RISK PROFILING FOR THE DECUMULATION WORLD

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The research

- We are concerned with poor outcomes for retirees.
- We have previously discussed how investment risk is often framed incorrectly.
- We review the impact of the other risks, quantifying their true risk – Goals Risk.

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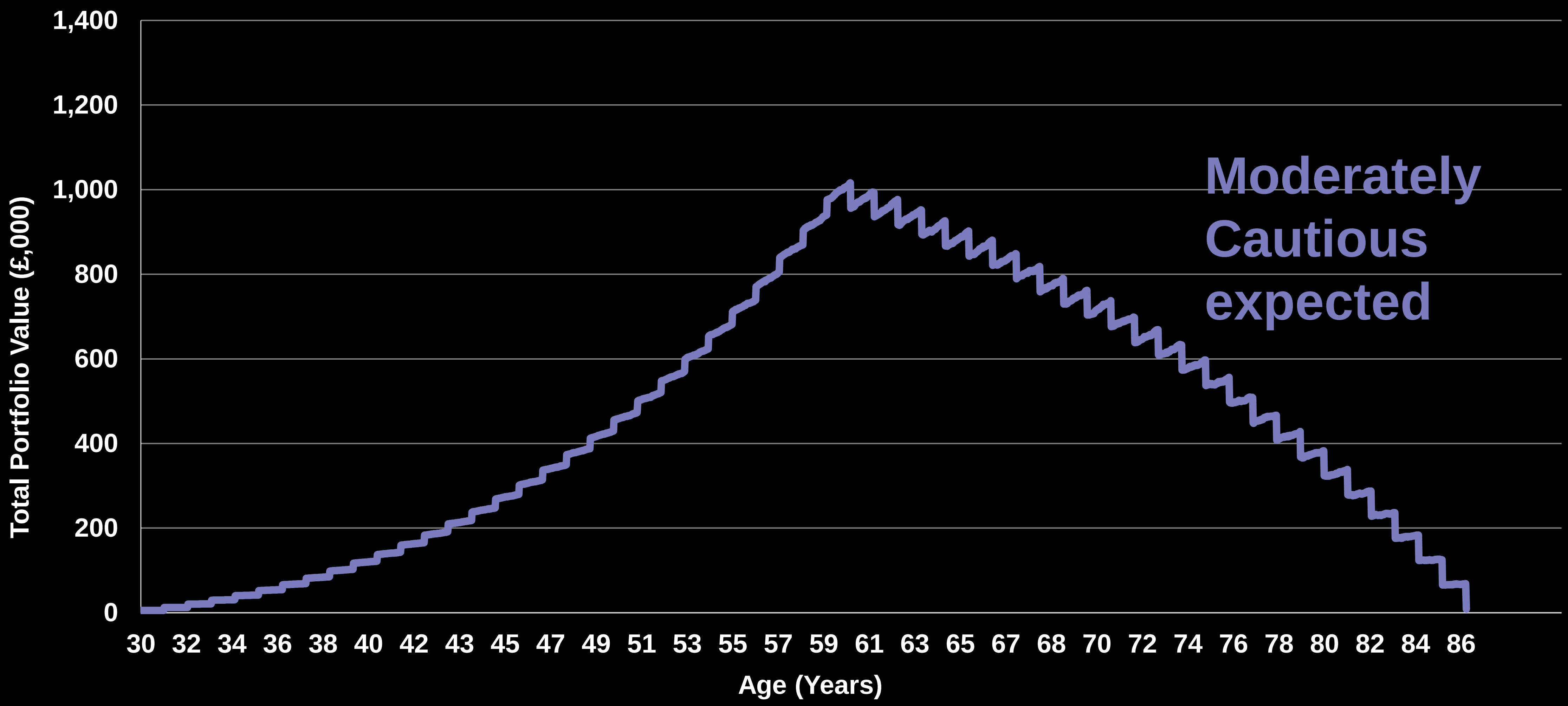
A simple saving model



