How Carrie and Chris increase the certainty of meeting their retirement income goals

Carrie and Chris

Client: Carrie and Chris

Age: Both age 66

Assets: Homeowners – $350,000 each in superannuation, $20,000 combined personal assets and $50,000 cash

Goals: Revisit their retirement plan to increase certainty of attaining retirement income outcomes.

Meet Carrie and Chris

Carrie and Chris, both aged 66, retired a couple of years ago. They had long looked forward to retirement and finally their retirement dream had become a reality. With some key items on their bucket-list ticked-off during the first 18 months of retirement, the last little while has been significantly quieter with pandemic related travel restrictions.

It is fair to say that, financially, Carrie's and Chris' retirement has also been a little rockier than they had anticipated with interest rates at historic lows and a bumpy share market.

Carrie's and Chris' assets

Carrie and Chris aren't a showy kind of couple. They own their own home. It is a modest home in a nice suburb in a big city. It is close to family and friends and suits their lifestyle perfectly. They have no plans for moving any time soon.

Carrie and Chris each have $350,000 in account-based pensions invested across a diverse range of investment options in accordance with their "balanced" (50% growth / 50% defensive) risk profile. Their financial adviser, Colin, helped them establish their account-based pensions when they retired with rollovers from their respective super funds and Colin helps them with ongoing advice. Their account-balances are down quite a bit from what they started with just a couple of years ago as a result of their level of drawings from their pensions and the recent share market volatility.

They have $50,000 in cash and term deposits and they are keen to retain these funds, despite current low interest rates, just in case of a proverbial "rainy day".

They have $20,000 of non-financial assets, including an ageing, but reliable, car which does the job.

1 Estimates calculated using Australian Life Tables 2015-17, with 25-year mortality improvements as provided by the Australian Government Actuary.

Carrie's and Chris' retirement income plans

Carrie's and Chris' retirement income goals are "to live well, and for a long time". This retirement lifestyle costs them close to the ASFA "comfortable" retirement standard, currently $62,435 p.a. for a couple. Colin has determined that their essential spending is close to the ASFA "modest" retirement standard, currently $40,719 p.a., a bit above the current maximum rate of Age Pension of $37,014 p.a.

Revisiting retirement income plans for Carrie and Chris

In their most recent meeting with Colin, Carrie and Chris came to realise that they were at risk of running out of income in retirement. Market volatility has taken a toll on Carrie's and Chris' plans for retirement income.

In Colin's revised projections of retirement income, his fixed return (deterministic) projections showed Carrie's and Chris' desired level of income met out to their life expectancy (age 94). However, when Colin tested this level of drawings in a range of market scenarios (stochastic modelling) he found that there was just a 28% chance that Carrie and Chris could meet their desired retirement income level of $62,435 to life expectancy and, of significant concern, just a 34% chance that they could meet their essential spending requirements of $40,719 p.a. at this point. This was a retirement income plan at risk.

