



7iM WHITE PAPER

Challenging traditional attitudes towards investment risk and retirement

By Matthew Yeates
December 2021

Time for change

When we first published this paper in 2017, the UK was in the immediate aftermath of pension freedoms in the UK. The period was typified by fears that people would spend their hard-earned pension savings on Lamborghinis! Although those fears have shown themselves to be misguided, we feel the core message of our piece, of really questioning what 'low risk' means when it comes to retirement portfolios, is as timely in 2021 as it was then.

The last few years of investment markets have also been fraught with their own challenges, not least a deep global recession and accompanying market drawdown. However, despite the challenges of increased volatility, the period has rewarded those that remained invested with attractive total returns. Guideline returns for portfolios, driven partly by lower interest rates, have continued to fall, again increasing the need for many to look beyond the most traditional approaches for construction portfolios.

Although the start to finish journey has been positive for investors, higher volatility has brought its own challenges, especially for those that are withdrawing money from their accounts and 'decumulating'. Having a process to allow investors to remain committed to portfolios whilst withdrawing money, despite volatility, is crucial. In recent years, we have brought to market the 7iM Retirement Income Service, providing advisors the tools and process to do just that and a new section covers this within the piece.

Our original purpose was not to say that investors should take more risk, but many might want to as a consequence of reading this. Others may decide simply to delay reducing it. Perhaps the most encouraging finding of our detailed research is the staggering difference a little investment risk can make to outcomes when your savings are at their largest and the power of compounding can be used to best effect.

Importantly, the research was reviewed by an actuarial firm, Oxford Actuaries and Consultants, who deemed our methodology as appropriate and conclusions consistent with analysis up to the 90% probability level.

Matthew Yeates, Head of Alternatives & Quantitative Strategy

7iM

Matthew Yeates is the Head of Alternatives & Quantitative Strategy at 7iM.

The views expressed are those of the authors alone, not those of 7iM and are subject to change at any time, based on market or other conditions.

This document is intended for professional advisers only, not for retail clients.

Any reference to specific investments are included for information purposes only and are not intended to provide stock recommendation or investment recommendations to individual investors.

Past performance is not a guide to future performance.

1. Introduction

1.1. Re-examining the 'glidepath'

For years the classic approach to investing for retirement has been to take most investment risk in youth. Typically, people in their 20s and 30s are recommended to hold the largest portion of their assets in equities and a smaller amount in fixed income. The ratio gradually switches as the years progress so that, by retirement, the investor has only a small amount in equities and the bulk of their assets in fixed income. This has become known as the 'lifestyle' or (in America) the 'glidepath' approach.

Lifestyling is popular with advisers¹, as evidenced by the large number of assets now held in investment products that adopt a lifestyle strategy. These products automatically shift the asset allocation of a pension plan, over an investor's working life, according to a pre-set formula, linking an investor's age to the relative proportion of equities and bonds. Conveniently, the automated approach takes away some of the costs and administrative burden.

But could the lifestyle approach be flawed? A number of academic studies have begun to question the rationale and, in particular, its central contention that the appetite for equities should be linked to age.

Many conscientious financial planners are also being forced to rethink the old norms as a result of client longevity, new pensions freedoms in the UK and substantial distortions in fixed income markets.

1.1.1. Longevity

The simple truth is that people are living longer – much longer. Only as far back as 1980 a man retiring at 65 might expect 13 years of retirement. Now it is over 18. A woman had nearer 17 then and has over 21 now². The chances of living to 90 are almost three times as great now as they were then³, and many people will survive to 100. The number of centenarians living in the UK has risen by 72% in just 10 years⁴.

This requires pension savings to stretch 40% further on average. Longevity, together with the collapse in interest rates, explains why annuity rates have fallen. Back in 1980 a retiree could buy an annuity generating a 15% return. Today it is typically less than 5%.

There is every reason to believe longevity will continue to extend and so the problem of financing retirement will only get tougher.

¹ Consumer group which recently reported that three providers alone have a combined £36bn in lifestyle funds that follow the strategy of moving towards cash or fixed interest five to 15 years before retirement.

² ONS National Life Tables, United Kingdom, 1980-1982 to 2012-2014. Data for the years 1980-1982 show average life expectancy at 65 to be 13.07 years for men and 17.04 years for women. Data for the years 2012-2014 show average life expectancy to be 18.57 years for men and 21.05 years for women.

³ In 1984 there were 332 people aged 90 and over per 100,000 population. By 1994 this had increased to 503, and by 2004 it had reached 675. Latest figures show there were 853 people aged 90 and over per 100,000 population in the UK in 2014. Source: ONS – <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/bulletins/estimatesoftheveryoldincludingcentenarians/2015-09-30>

⁴ Department of Work and Pensions Research Report No 318: Survey of Annuity Pricing, Cannon and Tonks, page 49.

1.1.2. Pensions freedoms

Pensions freedoms, announced in 2014 and enacted in 2015, mean that those reaching retirement are no longer forced to buy an annuity. Prior to this, as much as 90% of the total value of pension product sales were in annuities⁵. Today, that number is closer to 10%⁶.

The changes also allow pension savings to be passed to children or other beneficiaries free of inheritance tax. The saver can draw from the assets at their marginal rate of tax and at the time of their choosing.

The perception of poor value from annuities, the flexibility of how much is drawn and the benefits of leaving what is left in a pension pot to loved ones upon death all help explain the attraction of drawdown.

There is, however, a significant disadvantage – drawdown cannot offer an assured income throughout life. Historically, annuities represented a cut-off point – the point people worked towards and at which the income for the rest of their life was determined. Your savings career was effectively over, and all your savings converted to future income at that point.

The effect of pensions freedoms is that, for many, this cut-off point no longer exists. This means that longevity risk becomes much more serious.

Given that only the more affluent have historically opted for drawdown in retirement, longevity risk is a new concept to many people and the industry is arguably still looking for ways to frame that risk in a meaningful way.

The truth is that people need to accumulate much bigger pension pots, either by saving more towards retirement or generating better returns from their investments both before and after retiring. The latter entails taking more investment risk.

1.1.3. Fixed income markets

Historically, fixed income markets have provided investors with an attractive, lower-volatility alternative to equities. In the past they have offered reasonable returns. This is no longer the case. At the time of writing, the return on five-year gilts is actually below the rate of inflation.

⁵ Association of British Insurers, August 2015. At their peak popularity in 2012 annuities accounted for £1.2bn a month in pension product sales, compared with £0.1bn for income drawdown products.

⁶ Association of British Insurers, November 2015: <https://www.fca.org.uk/data/retirement-income-market-data>

There was another reason why investors approaching retirement and annuity purchase opted to move into fixed income. By moving largely into bonds as retirement approaches, the risk of rising annuity costs undermining your income in retirement is hedged: any decline in interest rates (and by implication, income from annuities) is then offset by an increase in portfolio value.

If people are not forced to buy an annuity and fixed income is not delivering the returns it did, however, then the old rationales arguably no longer hold true – or even become irrelevant.

1.2. When the facts change...

This discussion paper suggests that it may be time to change our minds about the way we plan and invest for retirement.

