



13 July 2018

Superannuation
Productivity Commission
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By electronic lodgement

Dear Sir/Madam,

Thank you for the opportunity to respond to the Productivity Commission's Draft Report:
Superannuation: Assessing Competitiveness and Efficiency (May 2018).

Background and general comments

With more than AUD \$6.4 trillion in assets under management as at 31 March 2018, Vanguard is one of the world's largest investment management companies, serving over 20 million investors in 170 countries across the globe.

In Australia, Vanguard has been serving financial advisers, retail clients and institutional investors for over 20 years, with Australia being the longest-established presence for Vanguard outside the US. With over AUD \$130 billion of Australian-sourced assets managed out of our Melbourne office, Vanguard Investments Australia is a major provider of low cost investment management services to all segments of the Australian superannuation industry, as well as to the broader institutional, exchange traded fund and retail wealth management sectors.

Vanguard is not a direct participant in the Australian superannuation industry as either a MySuper or Choice product provider. However, our Australian business is deeply engaged in many of the key commercial and member-facing aspects of superannuation offerings for our clients, extending well beyond the provision of investment management services alone. These include applied research, data analytics, policy analysis, product design, member education and behavioural insights - value-added services that leverage the substantial experience of our US parent company and other global affiliates that are directly involved in pension fund provision to end consumers.

Vanguard's historical journey is a compelling case study as to how the benefits of scale have the potential to flow through to the end-investor in the form of lower product fees, efficient exposure to markets, and better net return outcomes. The Australian superannuation system should be well positioned to capture similar advantages, given its standing as one of the world's largest and most sophisticated defined contribution pension systems, its mandatory contribution framework and its near-universal coverage of the working population.

These factors mean that the Commission's review of Australia's superannuation system is of great interest to Vanguard, both as a major local market participant and at a global level. We see the review as a bellwether of issues, challenges and policy measures that will almost certainly arise in other markets that are undergoing similar demographic and labour market shifts as are underway in Australia, but are not yet as far advanced in their delivery of retirement outcomes to individuals in a defined contribution framework.

Overall Response to Commission's Findings and Recommendations

Against this background, Vanguard would like to affirm its strong endorsement for most of the key findings and structural reforms being proposed in the Commission's Draft Report.

In particular, we agree with the Commission's analysis and conclusions that:

- While most members and assets in the Australian system are in products that have performed reasonably well historically, there remain an unacceptable number of members in underperforming funds that could be doing significantly better (Draft findings 2.1-2.4)
- Fees and costs remain a significant drag on overall system performance, while gaps and inconsistencies in fee and cost disclosure has made true cost-based competition in this market largely elusive (Draft findings 3.1-3.4)
- The current policy settings for allocation of members to default funds contribute to erosion of retirement balances by leading to undue account proliferation and duplication of insurance (Draft Findings 6.2 and 11.1)
- Current policy arrangements create an undue barrier to access to the default segment by new entrants, while also contributing to an absence of competition for that market (Draft finding 7.2 and 12.1-12.3).

We also endorse and commend the Commission for its proposed structural reforms to remedy these issues, including through:

- The adoption of a 'once-only' default mechanism for new workforce entrants, administered by the Australian Government and ATO, building on existing MyGov and single-touch payroll initiatives and independent of the particular employment relationship (Draft Recommendation 1);
- The establishment of a single shortlist of up to 10 'best in show' providers, selected by an independent expert panel that is accountable to Government through a rigorous arm's length selection process (Draft Recommendations 2 and 3);
- Adoption of an "elevated MySuper" standard for all products seeking to retain default fund status, incorporating a strengthened outcomes test and a minimum investment performance threshold for retention of MySuper authorisation (measures relative to the fund's own stated asset allocation) (Draft Recommendation 4).

The various other recommendations made by the Commission in the areas of improved disclosure, fund governance, facilitation of fund mergers, insurance and additional tasks for the two system regulators (Recommendations 5 to 22) all appear aligned with these core structural recommendations and are also broadly endorsed by Vanguard.

At the detail level, we expect that many of the Draft Report recommendations will require careful refinement in implementation, and will likely benefit from further consideration by the Commission and industry feedback during the consultation process. Examples of this include the detailed criteria for assessment of the ‘best in show’ shortlist, and for selection of the independent panel charged with making this assessment. These issues have been extensively foreshadowed in the Commission’s public hearings and in commentary from numerous industry participants, so we are confident they will be further addressed in the Commission’s final report.

