



FINURA

# GUIDE TO SUSTAINING YOUR RETIREMENT INCOME



Pension  
**TRANSFER**  
Gold Standard

# REACHING THE SUMMIT

**It was the crowning moment of his career. On the 14th of July 1865, British mountaineer Ed Whymper stood on the peak of the Matterhorn, the first climber ever to have scaled the treacherous Alpine mountain.**

He wrote 'At 1.40pm, the world was at our feet and the Matterhorn was conquered'. Whymper and his men celebrated at the summit before beginning their descent. Sadly, their joy was short-lived. Although elated at having earned themselves a place in the history books, they were also suffering from extreme fatigue.

As they clambered down, roped together, one of the men suddenly slipped. Within seconds, four of the climbers were sliding down a near-vertical slope. The rope tightened and their comrades perished.

He would have been better advised to eschew victory celebrations and instead focus his mind on the descent. For mountains as high as the Matterhorn often prove deadlier on the way down than on the way up.

Any mountain guide worth their salt will tell you that the skills needed to reach the summit are quite different to those for getting back down. They will help you understand the risks associated with both legs of the journey and do their best to help you avoid them.

Take the earth's highest mountain, Mount Everest. Reaching its 8,848m summit is an achievement of epic proportions. But we do not often hear about the fatalities. There are no official records, but it is believed that around 280 climbers have died on Everest compared to around 4,000 climbers who have reached the summit.

Research in the British Medical Journal shows that most climbers who die on Mount Everest do so above 8000m, usually during the descent from the summit. According to mountain climbing expert Stewart Green, most deaths occur while descending the upper slope, after they have reached the summit. It is in the area above 8,000m called the 'Death Zone.' The high elevation and corresponding lack of oxygen coupled with extreme temperatures, weather and some dangerous ice falls, create a greater risk of death than on the ascent.

Reaching the summit of a mountain is an incredible achievement, but it is a halfway point. American mountaineer Ed Viesturs, who has climbed Mount Everest seven times, puts it rather succinctly, 'getting to the summit is optional; getting down is mandatory.' The summit is also the point of maximum risk. Thankfully, most climbers avoid the dangers thanks to the Sherpas they hire to help carry gear, install ropes, and break tracks.

The same is true for successful retirement planning. We believe that everyone benefits from having a retirement Sherpa, a financial planner who applies robust and empirical evidence to retirement income planning.

“ Retirement planning is akin to mountaineering in many ways. Accumulating your savings is the ascent and spending them is the descent. Financial planners are like mountain guides – financial Sherpas if you like. ”

# CONGRATULATIONS ON YOUR RETIREMENT

## Now the real work begins....

If you have recently retired or are just about to do so, congratulations! You have reached the peak of the mountain. You have worked very hard and saved carefully over the last few decades. However, it is only half the battle. Now, your challenge is to make sure that you do not run out of money.

Many factors contribute to a successful retirement; figuring what you are going to do with your time, keeping physically and mentally active, and managing your financial resources in a way that helps you achieve what matters to you.

This guide is dedicated to the financial aspect – specifically, how to make sure your retirement portfolio lasts for as long as you need.

This guide is probably not for you if you have decided to buy an annuity, or if your retirement income is mainly from defined benefit and State pensions. These give you a guaranteed income for life.

However, if you are thinking about, or already, drawing income from a drawdown pot or any kind of investment, this guide is for you. It will help you understand the specific risks with this and how to make sure your money lasts a lifetime.

## KEY RETIREMENT RISKS

**A Pig and a Chicken are walking down the road.**

**The Chicken says: ‘Hey Pig, I was thinking we should open a restaurant!’ Pig replies: ‘Hmm, maybe, what would we call it?’**

**The Chicken responds: ‘How about ‘ham-n-eggs’?’**

**The Pig thinks for a moment and says: ‘No thanks. I’d be committed, but you’d only be involved.’**

This fable illustrates one of the key differences between the saving and spending phases. The point is, in a breakfast of eggs and bacon, the pig has a lot more to lose than the chicken. Retirement is the stage when your pension pot transitions from a chicken into a pig. It becomes a lot more than just a number on a statement. You rely on it to pay your day-to-day bills, fund your lifestyle and enjoy your newly found freedom. When you are retired, you have more skin in the game so to speak.

