

Your Future Your Super Performance Test

Estimating the Opportunity Cost to Consumers

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Author: David Bell

Review panel: Emily Barlow, Andrew Boal, Kim Bowater, Nick Callil, David Carruthers, Matthew Griffith, Clayton Sills, Tim Unger



Table of Contents

- 1. Introduction 3
- 2. Previous Research 3
- 3. Opportunity Cost to Consumers 4
 - 3.1. Motivations and Research Question 4
 - 3.2. Sources of Opportunity Cost to Consumers..... 4
 - 3.3. Exploring the Relationship between Tracking Error and Active Returns 5
 - 3.4. Estimating the Opportunity Cost to Consumers..... 6
- 4. Conclusion..... 6

1. Introduction

In this paper we research the opportunity cost to consumers of the Your Future, Your Super (YFYS) performance test. We estimate that, should funds prioritise passing the performance test, consumers will incur an opportunity cost of \$3.3b per annum. This far exceeds the benefit of the YFYS performance test (forecast in the Budget to be \$10.7b over ten years). Indeed, the opportunity cost is larger than the forecast benefits of the entire YFYS reform package (\$17.9b over ten years).

What generates such a significant opportunity cost? The YFYS performance test will cost consumers because it will constrain super funds from constructing portfolios which are in members' best interests. This generates opportunity cost in terms of less effective risk management and less investment in opportunities expected to generate outperformance over time.

In this Paper we only assess the return opportunity cost and do not consider the risk impacts. In this respect it could be challenged that our analysis understates the full impact of the performance test on consumers.

Any research of this nature is open to critique, especially around assumptions. We detail the basis of our assumptions and make the models supporting this research open source ([here](#)) to enable industry and policymakers to better understand and explore different assumptions.

2. Previous Research

In response to the release of the YFYS reforms announced in the Budget, a working group was formed to analyse and assess the YFYS performance test. Papers and supporting statistical models are available [here](#).

The Working Group considers the performance test to be well-intended but has a range of concerns which emanate from the design of the test. The test assesses only one component of performance and ignores diversification benefits, as illustrated in Diagram 1. The Working Group considers the test a crude measure of implementation alpha ('crude' because of the limited number of public market benchmarks used).

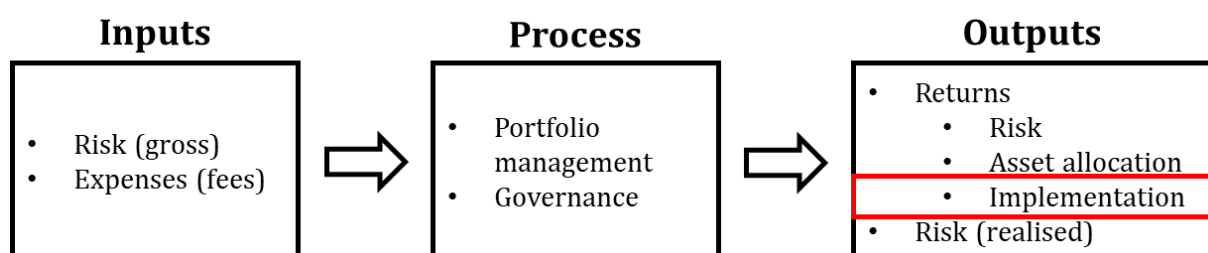


Diagram 1: Process representation of investment management. The red box reflects the focus of the YFYS performance test.

Working Group research casts doubt on the statistical effectiveness of the YFYS performance test. Further, the Working Group detailed multiple undesirable outcomes in relation to distortion of portfolio management processes, consumer outcomes, and industry structure.

Subsequent research by the Working Group formalised the conflict Trustees' will face between managing for best member outcomes and prioritising the YFYS performance test. We think many Trustees will discover that portfolios designed to pass the performance test may have lower expected returns, be less effectively diversified, and bear more risks than portfolios constructed in the absence of the performance test.

Of importance to this Paper, our research suggested that 1% annualised tracking error is a realistic level for funds who focus strongly on the YFYS performance test (we estimate many funds currently take more than 3% annualised tracking error against the proposed benchmarks).

3. Opportunity Cost to Consumers

3.1. Motivations and Research Question

Our previous research identified that the YFYS performance test may significantly constrain the investment strategies of super funds. Here, we are motivated to explore the impact of these constraints on consumer outcomes.

We address the following research question:

Can we estimate the cost (if any) to consumers of the constraints introduced by the YFYS performance test?

3.2. Sources of Opportunity Cost to Consumers

The YFYS performance test is expected to constrain the way that super funds design their investment strategy. The alternative would be for funds to continue with their present investment strategy and face an increased likelihood of failing the performance test at some point and/or the need to significantly change the investment strategy in response to weak short-term relative performance against the YFYS performance test.

