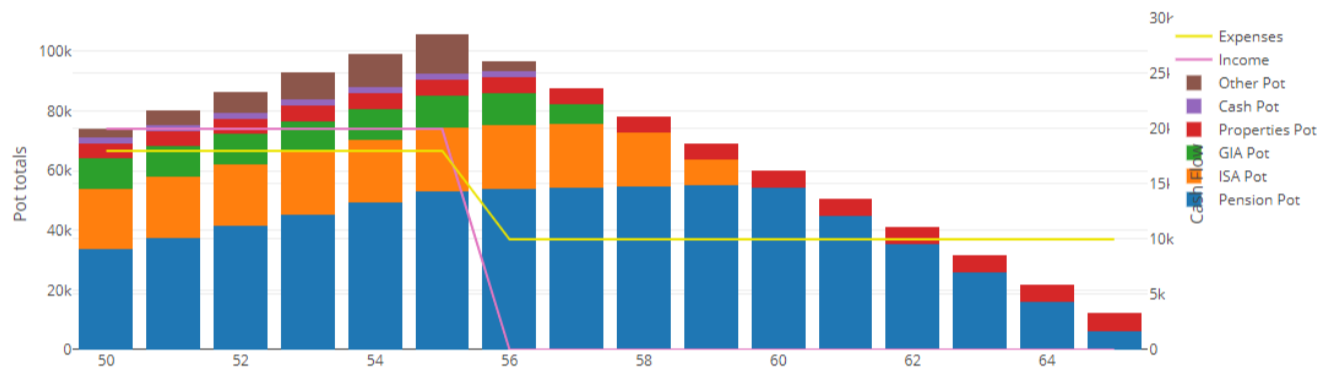




EP Calculate Cashflow Report



Personal Details

	You	Partner
Name	Ben	N/A
Age	57	N/A
Life Expextancy	85	N/A

Savings

Savings Start Year	2020
Inflation	2.5

Starting Pots

	Pension	ISA	GIA	Property	Cash	Other
Starting Value	190000	16000	30000	160000	25000	2000
Portfolio Type	balance	balance	balance	modcautious	modadventurous	modadventurous
Rate of Return	0	0	0	0	0	0
Total Charges	1.2	1.2	1.2	1.1	1.6	1.8

Income

	Your state pension	Your other guaranteed income	Partner state pension	Partner other guaranteed income
Amount	8000	45000	0	0
Start Year	65	57	0	0
End Year	85	65	0	0

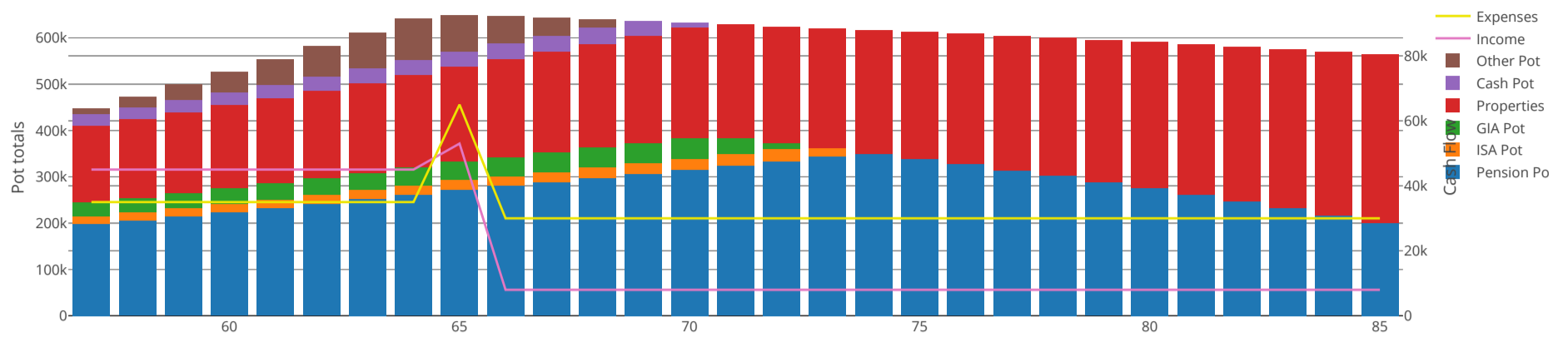
Contributions to Savings

	Personal Contribution to Pension	Company Contribution to Pension	Personal Contribution to ISA
Annual Amount	2500	0	0
Start Year	57	0	0
End Year	65	0	0

Expenses

	Essential	Discretionary	Capital	Other
Amount	35000	30000	0	0
Start Year	57	65	0	0
End Year	65	85	0	0

Ben's Cash Flow Calculation



This graph is showing you the total real net value of all your potential wealth accumulated, growing net of total charges and your inflation assumption, which are being used for your retirement income purposes. Your pension income and retirement expenditure is shown as adjusted with inflation, which is always a straight line showing that it retains purchasing value throughout.