Sadly, when it comes to retirement income planning, many people continue to think like chickens, when they should think more like pigs!

Here are some of the unique risks associated with retirement income planning. They sum up the differences between the saving and spending stages.

# 01

## DIMINISHED EARNING FLEXIBILITY

Retirement happens at the tail end of your working life, long after earnings have peaked. Returning to work after retirement is not a viable option for many. So, as we rely more on our financial assets, we want to take less risk with them.

# 03

## DECREASING COGNITIVE ABILITIES

As people get older, their ability to make a financial decision is impaired. It is estimated that financial capability declines at a rate of 1% to 2% each year from age 60. But, people still think they are just as capable as when they were younger. This is dubbed the overconfidence gap. It makes it challenging for people to manage a drawdown portfolio. It may even be challenging to give their adviser informed consent to manage it on their behalf.

# 05

## HEIGHTENED SEQUENCE RISK

Investment returns early in retirement can cause untold damage to your prospects of a decent income for life. Sequence risk is often confused with volatility, a traditional measure of investment risk. But it is a distinct and visible risk – particularly at the retirement income stage. We know that capital markets deliver good returns over the long term. But you will most likely need income from your portfolio monthly or yearly. More on this in a moment.

# 02

## INFLATION RISK

A major challenge is how to prevent inflation – the thief that keeps on taking – from depleting the buying power of your income over what may be a 30-year retirement, or possibly longer. A yearly income of £1,000 in 1988 had the buying power of £476 by the end of 2018 – a reduction of over 50% over a 30-year period using the Consumer Price Index (CPI).

# 04

## LONGEVITY RISK AND UNKNOWN TIME HORIZON

The fear of dying is high on the list of people's biggest fears. But actually, for retirees, the greatest fear should be of living too long! Indeed, research suggests that running out of money is a huge concern for many. Retirement income planning is particularly challenging because we are planning for a finite, but precisely unknown retirement period. Without the proverbial crystal ball, it is tricky to estimate how long we are likely to live.

“

All these risks are uniquely associated with retirement income planning and we should approach them in a scientific way. It is all the more reason why it makes sense to work with a financial adviser to help you.

”

## SEQUENCE RISK

The most significant risk to maintaining a lifetime income from your portfolio is known as sequence risk.

Sequence risk is the risk that the order of investment returns is going to be unfavourable. Returns in the early period of your retirement have a disproportionate effect on the overall outcome, regardless of long-term returns over your entire retirement period. And it must be properly managed to avoid disaster.

This risk exists when you're saving too, but it's amplified when you take money out of your portfolio during retirement (or the spending stage).

Research shows that your investment return in the first ten years of retirement largely determines whether you're likely to run out of money over a typical 30-year period.

If you get good returns in the early part of retirement, you're unlikely to run out of money. If you get poor or even mediocre returns in the early part of retirement, you may have a problem.

## SEQUENCE RISK VS VOLATILITY

It is important to understand that, sequence risk is NOT the same as portfolio volatility. The two are often confused, even by financial professionals.

Volatility is the day-to-day movement in your portfolio. It is measured using standard deviation – the amount your portfolio return deviates from the average over any given time period. Sequence risk on the other hand relates to the order of portfolio returns.

Sequence risk is the number one investment risk to manage in your retirement. Not volatility.

Many people try to avoid investment volatility when they are taking income from their portfolio. But, controlling volatility does not necessarily control sequence risk. This is because sequence risk is exacerbated by withdrawals from a portfolio, not by volatility.



The easiest way to think of sequence risk is to think of the words of the legendary Eric Morecambe, 'I'm playing all the right notes, but not necessarily in the right order.'



# THE NASTIEST, HARDEST PROBLEM IN FINANCE

**The key question you need to confront is, 'How much can I withdraw from my portfolio, to avoid the risk of running out?'**

This is what Nobel Prize winner William Sharpe calls the single 'nastiest, hardest problem in finance'<sup>4</sup>. Sharpe should know – he is an 84-year-old retired professor of finance from Stanford University, Nobel Prize winner and has an investment metric (the Sharpe Ratio) named after him.