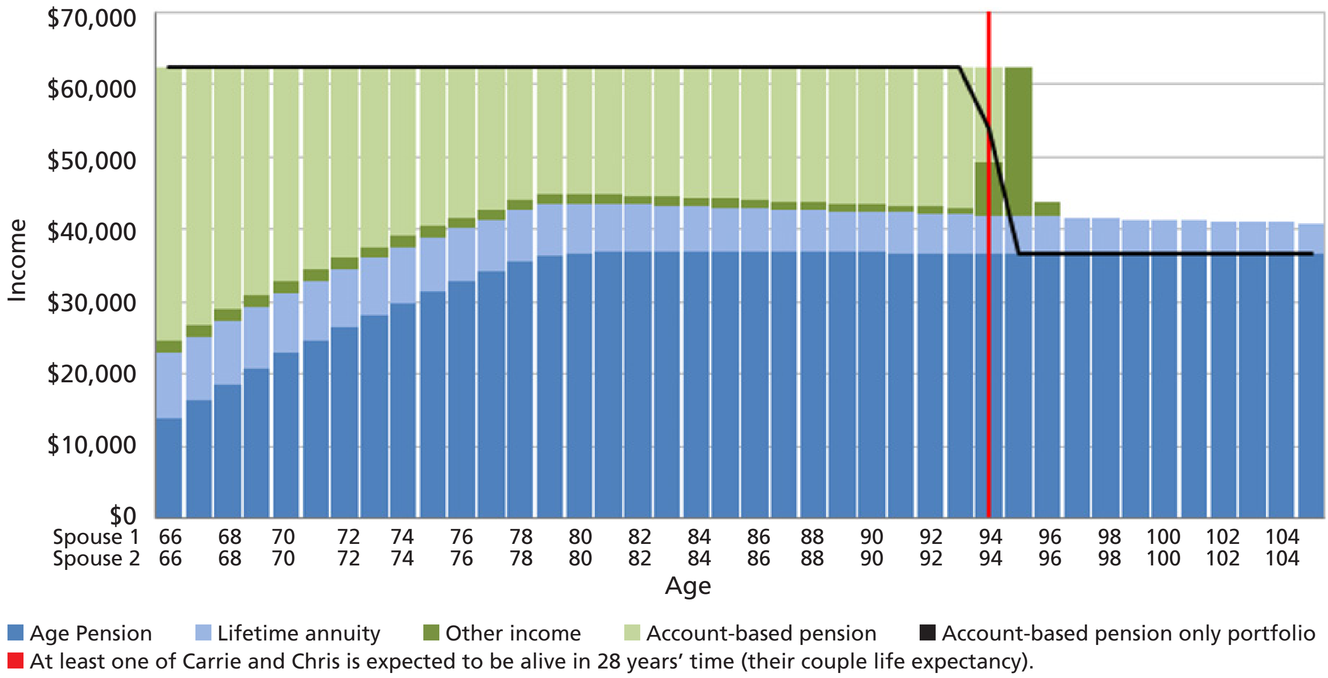
Concerned about low interest rates

When Carrie and Chris had first retired, Colin presented a retirement income strategy that was underpinned by a partial allocation to guaranteed lifetime income from lifetime annuities, but Carrie and Chris were concerned by locking in to lifetime annuity rates at what they saw to be low interest rates. Carrie and Chris opted for account-based pensions only at the time.

However, Colin has now modelled out an alternative retirement income strategy for Carrie and Chris now using a partial allocation of assets (from the defensive portion of their account-based pensions) to the newly available Challenger Guaranteed Annuity (Liquid Lifetime) RBA cash linked payment option (Liquid Lifetime RBA cash linked). This tailored lifetime annuity offers Carrie and Chris guaranteed income for life (irrespective of how long they live or how markets perform) with payments linked to changes in the RBA official cash rate.

This allocation for each Carrie and Chris to Liquid Lifetime RBA cash linked ($100,000 each, or approximately 28.6%, of their account-based pensions) provides an additional layer of guaranteed lifetime income ($9,048 p.a. combined in the first year) and immediately increases their Age Pension entitlement (from $7,725 p.a. to $13,965 p.a. combined in the first year).

Figure 1: Deterministic projection of Carrie and Chris' retirement income



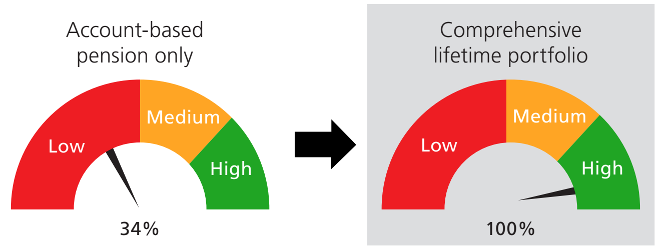
1 Liquid Lifetime RBA cash linked rate at 1 June 2020 and subject to change.

The deterministic modelling undertaken by Colin and shown in Figure 1 illustrates that this allocation modestly enhances the projected longevity of their account-based pensions. The deterministic modelling uses assumed and constant investment returns, including cash rates, over the entire period illustrated which means that in this projection the rate of payments of Liquid Lifetime RBA cash linked does not change over time.

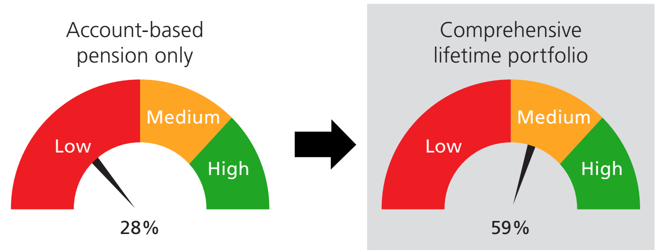
However, the stochastic modelling of Carrie's and Chris' retirement income plans shows dramatic changes.

Figure 2: Stochastic projection of Carrie and Chris' retirement income

Chance of $40,719 'needs' income being met



Chance of $62,435 'needs' and 'wants' income being met



The stochastic modelling shown in Figure 2 illustrates the chances (from 2,000 simulations) of Carrie and Chris meeting their desired retirement income level of $62,435 to life expectancy increasing from 28% to 59%. Most importantly the modelling shows an increase from a 34% chance to a 100% chance that they could meet their essential spending requirements of $40,719 p.a. This increase in confidence was significantly appealing to Carrie and Chris.