When your pension income is in excess of your expenditure, which is a positive cashflow, this is invested into the other pot. When your retirement expenditure is in excess of your pension income, the negative cashflow balance is taken from the other pot first, then your ISA pot and once these are depleted, it is taken from your pension pot.

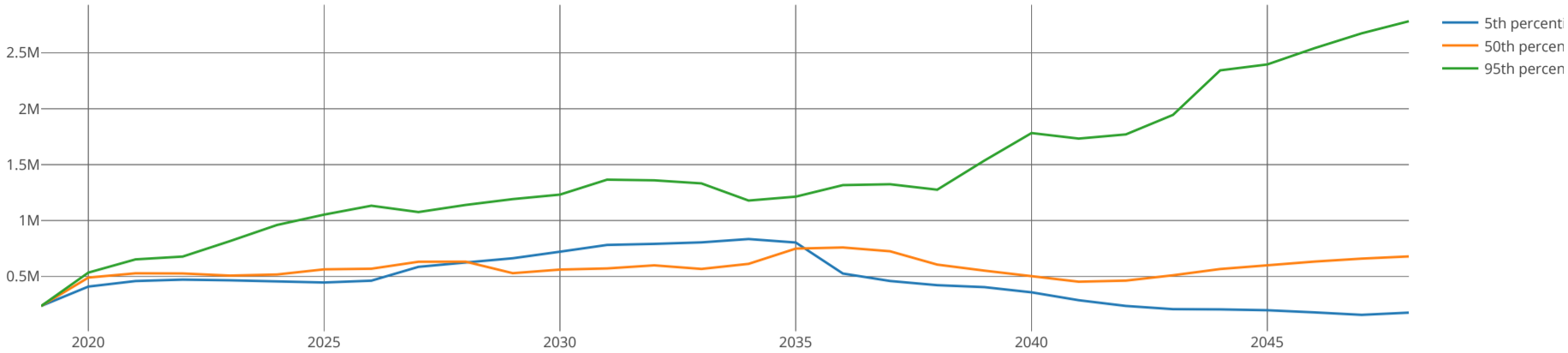
The net results of your income and capital requirements are shown with all figures net of total charges and inflation - showing 'real' value at all times in the future. The calculation is a deterministic, compounded calculation and recognised as an acceptable method for making reasonable assessments of longterm success.

Of course, these figures are only as accurate as the data input and will be out of date the day after they are done, which is a key reason why you should re-visit your calculations with your Financial Adviser regularly. However, they are a key part of your planning for your future financial success.

Year	Your age	Partner age	Income	Personal Contribution to Pension	Company Contribution to Pension	Personal Contribution to ISA	Expenses	Cash Flow	Full Total
Input	-	-	0	0	0	0	0	0	423,000
2020	57	-	45,000	2,500	0	0	35,000	10,000	447,843
2021	58	-	45,000	2,500	0	0	35,000	10,000	473,343
2022	59	-	45,000	2,500	0	0	35,000	10,000	499,516
2023	60	-	45,000	2,500	0	0	35,000	10,000	526,380
2024	61	-	45,000	2,500	0	0	35,000	10,000	553,955
2025	62	-	45,000	2,500	0	0	35,000	10,000	582,259
2026	63	-	45,000	2,500	0	0	35,000	10,000	611,313
2027	64	-	45,000	2,500	0	0	35,000	10,000	641,135
2028	65	-	53,000	2,500	0	0	65,000	-12,000	649,772
2029	66	-	8,000	0	0	0	30,000	-22,000	646,239
2030	67	-	8,000	0	0	0	30,000	-22,000	642,747
2031	68	-	8,000	0	0	0	30,000	-22,000	639,301
2032	69	-	8,000	0	0	0	30,000	-22,000	635,769
2033	70	-	8,000	0	0	0	30,000	-22,000	632,315
2034	71	-	8,000	0	0	0	30,000	-22,000	628,494
2035	72	-	8,000	0	0	0	30,000	-22,000	624,825
2036	73	-	8,000	0	0	0	30,000	-22,000	620,813
2037	74	-	8,000	0	0	0	30,000	-22,000	616,800
2038	75	-	8,000	0	0	0	30,000	-22,000	612,763
2039	76	-	8,000	0	0	0	30,000	-22,000	608,599
2040	77	-	8,000	0	0	0	30,000	-22,000	604,304
2041	78	-	8,000	0	0	0	30,000	-22,000	599,874