Lifecycle Investment Strategies

The one area in which we strongly disagree with the Commission’s draft report is in its negative depiction of the role of life-cycle or target date investment strategies as default investment options for Australian superannuation providers.

In its Draft Finding 4.3, the Commission has put forward the proposition that the eligibility of life-cycle investment strategies for MySuper status is “questionable given the foregone returns they pose for many members’ balances”. The report goes on to state that these products are “mostly suited to members who want to ‘lock in’ a lump sum for some immediate purchase after retirement... (whereas) for other members, maintaining a balanced portfolio before and after retirement would maximise retirement and lifetime income.” The Draft Finding concludes with a categorical statement that “Life-cycle products are better suited to the choice segment”, but then in its Information request 4.1 the Commission invites comment from respondents on this conclusion – i.e. *Should life-cycle products continue to be allowed as part of MySuper?*¹

In our view, the Commission’s draft report fails to recognise the potential benefits of well-constructed lifecycle and target date investment options, and of their likelihood of delivering sound outcomes over the full contribution lifespan of a defaulting superannuation fund member. We believe that a more thorough analysis by the Commission incorporating a utility-based measurement framework would have better distinguished between life cycle strategies as a concept and a particular sub-optimal execution of the concept, upon which much of the Commission’s assessment of lifecycle investment strategies is based.

We have provided detailed commentary on these points in our attached response to the Commission’s Information Request 4.1. Briefly, these comments are to the effect that lifecycle investment strategies (and analogous products such as Target Date Funds) *should* be permitted to remain as MySuper default investment options. By extension, we suggest that lifecycle strategies should also be within scope of the selection criteria for ‘best in show’ providers, alongside conventional diversified investment options such as balanced strategies.

If lifecycle products were excluded from the default MySuper offering as suggested in the Draft Report, we believe it would lead to an undue stifling of product innovation and diversity in the streamlined industry default environment that the Commission is proposing.

¹ Draft report, pp. 190-195

Conclusion

In conclusion, apart from our concerns over the Commission's position on lifecycle investment options, Vanguard is broadly supportive of the overall structural reform framework being proposed. We congratulate the Commission and its staff for the depth of analysis and insight that has underpinned its work throughout the review process, and look forward to assisting the Commission in any way we can as it finalises its report to Government.

Please contact me or Paul Murphy, Senior Manager Government Relations & Industry Policy should you wish to discuss our submission or require any further information.

Yours sincerely,

Robin Bowerman
Head of Corporate Affairs
Vanguard Investments Australia Limited

Attachment: detailed response to Information Request 4.1

Attachment to Vanguard Submission – Detailed Response to Information Request 4.1

4.1 Should life-cycle products continue to be allowed as part of MySuper? If so, do they require re-design to better cater for the varying circumstances of members nearing retirement, and how can this be achieved? What information is needed on members to develop a product better suited to managing sequencing risk?

Vanguard strongly believes that lifecycle investment strategies (and analogous products such as Target Date Funds or TDFs) *should* be permitted to remain as MySuper default investment options.

By extension, we suggest that lifecycle strategies should also be within scope of the selection criteria for ‘best in show’ providers, alongside conventional diversified investment options such as balanced and growth strategies.

There should be no predetermined restriction on the *method* through which a trustee of any given MySuper or ‘best in show’ provider seeks to deliver outcomes to its default option members, provided that their product meets the core MySuper criteria of being well diversified, low-cost, transparent in its operation and likely to deliver strong net retirement outcomes relative to a consistent passive reference benchmark.

Our arguments in support of this position are based on a number of factors including:

- Vanguard’s experience as a leading provider of TDFs in the US 401(k) DC pension system;
- Some limitations in the analysis of lifecycle options presented in the Commission’s draft report; and
- Our belief that selection of a suitable default option design is in principle best left to trustee discretion and judgment, rather than determined by restrictions imposed by regulation.

Vanguard’s experience as a TDF provider

While Vanguard is not a direct issuer of superannuation products in Australia, our US parent company is a leading investment manager and record-keeper of defined contribution (DC) pension assets in the US.

