portfolio construction forum

The Yin and Yang of retirement income philosophies

Angela Ashton | PortfolioConstruction Forum | 18 November 2014

"The Yin and Yang of Retirement Income Philosophies" by Wade Pfau & Jeremy Cooper, November 2014

Last week, Jeremy Cooper and Wade Pfau released a paper reviewing the spectrum of financial planning strategies that can be used to build a retirement income. In short, it's a very good review of the two opposing philosophies - probability-based and safety-first - and current thinking on the broad spectrum of issues around building retirement income streams. Given Cooper's involvement, the review has an Australian flavour to it.

For those who haven't heard of either of these gentlemen, Wade Pfau is a US-based professor who specialises in retirement income strategies. He is a very active researcher and has authored and co-authored many articles on the topic of retirement income (a number of which we've reviewed in the past). Pfau also has a blog which is well worth keeping an eye on. Jeremy Cooper is now Chairman Retirement Income at Challenger, before which he as appointed by the Australian Government to chair a wide-ranging review of Australia's superannuation system (the "Cooper Review").

Broadly, Pfau and Cooper carve up the current approaches to building retirement incomes into two schools of thought: Probability-Based vs Safety-First. These represent the extremes of current approaches - and the article then explores not just those extremes, but the wide array of approaches in between.

The Probability-Based approach is epitomised by the 4% rule, introduced by Bengen about 30 years ago. Basically, the approach looks for a level of income that can be withdrawn from a portfolio such that there is a relatively low probability of running out of money over retirement. The underlying portfolio is built using a standard MPT approach. This approach leads to higher levels of equity exposure in retirement portfolios - up to 75% - because the approach focuses on minimising the chance of running out of money. It doesn't really consider the use of annuities, but account-based pensions can be used. As Cooper & Phau point out, the 4% rule itself was determined using US data - and in Australia, it should probably be the 3% rule.

At the other extreme, the Safety-First school is represented by the lifecycle approach to investing and is championed by people such as Merton, Sharpe and Samuelson (just to name drop the Nobel prize winners!) as well as Bodie. We've previously reviewed this approach too. This school would suggest that there is no such thing as a safe withdrawal rate, because future market movements are unknowable. The layered portfolio approach suggested in behavioural portfolio theory would be the tactic suggested by this school. This would mean that funds are set aside for each layer of needs (e.g. food and shelter are the most basic need or level, the next level might be transport and so on, up to legacy needs as the least important issue). Each layer is funded differently, with the basic levels being funded very conservatively and the less important funded in a more aggressive way. Under this approach, annuities have great value.

Cooper and Pfau discuss the range of strategies that span the divide between these two approaches. In summary, these approaches are:

- Variable spending strategies – similar to the Probability-Based approach, but spending varies over time. It usually falls with age. There are countless approaches to variable spending, but the two major ones are spending a set percentage of the portfolio using a set of decision rules or starting with something higher then falling with market movements.

- Income buckets/time segmentation – this breaks spending down into time buckets and funds each bucket differently. For example, funds required for the next (say) three years are held in cash while funds required for expenditure in more than 15 years time might be invested completely in growth assets. The major advantage is that this approach can help to avoid panic during market turmoil as short-term funding is assured.

- Funded ratio management – this entails treating the investor's retirement savings in the same way a pension fund would. That is, the current value of discounted future income requirements can be compared to current assets to calculate a funding status (underfunded, funded or overfunded). Tim Noonan of Russell Investments, a Critical Issues Forum presenter at PortfolioConstruction Forum Conference 2014, is a major proponent of this approach. You can watch his Conference 2014 presentation to learn more about this approach.

- Goal segmentation or product allocation – championed by Milevsky, this involves determining a Retirement Efficient Frontier with an optimal allocation between standard asset classes and annuities.

- Bond ladders and longevity insurance – this proposes that retirement can be funded by a bond ladder (i.e. a series of bonds or similar low risk instruments that mature each year to fund annual expenditure) coupled with something like (say) a deferred annuity to take care of income needs after a certain age. Using this approach, the annuity should not represent a huge initial cost.

- Floor-leverage rule – this barbell strategy uses very safe and very volatile assets. The very safe assets fund most needs and represent most of the portfolio (say 85%). The rest is placed in a very volatile portfolio (e.g. a three times levered equity portfolio). Excess gains are harvested from the volatile portion but new funds are not added to rebalance if the volatile portfolio falls in value.

- Managed DC – Robert Merton has done work on this approach, which seeks to create an outcome similar to a defined benefit fund. A large part of the portfolio is invested to provide a minimum income with very high certainty. This might be in the form of an annuity. Effectively, it tries to lock in an income stream when it is available. The rest of the funds are invested to meet the overall spending goal.

The burning question is, of course, which approach is best? This will obviously depend on your own philosophies and approach and each client's specific needs – that is, there is no need to subscribe to just one approach.

What this white paper does is dish up an entire retirement income planning buffet for you. There's a lot of good information in it, as well as many references for those who want to dig deeper into any of the strategies. Do be sure to try and taste test each approach. You might find that at least some clients will be best suited to the approaches you might have previously relegated to the boring salad category!

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