SOURCE: 7IM

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Moving up the risk scale

SOURCE: 7IM

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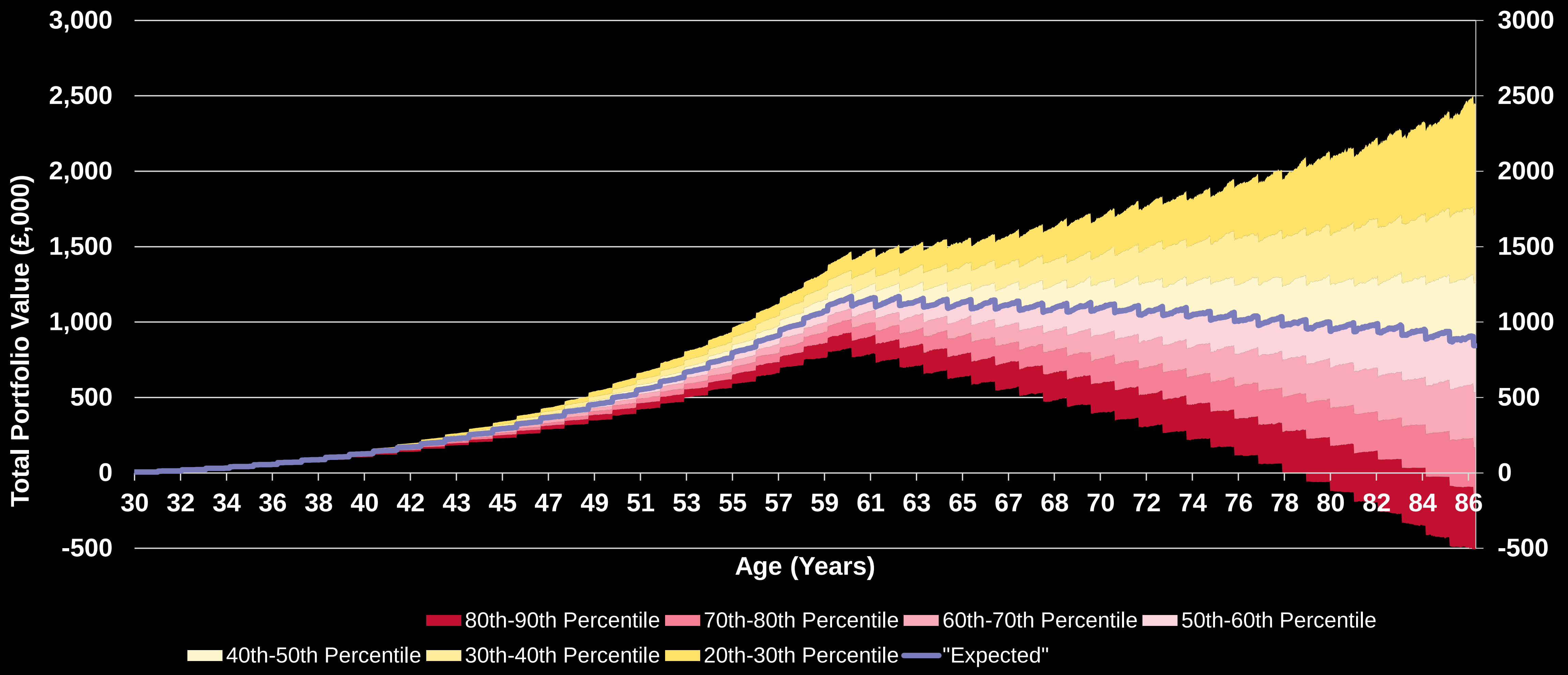
Looking at the range of returns



SOURCE: 7IM

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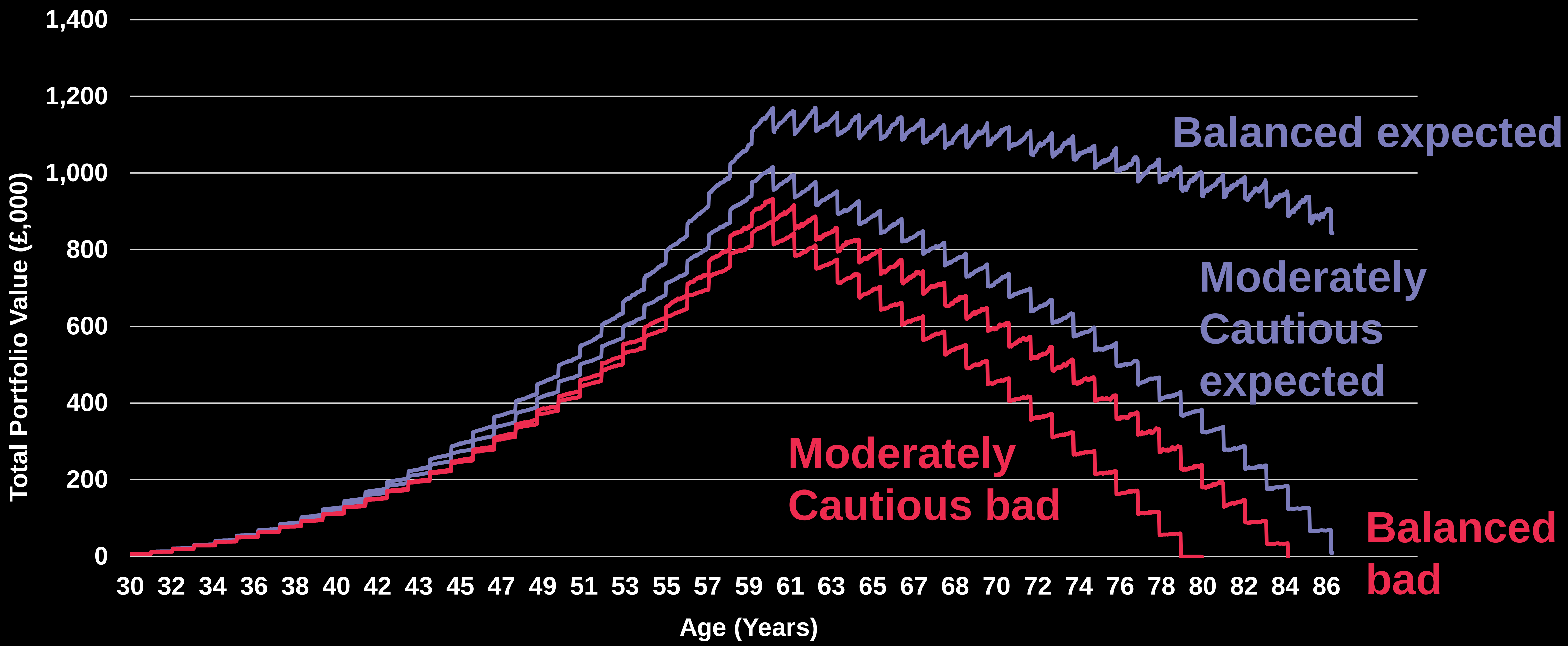
Comparing bad outcomes



