

Introducing a Retirement Benefit Target

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Abstract

The true purpose of a retirement savings system is to incentivise or compel consumers to spread their personal consumption over their whole lifetime. To support such a purpose, one of the key objectives of a retirement system has to be that of post-retirement income provision. The objective of the superannuation system in Australia however is positioned as an investment structure, i.e. the accumulation of a tax-free discretionary lump sum at retirement date. The introduction of a retirement benefit target could assist the superannuation industry to make a fundamental change to the current objective of defined contribution funds: from wealth accumulation pre-retirement (i.e. maximising risk-adjusted investment returns) to post-retirement income benefits provision. This paper examines the use of a retirement benefit target for defined contribution funds. Different types of retirement benefit target are described and how these can be linked back to defined contribution (accumulation) savings. Potential methods to report to individuals relative to the different types of retirement benefit target are also explored, together with examples of commonly used retirement income targets. A retirement benefit target for an individual will translate into a capital amount for a fund to aim for at that person's retirement date: a *defined target fund*.

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Introduction

Most individuals only have the capacity and ability to earn an income during their working lives, i.e. before retirement. However, they have a reasonable chance of living beyond this age. This means that money earned while working needs to fund consumption for almost 70 years in total.

This describes the main purpose of retirement savings: to spread consumption over a lifetime, from earnings during the working period only.

Unfortunately, human natural bias places emphasis on immediate consumption and immediate needs. Left to our own devices, very few individuals would make any kind of long term financial provision.

Governments in developed countries generally demonstrate a moral and social obligation and commitment to provide for the basic needs of its old age citizens (or residents). In this regard, governments also have a responsibility to encourage and, where possible, compel individual retirement provisioning. In Australia this takes the form of a means-tested Age Pension (Australian Government, 2012) and the Superannuation Guarantee (SG). The SG is a compulsory minimum defined contribution towards retirement savings.

Although the Australian superannuation system is internationally recognised and acclaimed, certain shortcomings continue to be highlighted relative to systems in other countries. Notably, overweight equities investment strategies and the absence of a requirement to take at least part of the benefit as a lifetime income stream are consistent criticisms (Mercer, 2010 and 2011). Effectively, Australia has a *wealth accumulation* system that is not conducive to *consumption spreading*.

Two apparently very simple questions are therefore often asked by individuals nearing retirement:

- How much retirement income do I need?
- Do I have enough superannuation saved?

Australian fund members don't know what their superannuation will provide, or whether they will have enough. In fact, very few even know how much they will need at retirement. And this is only *at* retirement. Fewer have any idea of the expense profiles they might incur *during* retirement, e.g. health care at advanced ages.

This situation is perpetuated by the superannuation (and associated services) industry. Superannuation funds often measure success as total assets, number of members or investment returns, and the growth therein. Fund objectives are also set around these measures.

This is exactly why a fund needs a retirement benefit target. It focuses the management and service of the scheme on its original, fundamental purpose: a vehicle designed to assist its members to spread their consumption over a lifetime.

Why a target?

A target gives purpose, direction, a vision, a plan, something tangible and achievable. By narrowing this for the superannuation sector, various reasons can be considered for having a specific retirement benefit target within a fund:

a) Creates relevance

The long term nature of superannuation accumulation is generally poorly understood and not appreciated by fund members. This relates to both the economic variables (like saving and investing) and the social variables (like retirement lifestyle and consumption needs). As a result, many members demonstrate disinterest, apathy and disengaged behaviours.

A customised individual retirement benefit target creates present day relevance for the ultimate benefit from a fund. This is achieved by expressing expected retirement income (including estimate Age Pension entitlements) in today's money terms, giving an individual member a specific and clear number that can be compared to something familiar and understandable: current income and expenditure.

b) Sets a specific objective

Superannuation accumulation philosophies are effectively a gamble: contributions are made without any specific or clear idea of the actual outcome, with a variety of outcomes are possible, ranging from complete disaster, to euphoric luck, dependent on exit timing.

A target creates clarity. In other words, it creates a clear outcome for a given commitment. In a way a specific accumulation objective can be compared to the return of a defined benefit where, for a specific contribution rate over a set period of time, the fund would provide a 'predictable' benefit, although not a guaranteed benefit.

c) Informs strategy development

Once a retirement benefit target has been set so that a specific objective is created, all fund processes, structures and strategies can be designed and developed to achieve (or increase the likelihood of achieving) the target. This gives purpose to, and drives the fund's strategy.

