis)

Income group	Retire at 65	Retire at 70
Low	7%	0%
Medium	11%	4%
High	13%	6%
Max	15%	8%

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Late Starters Should Plan on Working Until 70

Late starters need to make significant efforts to improve their retirement readiness. Postponing retirement also improves the replacement rate from Social Security.

Starting age of retirement saving and retirement age

■ 10% Contribution Rate   ■ 15% Contribution Rate   ■ 20% Contribution Rate

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Rethinking Social Security to Allow Flexible Retirement

Deferring Social Security is an important tool in retirement planning — why stop there?

Potential changes to Social Security for the new retirement reality:

- Allow deferral beyond age 70 at an actuarially adjusted rate?
  - Make Social Security the longevity backstop
  - Provide meaningful income for higher income cohorts
  - Make it easier for people to manage their DC savings to a finite time horizon
- Allow partial deferral and flexible claiming (e.g., the Swedish model)?
  - Facilitate part time work in retirement
  - Reduce the anchoring effect of the maximum age for claiming

Key Areas of Focus for Policymakers

Ensure participation   Automatic enrolment

Raise savings rates   Automatic escalation — but differentiate by income groups?

Optimize returns   Investment diversification and lower charges

Reduce leakage   Automatic rollovers

Encourage late life work   No compulsory retirement age; greater flexibility in social security

Conclusions

- Rising longevity and lower expected returns are a challenge

- The solution is obviously working later and saving more

- There are plausible packages of actions that will allow current cohorts to retire well

- Automatic enrolment and contribution escalation can help participants save

- Policymakers need to make it easier for people to extend their working careers

- More flexibility in social security may be valuable

Appendix A : Important Disclosures

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Appendix B : Biographies

Biographies

Catherine Reilly, CFA

Catherine Reilly is a Vice President of State Street Global Advisors and Senior Investment Strategist in the Defined Contribution Team. She is responsible for product development, strategy and research, with a particular emphasis on global best practices.

Prior to joining State Street, Catherine spent 15 years as Chief Economist of Pohjola Asset Management in Finland, where she advised large institutional clients on the macroeconomic outlook and asset allocation. Before entering the asset management industry she worked as a consultant for McKinsey & Co in the Helsinki office.

Catherine has a Master in Public Administration from the Harvard Kennedy School of Government and a MSc in Economics from the Helsinki School of Economics. During her time at the Kennedy School she conducted extensive research into global pension systems. She earned the Chartered Financial Analyst designation and is a member of the CFA Institute.

Alistair J. Byrne, CFA, PhD, IIMR

Alistair leads SSGA's European DC Investment Strategy Team and is responsible for developing the firm's investment proposition for DC clients, working with consultants, platforms, plan sponsors and trustees. He is well known for thought leadership in the DC market, regularly publishing research, speaking at conferences and being quoted in the press.

Prior to joining State Street in 2014, Alistair was a Senior DC Investment Consultant at Towers Watson, where he advised a number of large DC plans and led a team of DC consultants and analysts. He has over 20 years investment experience, including as a consultant advising financial services firms, a business school academic and in a number of senior investment management roles at AEGON UK.

Alistair is a CFA charterholder and has a PhD in finance from the University of Strathclyde.