SOURCE: 7IM. THE CHART DEPICTS THE 50TH AND 80TH PERCENTILE OF RETURNS GENERATED FROM A SIMULATION PROCESS USING 12 YEARS OF HISTORICAL DATA FOR EACH RISK PROFILE. THE RESULTS ASSUME NO CHANGES TO THE INVESTMENT MIX ARE MADE OVER THE LIFE OF THE FUND.

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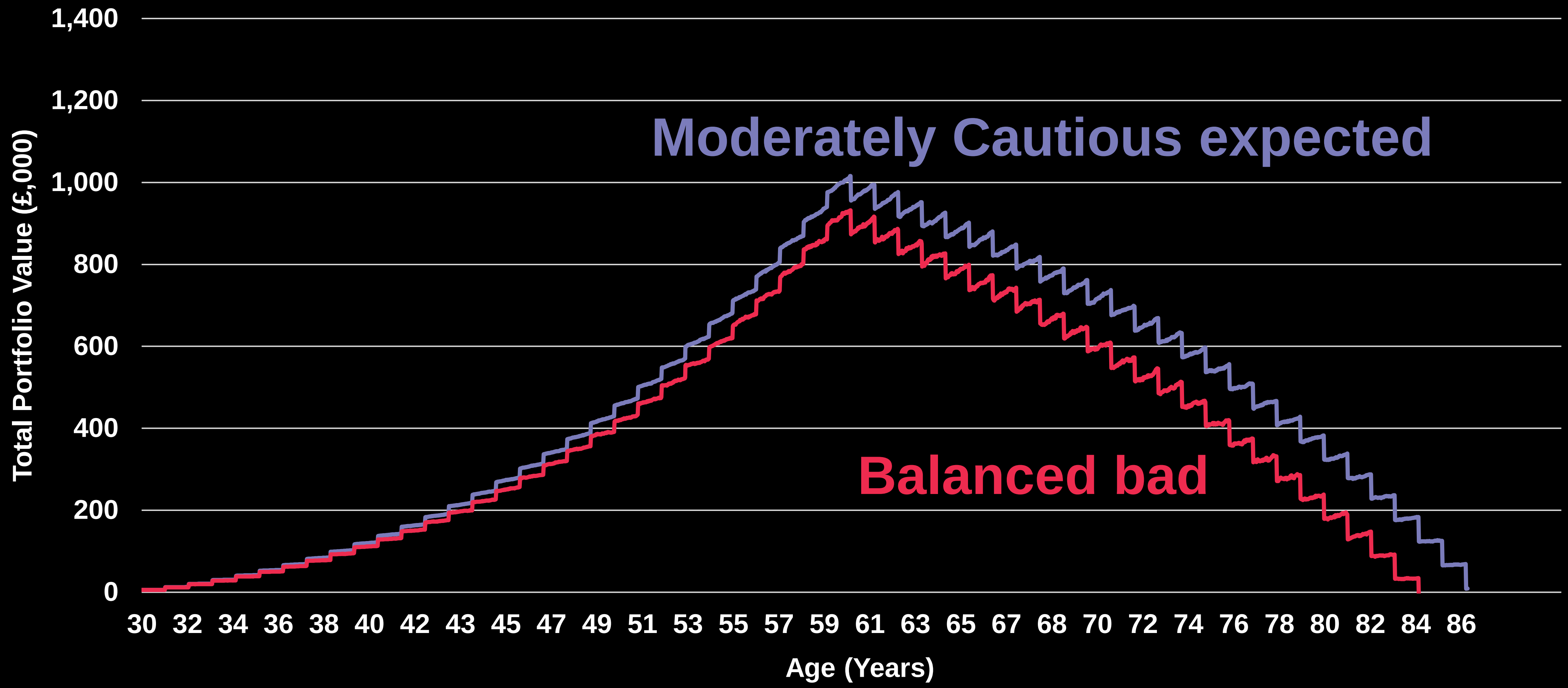
The comparison clients often make