Do not be tempted to confront this question by using one of the commonly available retirement calculators though. These are mostly based on cashflow projections. Expert Dr William Bernstein calls any tool like this a 'retirement calculator from hell'. He notes that 'these calculators all make the same erroneous assumption – that your expected rate of return is the same each and every year<sup>5</sup>. The real world doesn't work that way.'

To address this problem, Bill Bengen, an aeronautical engineer turned financial adviser, proposed using extensive historical data to explore how well a withdrawal approach might fare under a wide range of market conditions.

Bengen's idea is very simple; consider how your withdrawal would have fared in good times and bad times. Then, choose a conservative approach that survived most or all situations over the last 100 years or so. You will still have to adjust along the way, but you can be confident that market conditions would have to be worse than any we have seen in the past to be a problem.

Bill Bengen established this key framework to manage sequence risk back in 1994. He developed a Sustainable Withdrawal Rate (SWR). This rate is a percentage of the initial withdrawal. Ongoing amounts are then adjusted for inflation. This SWR was capable of surviving any 30-year period in last 100 years.

Using US historical data, Bengen established what is now known as the 4% rule. In other words, an initial withdrawal of \$40,000 from a \$1,000,000 portfolio invested in 50% US Equities and 50% US Intermediate Bonds would have lasted 30 years, in the very worst-case scenarios.

The most important point to remember is the withdrawal percentage is based only on the portfolio value in the first year of retirement. So, for instance, a withdrawal rate of 4% from a £1,000,000 portfolio gives an income of £40,000 in the first year. This £40,000 a year then increases or decreases in line with inflation each year, regardless of the ongoing portfolio value.

## BENGEN'S FOCUS ON THE WORST-CASE SCENARIOS IS IMPORTANT

It creates a high level of confidence that a plan will succeed. Of course, no one really knows what the future holds, but it is reasonable to suggest that a withdrawal plan that survived WWI, WW2, The Great Depression and many other severe market conditions, is likely to be successful.

However, we should not necessarily consider just the absolute historical worst-case scenario for a SWR. We can also bring in the concept of probability of success (PoS, or success rate) or the probability of failure (PoF or failure rate). The success rate gives us the percentage of times that a given withdrawal approach has lasted the full retirement period.

Defining one's retirement strategy in terms of probability of success or failure may seem odd at first. But it just acknowledges that there is always a risk associated with any retirement plan. There are no absolute guarantees here!

The concept of probability is used in many other fields, including medicine – particularly surgery, where lives may be at risk. Compare this with retirement, where one's money (and lifestyle) is at risk. Arguably, if it's good enough for medicine, it is good enough for retirement planning. Success rate simply tells us the chances that we may run into market conditions that would force us to adjust withdrawals in the future, if we want to avoid running out of money.

Many experts believe that working to an overall probability of success of 80%-90% or more is reasonable in retirement income planning. This means that there is a 10%-20% chance you will have to make an unplanned adjustment to your withdrawal plan if you experience poor returns early in retirement.

## WHAT DOES THIS MEAN FOR ME?

Do not rely blindly on the 4% rule. Everyone needs their own personalised sustainable withdrawal strategy.

While Bengen's idea is very useful, it is important to stress that the 4% rule itself does NOT apply to everyone for the following reasons:

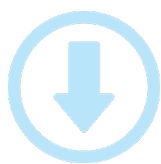
- Your portfolio is likely to be different to the one Bengen used. The mix between equity, bonds and other mainstream asset classes makes a difference to the sustainability of the withdrawal
- You may have longer or shorter time scales than the 30 years used in Bengen's research
- You have to account for the investment fees and taxes you'll pay
- Typical spending in retirement isn't static in real terms

# RULES-BASED WITHDRAWAL STRATEGIES

Since Bengen's original work, other researchers have added to the body of knowledge and developed other sustainable withdrawal strategies.

