

MEETING THE FINANCIAL NEEDS OF RETIREES:

a layering approach to building retirement income portfolios

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Traditional financial planning approaches, which tend to focus on risk profiles and asset allocations aimed at accumulating a pool of savings, do not necessarily meet the financial objectives of retirees. While a higher level of savings at the start of retirement is better, the ultimate objectives are the delivery of income in various stages during retirement and financial plans that can be adapted to meet the more individualised needs of retirees. In this paper we develop a model of portfolio construction for retirement income based on a strategy of layering income to target changing spending needs at different time stages of retirement. The result is a practical approach that financial advisers can implement with retiree clients to meet their spending requirements.

The transition into retirement often results in many changes for the new retiree. The management of their invested capital is just another one of these changes. In the accumulation stage, the investor can focus on simply growing their capital (subject to the risk-taking involved) through contributions and long-term investment returns. The retirement phase is the ultimate objective of a lifetime of investment, where the retiree is dependent on their amassed savings. The retiree now has a use (or several uses) for their money and this changes how they should invest.

Initial portfolio considerations, such as Samuelson (1969) and Merton (1971), looked at managing the whole lifecycle of investments for an investor with a mathematical approach (leading to the literature on 'age-phasing' of risk-taking in asset allocation). A different approach for retirement was raised by Bengen (1994) and Cooley et al. (1998) who developed what is now known as the 'sustainable withdrawal rate' to determine what proportion of their retirement savings a retiree could safely spend each year. This is the rule of thumb (based on historical US data) that a new retiree who spends 4 per cent of their capital in the first year of retirement can expect to increase this spending with inflation each year and only have a small chance of running out of capital over a 30-year retirement.

Extending the 'retirement is different' concept, Ameriks et al. (2001) and Merton (2003) have progressed the theory to goals-based investing, and the use of partial annuitisation, to achieve investment

outcomes that meet people's goals. This paper builds a framework of layers that uses a goals-based approach to deliver income to meet the needs of retirees.

Providing retirement income

Retirement is different.

Providing financial advice in retirement is also different from providing financial advice for retirement. In the accumulation phase, the main objective is simply to grow each person's savings as much as possible (subject to an acceptable level of risk-taking). In retirement, there is a need to generate the cash flow (retirement income) that is required to sustain the desired lifestyle of the retiree who is now living without a wage. Retirees (as opposed to accumulators) have additional needs that have to be met with their savings, while also facing a different and larger set of risks that have to be managed.

Goals based investing

This form of investing has been popularised by Chhabra (2005). The essence of this approach is that investments should be aligned with their ultimate objective. This is akin to the institutional concept of asset-liability matching. To translate the approach to a retail investor, it is necessary to consider their needs. By the time an investor is retired, these needs can fall into two categories: spending while the person is alive (retirement cash flows); and a bequest motive (the next generation). This paper, puts the bequest motive to one side (and assumes that home

ownership is maintained), and considers the spending of the retiree and how to align a portfolio with their needs.

The needs of retirees

Retirees facing the challenge of producing income from accumulated wealth typically have different needs from other investors. In broad terms, the financial needs of a retiree involve a trade-off between: providing income for spending on essentials and other desired consumption; meeting health and aged care costs; and the desire to leave an estate to future generations. A survey by National Seniors Australia (2013) confirms these needs.

Higgins and Roberts (2011) show that the pattern of expenditure changes during the different phases in retirement. The active early stage of retirement is typically associated with the highest level of expenditure, as the retiree is most able to enjoy additional activities such as travel. Expenditure falls as the retiree becomes more passive and travels less. The final frail stage typically involves lower spending levels, with health care and assisted living costs dominating the budget.

A goals-based approach involves separating investments into components to cover these different needs. This is the role of the layering approach developed in this paper. The portfolio in this case could be considered to have four components, or layers (some of which a retiree might omit as not important to them). They are assets providing money available for:

1. essential spending
2. discretionary consumption
3. later-in-life expenditures, including increased health and aged care costs
4. bequest.

This breakdown of a retiree's portfolio is a simple construct that will be intuitive to many retirees. Also, by aligning with the mental heuristics of a retiree, a portfolio constructed along these lines is likely to be associated with a greater utility because it increases the chances of achieving each target.

Risks faced by retirees

In addition to a necessary trade-off between the competing needs, retirees must also take into account market risk, inflation risk and longevity risk. Other key risks in retirement that an adviser should always be aware of include:

- > **Behavioural risk:** This is when the behaviour of the retiree client differs from the plan (such as some ongoing 'one-off' spending) leading to a more rapid depletion of capital

- > **Public policy risk:** The government might change some of the rules around the age pension or the taxation of retirement income.

Market risk

The role of market risk changes in the retirement phase, as the need for cash flow alters how a portfolio recovers from even the smallest market setback. An accumulation investor has the flexibility to allow some time for the investment to recover (if indeed it will) but, because of their spending needs, most retirees do not have the luxury of waiting.

The biggest difference with market risk in retirement is the sequence of returns risk or, more simply, sequencing risk. The concept was first introduced by Milevsky and Abaimova (2006) and has recently been adopted in the context of the Australian superannuation market by Doran et al. (2012).

