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Measured Investment Inefficiency of the Australian Superannuation System

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Investment Analytics Research

Australian Superannuation System

Positive Impression Misleading

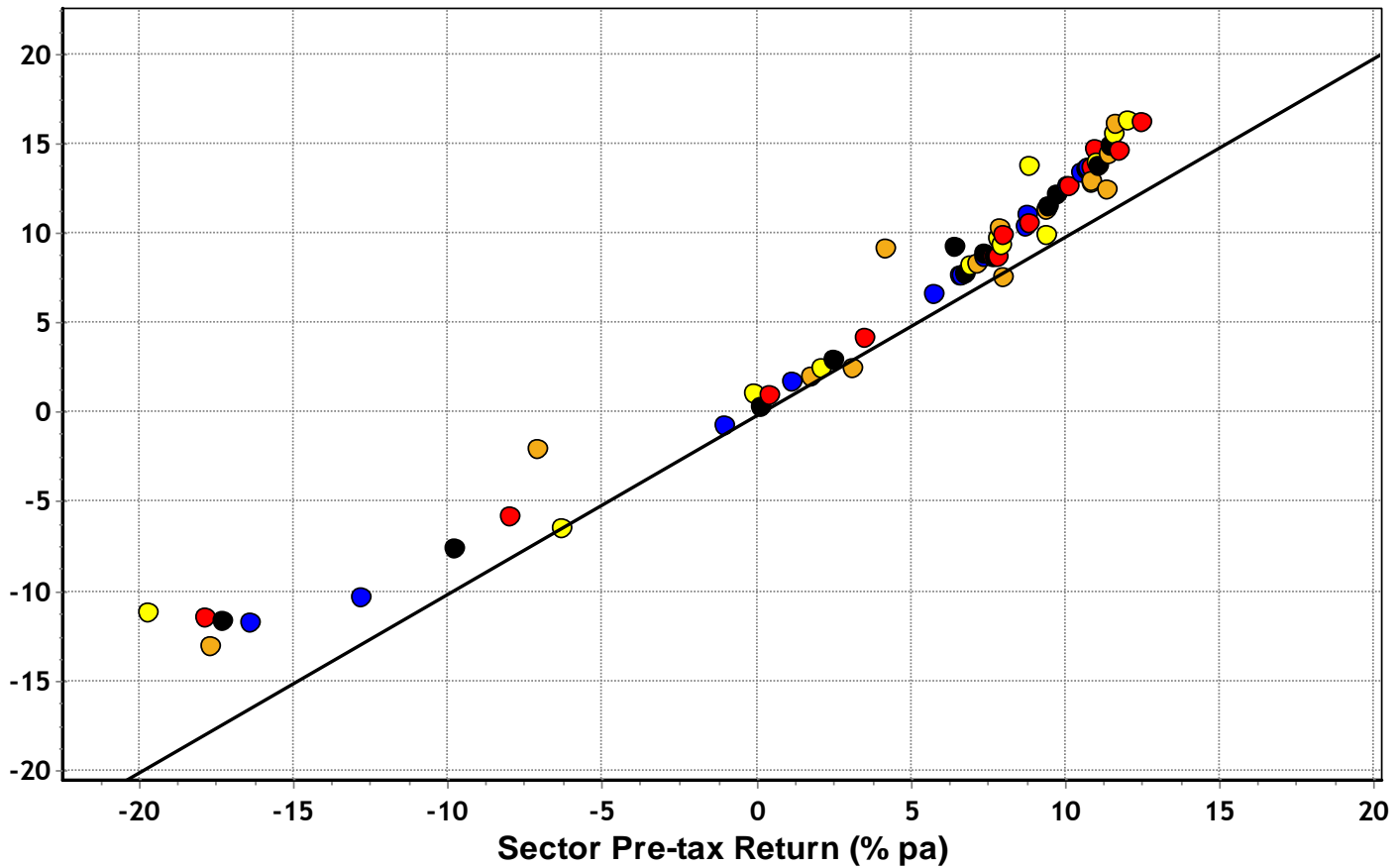
- Most do not understand performance
- Rapid asset growth of system
- **Sampling bias** of media reporting

	Large APRA	Corporate	Industry	Public sector	Retail
Survivor Sample	111	13	38	11	43
Percentage representation of the population					
2005	20	5	54	55	22
2006	26	9	57	60	23
2007	30	14	58	55	24
2008	32	17	62	52	25
2009	36	22	66	52	28
2010	41	27	67	52	32
2011	47	36	73	50	40
2012	50	41	76	52	42
2013	53	45	83	55	42
2014	57	48	88	58	43
2015	58	57	90	58	43
2016	63	72	93	61	47
2017	68	76	95	65	52

2005: 1,078 distinct funds only 546 funds in “population”

276 new funds

Survivorship Bias on Returns (111 Funds vs Sector 2005-2017)



Over-estimate by 2% p.a.