We will show that, **in most circumstances, investors would be better off leaving more of their portfolios in equities at and into retirement than they might have done traditionally.**

The reason is simple: people tend to be at their wealthiest as they near retirement age. This is the point at which their portfolios can deliver the maximum benefit through growth in investments. Yet this is also the point when traditional thinking leads most people to take their foot off the gas.

In presenting this data we recognise that equity risk is often a cause of serious anxiety and that our findings will present a challenge for advisers and investors.

At retirement, people's ability to recover losses often disappears and, so, many are naturally extremely sensitive to equity risk. Too often, however, there is a fixation on this one risk, downplaying others – primarily longevity risk.

The reality is that, in the circumstances in which many people now find themselves, the far greater risk for them is that their retirement savings will run out too soon. The consequences of that should cause far more sleepless nights than the volatility of world stock markets.

This paper draws both on academic research in Europe and the USA and on our own simulations, which use data from the performance of our own funds over the past 16 years, and include scenarios significantly bleaker than investors have experienced even over that traumatic period.

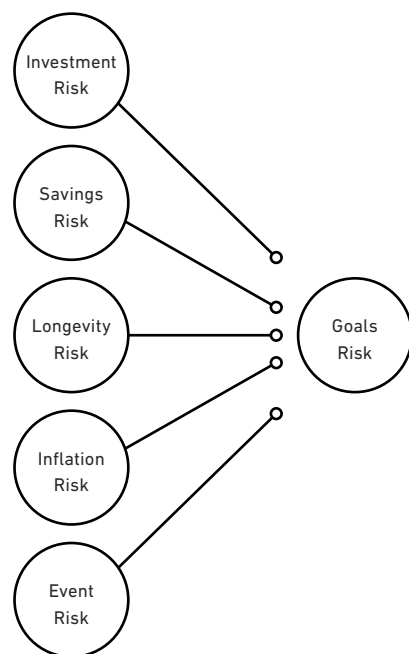


Figure 2a: Risk hierarchy

2. Understanding risk

2.1. The importance of goals

It is important to have a clear understanding of what is meant by risk. Figure 2a represents this pictorially.

The overriding objective of any advice to clients is to enable them to achieve their financial goals. The overarching risk, therefore, when looking to address their retirement income strategy is fundamentally a 'goals risk' – in simple terms, that they fail to achieve their financial goals. All other risks are subsets of this risk, as represented in figure 2a.

One of the key roles of the adviser is to help the client establish clear and sensible goals. Discussing the underlying risks is usually an important part in the process. Sometimes, for instance, a client will moderate their goals once they understand the investment risks they may have to take or the amount of savings they will realistically have to commit.

2.2. Some risk definitions

Investment Risk – In terms that most investors are familiar with, this is the risk that they will lose a good proportion or all of their capital. There may be a number of underlying risks that might contribute to this, including market risk, liquidity risk and counterparty risk.

Some of these can be offset by skilled investment management, but not all. The residual risks, however, can be mitigated by sensible financial planning.

Investment risk is a worry for retirees because they have little ability to make good any losses through employment earnings. They are also acutely aware of it because they see coverage of rising and falling markets in the news each day.

Such concerns may induce clients to take less investment risk with their savings, for example by avoiding volatile assets such as equities. With less investment risk, however, investment returns are likely to be lower, leading to a smaller pension pot. A smaller pension pot means less money to spend in retirement, which may not meet the client's financial goals. An excessive focus on investment risk, therefore, increases exposure to other risks.

Investment lore dictates that the higher the investment return that is targeted, the higher the investment risk that will have to be taken. History has shown that over the long run, equities have returned significantly more than bonds and cash, but there have been occasions when markets have plummeted.

Savings Risk



This is the risk of not saving enough – whether that is because a client does not understand the implications of not saving enough, does not think or care about the long-term, or is simply not able to put money aside.

Longevity Risk



This is the risk of outliving savings. As generation upon generation lives progressively longer, this risk becomes more of a threat. This risk can be reduced by accumulating a bigger pot: either by saving more or by investing in assets that generate better returns – or a combination of the two⁷.

Inflation Risk



This is the risk of prices rising faster than the value of the savings, which means the money will not stretch as far as the client might have hoped. This can be addressed by saving more or by investing in generally higher risk assets, such as equities or property, that traditionally tend to compensate more for inflation.

Event Risk



This is the risk of a client's financial plans being spoiled by unexpected events (for example, divorce or illness). Some event risks can be offset by insurance, but others can only be addressed by having a sufficiently large savings pot.

All of the above risks clearly increase Goals Risk substantially.

There is another factor that it is important to recognise when discussing investment risk. In the accumulation phase, when drip-feeding money into the markets regularly, investors can arguably benefit from volatility as they buy more units of an asset if the price temporarily falls. This is the well-known 'Pound cost averaging'.

However, in retirement, if investors are drawing income regularly, the reverse effect happens. Some have labelled this 'Pound cost ravaging'. By selling assets when markets are low, losses are locked in.

2.3. Is it time to change our risk focus?

In this paper – particularly in chapter five – we argue that the prime risk focus of many advisers in the financial planning process is Investment Risk. This is understandable, and we are not underestimating its importance. However, it is often the starting point of the planning process. There is a strong case to be made that this distorts appreciation and perceptions of other risks, some of which are very serious.

Are people oversensitive to Investment Risk? In the next two chapters, we will look at some of the academic studies on the subject and our own research into what happens if we challenge the traditional lifestyle investment planning model and expose portfolios to increased Investment Risk.

⁷ Arguably, you might also reduce this risk by eating, drinking and smoking too much, but few advisers would recommend this approach.

3. Risk, return and retirement: the academic literature

3.1. From launchpad to glidepath

Research in this field can be roughly divided into two areas of study: pre-retirement and post-retirement. Although the two are inextricably linked, for our purposes it is helpful to deal with them separately.

Intuition suggests we ought to begin with the former, but it is the latter that has the longer and richer history in the literature. Accordingly, we will start by reviewing developments in the post-retirement sphere before turning our attention to how these have more recently been extended to the pre-retirement sweep of the 'glidepath'.

3.1.1. Post-retirement risk

The rocket man and the rule

In 1969, William Bengen graduated from the Massachusetts Institute of Technology with a degree in aeronautics and astronautics. He later co-authored Topics in *Advanced Model Rocketry*, "a comprehensive and rigorous treatment of trajectory analysis, aerodynamics and flight dynamics". His background now seems strangely fitting, since the research he carried out when he eventually became a financial adviser would serve as a launchpad for a strand of academic enquiry whose relevance continues to soar today.

It was Bengen who gave the world what has become commonly known as the '4% rule'. Based on an examination of historical market behaviour, he concluded that retirees could safely draw down up to 4% – or, to be precise, 4.2% – from their portfolios each year, with adjustments for inflation, without fear of outliving their money.

Bengen analysed actual stock returns and retirement scenarios over a 75-year period. Assuming a 50-50 stock-bond allocation, he described a 5% withdrawal rate as 'risky' and anything above 6% as 'gambling'. In 2006 he revised his ideal 'safe' figure, by then popularly referred to as the 'Safemax rate', to 4.5% if tax-free and 4.1% if taxable.