SOURCE: 7IM

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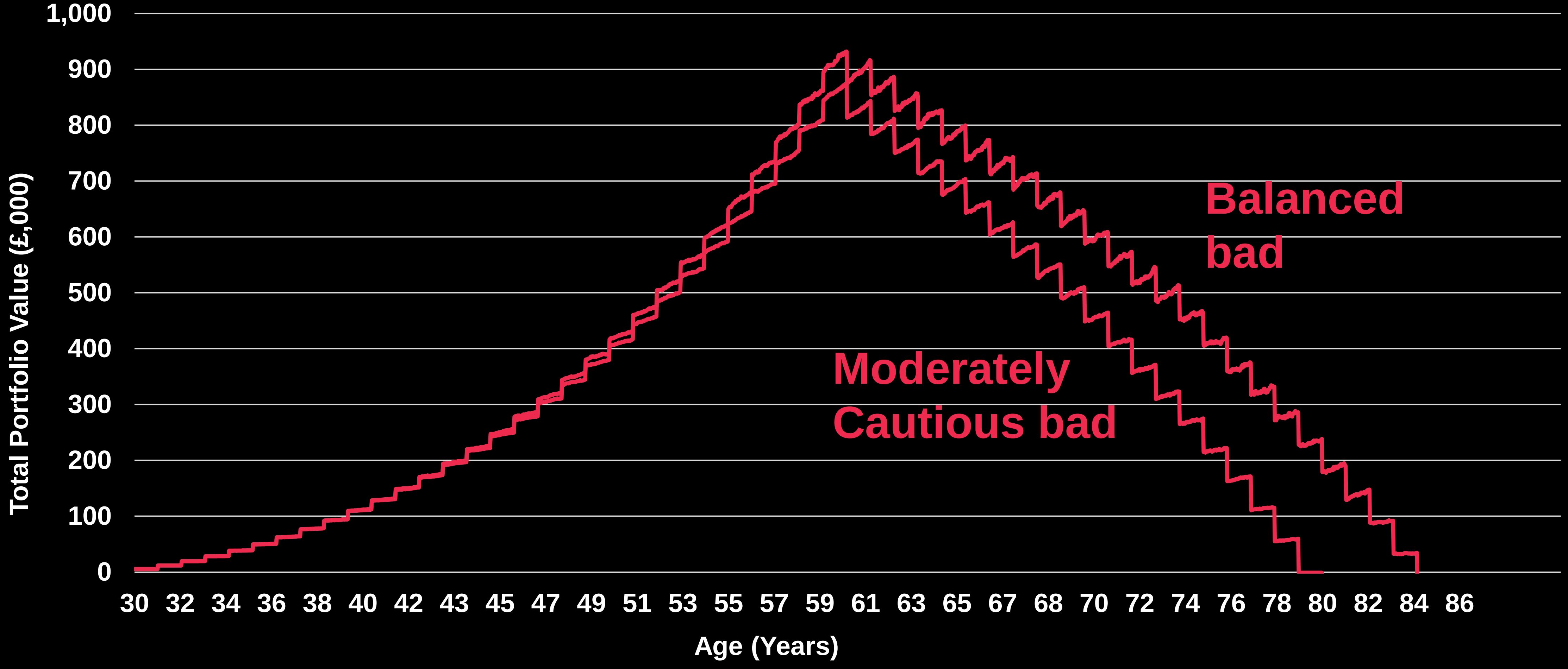
Comparing bad outcomes