Currently there is significant variability in the outcomes Australian funds produce for their members. If the objective is changed, from maximising risk-adjusted returns, to a specific target, fund strategies can be tailored not just to deliver such a target on average, but also to increase the likelihood of achieving the target (i.e. reducing variability of outcomes – more certainty).

d) Benchmarks progress

A retirement benefit target can be used throughout a member's membership as a yardstick to measure progress. In this way a new, unique, personalised and relevant criterion for improving member communication can be applied retrospectively and prospectively:

- Retrospective reporting (like annual benefit statements) can provide a “progress report” based on what has happened, what proportion of the target has been achieved to date, i.e. accrued benefits. This will show the member whether a fund has delivered relative to its objective.
- Prospectively, the member’s current account balance can be projected forward, based on current strategies, to provide 1) the expected level of benefit (relative to target) at retirement and 2) the likelihood or certainty level of actually achieving it. This assists individuals with their retirement planning and sets expectations.

e) Baselines impacts of adjustments to strategy

It is very possible that the ideal retirement benefit target for an individual will differ from (i.e. be more than) what a fund projects as a likely outcome. However, the powerful use of the target then becomes the measure of the *relative* impact of a change in strategy.

A member will be able to obtain the relative impact of a change in one of the three key accumulation factors (contributions, investment strategy, tenure) on the level of (and likelihood of achieving) the expected retirement benefit target.

f) Refocusses plans as circumstances change

Ultimately a retirement benefit target cannot be static, but must be flexible to allow for the potential changes to an individual’s circumstances. This refers mainly to “life events”, like birth or death of a direct family member, marriage, divorce, etc. that fundamentally affect member standard of living.

Other examples may be a career change, leading to significantly different current or expected future salary, with the resultant and associated lifestyle changes. A large inheritance may also result in changed requirements and needs from savings within the superannuation system.

A target also needs to remain relevant and relative to environmental factors like purchasing power of money (price inflation) and standard of living (wage inflation). General regular review of the real level of the target is therefore important.

The overall outcome from introducing a simple, yet flexible retirement benefit target could be increased member engagement as a result of better understanding and relevance of the benefit delivered through the superannuation fund. The target guides strategy development and review for the scheme as a whole.

Ongoing projections and reporting would still allow performance comparisons, but rather than being peer-relative, these would be value judgements relative to progress made in achieving a defined target objective. Targets also assist members to plan for, manage and continuously review their consumption spreading over full lifetime.

Different types of target

A retirement benefit target should be relative to an individual's earnings and working period, as well as life expectancy, living standards, proportionate contribution to household disposable income and post-retirement consumption patterns. However, a certain basic minimum dollar amount can be established as protection against absolute poverty.

The Australian Government provides a form of protection against poverty through the Age Pension (and associated social benefits like the concession card). Australian residents are conditionally eligible for the Age Pension, which is means-tested and indexed. This needs to be accounted for in defining the targets described below:

a) Nominal dollar amount – lump sum

A fixed dollar lump sum amount is probably the simplest type of target, for example \$100,000.

However, members may often not appreciate the full impact of inflation on nominal values. For example, an annual inflation rate of 4% would erode the purchasing power of money by more than a third in just 10 years. Say a member wishes to save up \$100,000 in ten years' time, at a 4% inflation rate, that \$100,000 will only be able to purchase approximately \$66,000 worth of today's goods.

Superannuation savings are accumulated over long periods (in excess of 40 years) and are therefore prone to inflationary effects. Member appreciation and understanding of these effects are often limited.

A nominal dollar lump sum target would therefore only be appropriate to meet known fixed liabilities over a reasonably short period of time.

b) Nominal dollar amount – regular income

For many individuals a regular income nominal dollar amount would represent the most practical and intuitive retirement benefit target.

This is particularly true for members who are close to retirement, as they would be in the final stages of planning for their consumption phase and may have already set a budget for post-retirement expenses, for example, \$2000 per fortnight.

A fixed regular income amount could be practical as a target because the Association of Superannuation Funds of Australia (ASFA) Retirement Standard (ASFA, 2011) ("the *Standard*") can be used as reference for planning and comparison.

The *Standard* is well-recognised and benchmarks the annualised budget needed by Australians to fund either a comfortable or modest standard of living in the post-work years. It is updated quarterly to reflect inflation and provides detailed budgets of what singles and couples would need to spend to support their chosen lifestyle, either at a "modest" or "comfortable" level.