Bengen's paper, *Determining Withdrawal Rates Using Historical Data*, was published in the *Journal of Financial Planning* in 1994. It is widely regarded as a landmark. It inspired a raft of studies, the majority originating in the US, on the subject of sustainable retirement portfolios. Now, more than 20 years later, its spiritual successors are increasingly taking the debate in novel and ever more surprising directions.

Shattering the 'age in bonds' myth

Bengen himself advocated a gradual reduction of exposure to equities in retirement. Having focused on a 50-50 stock-bond balance for his formative study, he investigated asset-allocation adjustments in a follow-up paper that was published in 1996. He recommended decreasing equity holdings at an annual rate of 1%.

This proposal was in keeping with the well-known 'age in bonds' or 'a hundred minus your age' rule, which propounds that the proportion of bonds in a portfolio should be equal to the investor's age and that the proportion of stocks should be equal to a hundred minus the investor's age. Slight variations on this theme have been put forward since, but what they all share is a post-retirement glidepath characterised by a decline in equities.

David Blanchett, an institutional consultant at the Kentucky-based Unified Trust Company, was among the first researchers to genuinely contest this view. In *Dynamic Allocation Strategies for Distribution Portfolios: Determining the Optimal Distribution Glidepath*, published in 2007, he championed a static approach. Drawing on an analysis of numerous glidepaths, time periods and withdrawal rates, Blanchett acclaimed static allocations as "remarkably efficient" and identified a 60-40 stock-bond split as the optimal choice for most retirees.

In the same year, John Spitzer and Sandeep Singh's *Is Rebalancing a Portfolio During Retirement Necessary?* edged even further from the norm. Spitzer, a professor of finance at the State University of New York, and Singh, a professor of economics at the same institution, looked at various glidepath (i.e. lifestyle) strategies over a 30 year period and found that withdrawing from bonds first would be the best-performing strategy of all.

Such a finding bordered on financial planning sacrilege. It implied that the long-established 'declining equity' (DE) glidepath should be replaced by a 'rising equity' (RE) glidepath. Spitzer and Singh displayed a keen awareness of the likely response when they conceded: "The resulting stock-heavy portfolio may make some investors uneasy."

In 2014 two of the most prolific researchers in the field added their voices to the growing pro-RE chorus. Wade Pfau, a professor of retirement income at the American College of Financial Services, and Michael Kitces, the Pinnacle Advisory Group's director of research, cast doubt on what they conspicuously labelled 'conventional wisdom' by demonstrating the ability of an RE glidepath to reduce both the probability and the magnitude of portfolio failure.

The pair's paper was entitled *Reducing Retirement Risk with a Rising Equity Glidepath*. Like Bengen's 1994 study, it was published in the Journal of Financial Planning and revolved largely around the 4% rule. Pfau and Kitces considered around 10,000 simulations for more than a hundred glidepaths, using inflation-adjusted withdrawals of 4% and 5% as a guide, and ventured that a portfolio should "start out conservative and become more aggressive".

3.1.2. Pre-retirement risk

The plight of Prudent Polly

Many studies questioning the merits of a post-retirement DE glidepath have couched their arguments in comparatively equivocal terms. This is a default ploy among academics justifiably wary of the durability of existing paradigms. With journal editors routinely perceived as the gatekeepers of tradition, there can sometimes be a marked disinclination to rock the boat too fiercely, regardless of how ground-breaking a paper's findings might be.

When Robert Arnott expanded the debate to encompass pre-retirement DE strategies, courtesy of a 2012 paper provocatively entitled *The Glidepath Illusion*, he exhibited no such qualms. Arnott, CEO of Research Affiliates, introduced his uncompromising assessment with a marked absence of ambiguity, declaring: "Young adults should buy stocks; mature adults should favour bonds. Or so we're taught. This type of logic has spawned a huge retirement planning industry. Shockingly, the basic premise... is flawed."

Arnott posited that the core presumptions of a 'classic' DE glidepath are (1) greater end-point wealth and (2) less uncertainty in estimating retirement income during the later years of wealth accumulation. He set out to test the accuracy of these presumptions by simulating the performance of three distinct glidepath strategies with reference to more than 140 years of historical returns, presenting his results through the memorable medium of three savers:

- Prudent Polly, whose stock-bond allocation progressively moves from 80-20 to 20-80
- Balanced Burt, whose stock-bond allocation is rebalanced annually to a static 50-50
- Contrary Connie, whose stock-bond allocation progressively moves from 20-80 to 80-20

According to Arnott, a DE strategy fails on both counts in terms of satisfying the aforementioned core presumptions. Typically, Polly would not only enjoy less end-point wealth than Burt and Connie but would also have no more confidence about her retirement income. Assuming an annual investment of \$1,000 over 40 years, Burt would be an average of 11% better off than Polly; even more significantly, Connie would be an average of 22% better off. Polly would on average enter retirement with \$124,000, Burt with \$138,000 and Connie with \$152,000.

Crucially, worst-case scenarios would show a similar pattern. In the worst outcomes experienced over 140 years of historic returns, Polly would end her working life with just \$50,000, Burt with \$52,000 and Connie with \$53,000. Connie would also fare especially well during the decade immediately prior to retirement, in no small part because size matters: as Arnott noted, earning good returns from equities when a portfolio is large trumps the benefits of reducing risk over time.

A key shortcoming of a DE glidepath, Arnott asserted, is that the putative removal of risk also entails the premature removal of return. “You’re years away and already ramping down risk,” he said in an interview about his findings. “In our research you get richer as you get older, so when you finally have enough money to matter you’re already moving into low-return assets. You wind up poorer and with no greater clarity on how much you’ll have in retirement.”

Answering a high calling

Arnott revisited *The Glidepath Illusion* two years later in *The Glidepath Illusion... and Potential Solutions*. By then his initial findings had been validated on a multinational scale by Javier Estrada, a professor of financial management at Barcelona’s IESE Business School, who examined data for 19 countries and reported a DE glidepath to be the most ineffective option in every sample – a result that even Arnott himself felt compelled to describe as “quite startling”.

Repeating his criticism of the standard DE glidepath’s inability to meet its fundamental objectives, Arnott made the point that a lot can be done to improve the performance of a portfolio through good management that, for instance, offers effective asset allocation, proper diversification and a superior understanding of risk and return.

Using a similar method to that employed in his 2012 study, Arnott investigated the effect of several refinements to the customary glidepath methodology. These included a more dynamic approach to bond duration and the introduction of ‘smart beta’ strategies. Even though the modifications were simplistic, the improvements were found to be “substantial”.

"Our illustrative strategies are no recipe for replacing the classic glidepath strategies," Arnott wrote. "They merely illustrate how easy it is to improve our clients' prospective retirement income and wealth. A more sophisticated solution might add a whole spectrum of additional asset classes – many offering more yield or higher growth prospects than the classic glidepath strategy – and could incorporate tactical disciplines to avoid the pitfalls of mechanistically trading into markets at near-record low yields."

Tellingly, Arnott concluded with an appeal to investment managers' "high calling" – a major element of which, he said, should be to "question current approaches whenever the empirical evidence doesn't support our common perceptions". "Conventional wisdom isn't easy to overturn," Arnott admitted in his closing remarks; and yet the encouraging truth is that paradigms do shift, not least when the evidence becomes too persuasive to ignore.