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Risks for a saver

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A saver with no risk

SOURCE: 7IM

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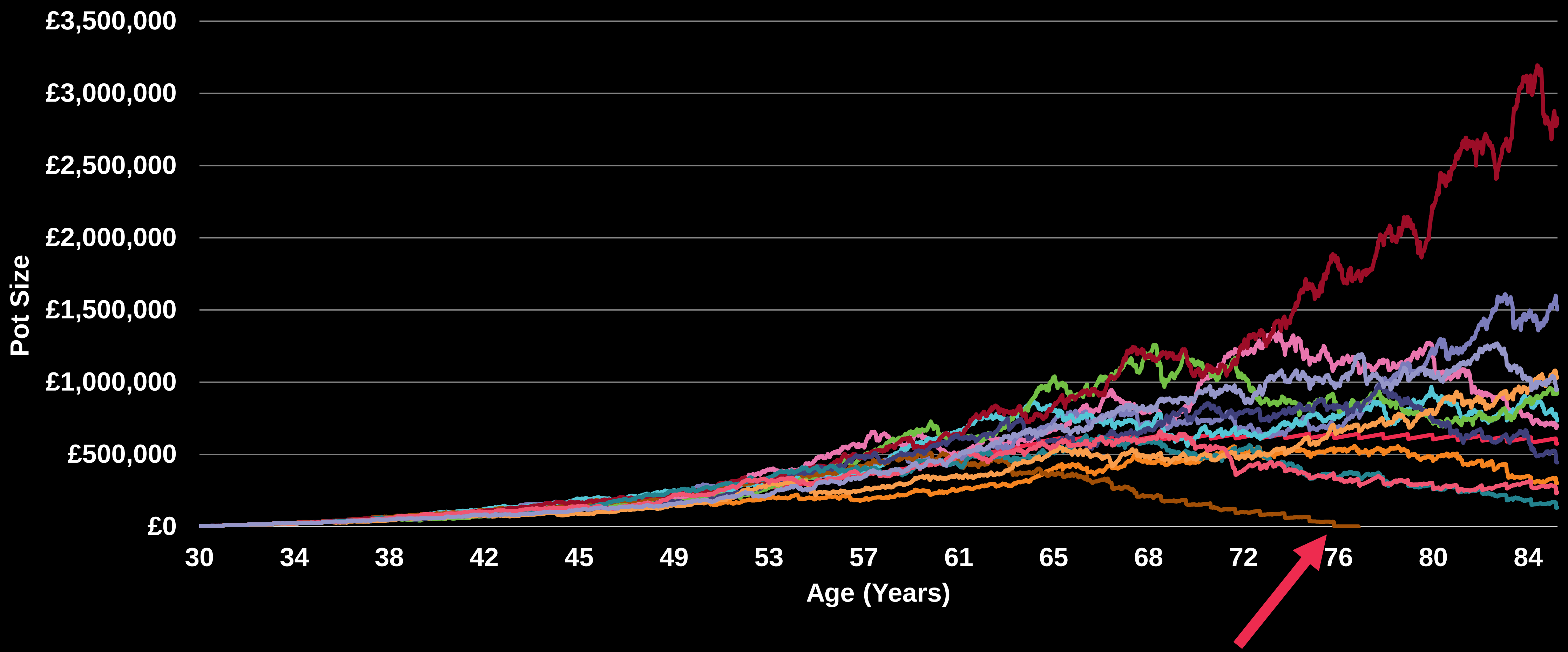
Simulating Investment Risk



This is a goal risk event

SOURCE: 7IM

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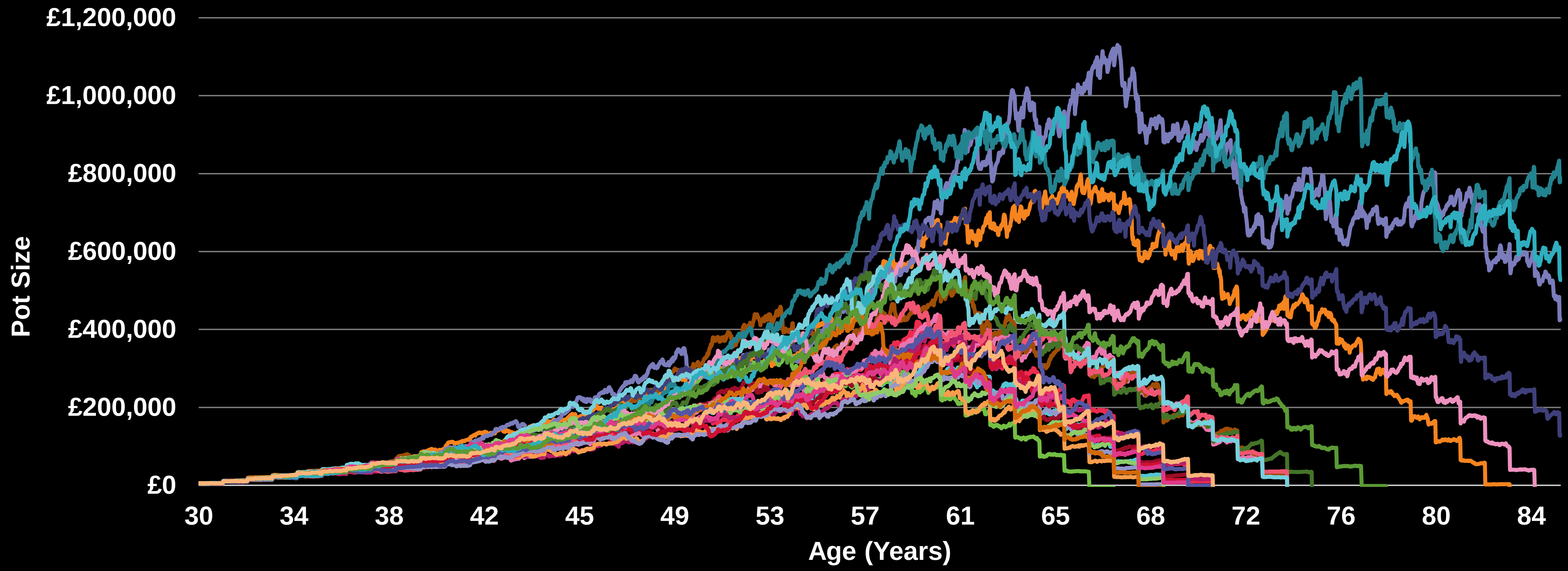
- Mrs Miggins is 30 years of age:
    - She plans on saving 15% of her salary every year into her pension
    - She wants to retire at 60
    - She wants her portfolio to provide 40% of her final salary as income
    - She is comfortable with some investment risk, so targets a 5% return (Balanced)