The most recent national figures released for the *Standard* (December 2011) show that a couple planning a comfortable retirement lifestyle would have to spend \$55,249 a year, while those seeking a ‘modest’ retirement lifestyle may spend \$31,675 a year.

A nominal dollar income amount carries the same inflation erosion risk as the fixed dollar lump sum target described above. The further away retirement date is, the higher this risk.

c) Replacement ratio

In its simplest form, a replacement ratio retirement benefit target can be defined as the gross income after retirement, divided by the gross income before retirement. For example, assume an individual earns \$60,000 per year before retirement and receives \$45,000 total retirement income. The replacement ratio is 75 percent (\$45,000/\$60,000).

This does not mean that the disposable income after retirement is 75% of the pre-retirement disposable income. The definition for replacement ratio and the simple example used here are gross of income tax.

An adequate replacement ratio can be calculated as the percentage of gross pre-retirement income for an individual that maintains their standard of living after retirement. Generally, less gross income is needed after retirement, due to a reduction in income taxes, savings, work-related expenses, debts, etc.

The 2008 Replacement Ratio Study™ (Aon Consulting, 2008), which is based on the USA system, uses the following example to illustrate the practical application of a replacement ratio:

Replacement Ratio for Employee Earning \$60,000 Who Retires at 65

	Annual Income		Replacement Ratio ② / ①
	Before Retirement	After Retirement	
	①	②	③
Gross Income	\$60,000	\$46,972	78%
(Taxes)*	(10,967)	(49)	
(Savings)**	(2,225)	0	
(Age- & Work-Related Expenditures)***	(34,253)	(34,368)	
Amount Left for Other Living Expenses	12,555	12,555	

* Tax rates and Social Security amounts are based on the laws in effect on January 1, 2008.
 ** Savings are assumed to stop at the time of retirement.
 *** See Appendix III for details about assumed age- and work-related expenditures.

The table above shows that a 78% replacement ratio would allow an American employee earning \$60,000 to retire at age 65 in 2008 without reducing their standard of living. Because taxes and savings decrease at retirement, this person is just as well off after retirement with a gross income of only \$46,972. Similar estimates can be done within the Australian context.

The nature of the replacement ratio (as defined above) is such that it will not be the same percentage of gross pre-retirement income for all individuals, due to the impact of tax. The replacement ratio to maintain a pre-retirement standard of living is highest for the lowest paid individuals. This is primarily for two reasons:

Firstly, lower paid employees generally save the least and pay the least in taxes as a percentage of their income. Thus, they spend a higher percentage of their income and need a higher replacement ratio to maintain that level of expenditures. Secondly, age and work-related expenditures do not decrease by as much, as a percentage of income, for the lower paid employees. This also means they need more income after retirement (as a percent of their pre-retirement income) than the higher paid employees.

Depending on the tax system, total gross replacement ratios can therefore vary from as high as 95% for low income earners to as low as 70% for higher income earners to produce consistent disposable income. Ironically, the replacement ratio increases again to over 80% for the extreme high earners, due to the (continued) high marginal tax rate payable on income. The distribution of total replacement ratios according to income level is therefore almost U-shaped.

Bateman and Piggott (2010) estimate that around 75% of Australians of eligible age receive some Age Pension, with around 60% of these paid at the full support rate. Generally, the Age Pension proportion of post-retirement income is greatest for the lowest earners and reduces as income and net wealth increases (i.e. means tested). Low income earners need the lowest replacement ratio from their superannuation, because a large proportion of their total required post-retirement income will come from the Age Pension. As an individual's income increases and the Age Pension eligibility decreases, the net replacement ratio required from superannuation increases.

The replacement ratio target from a superannuation fund should therefore be a function increasing with earnings, whereas the total replacement ratio target from all income sources is a U-shaped function.

d) Combination

In practice, a combination of all the different types of target described above can be used. Such a target would be set by an individual, with the assistance of a financial planner and may include components based on both nominal dollar and relative salary measures. This detail may not be possible for a fund.

e) Other considerations

There are a number of other factors which cannot be ignored when considering the type of target to use. The household situation (living with a partner or not, and that person's income and retirement provision) will have an impact, because Age Pension entitlements depends on this. A joint household can also share certain expenses.