These are called rule-based strategies; they have a higher withdrawal rate but use safeguards (rules) to stop you running out of money. Typically, people will adjust their spending gradually downwards if they face poor returns early in retirement.

Some of the more popular strategies include:



## FIXED WITHDRAWAL WITH NO INFLATION ADJUSTMENT

This approach assumes that you do not adjust your withdrawals for inflation at all during your retirement. So, your income declines in real terms over time.



## GUYTON INFLATION ADJUSTMENT

This approach recommends adjusting your withdrawals for inflation each year except after a negative portfolio return.



## CAP & COLLAR

Under this approach, you set an upper (cap) and lower (collar) inflation limit. You adjust your withdrawals each year for inflation on this basis.



## GUARDRAILS

You can reduce or increase what you spend based on a predefined percentage of your initial withdrawal rate.

As you can see, these rules can be complex to define and understand. Each of these has its pros and cons. A good financial adviser can help you work out the best approach for you.

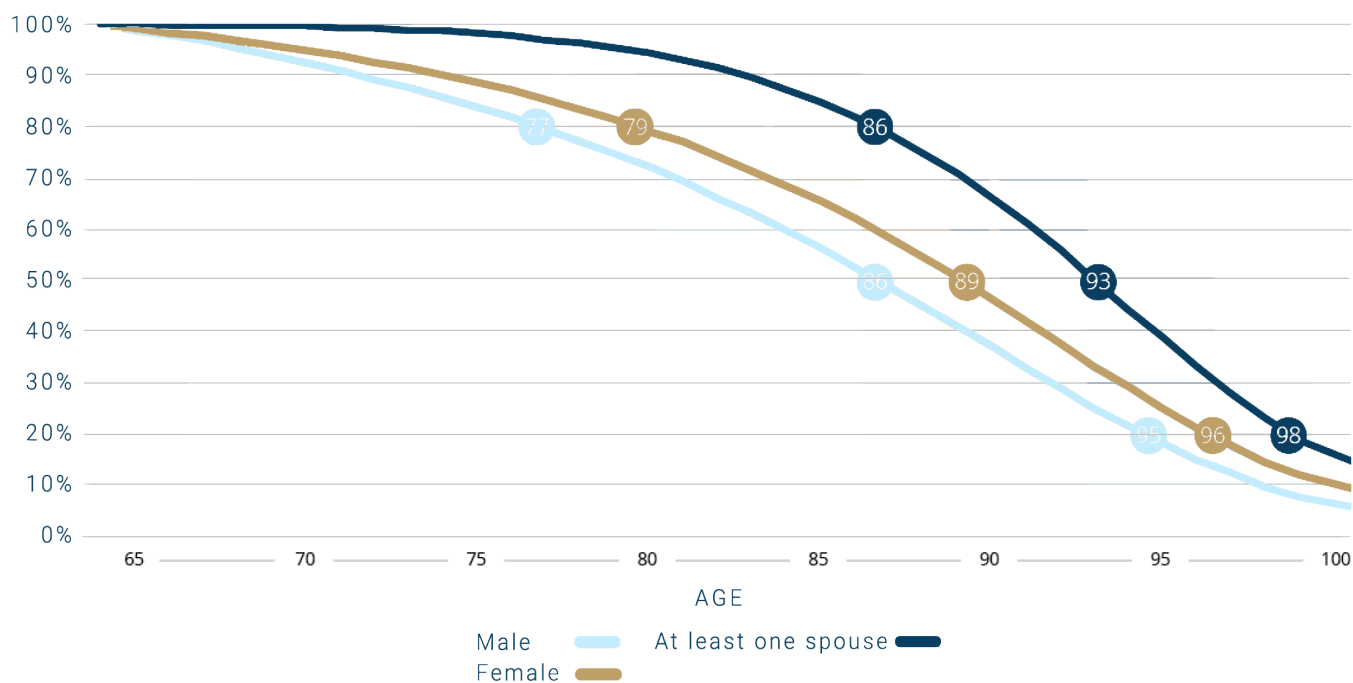


# MANAGING LONGEVITY RISK

A major challenge to working out whether you will run out of money is understanding how long you will live (longevity).