We think this will have two important effects:

1. It will be more difficult to manage risk effectively. We think funds will find it harder to diversify their portfolios, manage specific areas of risk such as ESG risks, and manage for specific risk scenarios. All these activities are likely to generate tracking error.
2. Returns will possibly be adversely impacted. In theory, tracking error is taken with the expectation of generating active returns. Arguably a policy which constrains funds from taking tracking error will reduce expected returns.

Valuing the benefit of risk reduction is a difficult and subjective exercise. The Working Group acknowledges that there is a benefit to consumers from better managed risk, but the value of this benefit is not explored in this Paper. The focus of our work is on the return opportunity cost.

3.3. Exploring the Relationship between Tracking Error and Active Returns

In finance, return expectations are generally linked to the amount of risk (the concept of a risk premium). Similarly, active return expectations are generally linked to the amount of tracking error. The information ratio links expected active returns to tracking error as follows:

Expected (active returns) = Expected (information ratio) x targeted (tracking error).

Hence the opportunity costs to consumers of portfolio constraints can be approximated by:

Expected (opportunity costs) = Expected (information ratio) x reduction in targeted (tracking error).

Traditionally, tracking error represents the risk of a portfolio relative to its representative benchmark. However, the YFYS performance test creates a distorted version of tracking error because only a limited number of public market benchmarks are used.

What is an appropriate information ratio assumption? We make the following observations:

- Not all the tracking error adopted by funds is used to generate active returns. Some tracking error may be the result of risk management activities such as diversification. This encourages a conservative approach should be adopted.
- A range of return-based activities generate tracking error under the YFYS performance test:
 - Active management within individual sectors (i.e., “traditional” active management)
 - Investment in asset classes which aren’t accurately benchmarked under the YFYS performance test
 - Direct risk management strategies such as portfolio overlays
 - Short-term trading decisions around asset allocation and total risk exposure

We consider an information ratio of 0.2 to be reasonable. Any assumption will be subjective and controversial, as discussed in Table 1. However, we consider our assumption to be conservative.

Too Conservative	Too Aggressive
<ul style="list-style-type: none"> • There are some situations where outperformance results directly from the YFYS benchmarking process. For example, under the YFYS performance test, a reasonable expected information ratio for high yield credit would be 0.33. • Some ability to package market performance as alpha, means it is not just an alpha debate. • Some potential for traditional active returns for institutional investors who pay lower fees (topic of strong debate). • Multiple active return activities generate diversification and improve the information ratio. 	<ul style="list-style-type: none"> • Not all tracking error is used to generate active returns (e.g. it could be used for the purpose of portfolio diversification), so the information ratio assumption should be diluted. • Strong academic debate that alpha is a zero-sum game. • Some evidence of funds underperforming by large amounts.

<ul style="list-style-type: none"> • Some evidence of super funds outperforming the test by larger amounts. • Over time there is an argument that funds with poor implementation performance will exit the industry, which should raise future performance expectations. This is the policy intention. 	
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Table 1: Both sides of the debate on information ratio assumptions.

3.4. Estimating the Opportunity Cost to Consumers

We now have the necessary inputs to estimate the opportunity cost to consumers if the YFYS performance test were to constrain funds as much as detailed in our previous research. For the purposes of our calculation we assume:

1. 1% annualised tracking error becomes industry practice (as identified in our previous paper: “[Exploring the Impact on Super Fund Investment Strategies](#)”)
2. An information ratio of 0.2

We find the expected return opportunity cost to be approximately \$3.3b per annum. Workings are detailed in Table 2.

	Assets (\$b)	Assets in DC (assumed)	DC Assets (\$b)	Assumed Current Tracking Error	Constrained Tracking Error	Opportunity Cost (\$b, per annum)
Retail	600	90%	540	1.5%	1.0%	0.54
Corporate	60	50%	30	2.0%	1.0%	0.06
Industry	760	90%	684	3.0%	1.0%	2.74
					Total	3.34

Table 2: Estimating the return opportunity cost to consumers of the tracking error constraints resulting from the YFYS performance test. The assumed information ratio is 0.2. Assets by sector are broadly based off ASFA Superannuation Statistics December 2020. Public sector funds are excluded from this calculation.

The model underpinning Table 2 is contained as a separate worksheet in the larger model exploring impact ([here](#)). This enables alternative assumptions to be considered.

4. Conclusion

In this paper we estimate that, should funds prioritise passing the performance test, consumers will incur an opportunity cost of \$3.3b per annum. This far exceeds the benefit of the YFYS performance test (forecast in the Budget to be \$10.7b over ten years). Indeed, the opportunity cost is larger than the forecast benefits of the entire YFYS reform package (\$17.9b over ten years).

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