- **What is Mrs Miggins' risk profile?**

Simulating Mrs Miggins' risk



A goals risk profile should reflect the real risk of a retirement plan – the risk of running out of money

SOURCE: 7IM

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Capacity for (investment) loss

Capacity for Loss refers to *"the customer's ability to absorb falls in the value of their investment… (that would) have a materially detrimental effect on their standard of living."*

Source: FCA FG11-05

"One concern we have is that I personally have some conversations with people in the industry and I get the impression they don't quite get what capacity for loss is. They start to talk about clients' emotional reactions to losses."

Source: Rory Percival, November 2014

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Risks for a saver

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Which lever is biggest?

Likelihood of meeting goal

Impact of	**Saving** 1% of salary	3.8%	more likely
	Increasing **investment** return by 1%	7.1%	
	Retiring 5 years later	15.7%	

SOURCE: 7IM

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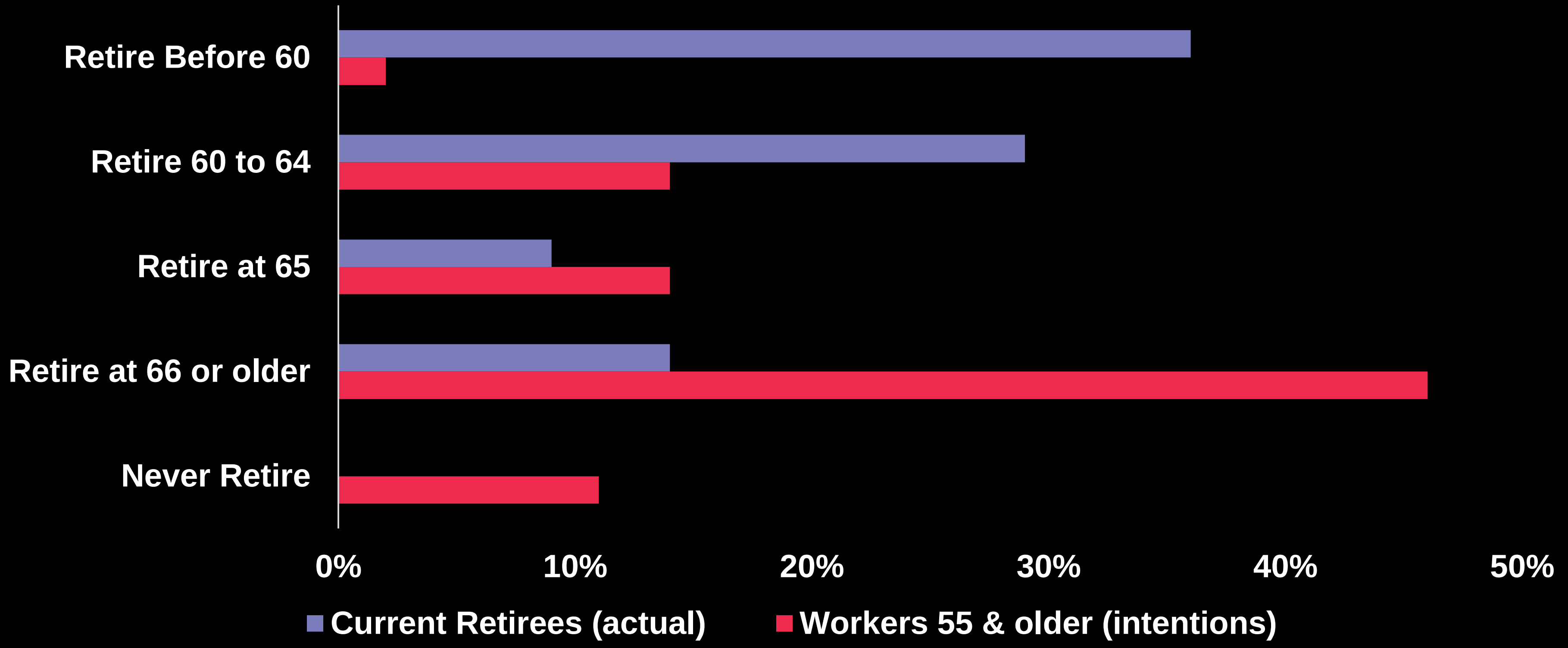
Retiring later?

