DREW·WALK & CO

**21 June 2018**

Meredith Baker
Research & Inquiry Manager
Productivity Commission
Level 2, 4 National Circuit
Barton ACT 2600

Dear Meredith,

Re: *Superannuation: Efficiency and Competitiveness, Public Hearings*

Thank you for the invitation to appear at the above Hearing in Brisbane on Friday 22 June 2018. As requested, please find attached ("Attachment 1") a set of dot points on the topics that the Commissioners may wish to discuss.

Please do not hesitate to contact us if you would like to discuss this matter further.

Yours sincerely,

**Dr Michael E. Drew**
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Director

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**ATTACHMENT 1: Discussion Points**

***What you have done for others on lifecycle products or related strategies (proof statement)***

We have been involved in research on default option design, specifically, lifecycle (also known as target date funds, "TDFs") strategies for over a decade. Dr Michael Drew was the only academic invited to provide testimony at the Department of Labor and Securities Exchange Commission *Public Hearing on TDFs and Other Similar Investment Options* in Washington, D.C., in June 2009. The full transcript (including Dr Drew's testimony) is available here: https://www.sec.gov/spotlight/targetdatefunds/targetdatefunds061809.pdf

The impact of this work is recognised with a formal citation in the Federal Register (The Daily Journal of the United State Government) on TDFs in 2010, see: https://www.federalregister.gov/documents/2010/06/23/2010-15012/investment-company-advertising-target-date-retirement-fund-names-and-marketing

We have written some of the most widely cited (by both industry, regulatory, and scholarly studies) and debated scholarly papers on the topic of lifecycle strategies and TDFs, most notably:

- *Portfolio Size Effect in Retirement Accounts: What Does It Imply for Lifecycle Asset Allocation Funds?* [Basu and Drew, 2009], http://jpm.iijournals.com/content/35/3/61
- *Dynamic Lifecycle Strategies for Target Date Retirement Funds*. [Basu, Byrne and Drew, 2011], http://jpm.iijournals.com/content/37/2/83
- *Retirement Adequacy through Higher Contributions: Is This the Only Way?* [Drew, Stoltz, Walk and West, 2014], http://jor.iijournals.com/content/1/4/57

In addition, we have been the lead researchers on FINSIA's trinity of studies on the retirement risk zone, that deal directly with issues related to the design of the glide path both to-and-through retirement:

- *Sequencing Risk: A Key Challenge to Creating Sustainable Retirement Income.* [Basu, Doran and Drew, 2012], https://www.finsia.com/docs/default-source/Retirement-Risk-Zone/sequencing-risk-a-key-challenge-to-creating-sustainable-retirement-income.pdf?sfvrsn=2
- *How Safe are Safe Withdrawal Rates in Retirement? An Australian Perspective.* [Drew and Walk, 2014], https://www.finsia.com/docs/default-source/Retirement-Risk-Zone/how-safe-are-safe- withdrawal-rates-in-retirement-an-australian-perspective.pdf?sfvrsn=6b7ede93_2
- *The Role of Asset Allocation in Navigating the Retirement Risk Zone.* [Drew, Walk and West, 2015), https://www.finsia.com/docs/default-source/industry-reports-retirement-risk-zone/the-role-of- asset-allocation-in-navigating-the-retirement-risk-zone.pdf?sfvrsn=48c08e93_4

The final paper in this series, on the role of asset allocation and default options, is of particular relevance to this Public Hearing, as it formally tests the following glide path designs:

- A declining equity glide path (e.g. where equity exposure is lowered as people get older);
- A static fixed allocation (Bengen, 1996; Blanchett, 2007);
- A rising equity glide path (e.g. the portfolio is initially conservative and becomes more aggressive through the retirement period (see the work of Pfau and Kitces, 2014 based on the based on the portfolio size effect work of Basu and Drew, 2009) to minimise the probability of ruin during retirement).

***How might you help us better understand, design and evaluate such strategies***

In responding to this issue, we would like to share an aviation analogy regarding this glide path, a central design issue in lifecycle strategies. As is well-documented, the majority of general aviation accidents occur during take-off and landing. The setting of the glide path is, that is the aircraft's line of descent to land, is a deceptively complex problem.