3.2. References

- Arnott, R: *The Glidepath Illusion*, 2012
- Arnott, R: *The Glidepath Illusion... and Potential Solutions*, 2014
- Bengen, W: *Determining Withdrawal Rates Using Historical Data*, 1994
- Bengen, W: *Asset Allocation for a Lifetime*, 1996
- Bengen, W: *Conserving Client Portfolios During Retirement*, 2006
- Blanchett, D: *Dynamic Allocation Strategies for Distribution Portfolios: Determining the Optimal Distribution Glidepath*, 2007
- Estrada, J: *The Glidepath Illusion: An International Perspective*, 2014
- Pfau, W, and Kitces, M: *Reducing Retirement Risk with a Rising Equity Glidepath*, 2014
- Spitzer, J, and Singh, S: *Is Rebalancing a Portfolio During Retirement Necessary?*, 2007

4. A closer look at how Investment Risk affects Goals Risk

4.1. A tale of trade-offs

We mentioned in the introduction to this discussion paper the importance of acknowledging the extent to which the long-term investment landscape has altered in recent years. Greater longevity, pensions freedoms, lower fixed-income yields and other factors have combined to bring about this transformation.

In 2012 Robert Arnott made a similar point at the end of *The Glidepath Illusion*, urging investors to “think about the implications of a starkly different world”. “For those who prefer to pretend that the old norms have not changed,” he wrote, “this ‘new normal’ will feel like a black swan, and they will suffer accordingly.”

As we have seen, the academic literature suggests the situation demands a significant evolution, if not a revolution, in attitudes to de-risking. Even if Bengen’s ‘4% rule’ still holds true – and a burgeoning body of research indicates it might not – there is a growing possibility that many investors will have little chance to put it to the test unless they substantially revise how they think about risk, not least with regard to asset allocation in the course of the investment journey leading to and beyond retirement.

This brings us back to the overarching issue of goals risk – that is, the risk of an investor not achieving his or her financial objectives. Remember that all other risks feed into goals risk. It is human nature to focus on those risks that are most easily seen, which is why many investors tend to concentrate more on the likes of investment risk and less, if at all, on goals risk.

A key lesson to emerge from the academic literature is that traditional strategies for managing investment risk might serve to heighten goals risk. In other words, the long-established approach of taking more risk in early life and less in later life may well reduce the likelihood of reaching a desired level of financial security in retirement – the very opposite of what conventional wisdom predicts.

Building on the various studies discussed in the previous chapter, we have examined the specific trade-off between investment risk and goals risk in more detail. Our findings lend further weight to the argument for turning accepted thought on its head.

Industries impacted by COVID-19, such as airlines, restaurants and travel, should make a comeback – provided they have enough cash to keep going until their revenues recover. Some won’t, of course, and will go bust.

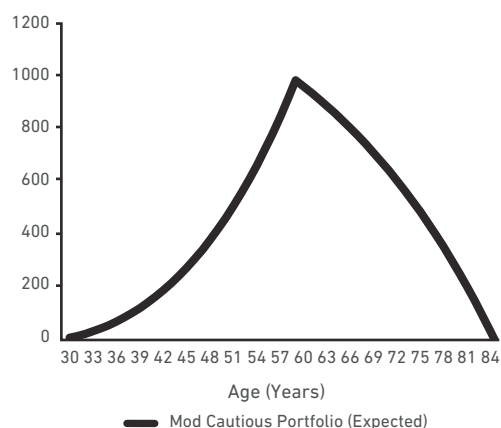


Figure 3a: A simple savings model

Source: 7IM. Based on saving an average of £20,000 a year for 30 years (phased from low to high), followed by decumulation at a rate of £60,000 a year for 30 years. Expected return on investment of 4% after all fees. Ignores taxes and inflation.

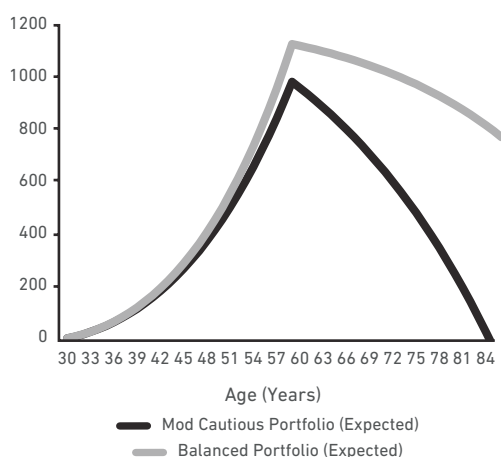


Figure 3b: Adding more return

Source: 7IM. Based on saving an average of £20,000 a year for 30 years (phased from low to high), followed by decumulation at a rate of £60,000 a year for 30 years. Expected return on investment of 4% after all fees (5% for higher risk portfolio). Ignores taxes and inflation.

4.2. Size matters

Our starting point is a simple savings model that provides us with a proxy for goals risk. To obtain this we need to consider the amount of capital available at every phase of the glidepath, including the period following retirement, and follow the journey all the way from the point at which saving commences to the point at which the money runs out.

This is shown in figure 3a, which forecasts the wealth accumulation and decumulation of an investor who saves an average of £20,000 a year from the age of 30 to 60, retires and then sets about withdrawing an annual pension of £60,000 a year, expecting to do so until the age of 90. We assume a constant growth rate, compounding annually, of 4%; this reflects our own Moderately Cautious portfolio's representative return of around 5% minus 1% in advisory and miscellaneous costs. For the time being we ignore market volatility – we are assuming a stable, steady rate of return. We will introduce and discuss investment risk later. As you can see, in this simple savings model the money runs out when the investor is nearly 86.

Now, let us compare this trajectory with that of an investor who takes slightly more investment risk. In this scenario, illustrated in figure 3b, the growth rate is 5%, which reflects our Balanced portfolio's representative return of 6% minus 1% in costs. The forecasted divergence increases only gradually during the accumulation phase but is manifestly significant in retirement.

As Arnott observed: "Size matters." The larger a portfolio, the greater the benefits of earning enhanced returns. In practical terms, it is in later life when people tend to be at their wealthiest, and that is therefore when making an investor's portfolio work harder is likely to have the greatest impact. In the words of Morton Shulman, one of the most successful stock-pickers of the 1960s: "To make a million dollars, start with 900,000."

There is another striking conclusion to be drawn from this chart – how much impact a relatively small amount of extra risk makes. The difference in the comparison presented here amounts to hundreds of thousands of Pounds. At the point where the more cautious investor is running out of money the second investor still has just over £800,000 in savings.

