The impact of inflation on retirement planning

Pension decumulation

Adviser Solutions

Fidelity INTERNATIONAL

Introduction

Paul Squirrell
Head of Retirement and Savings Development

Inflation can have a profound impact on the finances of retirees and its influence is widespread. The obvious consequence is the erosion in the value of income over time, but inflation can have a far-reaching impact over many aspects of retirement.

William P Bengen, the father of the 4% rule, said that 'the time line of inflation that a retiree experiences when they stop working is as important to their portfolio's endurance as the sequence of investment returns'. In other words, inflation rates at the beginning of retirement can influence sustainable withdrawal rates throughout retirement.

What's more, if expenditure is assumed to decrease during retirement, should income be fully protected against inflation? If it isn't necessary to match inflation each year, what are the implications for withdrawal rates? The level of inflation can also have an adverse effect on the negative correlation between equities and bonds in certain circumstances.

Annuities are impacted by inflation too. High inflation invariably leads to interest rate increases that usually result in higher annuity rates, while low inflation will commonly deflate annuity rates. And there's the relationship between level annuity rates and escalating or inflation linked annuity rates. Are increasing annuities value for money?

Our report considers all of these issues and draws on research and studies that show how inflation can affect the decisions retirees make at and during retirement. Inflation is a recurring issue for advisers and their clients. Our report brings this issue into focus to help you plan and develop retirement strategies to help your clients combat the risks posed by inflation.

Contents

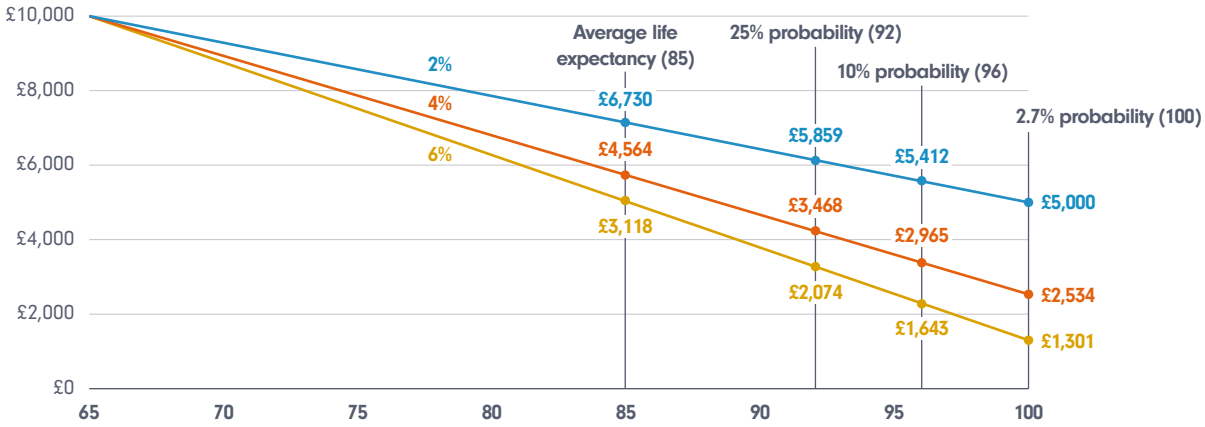
The impact of inflation on retirement planning

According to the author Sam Ewing 'Inflation is when you pay fifteen dollars for the ten-dollar haircut you used to get for five dollars when you had hair'. Using a less colourful definition, inflation is the rate of increase in prices over a given period of time.

With retirement lasting 20–30 years, even modest rates of inflation can significantly erode the value of retirement income. The charts below plot average inflation rates of 2%, 4% and 6% over a 35-year period, which would take a 65-year old to 100. The chart also shows the survival rate at different points using average mortality for a 65-year old followed by a range of probabilities.

The charts look at survival rates for men and women separately.

Chart 1: Value of £10,000 at 2%, 4% and 6% inflation rates at different survival points (males)



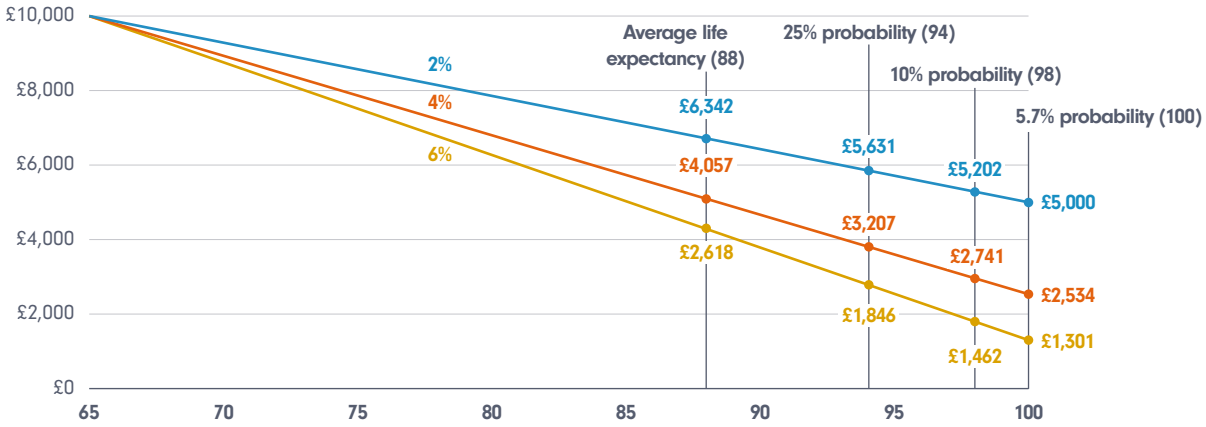
Source: Life expectancy calculator, ONS, March 2025.

Men who live to 85, the average life expectancy for a 65-year old man today, would see the value of their income more than half at this point if inflation averaged 4%. In contrast, at 2% average inflation over this period, income would reduce by nearly a third. If inflation averaged 6% pa, the value would reduce by around two thirds.