The risk from a market downturn is at its greatest when the capital invested in the market is at its largest (portfolio size effect). This is the period leading up to and just after retirement. The problem for the retiree is that, after a market downturn, when they use their capital to generate a cash flow for spending, there is less capital invested in the market to benefit from the recovery. A retiree can manage these risks by investing in, and taking cash flows out of, assets with low(er) volatility, or by investing part of their capital into a product producing a stable income flow.

Inflation risk

In retirement, to meet spending goals, cash flows need to be protected against inflation. Other than inflation indexed assets, there are few assets which can protect against unanticipated inflation.

Longevity risk

Retirees often plan for their savings to last a certain length of time, but there is always a risk that they live longer than planned. Conversely, it does not make sense for everyone to plan to live to the maximum possible life expectancy. In reality, people will live to a range of different ages. A robust retirement plan could project incomes out for 30 years (to age 95). There would be a 40 per cent chance that one member of a couple would still be alive at that time, requiring some income (and possibly more than the Australian Age Pension, hereinafter referred to as the 'age pension').¹

Building a portfolio to produce regular income

These differing income and risk requirements need to be met by any retirement income portfolio. To build such a retirement income portfolio, it is necessary to consider the following issues at least:

- > The probable length of time spent in each of the active, passive and frail stages of retirement
- > The level of income required for the minimum acceptable standard of living for the retiree across all the stages
- > The spending that would be desirable for a more comfortable lifestyle, particularly in the early stages of retirement
- > A level of precautionary savings that is required in case of emergency
- > The risk tolerance of the retiree in relation to the volatility of their capital
- > The age and life expectancy of the household of the retiree
- > Any desire to leave a bequest to their estate from their retirement savings.

Any plan for retirement income should be tailored to meet these various objectives using the pool of retirement savings that has been accumulated by the retiree. The retiree will have to make a set of competing choices among these different needs, either explicitly or implicitly. For example, setting a higher level for the minimum acceptable standard of living will reduce the funds available for additional spending early in retirement.

Once an adviser has a clear understanding of their client's objectives and needs, and develops appropriate plans to mitigate the risks, it is then possible for the adviser to build a retirement portfolio for their client. The retirement plan and portfolio should be dynamic. The client's objectives and needs will change over time, requiring adjustments to the plan, and market movements might also necessitate adjustments to the portfolio. Every plan, however, needs a starting point. This will not actually be set in stone, but the original plan should cover the whole of life and potentially beyond, with bequests and estate planning.

A layer of lifetime income

National Seniors Australia (2013) reported that three of the most important concerns of older Australians were:

- > being able to afford aged care and medical costs
- > money that lasts a lifetime
- > regular constant income that covers the bare essentials.

The first area of concern — aged care and medical costs — is often the last significant expenditure that a person makes. In Australia, a large proportion of this is borne by the government rather than the individual and, in practice, this often requires selling the family home and reducing bequests. Incorporating additional expenses here, in the approach adopted below, involves the allocation of some assets to a long-term portfolio.

The combination of the second and third concerns highlighted above leads to what is a very common objective for a retirement income plan. That is, a retiree will always want to have a regular source of income to cover the essentials for the remainder of their life. The definition of the essentials will vary across retirees, but the key is to be able to sustain what is considered to be the minimum standard of living. Zwecher (2010) describes this as the bedrock component of lifestyle flooring.

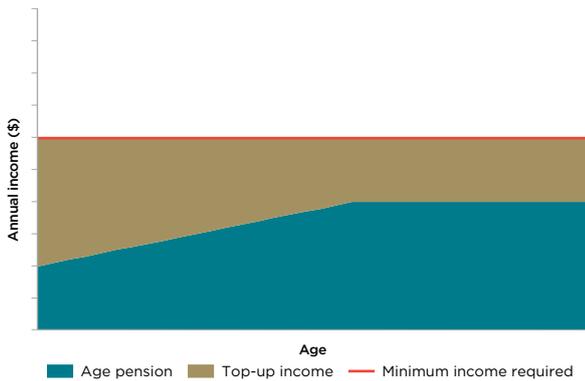
The first component of the flooring minimum will be the age pension. This provides a safety net to support a bare existence. Many retirees, even with their superannuation, will receive a part age pension, and might be entitled to a full pension at older ages as they spend their superannuation assets. Rice Warner (2012) estimates that currently over half the eligible population are on a full pension by age 80.

The situation illustrated in Figure 1 is a realistic outcome for a large number of Australian retirees. The thick line represents the (real) level of expenditure that is seen as needed for the minimum lifestyle. The black area is the entitlement to the age pension, which is initially subject to a means test, but ultimately reaches the maximum payment due to the depletion of financial assets. The shaded area is a level of income that is required to top-up the age pension to their minimum required level.

In order to have a retirement plan that provides the required regular income for life, it is necessary to have an income stream that will continue for life as part of the portfolio. There are several different ways to construct this income stream, with different implications for dealing with market, inflation and longevity risks described earlier:

- > a defined benefit pension
- > a lifetime annuity
- > a variable annuity.