In retirement planning, it is best to think of it in terms of survival probability, which gives us an idea of the chances you will live to a certain age.

## PROBABILITY OF A 65- YEAR OLD LIVING TO VARIOUS AGES



The ONS cohort data in the chart above shows the survival probability for a 65-year-old male and female. There's an 11% chance a 65-year-old male will celebrate their 100th birthday, and that rises to 15% for a female of the same age. For a couple of the same age, the probability that at least one of them will live to age 100 is a 24%.

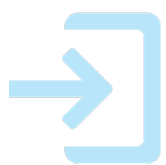
“ Ideally, a withdrawal plan should go right through to the tail end, where an individual or a couple only has a 10% to 20% probability of surviving. The goal is not to precisely predict how long you may live. The goal is to address the risk that you outlive your wealth. ”

# WHAT IS YOUR SUSTAINABLE INVESTMENT STRATEGY?

**A sustainable withdrawal strategy is your plan for NOT running out of money in retirement.**

This plan is unique to each individual or couple. There is no one-size-fits-all solution when it comes to spending your nest egg. You need a highly personalised approach tailored to reflect your goals and circumstances.

Managing withdrawals is a delicate balancing act, thanks to the complex and nuanced nature of mitigating sequence and longevity risk. There is a myriad of decisions to make including:



## YOUR WITHDRAWAL STRATEGY

This should include guidelines on likely future changes and how to deal with one-off lump sum withdrawals over and above normal income needs.



## PORTFOLIO MANAGEMENT STRATEGY

This should include asset allocation, re-balancing, what proportion of portfolio (if any) to hold as a cash buffer, what order you will sell from asset classes and tax wrappers.



## YOUR LONGEVITY

This is an estimate of how long you are likely to live.



## SUCCESS RATE

This tells us the chances that we may run into market conditions that would force us to adjust withdrawals in the future, if we want to avoid running out of money.



## ANY LEGACY YOU WANT TO LEAVE



## YOUR FEES AND TAXES

These are just some of the things to consider and you'd be forgiven for wondering where to start!

Thanks to technology, your adviser can use extensive historical data to model and illustrate how these decisions could impact the amount you can take from your portfolio in the best and worst of market conditions.

# CASE STUDY

## NO. 1

After 30 years in the music industry, Janet Sample is looking forward to a slower pace of life, doing some traveling and spending more time with her grandchildren.

At 62 and with the house paid off, Janet has managed to build up a substantial nest egg. She has a total of £1m in her pension pots and ISA.

She would like an income of £40k pa after tax from her portfolio until her state pension kicks in at 66. Then, she only expects to need £30k a year. Janet would like to leave a legacy to her grandchildren and a mental health charity that supported her when things were particularly rough in her early career. She would ideally like her home, currently valued at £450k, to go to her grandchildren. She will leave a legacy of £50,000 to the charity.

Janet is an experienced investor and has always taken the sensible approach of spreading her portfolios equally between global equities and bonds. She expects this to continue.

### THE OUTCOME

After a detailed analysis, her financial adviser suggested some changes to improve her income sustainability.

- Janet's withdrawals are to increase in line with inflation less 1%. This means that her income will rise but at a slower pace than inflation. There is extensive research to suggest the people tend to spend progressively less as they get older.
- A portfolio mix with 60% allocation to equities, instead of the current allocation of 50%. The rest is allocated to global bonds.

This plan significantly increased the chances of meeting Janet's income goal to 89%. This means that, with small adjustments along the way, Janet's portfolio will last until she is 95. Even taking into account some of the severe market conditions. However, she might have to leave less money for her favourite charity in some of the worst scenarios. Of course, if market conditions more favourable, then she will achieve this goal.

### WITHDRAWAL POLICY STATEMENT

#### Total Portfolio



**£1,000,000**  
as at 9th April 2019

#### Required Income



From age 62 to 65: **£40,000**  
From age 66 onwards: **£30,000**

#### Fees



**Pension** 1.50% each year  
**ISA** 1.50% each year

We do not know what the future holds - the above is based on historical data that reflects asset class behaviour and inflation. Past performance is no guarantee of future returns but it gives some insight into how a plan could fare in a wide range of market conditions.