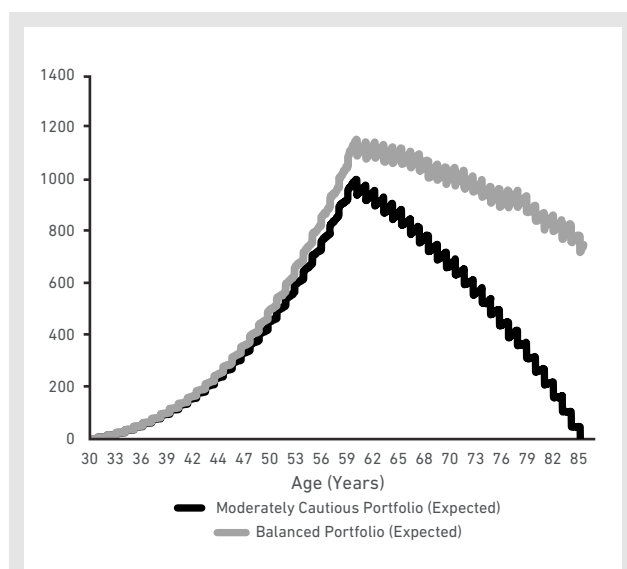


Figure 3c: Adding risk scenarios

Source: 7IM. The chart depicts the 50th 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.

The effect of compounding has a major influence here. The mental shortcuts that all too often characterise investor behaviour might prompt many people to infer that such a sizeable disparity in outcomes could stem only from a similarly sizeable disparity in Investment Risk, but this is not the case.

The reality is that the additional Investment Risk required is simply that associated with increasing expected return by a mere 1%. Compounding returns do the rest of the work. In the 7IM suite this equates to a single step along the risk-profile scale. A marginal decision can have a big impact.

4.3. Under stress

A shortcoming of the projections in figures 3a and 3b is the absence of volatility. Now let us incorporate the ups and downs of the real world.

By taking our forecasted trend growth of 4% and 5% and overlaying it with a range of scenarios that draw on the historic volatility experienced by our portfolios in the past 16 years, we can begin to see how the narrowly differing strategies might perform. Note that this is a period during which investors endured the global financial crisis, the Eurozone crisis, taper tantrums and, most recently, extreme volatility and 'flash crashes'.

Using a statistical process known as bootstrapping, we chop the 12 years into blocks of six-week returns and reorder them several thousand times to generate myriad paths over time. This gives us a wide spread of possible returns, including samples far worse than those actually experienced: for instance, we might be unlucky enough to end up with a sequence of blocks entirely made up of the nadirs of 2008 and 2011.

Figure 3c shows the 50th percentile of returns – the average return – for the Moderately Cautious and Balanced portfolios using this simulation. This is a more complex model – we are modelling weekly returns, after all.

The jagged line reflects how we are withdrawing money regularly, seeing more volatility. This more complex model addresses the issue of 'Pound cost ravaging', which we mentioned in chapter three. Here we have to draw regular income from our pension pots to live on, but as a consequence we risk locking in losses when markets fall because we cannot wait for them to recover.

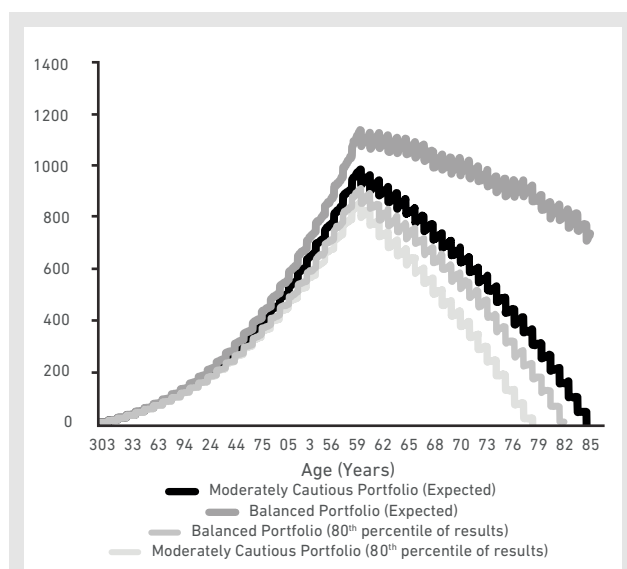


Figure 3d: 80th percentile ('bad') and 50th percentile ('expected') scenarios applied to the Moderately Cautious and Balanced portfolios

Source: 7IM. The chart depicts the 50th 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.

As with our original model, the divergence increases steadily during the accumulation phase and then becomes ever more marked in retirement. Our contention that a marginal decision regarding Investment Risk can have a major impact on Goals Risk is, as you would expect, demonstrated again, because this is based on the average (i.e. the expected) return.

However, this analysis now enables us to show what happens in the 80th percentile of possible returns for each risk profile – the 'bad' scenario – as in figure 3d. In lay terms, on a scale of one to 100 of outcomes, where one is the best and 100 is the worst, this is number 80 on the scale. It is worth pointing out that this percentile constitutes a scenario much more unfavourable than any witnessed during the past 12 years; this underlines how deliberately conservative we have been in our choice of data.

Yet again, as can be seen, the more aggressive of the two profiles delivers a notably superior outcome. It is true that this strategy involves greater exposure to 'bad' events than its more risk-averse counterpart, but a higher rate of return over the long run more than compensates for this.

4.4. Investor psychology

Imagine a gamble that offers a 50% chance of winning £1,000 and a 50% chance of losing £900. Even though the potential pay-out is bigger than the potential punishment, a raft of research suggests the overwhelming majority of people would not be tempted.

This is a basic illustration of what Nobel laureates Daniel Kahneman and Amos Tversky christened "prospect theory". Supported by an array of studies in the fields of psychology and experimental economics, the concept posits that we place more emphasis on avoiding losses than on acquiring gains. As behavioural scientist Richard Thaler, one of the architects of 'nudge'⁸, has claimed: "Losses hurt roughly twice as much as gains feel good."

Such a mindset is relevant here, because it encapsulates the misguided mental framing that many investors apply when choosing between risk profiles. The problem is that they do not compare like for like. They do not evaluate the expected range of returns for a lower risk portfolio alongside the expected range of returns for a higher risk portfolio.

⁸ The 'nudge' concept emerged from the field of behavioural economics. The central idea is that indirect suggestion and positive reinforcement can influence behaviour just as effectively as direct instruction, enforcement or legislation. Outlining his original definition, Thaler explained: "Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not."

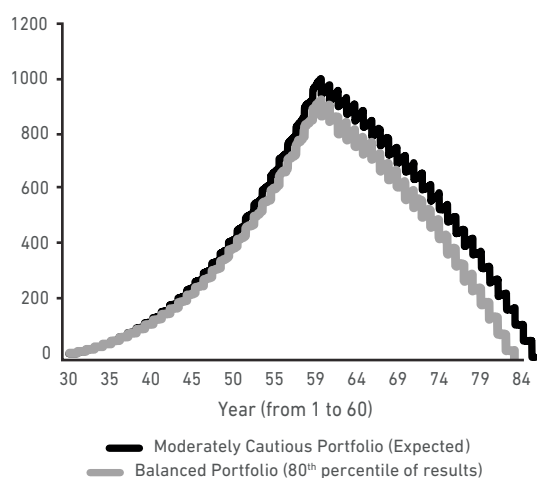


Figure 3e: The comparison clients often make

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.