At 31 March 2018, Vanguard provided services to more than 10,800 corporate plan sponsors and 4.9 million participants (members), with total DC assets under management of over US\$1.2 trillion. More than half of these assets (US\$650 billion) were in Target Date Fund (TDF) products, with an average weighted cost to participants of 0.13% p.a. - a fee level that is around one quarter of the industry average in the US² and less than one-eighth of the headline average of 1.1% p.a. noted by the Commission as the Australian industry average in 2016-17.³

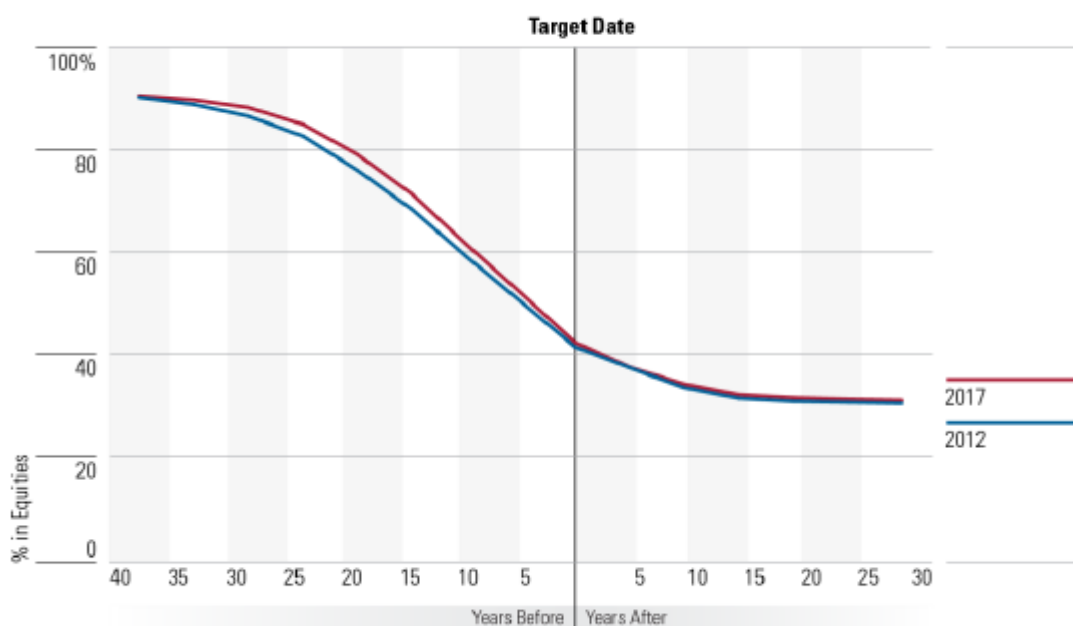
² *How America Saves 2018* (Vanguard 2018)

³ PC Draft Report, p.132

Across the US DC pension system as a whole, a recent research report from Morningstar⁴ notes that the TDF segment of the 401(k) pension market in its entirety surpassed US\$1 trillion in 2017, with inflows exceeding US\$70 billion for the most recent calendar year.

Aside from chronicling the very rapid growth in scale and coverage of TDFs, an interesting observation in this report is its summary of the average strategic allocation to equity assets at various ages, across the three major providers (including Vanguard), which in combination accounted for some 70% of the total TDF market in the US at the end of 2017.

Exhibit 40 Average Strategic Equity Glide Path, 2017 versus 2012



Source: Morningstar, Inc. Data as of 12/31/17.

Two particular items of note from this graph are:

- The significantly higher average exposure to growth assets (up to 90%) for at least the first 20 years of a member’s contributions, relative to a static 70/30 balanced portfolio.⁵
- The fact that the glide path descent typically occurs through a very gradual, continuous adjustment process, rather than in sudden step changes at fixed points in time.

⁴ Morningstar 2018 Target-Date Fund Landscape (May 2018)

⁵ In Vanguard’s standard TDF offering in the US, equity allocations are held at 90% until age 40 before tapering down gradually to 50% in gradual increments between age 40 and 65 (the notional target retirement age), and further to 30% between ages 65 and 75.

Limitations in the Commission's Analysis

Neither of these key design characteristics that are typical of the US-style TDF system appears to have been considered in the stochastic modelling of lifecycle investment options undertaken by the Commission in its Draft Report.

We appreciate that the Commission's analysis may reflect a less than optimal *execution* of the lifecycle fund concept in the Australian market to date, or by product designs that have arguably been driven primarily by peer risk considerations and/or administration capability constraints. However, it does not in our view do justice to contemporary best practice in TDF design which we believe is better represented by the contemporary US practice depicted in the graph above.