There is a 25% probability that a 65-year old man could live to 92. By this time, the income would reduce, in real terms, to around a third of its starting value if inflation averaged 4%. At 2% annual average inflation, the income is still worth more than 50% of its original value. If inflation averaged 6%, the value of £10,000 at age 92 would be a little over £2,000. This shows how devastating high inflation can be on the purchasing power of income in retirement.

A similar picture emerges for women, but the impact is greater because life expectancy is longer. Chart 2 shows that, for the one in ten women who live to 98, the value of their income would have fallen to just over a quarter of its original value at 4% pa inflation. Even at average life expectancy of 88, income would lose around 60% of its value. At 2% average annual inflation the impact is lessened, but income would still almost half in value for the one in ten women who live to 98. For the one in twenty women who live to 100, the original £10,000 would be worth less than 15% of its original value if inflation averaged 6%, while women who live to 94 would find that their original income of £10,000 would be worth less than 20%.

Chart 2: Value of £10,000 at 2%, 4% and 6% inflation rates at different survival points (females)



Source: Life expectancy calculator, ONS, October 2023.

Background

The UK inflation rate for January 2025 was 3% , up from 2.5% in December 2024, Between September 2022 and March 2023, the UK experienced seven months of double-digit inflation, which peaked at 11.1% in October 2022[1].

To put this in context, overall UK inflation averaged 2.82% from 1989 until 2023[2]. If we go back further and consider the period from 1950-1988 the average annual rate of inflation was 6.4%[3], but this included the great inflation of the 70s. During this period, CPI inflation in the UK averaged 12% on a calendar-year basis, peaking at almost 23% in 1975[4].

Prospects for the future

The expectation from the Bank of England is that inflation is likely to rise to 3.7% over the first half of 2025, then fall back to the 2% target.[5]. Of course, this is a forecast and extraneous circumstances could undermine this expectation.

1. Inflation rate in the UK 1989-2023, published by Dick Clark, February 2025, Statista.
2. Trading Economics, October 2023.
3. Consumer price inflation, historical estimates and recent trends, UK: 1950 to 2022, ONS, May 2022.
4. Forty-year high and rising, but this isn't 70s inflation, Oxford Economics, June 2022.
5. Monetary Policy Report, Bank of England, February 2025.

Pensioner inflation

The data exists to track pensioner inflation rates, but it needs to be used carefully. Retirees are increasingly leading disparate lifestyles. There may have been a degree of homogeneity in the past, but it's less relevant these days. Not only are there differences between retirees in terms of their interests and activities, but differences are likely to exist between young retirees and older retirees, single retirees and retired couples and wealthy retirees and those struggling financially during retirement. Consequently, it's interesting to note the differences in the rates of inflation shown below, but care is needed in applying this data.

Chart 3: Annual percentage growth by household retirement status

Year	Non-retired	Retired
2018	2	2.1
2019	1.4	1.5
2020	0.7	0.5
2021	5	4.9
2022	10	11.4

Source: Inflation and the cost of living for UK households, overview: June 2022, ONS (including owner occupiers housing costs).

The prospect of a return to average annual inflation of 2% in 2025 is welcome news for UK retirees. However, even at these levels there is a need to consider the long-term impact on income. There are different issues to consider for those who buy an annuity and those who choose drawdown. We'll explore these in the rest of this report.

Key points

- As life expectancy increases, even modest levels of inflation have a significant impact on retirement income over the course of an average retirement.
- At higher levels of inflation, the impact can be devastating. At 6% average annual inflation rate, £10,000 would be worth less than a third of its starting value (£3,118) after 20 years (average life expectancy for a 65-year old man).
- The Bank of England expects inflation to return to its 2% target rate in 2025. However, this isn't guaranteed and the economy remains in a perilous position.
- Comparing rates of inflation for retired households with non-retired households is interesting, but it's difficult to draw any firm conclusions from the data.
- Even at modest levels of inflation, there is a need to explore the implications of inflation on the choices people make at retirement.

Inflation and the implications for income drawdown

Inflation can affect drawdown clients in a number of ways:

- Inflation at the point someone starts to take benefits from their drawdown fund can influence the calculation of a safe withdrawal rate.
- The pattern of expenditure over the period of retirement can impact the need to fully inflation proof income.
- The relationship between bonds and equities, specifically the degree of correlation, can be affected by the rate of inflation.

Let's consider each of these in turn.

Inflation rates when withdrawals start

'The time line of inflation that a retiree experiences when they stop working is as important to their portfolio's endurance as the sequence of investment returns'. This quote is from the originator of the 4% rule, William P. Bengen. Bengen wrote a paper entitled 'Choosing The Highest Safe Withdrawal Rate At Retirement' in October 2020[6]. His analysis built on an earlier report by Michael Kitces, 'The Kitces Report', in May 2008. Kitces work focused on the relationship between the stockmarket, share prices and withdrawal rates.

The time line of inflation that a retiree experiences when they stop working is as important to their portfolio's endurance as the sequence of investment returns.

Kitces used the cyclically adjusted price-earnings ratio (CAPE). This is a variation of the price to earning ratio calculated by dividing the current price of a stock by its average inflation-adjusted earnings over the last 10 years. In this way, it smooths short-term fluctuations in earnings.

Kitces plotted the Shiller CAPE (the cyclically adjusted price-earnings ratio for the S&P 500) against the 'safe' historical maximum withdrawal rate for the first day of every quarter, from 1926 through 1990 (called the 'Safemax'). Rebalancing was annual, and the target portfolio consisted of 30% US large-cap stocks, 20% US small-cap stocks and 50% intermediate-term US government bonds.

The analysis showed that if markets are overvalued when income withdrawals start, safe withdrawal rates should be lower than 4%, but if markets are undervalued the safe withdrawal rate can increase. In some cases, significantly so. CAPE ratios for the UK and other stock markets can be found using Barclays Historic CAPE ratio by country.