One of the key issues often overlooked is the difference between superannuable salary and actual total income (i.e. including bonus, overtime, etc.). This is of particular relevance for net superannuation targets related to replacement ratio, which would be based on superannuable salary only. In these cases it is quite likely that parts of an individual's income are excluded and that the target replacement ratio may be misleading.

Linking the target to superannuation accumulation

Setting a retirement benefit target (as described above) is really only the first half of the challenge. It determines the target level of income at commencement of retirement for the individual and only answers the first question asked: *How much retirement income do I need?*

The second half of the challenge is: *Do I have enough superannuation saved?* In effect, this links a target regular income amount (at commencement of retirement drawdown) to the pre-retirement accumulation nature of superannuation. Effectively this translates to the amount of superannuation money needed to fund the target.

To answer this second question, the retirement benefit target needs to be converted to a capital sum, sufficient for the fund to provide the target benefit to the member. By representing the target as a capital sum, the link can be made back to a concept individuals are familiar with: defined contribution superannuation accumulation.

This conversion of income to capital (and vice versa) is more complex than perhaps generally appreciated, as there are a wide variety of factors that can impact a capital conversion calculation. The following helps to explain why:

a) The post-retirement consumption pattern

At the one extreme, the consumption may be a lump sum only at retirement, which wouldn't require any capitalisation. Most retirees theoretically require a regular income stream, increasing with cost of living, together with possible ad hoc lump sums to meet extraordinary or unforeseen expenses.

Higgins and Roberts (2011) have shown evidence of a substantial decline in total expenditure with age. At retirement a cash sum is usually spent on an overseas holiday or caravan. During the "active" years of retirement (say ages 60 to 70) consumption for regular living expenses may well be at its highest relative level.

As retirees enter a "passive" phase of retirement (ages 70 to 85), relative consumption levels may reduce in line with a decline in activity. Consumption needs will increase again at advanced ages (80+) when retirees may require frail and old aged care.

Care should be taken to account for the pattern of consumption (e.g. front loading, or increasing, or lump sums) when capitalising a commencement target benefit.

b) Indexation and cost of living increases

The allowance (if any) for future increases to a retirement income target during the post-retirement phase can have a significant impact on the capital amount required. Such increases could be zero, at a fixed rate (e.g. 2%) or indexed (e.g. based on the Consumer Price Index).

For illustrative purposes, and based on retail quotes for female lifetime annuities at age 65, the capitalised amount for a certain retirement benefit target can be estimated as follows, depending on the future increases required:

Table 1: Capitalised target for different future increases

Target (pa)	Future increases	Estimate capital	Cumulative difference
\$20,000	Zero	\$291,834	-
\$20,000	Fixed 2% pa	\$367,080	26%
\$20,000	CPI Indexed	\$410,088	41%

As the table above shows, even though the retirement benefit target in all three cases is similar, based on the chosen level of post-retirement increases, the estimate amount of capital required to provide that income for life will be vastly different, e.g. a member with a target annual income of \$20,000 will need 41% more capital to secure annual indexation, compared to no increases.

c) Term and Age at commencement

The period for which the target retirement income is payable (i.e. term) has a direct impact on the capitalised amount required. Using retail quotes for indexed annuities for a 65 year old female, the following table illustrates the point:

Table 2: Capitalised target for different terms

Target (pa)	Term required	Estimate capital
\$20,000	“For the next ten years only”	\$182,695
\$20,000	“For the next twenty five years”	\$396,479
\$20,000	“For the rest of my life”	\$410,088

It is worth pointing out that even though the average life expectancy for a 65 year old female is approximately 25 years, which can be covered fully by a 25 year term annuity, the cost of a lifetime annuity is higher, to guarantee income *for life*. This additional capital can be seen as the “insurance premium” payable for a lifetime income guarantee.

For lifetime income commencing at the target benefit level, the member’s age at commencement (i.e. retirement age) is a further consideration. This is because it can be expected that an income commencing at age 60 would be paid for 5 years longer than income commencing at age 65.

Retail single female indexed lifetime annuity quotes illustrate the impact of the age at commencement:

Table 3: Capitalised target for different age at commencement

Target (pa)	Age at commencement	Estimate capital	Difference
\$20,000	65	\$410,088	-
\$20,000	60	\$473,552	15%

As a very rough guide, to secure the same target benefit at retirement, one can assume that an additional 3% capital is required for every one year earlier that income commences (i.e. earlier retirement).