#### Success Rate



The plan is likely to stay on track in 89 out of every 100 scenarios. The plan may need tweaking to achieve Janet's objectives.

#### Longevity



**95** years old

Janet expects to live to age 95. This portfolio could last until she is 95. This is in the 10th percentile scenario.

#### Legacy



52%  
**£26.1k**

When Janet is 95, she could have **£26.1k** left in her portfolio. That is **£23.9k** less than her planned legacy of **£50k**. She could end up with a higher amount in 9 out of 10 scenarios.

#### Lifetime Income



**£933.1k**

Janet needs a total lifetime income of **£1.03m**. By age 95, the total she will have taken (adjusted for inflation) is **£96.9k** less than she needs in the 10th percentile scenario.

# CASE STUDY

## NO. 2

The Miggins have just sold their business and their home in Essex. They've decided to retire to Cornwall. They've both recently turned 66, so they've started to draw their State pension.

After buying a new retirement home, they expect to have £600k left in their pension pots. They need an income of £30,000 after tax, as well as their State Pension. The Miggins are comfortable with equity risk and are prepared to hold as much as 70% of their portfolio in equities and the rest in bonds.

The Miggins recognise that flexibility with their income is the price they'll have to pay for the high level of withdrawals they want to make. Accordingly, they're quite happy to fall back on their property if they need to. They're not particularly keen on leaving wealth to their relatives; they've spent much of their lives supporting their children, so now it's time to enjoy their own lives.

### THE OUTCOME

After a detailed analysis, their financial adviser suggested some significant changes to their withdrawal plan.

The withdrawal of £30,000 after tax isn't sustainable. The Miggins will be able to spend £24,000pa after tax and fees as long as they accept they'll have to make some changes to their spending if market conditions demand it. These changes will be guided by the following rules:

- Their withdrawal will be adjusted every 3 years as follows:
  - If their withdrawal rate goes above 7% within the first 15 years of retirement, they reduce their spending by 5%.
  - If their withdrawal rate drops below 3% within the first 15 years of retirement, they can increase their spending rate by 10%.

This plan significantly reduces their risk of running out of money. The analysis shows that even under severe market conditions, the risk of running out of money before Mrs Miggins's 99th birthday is minimal. However, there is a price to pay - their spending would have to be reduced in the event of severe market conditions in the early stage of their retirement.

### WITHDRAWAL POLICY STATEMENT

#### Total Portfolio



**£600,000**

as at 9th April 2019

#### Required Income

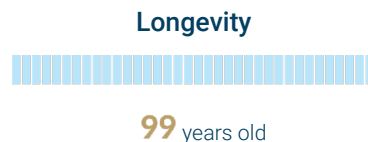


From age 66 onwards: **£24,000** Pension 1.50% each year

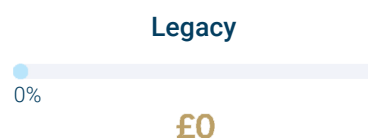
#### Fees



The plan is likely to stay on track in 93 out of every 100 scenarios. The plan may need tweaking to achieve their objectives.



They both expect to live to age 99. This portfolio could last until Jake is 99. This is in the 10th percentile scenario.



When they are 99, they could have £0 left in their portfolio. That is £1 less than their planned legacy of £1. They could end up with a higher amount in 10 out of 10 scenarios.



They need a total lifetime income of £792k. By age 99, the total they will have taken (adjusted for inflation) is £123.2k less than they need in the 10th percentile scenario.

We do not know what the future holds - the above is based on historical data that reflects asset class behaviour and inflation. Past performance is no guarantee of future returns but it gives some insight into how a plan could fare in a wide range of market conditions.