Bengen was concerned that using the CAPE alone at the beginning of a 30-year time frame couldn't accurately define the safe withdrawal rate with a high degree of certainty. He concluded that other factors should be investigated to improve the reliability of this method. Specifically, Bengen identified inflation.

If returns are inflation linked, then a period of high inflation in the early years can have a significant impact on levels of safe withdrawal rates. This is because inflation proofed increases are effectively 'baked in' to the income withdrawals for the full term.

To demonstrate the importance of inflation at the start of retirement, chart 4 shows the safe withdrawal rate for five retirees who all retired at a point when the CAPE ratio was about the same. The difference in the safe withdrawal rate can't be explained by the CAPE ratio alone.

In some of the examples, even though the CAPE ended higher – which would suggest higher investment returns – the safe withdrawal rate is lower.

6. Choosing The Highest Safe Withdrawal Rate At Retirement, William P Bengen, Financial Advisor, October 2020.

Chart 4: Retirement Criteria for five retirees with similar beginning CAPE

Retirement date	CAPE (begin)	Safemax	30-year CAPE	Inflation trend
1 April 1927	14.5	**8.7%**	16.1	Deflationary
1 October 1954	14.6	**6.8%**	9.6	Moderate inflation
1 October 1940	14.3	**6.5%**	15.1	Moderate inflation
1 October 1937	14.4	**5.9%**	22.1	Moderate inflation
1 October 1945	14.4	**5.4%**	10.3	High inflation

Source: Choosing The Highest Safe Withdrawal Rate At Retirement, William P Bengen, Financial Advisor, October 2020.

Bengen's work suggested that the inflation trend lies behind these apparent anomalies. As inflation increases, the safe withdrawal rate declines. From this, Bengen developed a series of tables to suggest safe withdrawal rates based on a combination of the CAPE ratio and inflation rate in the 12-month period immediately before retirement (see chart 5).

Note that 'The Beginning Shiller CAPE' bands shown below are different in each section, making it difficult to directly compare the Safemax rates line by line.

Chart 5: The impact of the CAPE ratio and inflation on safe withdrawal rates

Low-inflation regime CPI 0% to 2.5%		**Moderate-inflation regime** CPI 2.5% to 5.0%		**High-inflation regime** CPI greater than 5.0%	
Beginning Shiller CAPE	**30-year historical Safemax**	**Beginning Shiller CAPE**	**30-year historical Safemax**	**Beginning Shiller CAPE**	**30-year historical Safemax**
9-11	**7.50%**	8-10	**9.00%**	6-8	**10.00%**
11-13	**7.00%**	10-12	**7.50%**	8-10	**8.50%**
13-15	**6.50%**	12-14	**6.75%**	10-12	**7.25%**
15-17	**6.00%**	14-16	**6.50%**	12-14	**6.50%**
17-19	**6.00%**	16-18	**6.00%**	14-16	**6.00%**
19-21	**5.50%**	18-20	**5.50%**	16-18	**5.50%**
21-23	**5.00%**	20-22	**5.00%**	18-20	**4.75%**
23 or more	**5.00%**	22 or more	**4.50%**	20 or more	**4.50%**

Source: Choosing The Highest Safe Withdrawal Rate At Retirement, William P Bengen, Financial Advisor, October 2020.

It seems sensible to assume that if markets are undervalued and inflation is low at the start of retirement, there may be scope for higher withdrawal rates and the converse should also be true. However, while these factors are indicative of a favourable environment, it's what really happens over the 30 year period that will determine whether higher withdrawal rates are justified. Concerns have been expressed about Bengen's analysis. For example, though Bengen observed several hundred cases, some of the cohorts contained only small numbers of observable cases[7].

There may be a case for higher withdrawal rates in the right circumstances, but careful monitoring is required throughout retirement and adjustments should be made whenever necessary.

Patterns of expenditure and inflation

Safe rates of withdrawal in retirement are usually predicated on an income increased by inflation each year. This assumes that, in real terms, expenditure is constant throughout retirement. How realistic is this? If expenditure decreases during retirement, how might this impact on the calculation of safe withdrawal rates?

The pattern of expenditure in retirement is often presented in the shape of a smile. The logic is that income needs fall gradually throughout the course of retirement, then rise when long-term care is required towards the end of life. This will be a legitimate pattern for some people, but it isn't universal. Let's consider the evidence: Firstly, how likely is the uptick in expenditure for care costs towards the end of life?

- Only 1 in 4 men and 1 in 3 women over 65 will have 'substantial care needs during retirement'[8].
- UK census data from 2021 shows that around eight in ten people aged over 90 years were not living in care homes and less than 4% of those aged 80 to 84 were in care homes[9].
- Others will receive care in the home, but much home care is provided by family and friends. It has been estimated there are nearly 5m unpaid carers in the UK[10]. In contrast, there are less than 1m paid carers providing care services[11].

If most people won't require expensive residential care costs, or can rely on family and friends to take care of their needs in the home, what is the likelihood that their income will fall during retirement? A common view is that expenditure is highest in the early years of retirement. New retirees are usually in good health and keen to make the most of their retirement. This may include travel at home or abroad and socialising with friends; maybe a more intense focus on hobbies and interests; perhaps regular visits to the theatre, sports events or cinema trips with grandchildren. The early years are an opportunity to really make the most of retirement.

The pattern of expenditure in retirement is often presented in the shape of a smile. The logic is that income needs fall gradually throughout the course of retirement, then rise when long-term care is required towards the end of life.

7. Can we raise our Safe Withdrawal Rate when inflation is low? – SWR Series Part 41, Early Retirement Now, October 2020.
8. Pensions and the funding of long-term care, Institute and Faculty of Actuaries, 2015.
9. Chief Medical Officer's Report 2023, Health in an Ageing Society, 2023.
10. House of Commons, Informal carers, June 2023.
11. Home care facts and stats: number of providers, service users and workforce, Homecare.co.uk, April 2021.