This additional capital requirement is in addition to the reduction in expected capital accumulation as a result of one year less in the accumulation phase (no contribution or investment return growth).

d) Gender

Statistically, Australian females have a longer life expectancy than males. Therefore, if a regular income retirement benefit target is required to be payable for life, the amount of capital required by a female member will be higher than the capital required for an equivalent male lifetime income. Although this factor is not significant, it still deserves recognition, as the capital value required to provide for a female indexed lifetime income can be as much as 9% more than that for a male.

e) Number of lives (joint income/shared household)

Based on the Australian Life Tables 2005-07, the average life expectancy for a 65 year old member is approximately 87 and 90 years for males and females respectively. This means there's a 50% chance for each gender to reach these ages. However, if viewed as a couple, both aged 65 now, there's a 20% chance that at least one of them will live past 98.

If a retirement benefit target is set to provide for the lifetime regular income consumption of a single person, significantly less capital will be required than if the same target was earmarked for the consumption of a couple.

This can be illustrated again by reference to the following retail quotes for female lifetime annuities at age 65. Ignoring differences in actual consumption needs, it shows that 14% more capital is required to provide an income for two lives (joint life) as apposed to one (single life):

Table 4: Capitalised target for single and joint lives

Target (pa)	Single life	Joint life	Difference
\$20,000	\$410,088	\$465,549	14%

As shown above, there are a number of demographic and behavioural factors that could impact on the capital required to provide a particular level of retirement benefit target. These are in addition to the economic assumptions used in calculating the retail annuities.

Linking a retirement benefit target to superannuation accumulation (particularly for long term or lifetime regular income) needs to be a balance and trade-off between simplicity and consistency of capitalisation method vs. wide variety of possible outcomes from the combination of demographic and behavioural factors for individual members with unique circumstances and needs.

Reporting relative to the target

Once a retirement benefit target has been set and linked to superannuation accumulation, it needs to be reported to fund members. For the current Australian *wealth accumulation* approach to superannuation, reporting is simple, because it is reporting on regular, retrospective, time-weighted investment returns performance over rolling periods only.

With a target, a new reporting challenge arises. This is because a successful outcome is not known until either the point of retirement (for payment of a lump sum), or only at death (for payment of lifetime income). This can often be many years into the future. Traditional retrospective superannuation reporting is therefore not well placed for target-based retirement benefit provision.

Relative to a target, members will require regular reporting to indicate progress made towards meeting such a target, and the certainty or probability of achieving it. There are four main approaches for reporting against a target:

a) Funding ratio

The funding ratio is a traditional defined benefit fund measure for assessing the fund's financial condition at a point in time. In simple forms, the funding ratio can be defined as the ratio of a fund's total net assets over its accrued liabilities. For example, if a fund's assets are \$450,000 and the accrued liability is \$500,000 the funding ratio would be 90%.

This concept can be extended to individual accounts. If one assumes that a fund member accrues the target benefit over the working/contributing period of membership in the fund, then the accrued to date retirement benefit target can be actuarially determined (on a discounted cashflow basis) and compared to the member's account balance at that date.

A secondary assessment would also be necessary: to determine whether 'future expected contributions' would be sufficient to provide for that part of the target benefit that still needs to accrue. This future expected contributions assessment can be incorporated into the accrued funding ratio to give an overall funding ratio.

Although technically correct, this method is complex, requires significant calculation, will differ for different types of target, introduces a whole range of new assumptions and is difficult to explain to members.

b) Lump sum projections

Once a retirement benefit target has been set, it can be capitalised at a chosen date, based on certain assumptions. On similarly consistent assumptions, a fund member's current account balance can be projected, together with future contributions and investment returns, to the same date.

It is important that both the capital and salary amounts are expressed in the same real terms, which should both be in today's money terms, to give a member an appreciation of the relevance of the amounts. In reporting to members, the capitalised target can be compared to the projected accumulation amount.

The reporting to members should further include a measure of certainty in achieving the projected accumulation, or expected variability of the outcome. Increased certainty is an improved outcome. This will also assist member to assess the implications of their intervention options.

c) Income projections

Providing income projections can be viewed as the inverse of the lump sum projections described above. Rather than capitalising a retirement benefit target, the target income is compared to the income that can be expected from the accumulated projection (based on the same capitalisation assumptions).