Robust Methods

Flow Quantity	Aggregates over 1997-2016 (\$ billion)
Starting total assets	344
Total contributions	1,697
Net cash flow (after payouts)	869
Net earnings	833
Ending total assets	2,046

Net earnings ~ Net payouts at 4% pa of total assets

Actual net return 4.1% pa; investment return 5.5% pa

Importance of Aggregate Performance

- Fund and option comparisons **not** persistent
- Some factor comparisons **are** persistent
- Sector comparisons **are** persistent due to factors
- Sector returns are asset-weighted returns of **all members**

Sector comparisons are important for individuals

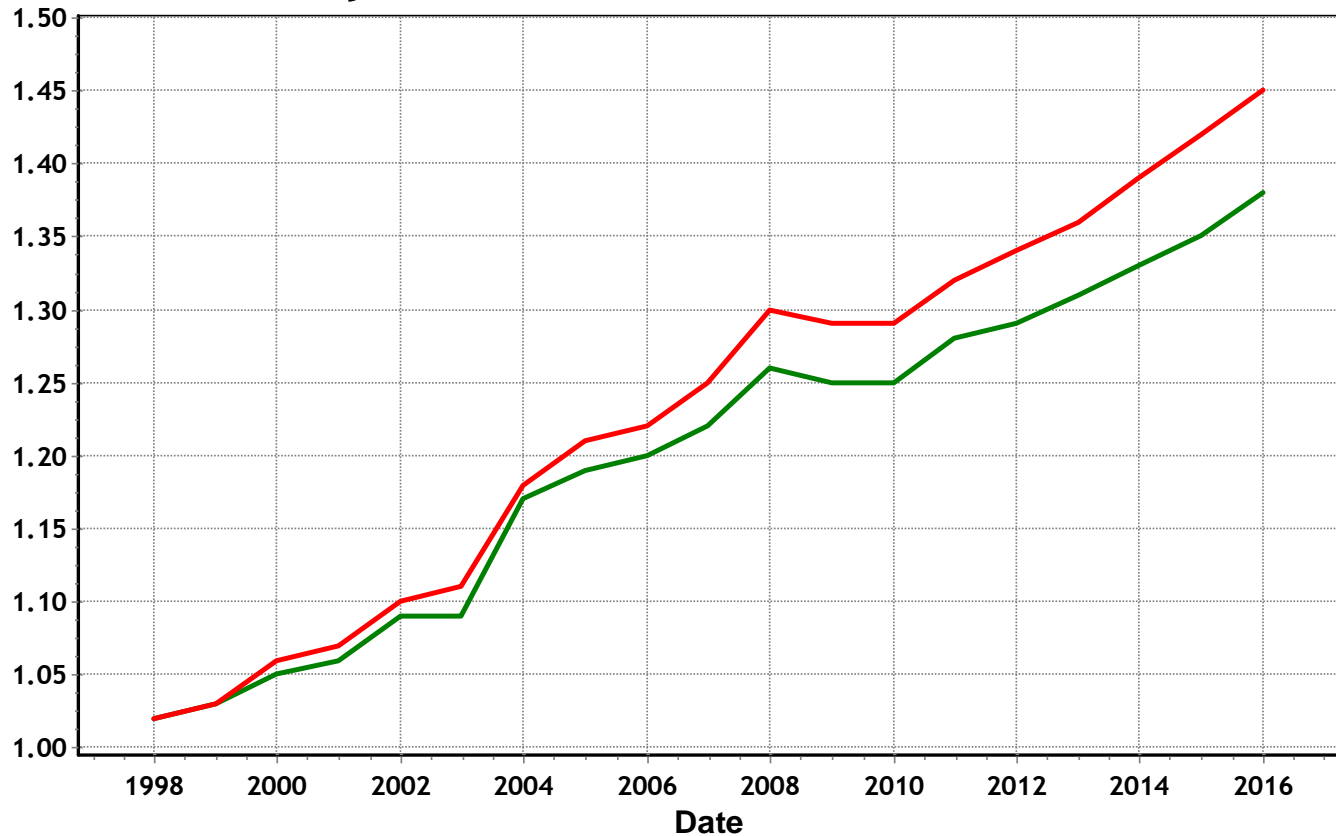
Average returns for sectors (CAGR) 1997-2016