At some point, health issues can emerge which make it more difficult for people to enjoy the active lifestyle that might have characterised their early retirement years. At this point, expenditure could decline. Holidays may have to be scheduled around hospital appointments. Opportunities to socialise may be less frequent as friends die or suffer poor health. Hobbies and interests that require mobility, may have to take a back seat.

Before we accept that a gradual decline in expenditure is inevitable there are a number of points to consider:

- **Retirement is not a homogeneous journey.** We are increasingly leading disparate lives during retirement, so it's difficult to generalise about expenditure.
- **Health is a key driver.** Average healthy life expectancy for a 65-year old is around 10 years for men and 11 years for women[12]. However, this masks some significant differences geographically. On average, a 65 year old man living in Wokingham can expect to enjoy more than 13 years healthy life expectancy, while a 65 year old Wokingham woman can look forward almost 15 years of healthy living. In contrast, a 65 year old man in Rochdale may only experience a little over 8 years in good health and a 65 year old Rochdale woman less than 9 years[13].
- **Expenditure may change, but not necessarily fall.** A 2022 Institute of Fiscal Studies report suggests that it is not conclusively proven that expenditure falls during retirement. The nature of retirement expenditure may change with a fall in money spent on holidays and socialising offset by increases in household bills and help around the home (gardening and cleaning, for example)[14].

While we cannot say with certainty that expenditure will fall during retirement, it's reasonable to assume that it could fall in many instances. It may also be the case that some people might intentionally chose to spend more earlier in retirement in the expectation that expenditure will fall later, but resigned to the fact that they may have to curtail their expenditure if it doesn't.

Impact of inflation

A 1998 US study[15] looked at the impact of a level, fixed income compared with a fully inflation adjusted income. The analysis covered two periods. The first period covered 1926-1997 and the second period covered from 1946-1997. The earlier period included the Great Depression and World War 2. These catastrophic events have a significant impact on withdrawal rates. Excluding these events, and focusing on the post war period, may give a better sense of what is likely to happen in the future.

If inflation is ignored, a 7% withdrawal rate would be sustainable over 30 years assuming a 75/25 equity/bond split (see chart 6). This compares with 4% if payments are inflation adjusted (see chart 7).

12. Centre for Ageing Better, Health and life expectancies, ONS (England, 2018/20).
13. Healthy life expectancy in England and Wales by age and sex: between 2011 to 2013 and 2021 to 2023, ONS.
14. How does spending change through retirement?, Institute for Fiscal Studies, May 2022.
15. Sustainable withdrawal Rates From Your Retirement Portfolio, P.L. Cooley, C. M. Hubbard, D.T. Waltz, 1998.

Of course, not uprating income throughout retirement would have a significant impact of the spending power of retirement income. As shown earlier, even at 2% inflation, the value of money halves over 35 years.

Chart 6: Portfolio success rate, level income, 1946–1997

	Annual withdrawal rates as a percentage of initial fund									
	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
75% stocks and 25% bonds										
20 years	100	100	100	100	100	94	73	48	39	33
25 years	100	100	100	100	100	79	46	36	29	18
30 years	100	100	100	100	100	65	48	35	26	13
50% stocks and 50% bonds										
20 years	100	100	100	100	100	88	55	36	15	6
25 years	100	100	100	100	100	54	32	7	0	0
30 years	100	100	100	100	100	35	13	0	0	0

Source: Extracted from Sustainable withdrawal Rates From Your Retirement Portfolio, P.L. Cooley, C. M. Hubbard, D.T. Waltz, 1998.

Chart 7: Portfolio success rate, inflation adjusted income, 1946–1997

	Annual withdrawal rates as a percentage of initial fund									
	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
75% stocks and 25% bonds										
20 years	100	100	91	70	61	45	36	21	21	0
25 years	100	100	75	50	39	29	25	14	7	0
30 years	100	100	74	48	35	35	13	9	0	0
50% stocks and 50% bonds										
20 years	100	100	88	64	27	27	15	3	0	0
25 years	100	100	64	36	11	11	0	0	0	0
30 years	100	91	48	35	0	0	0	0	0	0

Source: Extracted from Sustainable withdrawal Rates From Your Retirement Portfolio, P.L. Cooley, C. M. Hubbard, D.T. Waltz, 1998.

Partial inflation linking

What is the impact on withdrawal rates if income is not increased fully in line with inflation each year, but partially increased? Bengen explored this idea, based on the premise that there are three key stages during retirement[16]:

- **The active period.** This is the period immediately after retirement, when many people are in good health and keen to make the most of their retirement.
- **The transitional phase.** At some point, people begin to slow down. They're not quite as fit and able as they used to be. This can lead to reduction in expenditure.
- **The passive stage.** Eventually health deteriorates. For many, this will lead to further reductions in expenditure, though this may not be the case if care is required.

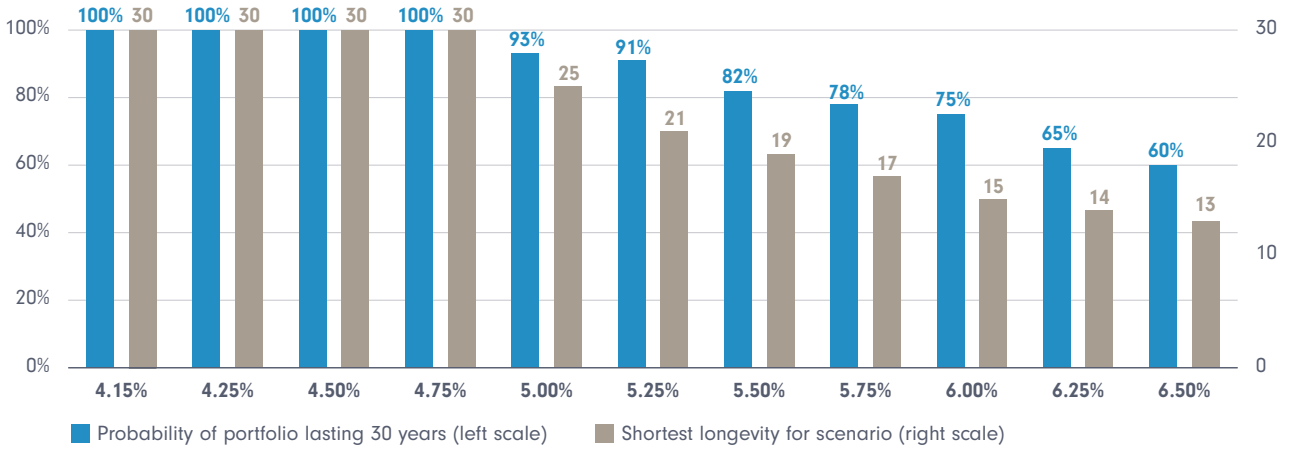
With these three stages in mind, Bengen modelled the following:

- **Active period.** During this phase, withdrawals increase annually by the actual inflation rate (10 years).
- **Transitional phase.** Withdrawals increase or decline annually by the inflation rate less four percent each year (10 years).
- **Passive stage.** Withdrawals increase annually by the rate of inflation less two percent each year.

Based on a portfolio of 63% equities and the remainder in government bonds, Chart 8, shows the withdrawal rates at different probabilities of success over a 30-year period. Assuming a 90% probability of success, an initial withdrawal rate of 5.25% is possible. The chart also shows how long money will last in the worst circumstances (in this case 21 years).

Even a 6% withdrawal rate has a 75% probability of successfully lasting 30 years (though funds could run out in 15 years in the worst case).

Chart 8: Probability of portfolio lasting 30 years v withdrawal rate (partial inflation proofing)

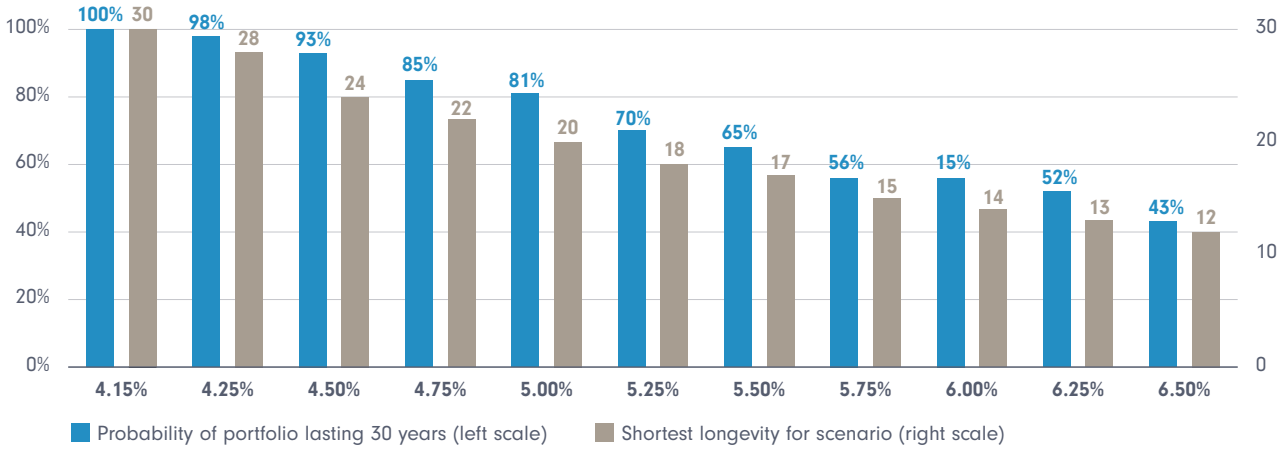


Source: Conserving Client Portfolios During Retirement, Part IV, William P Bengen, FPA journal, 2001.

16. Conserving Client Portfolios During Retirement, Part IV, William P Bengen, FPA journal, 2001.

In contrast, chart 9 shows the corresponding data if income rises each year by the full rate of inflation. In this case, the maximum income that could be taken to provide a 90% probability of success would be 4.5%. A 6% withdrawal rate would have only a 56% probability of success if income is fully inflation linked.

Chart 9: Probability of portfolio lasting 30 years v withdrawal rate (full inflation throughout)



Source: Conserving Client Portfolios During Retirement, Part IV, William P Bengen, FPA journal, 2001.

Inflation and a low interest rate environment

A separate 2020 study 'When QE broke the 4% rule' assessed sustainability of income during a low interest rate environment. This puts downward pressure on withdrawal rates (particularly given charges were assumed to be 2% pa in the study). Perhaps unsurprisingly, using 2020 bond yields produced lower withdrawal rates than those above. The study calculates that 3% should be a sustainable withdrawal rate if the payments are inflation adjusted compared with 4% if income isn't adjusted each year from inflation[17].

The 3% inflation adjusted income is broadly in line with the Morningstar analysis during this period. The latest Morningstar report modifies its assumptions, given the current economic and investment environment, and suggests that an inflation adjusted income of 3.7% is now sustainable over a 30 year period based on a 90% probability of success and a balanced portfolio[18].

In its 2024 report, Morningstar tested a strategy where Income isn't adjusted for inflation if the portfolio declined in value over the previous year. This increases the maximum safe withdrawal rate over a 30 year period from 3.7% to 4.2%[19].

> **The latest Morningstar report suggests that an inflation adjusted income of 3.8% is now sustainable based on a 90% probability of success and a balanced portfolio.**

17. When QE broke the 4% rule, LCP on point, September 2020.
18. The State of Retirement Income: 2024, Morningstar, December 2024.
19. The State of Retirement Income: 2024 Morningstar, December 2024.

Is there a silver bullet if inflation is rampant?

The key take-out from this section is that if income isn't fully inflation protected, there is scope to take a higher withdrawal rate, though the purchasing power of the higher income will erode over time. At low rates of inflation, this may not be a major concern, but at high rates of inflation this could have a significant impact.