Year	Your age	Partner age	Income	Personal Contribution to Pension	Company Contribution to Pension	Personal Contribution to ISA	Expenses	Cash Flow	Full Total
2042	79	-	8,000	0	0	0	30,000	-22,000	595,305
2043	80	-	8,000	0	0	0	30,000	-22,000	590,592
2044	81	-	8,000	0	0	0	30,000	-22,000	585,731
2045	82	-	8,000	0	0	0	30,000	-22,000	580,717
2046	83	-	8,000	0	0	0	30,000	-22,000	575,546
2047	84	-	8,000	0	0	0	30,000	-22,000	570,212
2048	85	-	8,000	0	0	0	30,000	-22,000	564,711

Monte Carlo



Success rate and the 50th Percentile (last 10 years)

Year	Your age	Partner age	Savings	Sucess rate
2039	76	0	552,133	99
2040	77	0	501,973	99
2041	78	0	453,050	97
2042	79	0	462,755	95
2043	80	0	510,539	93
2044	81	0	566,528	91
2045	82	0	602,917	88
2046	83	0	633,072	84
2047	84	0	659,511	81
2048	85	0	679,172	78

Rate of return	Standard deviation
4%	0.03
5%	0.06
6%	0.08

Appropriate Pension Transfer Analysis (APTA) Cashflow Projections

This is a very complex area, so we recommend that you speak to your financial adviser for further help and guidance on this.

New rules from the FCA, which applied from 1 October 2018, provided guidance on how cash flow projections should be compiled and used in reports which are part of a regulated advice process. These will be updated again in 2020.

The process and regulatory requirements necessary when using cash flow modelling is set out in COBS 19.1 annex 4A, B and C. This sets out a process and framework for an appropriate pension transfer analysis using cash flow modelling calculators, when being advised by an financial adviser on cash flow analysis.

APTA Cash flow guidance using deterministic (fixed rate) calculation. The method outlined in COBS 19.1 is:

- 1 - Take nominal return. The guidance on the most appropriate is the FCA mid-rate return(5%).
- 2 - Consider using a 'real' rate of return in your projections, which in our case is the nominal FCA mid-rate return (5%), net of inflation, which in illustrations/quotes for projections uses 2.5% for inflation and we default that as a minimum.
- 3 - Consider all or TOTAL charges (annex 4a of COBS 19.1) and obtain a real, net of charges rate of return for the compounded growth rate used in the deterministic fixed rate return.
- 4 - When using a stochastic modelling methodology (within this calculator is known as Monte Carlo), use the same inputs described above and perform the calculations. The output used cannot be any less cautious than the 50th% envelope as the limit of sustainability testing (as shown by our 50th% line on MC projections) for it to be compliant when used with adviser suitability reports.

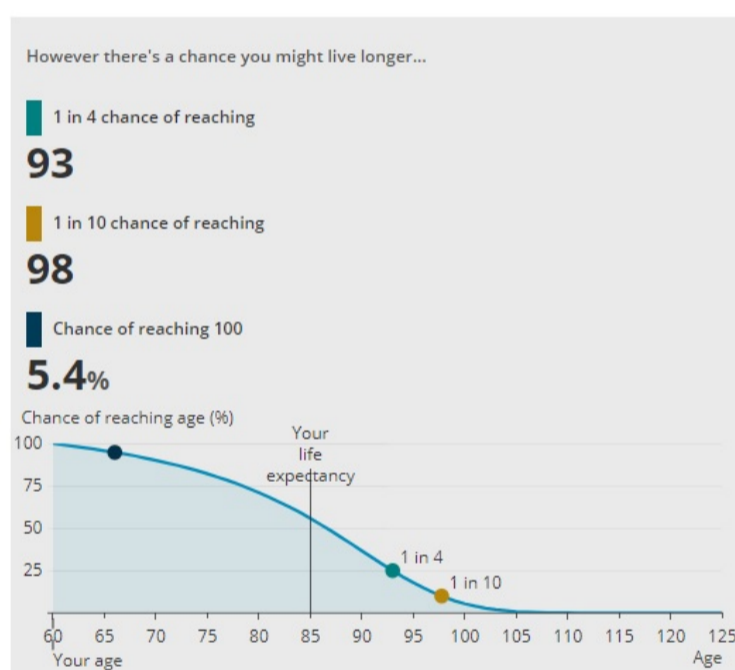
Modeling a sustainable future income

Life expectancy is calculated using the 2014-based principal projection for 2016 in the UK produced by the ONS.