Unlike the deterministic modelling in Figure 1 the stochastic modelling uses changing investment returns (including cash rates) each year, which means in each of the 2,000 scenarios, annuity payments increase or decrease each year with the RBA cash rate.

Income payments from Liquid Lifetime RBA cash linked

Carrie invests $100,000 in Liquid Lifetime RBA cash linked. Initially her annuity payments include a fixed payment of $4,161 p.a. and an RBA cash linked payment of $250 p.a. (based upon the current RBA cash rate of 0.25% p.a.) for a total initial payment of $4,411 p.a.[2]

Chris also invests $100,000 in Liquid Lifetime RBA cash linked. Initially his annuity payments include a fixed payment of $4,387 p.a. and an RBA cash linked payment of $250 p.a. (based upon the current RBA cash rate of 0.25% p.a.) for a total initial payment of $4,637 p.a.[3]

If RBA cash rates increase over time as Carrie and Chris believe they will, payments from the annuities will increase. This is shown in the table below in relation to Carrie's annuity.

It is important to remember that if at any time If RBA cash rates were to decrease annuity payments for Carrie and Chris would decrease accordingly.

	Fixed payment	RBA cash linked payment	Total payment
Current RBA cash rate (0.25% p.a.)	$4,161 p.a.	$250 p.a.	$4,411 p.a.
Cash rate increases to 0.75% p.a.	$4,161 p.a.	$750 p.a.	$4,911 p.a.
Cash rate increases to 1.25% p.a.	$4,161 p.a.	$1,250 p.a.	$5,411 p.a.
Cash rate increases to 2.25% p.a.	$4,161 p.a.	$2,250 p.a.	$6,411 p.a.

Retirement outcomes

The part-allocation from defensive assets with their account-based pensions to Liquid Lifetime RBA cash linked has significantly increased the certainty of attaining Carrie's and Chris' retirement income plans. They still maintain their allocation to growth assets (and defensive assets) via their account-based pensions but with the certainty of guaranteed income for life from their annuities. They are also comforted by the protection of annuity rates linked to future changes in RBA cash rates.

2 Liquid Lifetime RBA cash linked rate at 1 June 2020 and subject to change
3 Liquid Lifetime RBA cash linked rate at 1 June 2020 and subject to change

The calculations above are from Challenger's Retirement Illustrator tool as at 01 June 2020 (accessible to financial advisers only). Unless otherwise stated, the Illustrator does not take into account the short term measures announced as part of the Commonwealth Government's economic plan in response to COVID-19 (as outlined in the Coronavirus Economic Response Package Omnibus Bill 2020) including payments to support households, early release of superannuation and temporary reductions in the superannuation minimum drawdown rates. Depending on an investor's situation and user inputs, this may impact illustrations provided in the Illustrator.

The Retirement Illustrator also contains the following assumptions:

Government Age Pension: The Government Age Pension amounts illustrated are based on current law including the new deeming rates of 0.25% and 2.25%. For the purpose of rates and threshold indexation CPI and AWOTE are assumed to be the same. Any future changes to legislation will alter the Age Pension amounts projected. It is important to note that the Government Age Pension amounts projected are illustrations only and are not a guarantee that a person will be entitled to the Government Age Pension. Eligibility for Government Age Pension entitlements will vary depending on personal circumstances, including the future value of investments and changes to marital status. To check eligibility for the Government Age Pension, go to humanservices.gov.au.

Continuance of life: The Illustrator assumes the life/lives being illustrated do not die before the end of the illustration period. Where death occurs before the end of the illustration period the results will be different.

Taxation: The Illustrator does not calculate any tax payable on the projected regular retirement income or capital gains. Generally, once a person turns age 60 and retires, any income received from superannuation investments is tax-free. However, other investments not purchased with money rolled over within the superannuation system may be subject to tax. Where the annuity is purchased with non-superannuation money, tax may be payable on any lump sum withdrawal amount.

Amounts are shown in today's dollars: Results are shown in 'today's dollars'. This means illustrations take into account the impact of inflation between the time of the illustration and the future date, in order to show all figures in today's purchasing power.

Assumed rates of return: The illustrator's deterministic modelling assumes Account-based pension growth assets return 6.20% p.a. and defensive assets, 3.0% p.a. CPI assumed to be 2.0% before management fees of 0.70% and 0.30% respectively. In addition, platform fees are assumed to be 0.50% and cash deposits return 3.40% p.a. Lifetime annuities is assumed to form part of defensive assets and to maintain an overall asset allocation of 50/50 growth/ defensive (including the allocation to the defensive lifetime annuity), the asset allocation of the account-based pensions has been set accordingly.