There may be a silver bullet insofar as higher rates of inflation will usually lead to increases in interest rates. All things being equal, this should lead to higher annuity rates. If the purchasing power of income is reduced significantly as a result of high inflation, a strategic response could be to leverage higher annuity rates to mitigate the impact on the fund. Perhaps introducing a programme of partial annuitisation?

This issue is likely to arise some years into retirement, which means the benefits of higher annuity rates, driven by increased interest rates, should be supplemented by the mortality cross subsidy which increases with age. At 75 a single life, level annuity would provide over £9,400 income each year per £100,000[20] and over £14,000 income each year at age 85[21].

These rates are for a level annuity, so they won't directly address the issue of rampant inflation, but they can mitigate the impact of inflation on drawdown funds which have been depleted as a result of high withdrawal rates.

If income isn't fully inflation protected, there is scope to take a higher withdrawal rate, though the purchasing power of the higher income will erode over time.

20. Hargreaves Lansdown, March 2025 (based on single life, level guaranteed 5).
21. MoneyHelper, March 2025 (based on single life, level, guaranteed 5).

Inflation and asset allocation

There is one further issue drawdown clients should be aware of that's linked to inflation: The correlation between bonds and equities. The conventional wisdom is that these asset classes are negatively correlated. When equities rise bonds fall and vice versa. The first point to make is that this is a relatively recent phenomenon.

The Bloomberg US Aggregate Bond Index provides 46 years (1976–2022) of data to explore. Comparing this with corresponding data from the S&P 500 reveals that equities and bonds often moved in different directions about one third of the time. However, in nearly one quarter out of every 10, both equities and bonds were down. Adjusting for inflation, bonds and stocks were both down approximately one quarter out of six. About once every year and a half (see chart 10).

Chart 10: Equities and bonds aren't always negatively correlated

	Nominal returns	Real returns
Both down	9%	16%
Bonds down, stocks up	14%	21%
Bonds up, stocks down	19%	17%
Both up	58%	45%
Approximate frequency both down	1 quarter per 2.5 years	1 quarter per 1.5 years

Source: Bloomberg US Aggregate Bond Index returns 1946-2022, (Rick Miller, Sensible Financial Planning).

The relationship between equities and bonds is, in part, a function of inflation. The nominal interest rates that define bond prices reflect inflationary forecasts and real interest rates. When these are both high, bond prices tend to fall. In contrast, equity prices are a function of the strength of the economy. When weaker market growth signals decreasing company profits in the future, the price of equities will usually fall. That means when a combination of high inflation, and high real interest rates, occur simultaneously with a weak economy, both equities and bonds are likely to fall.

This doesn't mean investors should abandon bonds. As well as being negatively correlated much of the time, bonds are characteristically different from equities. They are often less volatile than equities. They can be used within a drawdown fund for income generation or to preserve capital. They may also be used for capital appreciation. It's useful to understand how inflation can affect the relationship between the movement of equities and bonds, but bonds will continue to be a key asset in a drawdown portfolio independent of their potential to act as a counter to falls in equities.

The positive bond-equity correlation experienced during 2022 suggests markets are concerned that inflation will continue to impact both bond yields and equities at the same time.

Key points

- In conjunction with share prices, using the cyclically adjusted price earnings ratio (CAPE), inflation at the start of retirement can impact safe rates of withdrawal.
- Spending patterns in retirement suggest that there may be a reduction in expenditure during retirement, unless significant care costs are incurred.
- Ignoring inflation can significantly improve withdrawal rates, but the real value of income could fall significantly over time, even at modest rates of inflation.
- Partially allowing for inflation throughout retirement still has a positive impact on sustainable withdrawal rates.
- While bonds and equities are negatively correlated much of the time, this relationship does come under pressure when inflation and interest rates are high and the economy is weak.
- Nevertheless, bonds are still a valuable asset class for drawdown clients.

Inflation and annuities

Most people buy a level annuity rather than an increasing annuity that could protect against inflation. While annuity sales are on the rise, as rates have improved, data from the ABI suggests that 82% of annuities are still sold as level annuities[22]. With life expectancy increasing over the years is this odd? Could it be that people have reasoned that a level annuity may be better value? If so, are they correct? If not, is something else going on?

Let's compare an annuity escalating at 3% for a single life at age 65 with a level annuity on the same basis. The purchase price is £100,000. The starting income from the level annuity is £7,585 pa. In contrast, the escalating annuity starts at £5,461 pa[23]. Charts 11 and 12 (page 20) show the crossover point when the cumulative income from the escalating annuity exceeds the income from the level annuity at different survival points for males and females[24].

22. 2023 sets new post-pension freedoms record for annuity sales, The ABI, February 2025.
23. Hargreaves Lansdown, March 2025.
24. Life expectancy calculator, ONS, March 2025.

Broadly speaking, the point at which the total income from the escalating annuity exceeds the level annuity is a little longer than average life expectancy for men and below average life expectancy for women. The 50% of retires who live longer than average will receive more income from the escalating annuity. For the one in four men who live to age 92, they would receive £212,292 under the level annuity compared with £234,445 from the escalating annuity. For women, the difference is even more pronounced. Women have a one in four probability of living to age 94, at which point they would have received £227,462 from the level annuity compared with £259,809 from the escalating annuity.

Of course, this analysis doesn't recognise the timing of the annuity payments. It takes several years before payments from the escalating annuity match the payments from the level annuity.