The modelling presented in Technical Paper 6 starts from the premise of a lifecycle fund that switches from a standard balanced fund allocation to a 'safe' portfolio delivering a consistent 2.5% annual real return, in a single step change five years prior to retirement. The paper then makes various observations about the expected end-balance shortfall of this strategy relative to that of a portfolio that remained in a balanced portfolio for those remaining five years.

These simulations are presented in a table (reproduced below) depicting the implicit trade-off between elimination of sequencing risk (defined as the risk of the balanced fund balance being lower at retirement than five years earlier), and reduction in expected retirement balance in the lifecycle fund compared to remaining in the balanced fund, for six distinct member cohorts - for example, in Case B (a typical lower income male wage earner) there is an expected 'cost' of \$95,000 incurred in the lifecycle fund for reducing their sequencing risk from 9.7% to zero.⁶

⁶ Productivity Commission Technical Supplement 6, *Analysis of members' needs* p. 11, Table 6.1

Table 6.1 Life-cycle products produce losses for many different types of member

	Average retirement balance	Sequencing risk ^a	Loss if risk occurs ^b	Sequencing risk in life-cycle product ^c	Average loss from life-cycle product ^d	Relative loss ^e
	\$'000	%	\$'000	%	\$'000	%
Case A (default model)	977	9.8	73	0	132	10.5
Case B (lower male wages)	697	9.7	52	0	95	10.5
Case C (woman with 2 children)	331	13.9	26	0	46	10.6
Case D (part-time work when older)	948	11.3	73	0	130	10.5
Case E (higher experience effect)	1 278	10.5	97	0	174	10.5
Case F (higher risk life-cycle product)	977	9.8	73	2.1	69	5.5

^a Based on one million simulations. This is the risk that the value at retirement is less than the value five years earlier. ^b In the event of a sequencing risk, this is the average loss that occurs compared with a counterfactual in which the fund invests in a safe asset with a real return of 2.5 per cent per year. ^c While, by definition, there is zero sequencing risk where the life-cycle product involves an entirely safe asset, where the 'safe' asset includes some risky assets, this is no longer true. This is why sequencing risk remains for case F. ^d This is the average loss in the retirement balance from investing in a life-cycle product. ^e This is the average percentage reduction in the retirement balance of the life-cycle product relative to the balanced product.

Some important factors that in our view are missing from this analysis are:

- Any countervailing benefit from a *higher growth asset exposure in the earlier phase of the lifecycle fund glide path, and the compounding of those returns through the whole accumulation phase* – a factor that we believe is critical to best practice design of dynamic asset allocation products such as TDFs;
- Any weighting of the *magnitude* of the sequencing risk shortfall in the ~10% of scenarios in the Commission's model in which the balanced fund incurs a loss greater than the lifecycle option. Clearly a loss of say \$100,000 would be significantly more detrimental to the member than a \$1,000 loss, but the Commission's analysis seems to treat the two as equivalent.
- Conversely, any discussion of the *utility* to the member of the sequencing risk vs expected balance trade off. There is an implicit assumption in the Commission's commentary that the trade-off may be 'worth it' for Cases C and D (woman with 2 children and someone returning to work when older), but no actual quantification of where the appropriate 'tipping point' is considered to exist.
- There is no consideration included of the drawdown of assets beyond the retirement date in the stochastic model which is where the real effect of the sequencing risk is felt through the retiree needing to withdraw assets from a portfolio adversely affected by a volatile market. Instead the modelling considers only the balance at retirement.

In relation to these points, we contend that a prudent trustee may reasonably take the view that the relationship between expected final balances and sequencing risks in a conventional balanced portfolio is not a linear one, especially on the downside. This is particularly so in the

case of default retirement products in which the incidence of significant capital losses in the years approaching retirement can be quite devastating, given the limited opportunity for the member to recover losses incurred through ongoing contributions or deployment of ‘human capital’. Conversely, on the upside, outsized positive returns may largely be taken as windfall gains, with disproportionately lower utility to the member than their downside counterparts.

And finally, as noted earlier, a more holistic modelling approach would have factored in the long-term benefits accruing to the members from many years of more aggressive asset allocations in the earlier years of membership, when sequencing risks were less material.

Modelling Methodology

On a more technical level, we also have some concerns with the limitations of the stationary bootstrap modelling approach that the Commission has adopted in its analysis of lifecycle options.