This may be one step removed from what members see every day (i.e. their account balances), but it does provide a very real picture of the outcome (i.e. retirement income). It does not allow for lump sum target benefits to be included in the projections, unless these are deducted from the projected accumulation first and shown separately.

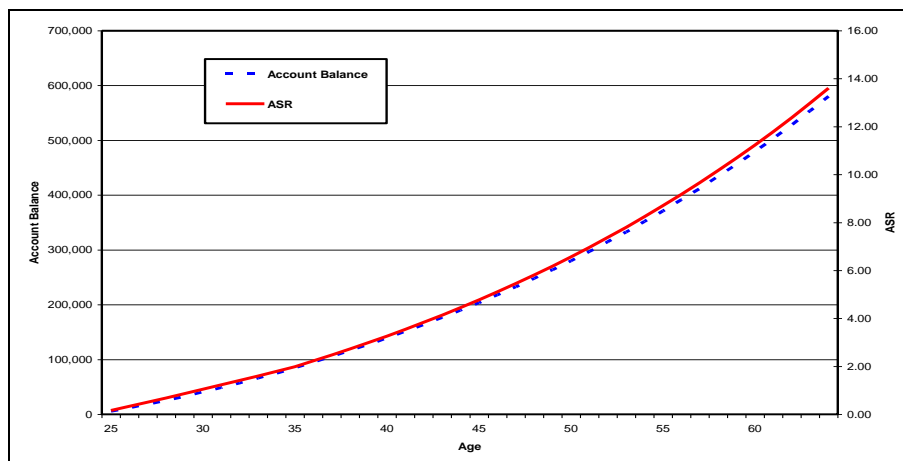
d) Asset/salary ratio

The asset/salary ratio (ASR) can be defined as the capitalised retirement target, divided by salary. For example, if the discounted value of the capital required to provide a particular retirement benefit target is \$475,000 and the member's current salary is \$50,000 pa (both in today's money terms), then the ASR would be 9.5, effectively a multiple of annual salary.

This is an extension of the lump sum projections method. The aim would be to achieve the ASR by the end of the accumulation phase. The difference though is that if the target is a replacement ratio function for example, then a change in salary would change the capitalised value of the target, whereas the ASR would remain reasonably constant.

Simple deterministic financial modelling of superannuation accumulation (using assumptions consistent with those in publicly available online calculators on fund websites) shows that the shape of ASR progression during accumulation is similar to that of the growth in a nominal account balance:

Graph 1: ASR and Account Balance progression



Source: Author's calculations

For a set retirement age, an ASR can therefore be used to compare current accumulated savings (as a multiple of current salary) against the age-based ASR required to achieve that particular retirement benefit target.

The practical logistics of implementing any of the above target reporting methods is beyond the scope of this paper.

Reporting towards a target retirement benefit does introduce possible new trigger point member contact opportunities that may not exist in a wealth accumulation system. This includes proactive advice relating to factors that can improve not just the level, but also the certainty of outcomes (e.g. contribution levels, investment strategies, tenure).

Benchmarks for a target

In 1999 the ASFA Research Centre published a discussion paper (ASFA, 1999) which was based on research undertaken in the development of a target for an adequate income in retirement. ASFA concluded that a 'rule of thumb' target of 60% of gross pre-retirement income emerged as consistent with most of the other benchmarks surveyed.

Using a relatively conservative approach to retirement income products, combined with the Age Pension, this target could provide a worker on average income with about 80% of their pre-retirement disposable income, which would give a 'modest but adequate' lifestyle in retirement for most workers. This would require a contribution rate of at least 12% SG over 30 years or more. ASFA further summarised commonly used retirement targets as follows:

Table 5: Summary of commonly used retirement income targets

Source of target	% pre-retirement gross income	% pre-retirement net (disposable)
Conventional wisdom	60%	
Financial planners	75%	
Clients of financial planners	50% plus	
Department of Treasury Retirement Income Modelling (RIM) Unit		60%
Defined benefit schemes	50-79%	69-92%
Superannuation guarantee after 30 years at 9%, (no supplementary contributions)	37-70%	48-79%
Superannuation guarantee after 40 years at 9%, (no supplementary contributions)	50-82%	62-90%

Source: ASFA Research Centre

The most recent ASFA Policy Principles (ASFA, 2010) note that most individuals with income above very low levels will want and need a retirement income which is a percentage of their pre-retirement earnings. This will be in the order of 60% to 70% of pre-retirement income. This level of replacement ratio could lead to a slight reduction in living standards and disposable income.