So why don't more people, particularly healthy 65-year olds and those whose parents lived to a ripe old age, consider an escalating annuity? Why is it still being rejected by the majority of people buying an annuity? There may be a number of reasons:

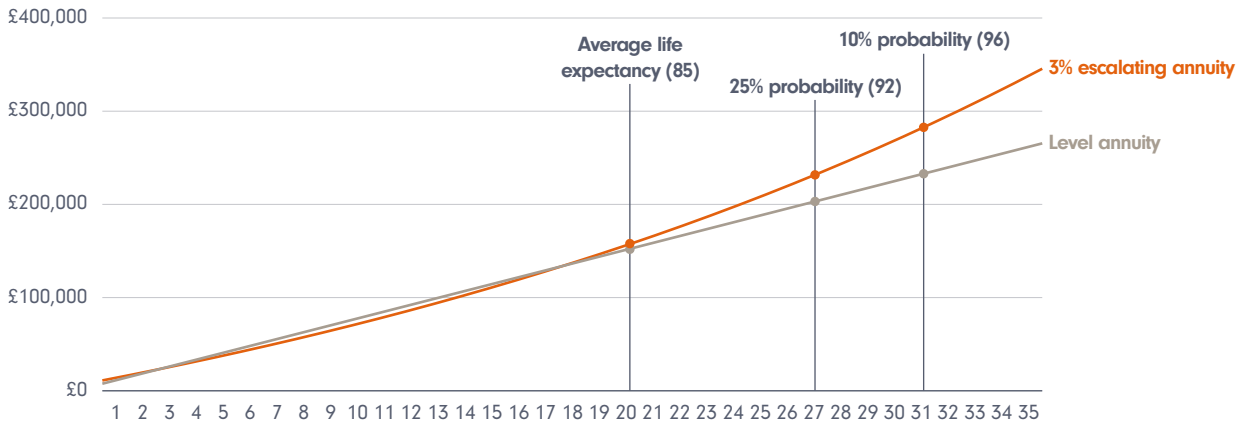
- **Hyperbolic discounting.** It could be a function of what the behavioural economists call 'hyperbolic discounting'. Broadly, we value a pound today more than a pound in the future.
- **Patterns of expenditure.** Some people may need as much income as they can get early in their retirement and might assume they'll need less income later in retirement. This is consistent with the concept of a gradual decline in income. A level annuity may, in real terms, provide this.
- **Underestimating life expectancy.** People consistently underestimate their how long they will live when asked about their life expectancy. Research from Canada Life among people aged 50 and over reveals that both sexes believe they will live to around 80[25]. On this basis, they may assume that the level annuity offers better value.

It should also be borne in mind that when inflation is low, the triple lock might increase at a faster rate than inflation, given the 2.5% minimum. This could cross subsidise the absence of any increase in a level annuity. Of course, the ongoing commitment to the triple lock by governments of whatever colour is not guaranteed.

Broadly speaking, the point at which the total income from the escalating annuity exceeds the level annuity converges around the point of average life expectancy.

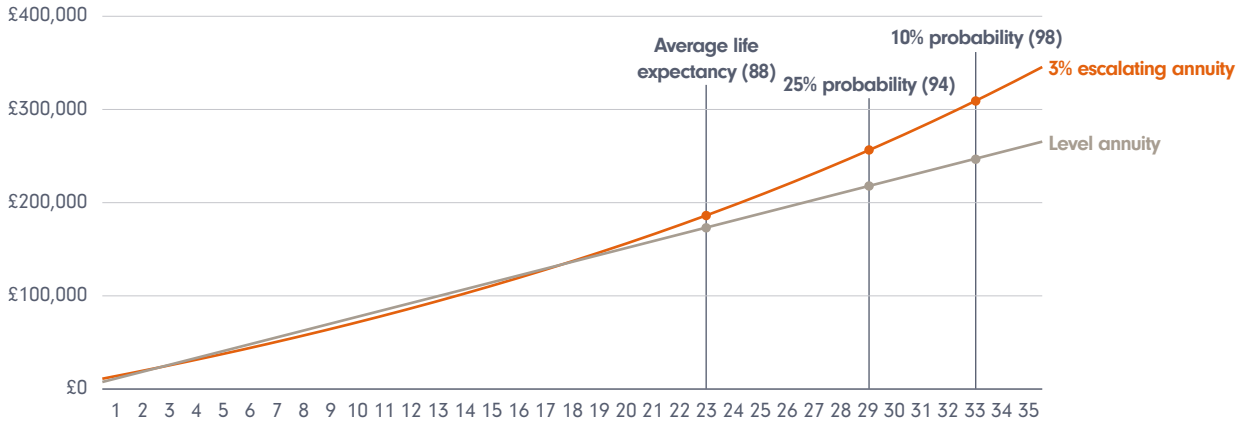
25. New retirement gap looms as people underestimate life expectancy, Canada Life, June 2023.

Chart 11: Cumulative income level v escalating annuity at survival points (males)



Source: Life expectancy calculator, ONS, March 2025.

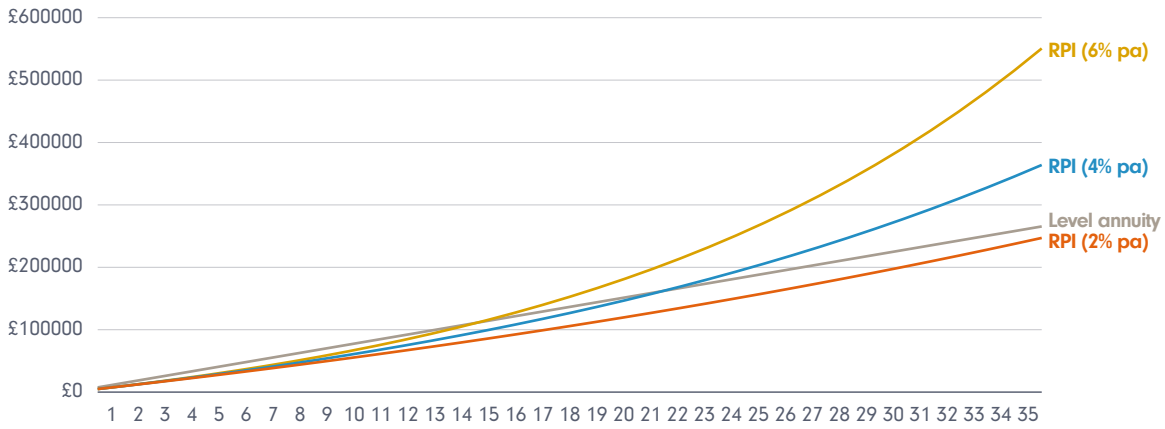
Chart 12: Cumulative income level v escalating annuity at survival points (females)



Source: Life expectancy calculator, ONS, March 2025.