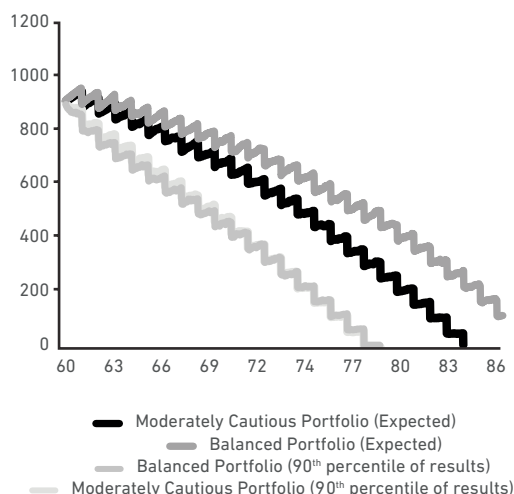


Figure 3f: What happens in a 'really bad' scenario?

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.

Instead they contemplate what the likely return from a lower risk portfolio might be and then contrast it to what they could be faced with if something utterly terrible were to happen with a higher-risk portfolio. In doing so they are not demonstrating risk aversion per se: rather, they are demonstrating *loss aversion*, which is one of the heuristics at the very core of Kahneman and Tversky's theory.

The comparison is essentially irrational, yet for our purposes it is instructive to make it anyway. The result is clearly outlined in figure 3e, which shows only the average/expected accumulation/decumulation trajectory of a lower-risk portfolio and the trajectory of a higher-risk portfolio that has experienced tough times.

Given the way in which many investors think about risk choices, often comparing the most likely outcome of their instinctively preferred lower-risk option with the worst case of a higher-risk option, comparing these two investment journeys in isolation is especially compelling. Even though all has gone as expected for the lower-risk portfolio while its higher-risk counterpart has repeatedly been exposed to 'bad' events, the difference in outcomes proves reasonably insignificant. The Moderately Cautious client runs out of money a couple of years later than the unfortunate Balanced client. Even when the basis for appraisal is inherently unfair, the path of more Investment Risk fares better than investors might have perceived.

4.5. The perfect post-retirement storm

As we saw in the previous chapter, much of the academic literature inspired by Bengen's formative work centred around the sustainability of portfolios in retirement only. In the spirit of these studies, let us round off by looking at what might happen in our model if the pivotal risk-profile decision were taken at the age of 60.

In figure 3f the investor has adopted the more cautious of our two approaches throughout the glidepath to retirement. Now comes the key choice between remaining cautious and taking more risk. Whatever happens next, it is too late for the investor to earn back any losses through working. Moreover, the market situation going forward is even more unhelpful than in our previous examples.

Faced with this perfect storm – which we reflect by using not the 80th but the 90th percentile of returns from our 12-year period – the investor has two options: continue on the cautious path or take more investment risk. Although to some it may sound like a question of consolidation versus carelessness, the data show that the higher-risk portfolio still makes sense.

Why? As before, a better rate of growth offsets the extra risk, with compounding once again playing a crucial part. Einstein is thought to have described compound interest as “the most powerful force in the universe”, and its role here certainly cannot be overstated.

The decumulation trajectories plotted in figure 3f echo the findings of Blanchett, Spitzer and Singh, Pfau and Kitces and others. All argued for more exposure to risk – in the form of equities rather than bonds – during retirement.

At this stage it might be worth recalling Spitzer and Singh’s caveat: “The resulting stock-heavy portfolio may make some investors uneasy.” This undoubtedly still applies. In the face of mounting evidence, however, the hope must be that this unease is increasingly recognised as misplaced, especially where compared with other risks facing retirees.

In concluding this chapter, we might usefully reiterate how conservative our choice of data has been. By selecting a sample period broadly characterised by some of the most challenging conditions in economic history, we have subjected the idea of taking more risk in later life to close and severe scrutiny – and it has survived every test. Note that in figure 3f, 90th percentile performance was approximately equivalent to that of a retirement portfolio doomed to experience an economic meltdown worse than the global financial crisis once every five or six years.

4.6. Closing remarks

Together, what all of these simulations underscore is the critical relationship between investment risk and goals risk. Many investors may well appreciate the dangers of taking too much investment risk, but how many fully grasp the prospective implications of taking too *little*? This, as we will explain further in the next chapter, is the message that must be successfully conveyed if conventional wisdom is genuinely to be overturned for investors’ long-term benefit.

5. How can we respond to the data?

5.1. The adviser perspective

Up to now we have focused purely on the risk for the investor, but what about the risks for the adviser?

The academic research and our own portfolio simulation testing turn conventional wisdom on its head and undoubtedly present a huge challenge to many advisers. We are not saying that all clients should automatically increase investment risk or retain higher levels of it as they get older, but we argue it may be the appropriate response for many.

No matter how convinced they are by the case we have presented, many advisers will be apprehensive about recommending investment strategies that may expose the client to greater short-term volatility and losses even though they are expected to deliver significantly better long-term outcomes.

This presents two perceived risks for them: regulatory risk and client risk.

5.1.1. Regulatory risk

It is worth reminding ourselves of the remit of the Financial Conduct Authority. In short, it is to see that consumers are fairly treated. In its own words:

This means ensuring that:

- *The financial industry is run with integrity*
- *Firms provide consumers with appropriate products and services*
- *Consumers can trust that firms have their best interests at heart*

Many advisers will be cognisant of the regulator's activities to limit the exposure of consumers to sophisticated products that are perceived to hold hidden and inappropriate levels of risk. It is important that we do not confuse this with being opposed to risk *per se*.

The FCA also does not want advisers to allow client emotion to sway them from giving advice based on rigorous professional analysis. Indeed, FCA technical specialist Rory Percival, addressing advisers at a conference in November 2014, was critical of advisers who confuse capacity for loss with appetite for risk.

*"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 and sound more like they are referring to the client's risk profile rather than capacity for loss... One of the concerns we have about capacity for loss is that the way some firms approach this is to ask the client: 'How much can you afford to lose before it has a material impact on your standard of living?' Our concern would be that that might be the right question, but are you getting the right answer? I suspect in the majority of cases there is the risk the client might give an emotional answer rather than the hard-nosed numbers point that capacity for loss is really getting at."*⁹

Percival went on to say that he believed advisers were capable of working out the client's capacity for loss through lifetime cash flow analysis and other planning tools. We would argue that this underlines how aware the regulator is of the sensitivity of clients to investment volatility and the importance placed on the adviser to support the client with wise advice.

Importantly, we can find no evidence to suggest that the regulator thinks clients should **automatically reduce risk as they approach retirement** or that advising to the contrary is wrong. What the regulator has said consistently is that it wants to see a process behind advice. So the regulator will be comfortable if a robust financial planning process is evidenced and an appropriate investment solution is selected based upon consideration of the client's goals, the investment return and risk required to achieve them and the client's capacity for loss and appetite for risk.

5.1.2. Client risk

Though the distinction has been made between the client's capacity for loss and appetite for risk, it is clear that advisers are acutely sensitive to the latter. Telling a client they can afford to lose 20% in a market downturn is one thing; telling them that they have is quite another!

The risk is that if you expose your client to too much volatility they will lose trust in you and sack you as an adviser – even if you warned them this was possible. Fortunately, as our research shows, the difference between being very comfortable in retirement and running out of cash before they die might very easily be a move from a cautiously managed to a balanced portfolio – targeting just 1% p.a. extra return.