The World Bank (World Bank, 1994) suggests that the target household replacement ratio should be:

- a) 100% of the net average lifetime wage
- b) 78% of the gross average lifetime wage
- c) 70% of the net final year wage
- d) 54% of the gross final year wage

The World Bank also noted that “The government should not necessarily mandate the full pension that might be desirable for individual households.” That is, these targets could be met through a combination of mandatory and voluntary provisions. It concludes that individual target replacement ratios will depend on circumstances, preferences, the rate of economic growth and the wage base.

The OECD expresses a target replacement ratio of 70% of final earnings as an adequate retirement income benchmark for the average individual at a standard of living in retirement that is similar to the standard of living enjoyed prior to retirement (OECD, 2009). It is important to note that, for an individual living near or below the poverty line, any reduction in income in retirement could mean financial hardship. The OECD target includes mandatory pension for private sector workers (publicly and privately funded) and typical voluntary occupational pension plans. Interestingly, the OECD report ranks Australia 29th out of 30 countries for the expected ultimate potential replacement ratio from these sources at normal retirement age (43%, compared to the average replacement ratio across OECD countries of 68%). Australia’s system also stood out in terms of the sensitivity of outcomes to investment returns and salary increases.

Member target vs. Fund target

In practice, a Fund does not have the simple privilege of a member joining at a young age with continuous contributory behaviour over an uninterrupted working life, single fund membership throughout and reaching retirement age with pension payments until death. In reality, members join and leave during the accumulation phase, have career breaks, retire early and outlive their finances.

The targets described in this paper are generally for an individual (not a couple) and includes Age Pension entitlements. It is effectively the member's target.

Once such a target for a member is set, the approximate capital amount required to provide target benefits can be calculated. Amongst the factors influencing the capital amount would be retirement date and assumed post-retirement consumption patterns, age and salary.

The capital amount will further depend on the manner in which the fund intends to deliver the benefits, e.g. via fully outsourced (or white-labelled) indexed lifetime annuities at the one extreme (prudently priced), or at the other extreme, a simple allocated pension product, applying a realistic estimate of individual life expectancy and future investment returns. These two extremes effectively then become the range boundaries for setting the fund's target around which strategies are designed.

Retirement benefit targets will vary between defined contribution funds, just as accrual rates differ between defined benefit funds. This is because the target will depend on the net contribution rate applied to retirement savings, which is impacted by, amongst others, fund expenses and insurance premiums. Fund-specific expected net investment returns, income benefit delivery mechanisms and membership profile also impact on the potential retirement benefit target.

Within a fund, a retirement benefit target could be unique for every individual member, due to particular personal circumstances, needs and risk tolerances. It is however arguably possible in practice for a fund to introduce similar targets for different cohorts of members who have reasonably homogenous characteristics.

This introduces what could be described as a new type of retirement fund: not defined contribution, not defined benefit, but a *defined target fund*.

Conclusion

A *defined target fund* would involve a fundamental change to current objectives (as described in Table 6 below). Such a change would require considerable courage, long term commitment, perseverance and trust from a Board of Trustees, not to mention the initial and ongoing member engagement programs. This should however be outweighed by the improved outcomes delivered to members and increased clarity of purpose.

Table 6: Changes required to a Fund’s objective to introduce a retirement benefit target

From:	To:
Wealth accumulation	Retirement income benefit provision
A reward for reaching retirement	Adequacy and certainty during retirement
Time-weighted return measures	Internal rate of return measures
Maximum risk-adjusted return over finite period	Meeting income target over an unknown period

By setting a specific target, present day relevance is created for superannuation, with increased member engagement opportunity. It would guide strategy development and becomes a benchmark for measuring success. Different options exist for reporting progress towards achieving the target, which should include a measure of probability.

Targets would vary between funds, both in terms of the type and quantum, but should be flexible enough to account for changes in member circumstances and external conditions over the long term. A number of benchmarks already exist, which can be used by funds as a guide in setting their targets.

Because the majority of retirees in Australia receive at least a part Age Pension, retirement income provision from superannuation is effectively a top-up to the Age Pension, rather than the primary source of retirement income. It is for this reason that there should be a separate *capital target for the Fund* in order to provide part of the total *retirement income target for the member*. The intention is to expand the paper in future to explore this concept in greater detail.

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