Savings Risk

When older workers plan to retire versus when retirees actually retired:



SOURCE: EMPLOYEE BENEFIT RESEARCH INSTITUTE, 2015 RETIREMENT CONFIDENCE SURVEY. GAO-15-419
NUMBERS DON'T ADD UP TO 100 BECAUSE THE REMAINDER OF THE RESPONDENTS EITHER DID NOT ANSWER OR SAID THEY DID NOT KNOW

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Saving later?

Savings Risk

- How would a 25% decline in the amount saved (as a proportion of salary) change a retiree’s probability of a successful outcome?
    - For example, a savings rate of 8% of income is reduced to 6% of income.

- Holding other assumptions constant, Balanced plans that would have a 70% chance of goal success fall to about 40%.

FURTHER READING: HEURISTICS AND BIASES IN RETIREMENT SAVINGS BEHAVIOUR, S. BENARTZI, R. THALER 2007

Living longer?

Longevity Risk

- How would a 10 year increase in lifespan change a retiree’s probability of a successful outcome?
  - For example, a retiree lives to 95 rather than 85 years.

- Holding other assumptions constant, Balanced plans that would have a 75% chance of goal success fall to about 50%.

Incorporating Longevity Risk

Longevity Risk

Incorporating Longevity Risk can decrease Goals Risk:

Market Risk, Mortality Risk, and Sustainable Retirement Asset Allocation: A Downside Risk Perspective

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SOURCE: MARKET RISK, MORTALITY RISK AND SUSTAINABLE RETIREMENT ASSET ALLOCATION: A DOWNSIDE RISK PERSPECTIVE, V.W HARLOW, K.C BROWN, 2014

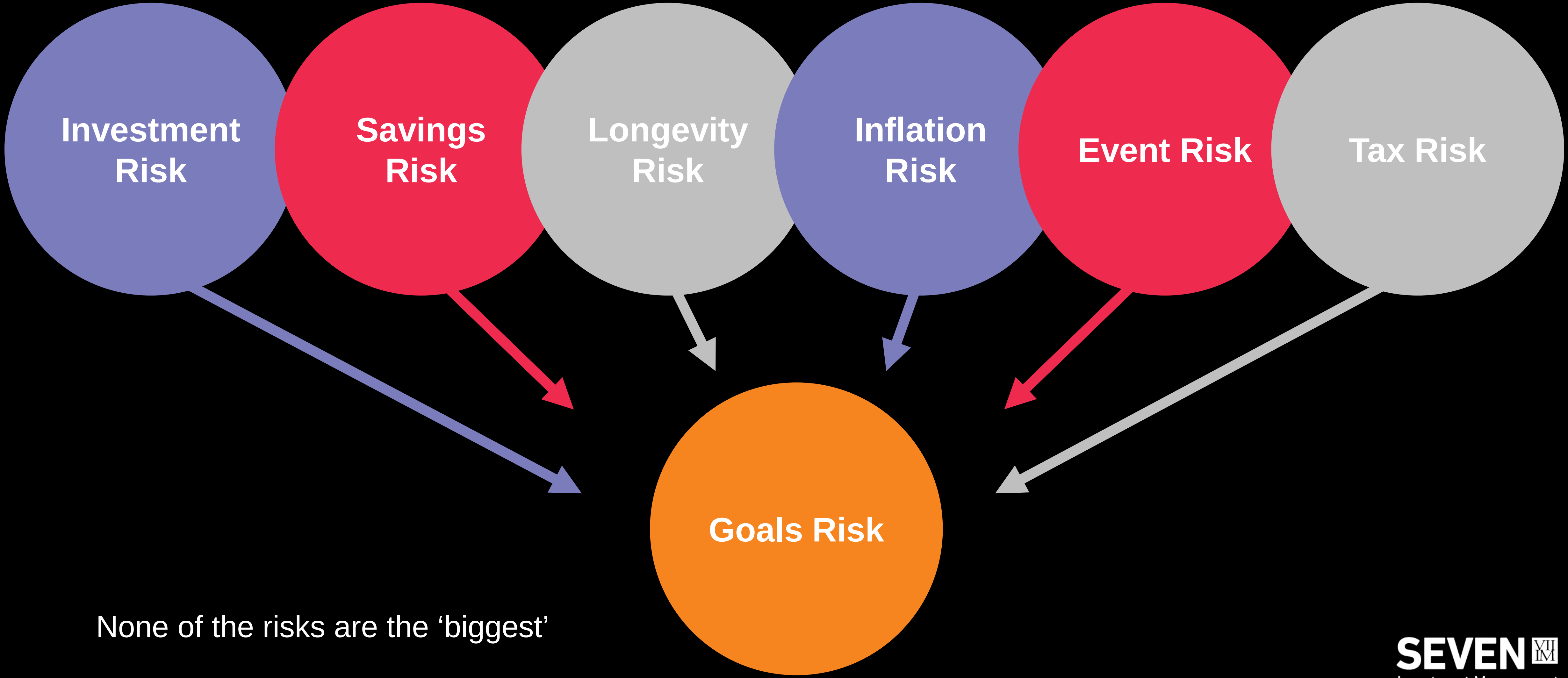
What about expected returns?