While principles exist, for instance, a conventional aircraft decline to a runway is typically along a glide path of three degrees, the experience of the pilot, advanced instrumentation and ground-based equipment must work in concert to mitigate under- or overshooting. This analogy lies at the heart of how to best understand, design and evaluate lifecycle strategies.

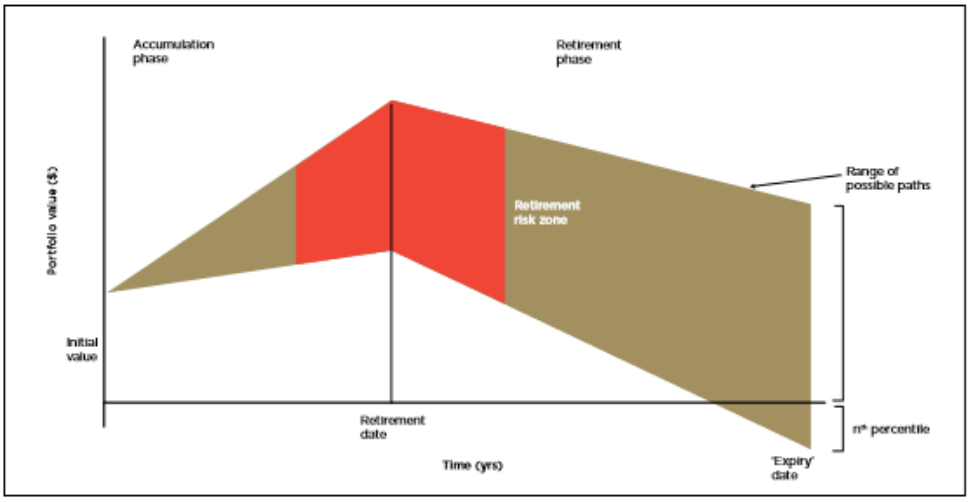
TDFs employ pre-determined age-base rules that switch the asset allocation through time, and typically it's a unidirectional approach to the problem. However, airplanes, like TDFs, do not operate in a vacuum. Events like the global financial crisis ("GFC") and the changing correlations of portfolio components within these funds require careful management. Accident prevention programs train pilots to deal with the effect of, say, wind shears on the glide path to ensure a safe landing. We could, for the sake of argument, think of the GFC as an extreme form of wind shear. Our evidence suggests that the general increase in portfolio size as one approaches retirement is significant from an asset allocation perspective. It is our conjecture that the key issue for the design of lifecycle strategies is to decide when you expose the largest amount of money to growth asset classes (such as equities). In summary, the idea of lifecycle strategy (or TDF) where risk is reduced on the basis of age is a very, very elegant concept indeed. However, as our aeronautical colleagues have taught us (and our research has shown), the glide path is a deceptively complex problem, and it is much more than a simple, predetermined rule.

We use this analogy to assist large defined-contribution plans to develop their foundational views on glide path design, which, in turn, directly influences how 'best' to evaluate such strategies. Our research supports taking a money-weighted approach to the evaluation of TDFs, which is very different to traditional time-weighted approaches to performance evaluation (Bianchi, Drew, Evans and Walk, 2014, attached). This approach to default design sees risk metrics such as expected shortfall, retirement wealth ratios and other cogent money- weighted measures prioritized by fiduciaries.

## *What is best practice default option design?*

Our research to date has underscored the importance of framing glide path design, management, implementation and ongoing governance, particularly around the 'retirement risk zone' (see Drew, Walk and West, 2015). The retirement risk zone is defined as the final five years of working life (the 'accumulation' phase) and the first five years of retirement (the 'decumulation' phase). Importantly, it is this 10-year period when the greatest amount of retirement wealth is in play and, therefore, risk is at an all-time high (see 'Figure 8' below).