So much for an escalating annuity, but what about an RPI linked annuity? It's impossible to predict what future inflation will be, but we can model alternatives. Chart 13 shows how an RPI linked annuity would compare with a level annuity measuring the cumulative total payments at 2%, 4% and 6% rates of inflation at different survival points for women.

Chart 13: Cumulative totals from a level annuity v RPI linked annuity



Source: Life expectancy calculator, ONS, March 2025.

The first point to note is that the starting income from the RPI linked annuity of £4,942 is significantly lower than the starting income from the level annuity of £7,585. That means at a low level of inflation, 2% for example, the cumulative income from the RPI linked annuity never exceeds the cumulative income from the level annuity over the 35-year period. At 4% pa average inflation rate, the RPI linked annuity starts to pay more, cumulatively, after around 20 years. In contrast, if inflation averaged 6% pa, the cumulative income from the RPI linked annuity would be greater after just 14 years.

RPI linked annuities are a classic example of an insurance product. They provide protection against an uncertain future, mitigating the risk of high inflation eroding income, but the quid quo pro is significantly less income, compared with a level annuity, if inflation is low.

Key points

- The data suggests that level annuities are much more popular than annuities that increase each year.
- The analysis suggests that the pricing is fair between level and an escalating annuity, so retirees who live longer should benefit from an increasing annuity.
- Hyperbolic discounting, the tendency to underestimate life expectancy and the belief that income needs will decline during retirement may lie behind the popularity of level annuities.
- The starting income from an RPI linked annuity is significantly less than a level annuity, which means at low levels of inflation the RPI linked annuity will not deliver more income cumulatively for over 40 years.
- In contrast, high levels of inflation mean that the RPI linked annuity provides better value at a much earlier point.

Summary

- As life expectancy increases, even modest levels of inflation can have a significant impact on income in retirement. At 65, average life expectancy is 20 years for men and 23 years for women. If inflation averaged 2% over this period, the value of income would reduce by around a third. At 4%, the value would more than halve. This is at a point when 50% of retirees would still be alive.
- The expectation is that inflation will return to the BOE target rate of 2% during the second half of 2025. Inflation is currently 3% (January 2025). Between September 2022 and March 2023, the UK experienced several months of double-digit inflation peaking at 11.1% in October 2022.
- Comparisons of inflation between retired and non-retired households suggests there aren't marked differences. It's also important to note that there is less homogeneity between retirees today, which makes it difficult to draw meaningful conclusions.
- Inflation can impact drawdown clients significantly. The rate of inflation, in conjunction with the cyclically adjusted price earnings ratio (CAPE), at the point income is first taken can determine the safe withdrawal rate. If inflation is low and markets appear undervalued this can lead to higher withdrawal rates.
- During retirement, partial inflation linking can also boost safe withdrawal rates. This is consistent with the view that a gradual decline in income is likely, notwithstanding the possibility of expensive care later in life.
- Asset allocation can also be influenced by inflation. While bonds and equities are negatively correlated much of the time, this relationship does come under pressure when inflation and interest rates are both high and the economy is weak. Nevertheless, bonds still represent a valuable asset class with different characteristics to equities.
- People who buy annuities are more likely to buy a level annuity, despite a recent rise in sales of increasing annuities commensurate with the increase in inflation. The analysis suggests that increasing annuities are fairly priced and will benefit people who enjoy a longer than average retirement.

- There are several reasons why level annuities may remain more popular. Hyperbolic discounting suggests people put a higher value on a pound today compared with a pound in the future. Patterns of expenditure may lead people to maximise their income in the early years of retirement while they are active. And people consistently underestimate their life expectancy which may mean they discount the value of an increasing annuity.
- Initial income from an RPI linked annuity is much less than a level annuity. At low levels of inflation, the cumulative income may never exceed the total income from a level annuity over the course of 35 years. However, an RPI linked annuity provides valuable protection against high rates of inflation.
- Inflation is a significant issue for retirees, but careful assessment of the economic environment at the point of retirement, and constant monitoring of inflation and patterns of expenditure during retirement, can provide retires who choose drawdown with a dynamic withdrawal rate.
- For annuity clients, a closer inspection of the value of an increasing annuity could make sense where the client's health and their genetic disposition – how long did their parents live and what did they die from – suggests a high chance of living beyond average survival rates.

Important information

This document provides information and is only intended to provide an overview of the current law in this area and does not constitute financial advice, tax advice or legal advice, or provide any recommendations. The value of benefits depends on individual circumstances. The minimum age clients can normally access their pension savings is currently 55, and is due to rise to 57 on 6 April 2028, unless they have a lower protected pension age. Different options may have different effects for tax purposes, different implications for pension provision and different impacts on other assets and financial planning

The value of investments and the income from them, can go down as well as up, so clients may get back less than they invest.

More insights on tax and pensions

We're committed to providing you with technical support to help you keep pace with the latest rules and legislation. Our range of practitioner material is designed to help you keep on top of all aspects of retirement planning. Themes covered include death benefits, pensions and divorce, the State Pension, pension withdrawals taxation and much more.

Visit the Technical matters hub on our website
fidelityadvisersolutions.co.uk/technicalmatters

For further information on our pension and investment options including Guaranteed Lifetime Income plan and Smoothed Fund please visit:
fidelityadvisersolutions.co.uk/guaranteed-lifetime-income
fidelityadvisersolutions.co.uk/smoothed

Adviser Solutions

Fidelity INTERNATIONAL

UKM0425/400293/SSO/0426