# THE POWER OF ONE-DEGREE COURSE CORRECTION

**In 1979 a passenger jet with 257 people on board left New Zealand for a sightseeing flight to Antarctica and back.**

Unknown to the pilots, someone had modified the flight coordinates by a mere two degrees. This error placed the aircraft 28 miles (45km) to the east of where the pilots assumed, they were. As they approached Antarctica, the pilots descended to a lower altitude to give passengers a better look at the landscape.

Although both were experienced pilots, neither had made this particular flight before, and they had no way of knowing that the incorrect coordinates had placed them directly in the path of Mount Erebus, an active volcano that rises from the frozen landscape to a height of more than 12,000 feet (3,700 m).

As the pilots flew onward, the white of the snow and ice covering the volcano blended with the white of the clouds above, making it appear as though they were flying over flat ground. By the time the instruments sounded the warning that the ground was rising fast towards them, it was too late. The airplane crashed into the side of the volcano, killing everyone on board.

It was a tragedy caused by a minor error—a matter of only a few degrees.

Experts in air navigation have a rule of thumb known as the one-in-60 rule. It states that for every one degree a plane veers off its course, you'll miss your target by one mile for every 60 miles you fly. And more importantly, the further you travel, the further you are from your destination. If you veer off course by one degree, flying around the equator will land you almost 500 miles off target!

The point here is that managing a withdrawal strategy in drawdown isn't a set-and-forget approach.

The flexible withdrawal strategies illustrate exactly this point, despite what some people incorrectly believe.

To enjoy a fulfilling retirement, confident that you won't run out of money, it's crucial to review your plan regularly with your financial adviser and make course corrections where necessary.

# GET IN TOUCH

We have no set agendas and any initial conversations or meetings are on our time.

Make contact to start a conversation today.

5th Floor  
20 Old Bailey  
London  
EC4M 7AN

E: [hello@finura.co.uk](mailto:hello@finura.co.uk)  
T: +44 (0) 20 8057 8004

## REFERENCES

- i. Based on the account of Giles Milton (2016): When Churchill Slaughtered Sheep and Stalin Robbed a Bank: History's Unknown Chapters
- ii. Firth P G et al (2008) Mortality on Mount Everest, 1921-2006: BMJ 2008; 337 doi: <http://dx.doi.org/10.1136/bmj.a2654> (Published 11 December 2008) :BMJ 2008;337:a2654
- iii. Finke M, Howe J and Huston S (2011) Old Age and the Decline in Financial Literacy, Social Science Research Network, Available at SSRN: <http://ssrn.com/abstract=1948627>
- iv. 'Tackling the 'Nastiest, Hardest Problem in Finance' By Barry Ritholtz June 2017, <https://www.bloomberg.com/opinion/articles/2017-06-05/tackling-the-nastiesthardest-problem-in-finance>
- v. The Retirement Calculator from Hell <http://www.efficientfrontier.com/ef/998/hell.htm>

### Important information

All rights reserved. This material is reproduced under license by Timelineapp Tech Limited. No further changes can be made to this material without written permission. This publication has been prepared solely for informational purposes, and is not an offer or a solicitation of an offer to buy or sell any security, product, service or investment. The opinions expressed in this publication do not constitute investment advice. Should you require advice you should speak to your financial adviser. The value of investments and the income from them may go down as well as up and investors may not get back the amount originally invested. The data contained in this document has been sourced by Finura Partners and should be independently verified before further publication or use. Third party data is owned or licensed by the data provider and may not be reproduced or extracted and used for any other purpose without the data provider's consent. Third party data is provided without any warranties of any kind. The data provider and issuer of the document shall have no liability in connection with the third party data. Finura Partners is an Appointed Representative of Evolution Wealth Network Limited who are authorised and regulated by the Financial Conduct Authority and based at Holmwood House, Broadlands Business Campus, Langhurstwood Road, Horsham, West Sussex, RH12 4QP. Finura Partners Limited are registered in England under Companies House number 09560937, 15 Bowling Green Lane, London, England, EC1R 0BD.



**FINURA**

5th Floor, 20 Old Bailey, London EC4M 7AN  
T: +44 (0)20 8057 8004 E: [hello@finura.co.uk](mailto:hello@finura.co.uk) W: [finura.co.uk](http://finura.co.uk)