FIGURE 8: Retirement Risk Zone relative to portfolio value

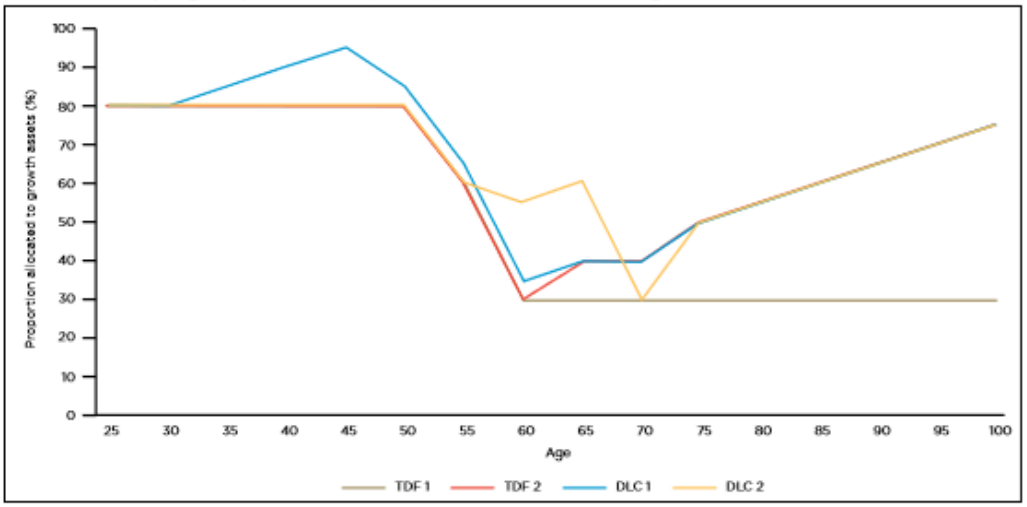



*Source: Drew, Walk and West (2015)*

Workers near or at retirement are at risk from two related phenomena: the portfolio size effect (wealth is at its zenith), and sequencing risk. Basu and Drew (2009) find that, due to the positive compounding effect of salary growth, contributions and returns, portfolio size grows rapidly in the latter half of a worker's accumulation phase. When the portfolio size effect is combined with an unfavourable sequence of returns (Macqueen and Milevsky, 2009) the impacts can be both extreme and irreversible.

To provide the Productivity Commission with an evidence-base for considering these glide path design issues on behalf of members, we would suggest competing default design approaches are evaluated through unified empirical approach. By way of illustration, we provide some sample glide paths for consideration ('Figure 11').

**FIGURE 11: Sample glide paths of TDF1, TDF2, DLC1 and DLC2 strategies**




*Source: Drew, Walk and West (2015)*

Our research efforts to date have led us to conclude that success in superannuation is about ensuring members achieve a meaningful level of fundedness over their retirement years that mitigates the potential ravages of inflation, sequencing and longevity risk. In summary, we support policy approaches that prioritise the following issues for members:

- Greater emphasis on an **individual's superannuation account** (money-weighted returns) rather than the disproportionate allocation of energy on the fund or product (time-weighted returns);
- The level of **fundedness** of an individual's superannuation account (including greater emphasis on metrics such as their retirement wealth ratio (RWR), annuity equivalent value (AEV) and inflation risk, see Bianchi, Drew, Evans and Walk, 2014);
- Understanding time-varying **sequencing risk** faced by individuals over the life course (in short, what's safe and what's risky changes over your life, see Basu and Drew, 2009); and
- Ensuring an individual's super account is being managed to **best-practice governance standards**, see Drew and Walk, 2016.

Further detail is available in our submission to the Productivity Commission (Bianchi, Drew and Walk dated 21 August 2017), see https://www.pc.gov.au/__data/assets/pdf_file/0016/221182/sub035-superannuation-assessment.pdf

**Disclosure Statement for Dr Michael E. Drew**

Consistent with the requirements of the American Economic Association's Disclosure Policy, the following disclosures relate to Dr Michael E. Drew, as at the below date:

*Interested parties providing financial support:*

- Nil.

*In-kind support:*

- Nil.

*Relevant paid positions:*

- I am Director at Drew, Walk & Co., a boutique firm of consulting financial economists that has commercial interests related to this field. A confidential list of activities is available upon request.
- I hold the position of Professor of Finance (tenured, fractional), Department of Accounting, Finance and Economics, Griffith Business School, Griffith University.
- I am a Specialist Member of the Investment Committee, QSuper Limited.
- I am a Member of the Investment Advisory Board, Petroleum Fund of *Timor-Leste*.

*Relevant unpaid positions:*

- I am a Member of the College Board, St Laurence's College (a Catholic school in the Edmund Rice Tradition).

*Disclosures relating to "close relatives or partners":*

- Nil.

Michael E. Drew

21 June 2018