According to the office for National Statistics (ONS) one in three of today's babies will live to see their 100th birthday, according to latest estimates. Your age and sex are two major factors that determine your chances. Under normal circumstances, based on these factors the average life expectancy for a 60- year old male is 85 years.

Your average life expectancy is...

85 years
(that's 25 years from now)



You can test your ONS life expectancy by [visiting this link](#).

Taxation

This calculator does not make any assumptions about your tax position in retirement. It does not perform any tax calculations. It does assume that any contributions into your pension savings, ISA and other savings are shown on a gross basis (inclusive of an tax relief which might be applicable).

Methodology

Due to the fact that some variables are unknowable, no calculator can produce a single 'right answer' regardless of the amount of detail you put into it. Most notably, this includes life expectancy, inflation, and rates of return (ROR) on investments. Further, the long term growth of investments is a function of market volatility and the sequence of returns. Consequently, EPC models three savings pots using both fixed rate and Monte Carlo analysis methods, each having separate and distinct advantages and disadvantages relative to these uncertainties in attempting to predict the future.

Fixed-rate analysis generates a single projection using an average inflation rate and average rates of return each year. It is particularly useful for getting a general understanding of where you stand relative to long term objectives, for making trade-offs between major choices and for exploring the sensitivity of your plan to certain parameters, such as inflation, rates of return, life expectancy, and so on. Its primary weakness is that it does not model year-to-year fluctuations in rates of return and inflation, which are facts of life in the real world. Consequently, the probability that your actual long term results will be better than those predicted by fixed rate projections are (very roughly) 50%, but the probability that you'll do worse are also (very roughly) 50%.

Monte Carlo analysis generates 500 projections using an average inflation rate and randomly varying ROR to simulate market volatility. The random RORs are based on a mean ROR and standard deviation that are derived from the portfolio selected for each savings pot as specified above, assuming high correlation between the asset classes (for a more conservative projection) and a normal distribution. Every one of the 500 projections will produce a different result (i.e., a long term projection equivalent to the fixed rate projection described above) but the results are distilled into 95th, 50th and 5th percentile curves (note: percentiles are explained below) to characterize the range of results.

The points on those curves are an aggregation of all 500 test cases. Therefore, for any given year in the analysis, you can get a sense of the distribution of results across a large number of cases. By attempting to simulate year-to-year fluctuations in rates of return (i.e., market volatility), Monte Carlo analyses are an attempt to address the weakness of the fixed rate analysis method described above. On the other hand, this is a poor tool for trying to make trade-offs between major choices or to study the sensitivity of your plan to certain parameters.

As the basis for these analyses, the characteristic return on the investments of the funds in each pot can be specified in one of two ways: 1) a specific nominal rate of return or 2) selection of one of several pre-defined portfolios each of which has certain risk and return characteristics. The choices made for your particular analysis have been highlighted in the main section of this report.

Geometric vs. Arithmetic Mean

The geometric mean of a sequence of volatile returns takes into account the compounding effects over time and it is never as high as its arithmetic mean counterpart due to the fact that volatility always produces some level of 'volatility drag'. Consequently, EPC uses the geometric mean of the historic data for its fixed rate analyses; however, since Monte Carlo analysis inherently simulates market volatility, EPC uses the higher arithmetic mean as the basis of the random returns generated in its Monte Carlo analysis.

Pre-Established Portfolio Options

It is possible to use an example mean nominal return for each of a pre-selected asset class and suggested portfolio. This is derived from the 28 years of historic data and the portfolios used can be described on request.

This calculator is for guidance only

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Results should not be relied upon in their entirety and shall not be deemed to be, or constitute, regulated financial advice. Regulated Financial advice can only be given by a regulated firm and individual. Although endeavours have been made to provide accurate results and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. There is no guarantee whatsoever under any circumstance.

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Thresholds, percentage rates and tax legislation may change in subsequent finance acts. Levels and bases of and reliefs from taxation are subject to change and their value depends on the individual circumstances of the investor.

The value of your investments can go down as well as up and you may get back less than you invested and legislation can change at any time.

If you are in any doubt contact your Regulated and qualified Financial Adviser.

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