FIGURE 1: Generating an income floor from the age pension and other income

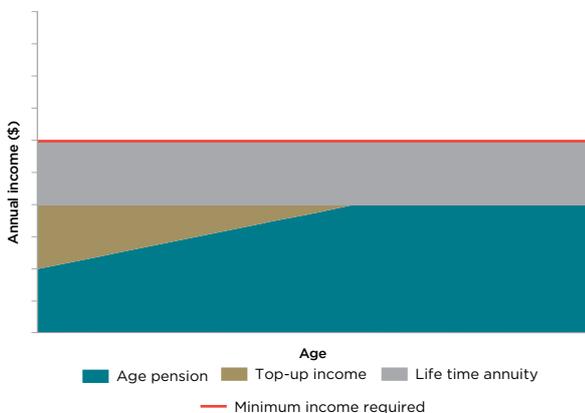


Source: Challenger.

For those who don't have a defined benefit pension, a lifetime annuity can be used to cover the gap between the age pension and their minimum lifestyle spending needs. Lifetime annuities are generally available with inflation indexation that will preserve the real value of regular payments over time. Using an account-based pension from a retirement superannuation account leaves the retiree exposed to market, inflation, and longevity risk.

The key planning question is to determine the appropriate level of income to be provided by the annuity, and the amount of 'top-up' income required during the period prior to becoming eligible for the full age pension. Over time, the ability to supplement reduces because of the depletion of capital, and the retiree will eventually be entitled to the full age pension. Therefore, the lifetime annuity income stream payment only needs to cover the smaller gap between the minimum income required, and the age pension and other income. Such an outcome is depicted in Figure 2.

FIGURE 2: Using a lifetime annuity to meet minimum spending needs

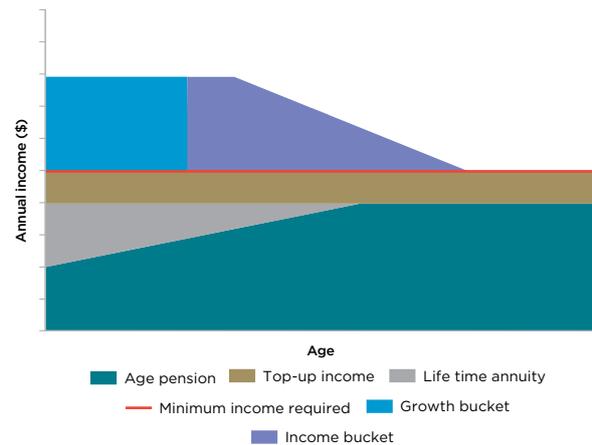


Source: Challenger.

Multiple layers: the bucket approach

This paper has introduced the concept of a layer of lifetime income as a useful way to meet the needs of a retiree. This can be extended to create layers for the differing needs of retirees that were identified earlier. These layers can take different forms. Indeed, a common approach would be a series of vertical layers (pooling investments by time horizon) often called a 'bucket' approach. Figure 3 provides a graphical representation of what such a series of layers might look like.

FIGURE 3: Combined layers for portfolio construction



Source: Challenger.

A bucket approach can help retirees set desired levels of expenditure, above their required minimum, for the different stages of retirement. Looking at the stylised example in Figure 3, there are two buckets above the minimum income layer: an 'income bucket'; and a 'growth bucket'.

With an allocation to cash and medium-term fixed interest assets, the income bucket produces additional income for the early active years of retirement. The growth bucket, where the allocation is to riskier assets, has a longer time frame giving assets time to recover from potential market downturns. The assets in the growth bucket will appreciate and, when required, be transitioned to income-producing assets to become a source of additional income later in retirement.

Such a bucket approach is only achievable when there are assets available after setting the required minimum income level. The minimum income layer should not, however, be sacrificed for a pure bucketing approach. A failed bucket approach without a minimum income layer could mean retirees are forced to live below their desired minimum standard of living.

Summary

A growing number of Australians will be retiring in the coming years. Each of these retirees will have desired outcomes for their financial assets that range across: spending on basic essentials; enjoying the active stage of retirement; having money for their needs throughout life; and being able to leave a bequest.

Portfolio construction in retirement involves using whatever financial means are available to meet these multiple, often competing, needs. A simple approach that can be helpful is to layer different investments to meet different needs. Building a layer of lifetime income to cover basic needs is useful in a portfolio, and this can free up capital for other investment to meet higher discretionary spending.

This approach was recently highlighted by Milevsky (2013) in his conclusion around lifetime income streams: 'the main result seems to be that at some advanced age — perhaps as early as 60 or as late as 80 — most consumers should have some of their wealth in life annuities'.

Acknowledgements

The authors are members of the Challenger Retirement Income Research team. Nothing in this paper should be regarded as financial advice. We would like to thank participants in the 2013 Personal Finance and Investments Symposium who provided feedback, as well as Kevin Davis for his review and assistance in the editorial process. Any errors or omissions remain the responsibility of the authors.

Note

1 Assuming a couple, both 65 retiring in 2013 based on mortality improvements by Treasury for the IGR2010 report.

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