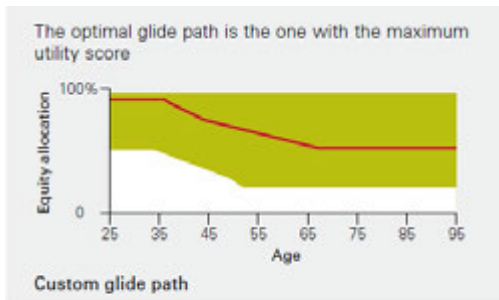
For example, if (as we suspect may be the case) the range of return outcomes modelled is constrained by those actually experienced in the historical data sample used, one potential danger is that the ‘worst case’ outcome is the one that occurred during the GFC, when equities declined by over 20% in one year. There is unfortunately no reason why a sudden loss of double that size or more cannot occur, but it is unclear whether the Commission’s analysis accommodates a ‘black swan’ scenario of this kind.

In the absence of more detailed disclosure of the process that was used⁷, it is difficult to know what level of confidence can be placed in the conclusions that were arrived at for such a significant recommendation in the Commission’s report.

By way of contrast, Vanguard’s Life-Cycle Investing Model in the US tests approximately 150,000 glide paths for US-based investors across a range of characteristics including risk aversion, savings rates, spending requirements and correlations of wages to market returns.

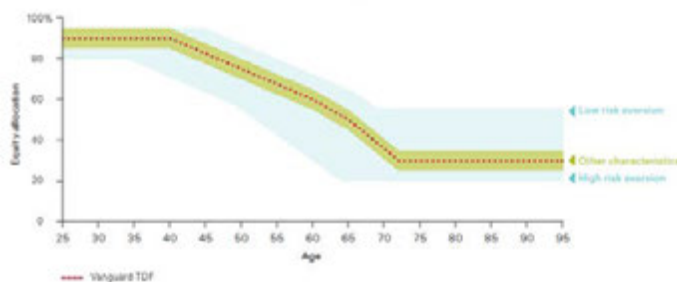
The high level results of these simulations are depicted in the graphs below.

⁷ for example whether the stationary bootstrap was supplemented with a vector correlation or like model to generate simulations, as recommended in Ganegoda and Evans (2015), cited in the Commission’s Technical Supplement 6



Note: The green shaded area represents the potential range of glide-path options.
Source: Vanguard.

Figure 5. Most population characteristics affect the glide path slightly



Note: The figure summarizes the impact of each population characteristic changing from low (25th percentile of broad population data) to medium (50th percentile) to high (75th percentile) as described in Table 2 on page 10. VGM simulations are as of March 31, 2015.
Source: Vanguard.

Noticeably, while there is the option for the model to return a static asset allocation as the optimal strategy for the population of a fund (which would be represented by a flat line), when considering investor characteristics, the optimal glide path returned is more aggressive for younger worker and more conservative for older workers. This suggests that, for US investors saving for retirement, a balanced fund would not be taking enough risk for a young worker and be taking too much risk for an imminent retiree⁸.

To guide the Commission in understanding Vanguard’s approach to TDF product design, we are pleased to provide links to research papers published by our US parent company that address this topic in detail.⁹ These include a description of the utility-scoring model developed by Vanguard’s Investment Strategy Group to define the glide path for both Vanguard’s default Target Retirement Funds and custom target date funds for individual retirement plan sponsors (Aliaga-Diaz et al. (2016)).

The absence of a similar utility-based framework for modelling member outcomes is, we believe, a key limitation in the Commission’s modelling of the lifecycle investment approach. We believe that incorporation of the notion of utility-adjusted wealth into the model would lead to a more reasonable depiction of the benefits of a good life cycle or TDF product design, including through highlighting instances in which higher wealth outcomes do not necessarily equate to better utility if the risk being taken to achieve the elevated wealth exceeds the risk tolerance of the member.

⁸ Aliaga-Diaz et al, Vanguard Life-Cycle Investing Model: A framework for building target-date portfolios (2016). <https://personal.vanguard.com/pdf/ISGLCIM.pdf>

⁹ See Donaldson et al, [Vanguard’s Approach to Target Date Funds](#) (2015); Utkus & Pagliaro, [A different kind of target date investor](#) (2017); Aliaga-Diaz et al, Vanguard Life-Cycle Investing Model: [A framework for building target-date portfolios](#) (2016).

Vanguard would be happy to provide access to technical analysts in our Investment Strategy Group to expand upon these points or undertake more detailed peer review or modelling simulations should the Commission wish to follow up on these points.