⁹ <https://www.moneymarketing.co.uk/fca-industry-does-not-understand-capacity-for-loss/>

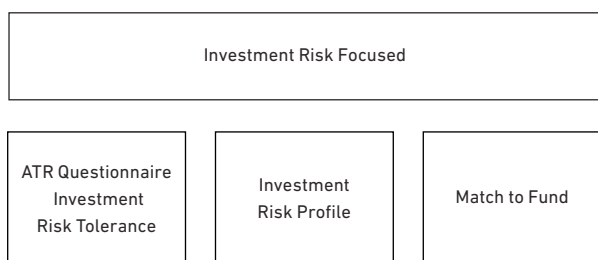


Figure 4a: Advice process focused on risk tolerance

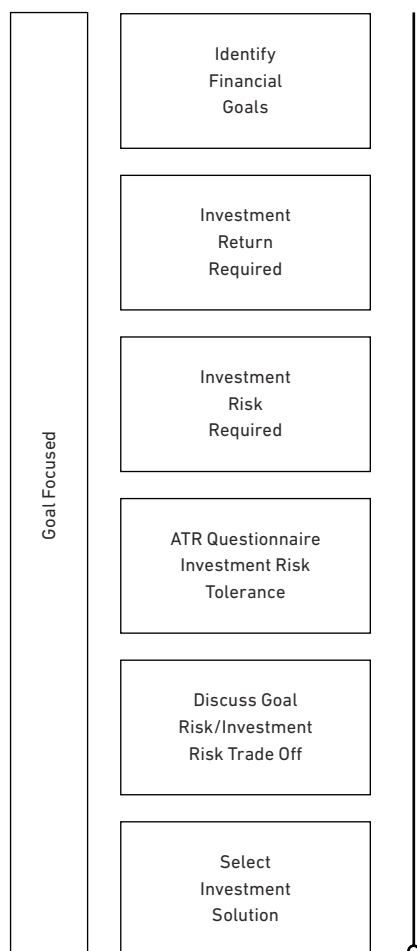


Figure 4b: Goals-focused advice process

5.2. Treading the right path

So how does the adviser make the client more comfortable with investment risk? We would argue that a simple step would be to make sure your advice process itself is not primarily focused on it.

Figure 4a shows the investment advice process that begins by asking about the client's tolerance to investment risk.

The outcome of this process can be that the client will be very comfortable – until their money runs out. There is a very considerable risk that some – perhaps many – clients going through this process will find themselves in precisely that situation, facing serious hardship.

At the beginning of this paper we described the challenges of greater life expectancy and poor fixed income returns, set against a backdrop of pensions freedoms. It is not stretching credulity to picture a wall of ombudsman complaints against advisers who 'allowed' clients to take too little Investment Risk and exposed them to heightened Goals Risk as a consequence. It is not unreasonable to expect the regulator to pick up this issue at some point and challenge advisers.

In figure 4b we demonstrate a different approach. Here the primary focus is on the client's goals – what they want to achieve and when. This determines the investment return they need, which in turn determines how much investment risk they need to take to achieve that.

At this point the adviser considers the client's investment risk tolerance versus how much risk they need to take to achieve their financial goals. If the client is not comfortable with the required level of risk then the adviser can take them through the options – for instance, save harder, work longer or reduce aspirations.

Here the client is forced up front to address the real issues facing them. As Arnott puts it: "Investors who are prepared to save aggressively, spend cautiously and work a few years longer (because we're living longer) will be fine. Those who do not follow this course are likely to suffer perhaps grievous disappointment... No strategy can make up for inadequate savings or premature retirement."

In our example we took an investor saving £20,000 and more a year towards retirement at 60 and then drawing £60,000 a year. In the bad scenario a cautious investment approach led to them running out of money by the age of 79. If markets perform more in line with expectations, they might comfortably enjoy another six years of this level of income. But what if the client lives beyond that?

It does not take much imagination to picture what life at 85 might be like on just the state pension. Maybe that is what drives loss aversion. Clients worry about losing their assets. They can picture the consequences of that easily. What many cannot picture quite so easily when they consider their pension pot is just how little income it actually generates, and how quickly that pot can be eroded by drawdown in retirement.

At the beginning of 2016, when we launched the 7IMagine My Future tool on the 7IMagine App¹⁰, we carried out research into how well investors understand pension savings commitments. We were not surprised to discover that eight out of 10 consumers simply do not know how much they need to save to achieve their target of a comfortable retirement and, when pressed to guess, typically underestimate by half.

Good advice is essential here. The client in our model has plenty of reasonably simple options – save a little more, work a little longer, draw less or take more investment risk. For many others, achieving a comfortable retirement is much tougher and the choices are fewer. It means saving a lot more, working a lot longer, drawing a lot less than expected *and* taking more investment risk. The earlier they start addressing the problem, the less drastic the solutions.

Eight out of 10 consumers simply do not know how much they need to save to achieve their target of a comfortable retirement and, when pressed to guess, typically underestimate by half.

It may be a difficult message to deliver, but it is better to give the client a more informed choice (and thereby less potential for subsequent complaint). And if all of this process is documented then the regulator should be happy with it.

Happiness seems a good point on which to end this chapter. The American comedian Leo Rosten – a Polish émigré who lived through the Great Depression – once remarked: “Money can’t buy happiness, but neither can poverty”.

Ultimately, what our research shows is that exposing your portfolio to more investment risk over the long-term can actually be a powerful way to offset the impact of some of the other risks we considered earlier – savings risk, longevity risk, inflation risk and event risk. Growing your wealth and achieving your financial goals may not make you happy, but it surely must help.

¹⁰ My Future is a gaming-style tool on the 7IMagine app that advisers can use to help clients easily understand and play with the trade-offs between the different types of risk. The 7IM research was conducted by Opinium between 5 – 9 February 2016 amongst 2004 nationally representative UK adults (aged 18+).

5.3. Managing cash flow in retirement – updated for 2021 edition

We spoke earlier about the challenge of ‘Pound cost ravaging’, where losses are locked in through the selling of assets for income in the wake of market tumbles.

If the client has the misfortune of retiring at the point when markets are down and starts to draw on assets then, it is likely to bring forward the point at which funds are exhausted. This effect is amplified when assets are running low, which is most likely to be towards the end of the client’s life, when they are at their most vulnerable.

This leads to another area that advisers need to explore, and one that underlines the significance of their role in continuing to support clients beyond their retirement date.

That’s why we created the 7IM Retirement Income Service (RIS). It is a bespoke solution designed to support the retirement plans created by advisers for clients. It provides greater control over income in retirement while mitigating many of the pitfalls associated with income drawdown. Importantly, it provides a framework that incorporates the goals risk, a simulation methodology outlined here, combined with a bucketing based approach and structured rules-based rebalancing.

We strongly believe that it makes sense for advisers to differentiate the structure of investment portfolios in the decumulation period and formalising this is one of the reasons many have created a Centralised Retirement Propositions (CRP) to sit alongside a broader Centralised Investment Proposition (CIP).