Investment
Risk

- How would a 2% decline in investment return change a retiree's probability of a successful outcome?
  - Over the last 10 years, yields on 10 year Gilts have fallen from 4.7% to 1.5%.
- Holding other assumptions constant, plans that have a 70% probability of goal success fall to about 25% (meaning they are *expected to fail*).

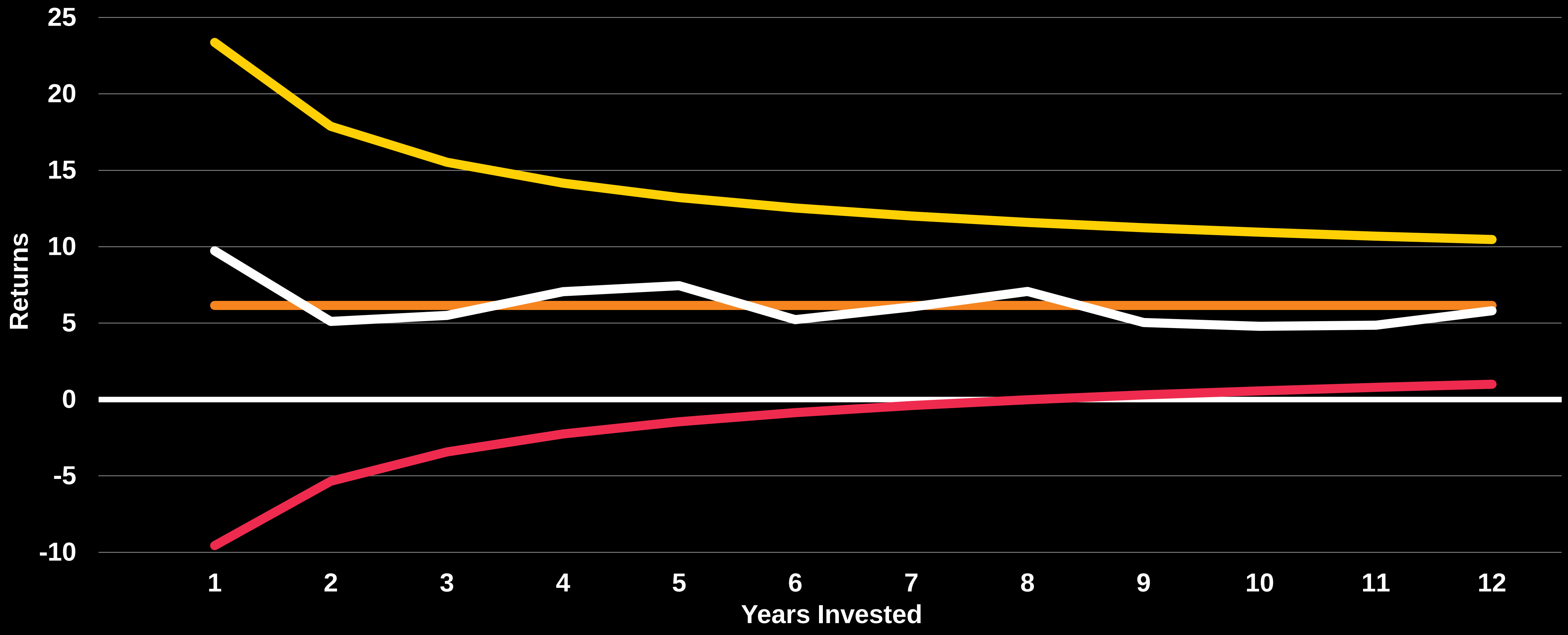
FURTHER READING: HOW MUCH SHOULD DC SAVERS WORRY ABOUT EXPECTED RETURNS? A. ILMANEN, ET AL 2016

Implications of the results



None of the risks are the 'biggest'

7IM – managed to expected return



SOURCE: 7IM, BLOOMBERG, FUNNEL CHART FOR THE BALANCED RISK PROFILE TO DECEMBER 2016

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THANK YOU