Differences between Australian and US systems

In making these comments, we recognise that the industry structure and legacy default environment in the US retirement system are quite different from Australia's, and that this has a bearing on the degree of uplift (or risk mitigation) that might be achieved from a TDF structure compared to a standard static balanced portfolio default option.

In particular, it is true that a major driver of adoption of TDFs in the US has been that they provide plan fiduciaries (employers) with more of a liability protection 'safe harbour' to provide exposure to growth-oriented investments than the much more conservative default options they had typically provided previously¹⁰.

The Australian system, to its great credit, does not have the same legacy problem, as the typical default option here (generally driven by independent fiduciaries), has always tended to be more growth-oriented and hence more aligned with the long-term investment horizons of typical default members.

While this may mean that the case for lifecycle or TDF style products may be less compelling on a relative basis here, on an absolute basis we contend that there is still room for lifecycle and TDF options to play a productive and innovative role as large scale default offerings in the Australian market.

To date, Vanguard has not undertaken the detailed modelling that would be required to construct an optimal glide path (or series of cohort-based glide paths) for a default Australian superannuation offering, along the lines of our US research cited above. At a high-level however, we assure the Commission that any design work we undertook in this area would not be a simple transposition of existing US-based structures onto the local market. Rather, we would see this modelling as a significant evidence-based research project, taking into account the characteristics of the broad Australian retirement income system that are materially different from the US, such as the mandated contribution framework, labour market participation trends, the means-tested social security rules, the various caps on additional contributions, and the distinct taxation structure of contributions, earnings and drawdowns in Australia's retirement income system.

Intuitively, we expect that these factors would support the case for higher growth-oriented exposures in the final years leading up to retirement (and likely beyond) in Australia than were reflected in the Commission's stochastic modelling, particularly for members who are in the full or part age pension eligibility 'zone'. However, until we have undertaken the analysis we hesitate to put specific numbers on this.

Looking ahead, further refinement of glide path design for particular demographic and/or behavioural cohorts would also be envisaged, depending on the degree of flexibility permitted by the default fund rules to adjust exposures based on analysis of transaction behaviour or additional information provided by members.

¹⁰ Pension Protection Act 2006 (US)

But importantly, in all of these cases the underlying *principles* for best practice TDF design developed from many years' experience in the US and other major DC pension systems would still apply. These include:

- A rigorous focus on *member outcomes* (expressed as a target income replacement in retirement) as the core objective being delivered, rather than more ephemeral supplier-driven or 'league table' based metrics;
- Execution of underlying investments through well-established, low-cost investment structures with significant inbuilt diversification and scale benefits, and high transparency of returns that are readily comparable to recognised market benchmarks; and
- Maximum efficiency in management of asset allocation adjustments, with minimal portfolio turnover or market impact cost imposed on members.

Trustee discretion vs regulated constraints on default option

One final comment we have in this section concerns which party is best placed to make a determination of - and take accountability for – the selection of the default investment option.

In our view, it is critical to the prudential framework of the superannuation system that this responsibility be exercised by the trustee rather than in effect mandated by regulated constraints on the type of default option that can be offered.

In this regard, it should remain open to trustees to adopt a lifecycle or TDF option, and (like any other alternative strategy), to substantiate this choice to the fund's members, stakeholders and regulators.

The decision on whether (and at what point) the trade-off between these competing considerations should be reflected in the default product design is most appropriately addressed at a fiduciary level rather than being predetermined by regulation.

Summary

In conclusion, we believe that the Commission's draft report paints an unduly negative picture of the potential benefits of well-constructed lifecycle and target date investment options, and of their likelihood of delivering sound outcomes over the full contribution lifespan of a defaulting member.

We would emphasise that we are not suggesting that MySuper default options should be *required* to be offered on a lifecycle or TDF basis; rather simply that providers should be *permitted* to offer default options based on these structures.

From there, we suggest that significant progress can be made to address the second and third questions in the Commission's information request, concerning better catering to varying member circumstances and better utilisation of member data to drive product design.

In principle we believe the TDF structure is very amenable to enhancements of this kind, including optimisation for demographic or occupational cohorts or adaptation to transaction behaviours and preferences. It also provides greater capacity for fund providers to focus their member engagement strategies on aspects of the retirement planning journey outside the realm of asset allocation, such as discretionary contribution strategies, communication enhancements to promote more member engagement (such as benefit projections on member statements), or strategies to optimise social security benefits.