6. Conclusion

6.1. Taking a holistic view

This research leads us to three important conclusions:

- In most circumstances, investors would be better off leaving more of their portfolios in equities at, and into, retirement than they might have done traditionally. The current model of reducing investment risk may be increasing their chances of running out of money towards the end of life.
- A very small increase in investment risk can make a remarkable difference to outcomes when pension pots are at their greatest and the effects of compounding are at their most potent.
- This is so important that we have to challenge, not just the convention of moving out of risk assets as retirement looms, but also the way investment planning is often conducted.

A process that begins with investment risk may have been appropriate in the retirement planning discussion when longevity was not such an issue, when annuities were the default option and when fixed interest generated sufficient returns above inflation¹¹. It is no longer appropriate today. A much more holistic approach to the various risks is required.

We should perhaps be as clear about what we are **not** saying.

- We are not saying every client should take the maximum amount of investment risk required – **they should take the minimum amount of investment risk to meet their financial goals**. Taking this approach may not be suitable for every client and will depend on their circumstances.
- We are not saying clients should take more risk than they are comfortable with after having thoroughly considered their goals risk. Clients may need to make compromises, but they should be informed ones.

6.2. Talking sense

When the Bank of England's former Chief Economist Andrew Haldane said he cannot make the remotest sense of pensions¹², what hope is there for most of our clients? It is all too easy for those of us rooted in the investment world to speak blithely of *asset allocation*, *decumulation* and *glidepaths*. These words mean little to most people.

The best advisers are educators. They make the complex clear. Their job is to guide their clients to the decision that is best for them, and that conversation should start with a discussion about their expectations in retirement. It should involve them understanding *all* the risks that might jeopardise that.

¹¹ In an interview earlier this year Arnott described Treasury notes as "certificates of appropriation". While we may not go quite so far, many investment managers will applaud the sentiment.

¹² Andy Haldane, speaking at the New City Agenda annual dinner in May 2016.

It seems bonkers to start the investment conversation with “How bad would you feel about losing 20% of your savings?” and then building an investment strategy from there. We cannot take away the stress of markets plunging, but we are doing clients a disservice if we allow anxiety about market volatility – *appetite* for risk rather than *capacity* for loss – to heighten goals risk.

For many clients, taking investment risk off the table at the point when their savings pot is at its biggest and the benefits of compounding returns are at their greatest is doing precisely that. It jeopardises their achieving what might otherwise be realistic ambitions and leaves them exposed to the very serious risk of living out their final years in poverty.

6.3. Education and relationships

The final conclusion we draw from this, is that advisers have a vital part to play in helping their clients to understand the risks that can prevent them achieving their goals. It may mean educating them to learn to accept investment risk. It may be helping them to revise their goals. It may mean both.

We believe this research supports those advisers who build genuinely lasting and strong relationships with their clients. It encourages those who seek to start those relationships early – even though the rewards at that point are lower.

By flipping convention on its head and not exposing them to too much investment risk early on in their careers, you can also help savers build confidence in the investment process and to become more comfortable with the vicissitudes of markets.

The research supports those advisers who communicate regularly with their clients, especially when markets are tumbling. In the absence of good communication during a crisis, the default position for most of us is to fear the worst. Reassurance, context and accurate information can help strengthen the client-adviser bonds, not jeopardise them.

Finally, the research demonstrates the value of advisers beyond retirement. Clients in retirement and using drawdown will need reassurance through market turmoil and guidance on how they draw on their savings. At the least most will need an annual meeting to check that they are living within their means and not unwittingly courting poverty later on in life. Some may be needlessly living in fear of running out of cash. Whatever the scenario, we see advisers playing a hugely important role in ensuring investors enjoy the best retirement possible.

**For further information,
please contact:**

Matthew Yeates

Head of Alternatives &
Quantitative Strategy

Investment Manager at 7IM

020 3823 8401

Matthew.Yeates@7im.co.uk

The “7” in 7IM refers to the seven original founders of the business.

Back in 2002, they couldn't find a firm who they trusted to manage their families' money properly – so they started their own company to provide the kind of investment service they were looking for themselves, but were unable to find.

At 7IM, we define ourselves by providing you with what matters most – innovative offerings that evolve to support your changing needs, underpinned by outstanding service.

Our first priority is to work in partnership with you to make the most of your clients' investments. Discretionary investment management, ready-made portfolio investments, funds and platform are all there to make it easier for you to provide an exceptional all-round service.

Growing from the early days of our seven founders' shared vision in 2002, 7IM now has over 400 people managing over £17.9 billion in assets. We have offices in London, Edinburgh and Jersey, and work with advisers across the UK.

About 7IM

Multigenerational investing

We do our best to pass on economies of scale, reducing fees so more investors within a family save with us. Grandparents, through to parents and their children, can invest as individuals with one charging structure – whether they live under the same roof or not.

A story of continuous innovation

In 2013, we launched 7IMagine, an app allowing investors and advisers to keep up to date with their portfolio. The brainchild of some clients – professional ‘gamers’ uninspired by their paper statements – 7IMagine was enriched in February 2016, with My Future. Again using gaming technology, My Future allows advisers and investors to capture details about family or individual finances, including any number of streams of income, properties, other assets and expenses, to help identify how sustainable their finances are and if/when their retirement income will run out.

Our funds

- Our **AAP fund range (Asset Allocated Passive)** is populated largely with passive structures to keep costs to a minimum. Asset allocation is actively managed to help exploit opportunities and reduce risk across the spectrum: **7IM AAP Adventurous, 7IM AAP Moderately Adventurous, 7IM AAP Balanced, 7IM AAP Moderately Cautious, 7IM Cautious and 7IM AAP Income**. Some of these risk profiles have funds domiciled in both Dublin (with UK reporting status) as well as the UK.
- Our **Multi-Manager fund range** invests in a range of active and passive vehicles. Costs still matter, but if we think an actively managed fund can outperform a passive alternative we have the freedom to choose it. Asset allocation is actively managed. There are different funds for different profiles: **7IM Adventurous, 7IM Moderately Adventurous, 7IM Balanced and 7IM Moderately Cautious**. Again, some of these risk profiles have funds domiciled in both Dublin (with UK reporting status) as well as the UK.

We also have a selection of funds designed to meet specific needs, such as the **7IM Personal Injury Fund, the 7IM Real Return Fund or the SRI focussed 7IM Sustainable Balance Fund**.

Our Model Portfolios

The 7IM Model Portfolios are a range of risk rated portfolios and are available within our discretionary investment services and standalone on the 7IM platform and other platforms. The Models use the same investment process and asset allocation as our funds.

Our range of Model Portfolios are available across the risk profiles: **7IM Adventurous Model Portfolio, 7IM Moderately Adventurous Model Portfolio, 7IM Balanced Model Portfolio, 7IM Moderately Cautious Model Portfolio, 7IM Cautious Model Portfolio and 7IM Income Model Portfolio.**

In 2019, we launched **7IM Pathway**, a diversified range of passive multi asset model portfolios underpinned by our robust Strategic Asset Allocation (SAA) process. The Pathway Model Portfolios differ from our traditional offering and are built purely using a streamlined version of 7IM's robust SAA.

The 7IM funds and Model Portfolios are available through the 7IM Discretionary and Platform as well as on other platforms.