	Corporate	Industry	Public sector	Retail	Large APRA
Net investment return (after costs)	6.1	7.2	6.6	5.4	6.1
Operating expenses rate	0.4	0.6	0.3	0.9	0.6
Pre-tax return (after all costs)	5.7	6.7	6.3	4.6	5.6
Super tax rate	3.6*	0.4	0.6	1.0	0.9
Net return (after all costs and taxes)	2.1*	6.3	5.8	3.6	4.6

Investment return difference large

Operating expenses smaller and constant

Industry/Retail Relative Return Indices



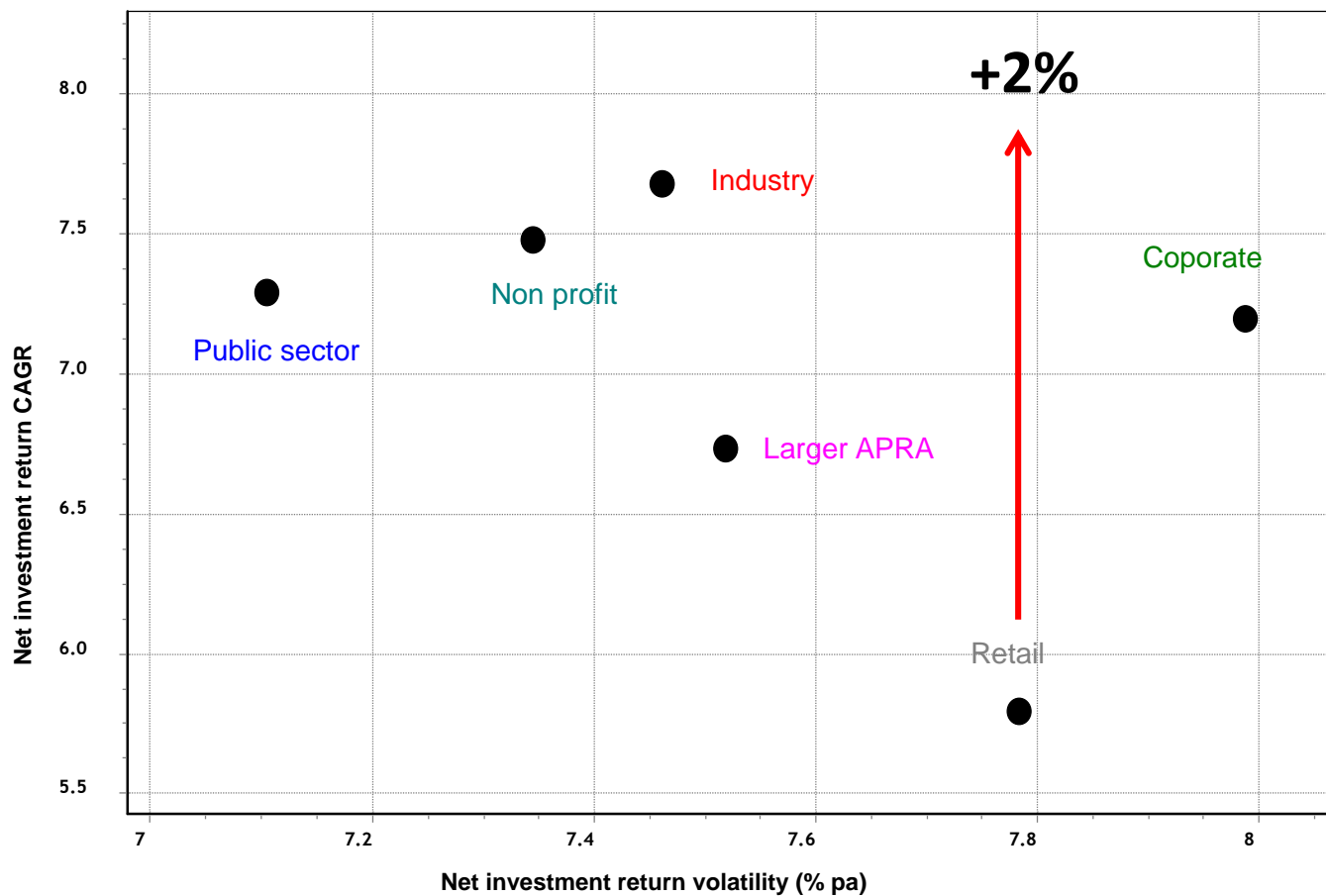
Net investment return

Pre-tax return

Performance difference *consistent and persistent*

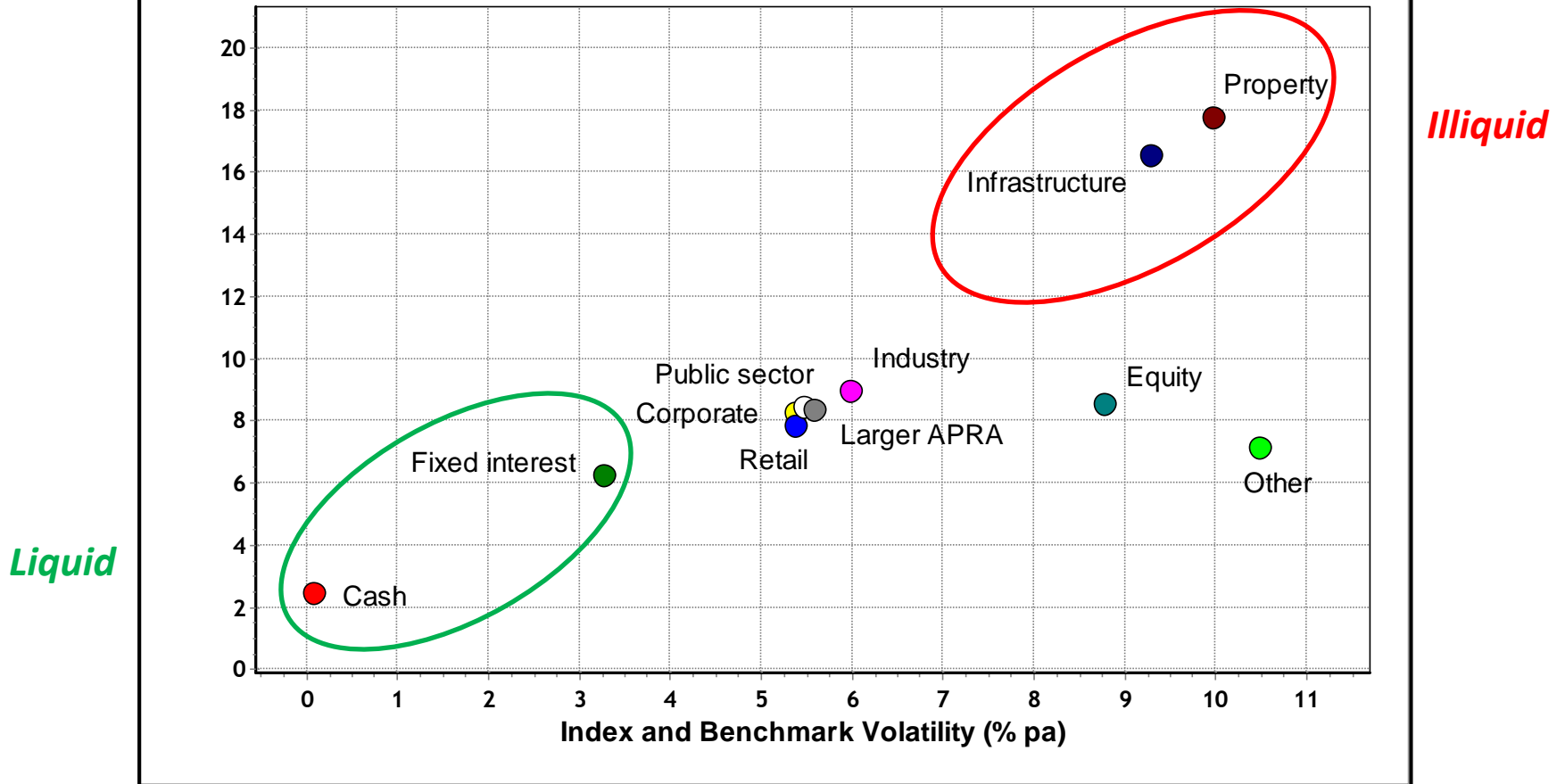
Net Investment Volatility vs Return

(Sep 2004 to Sep 2016)



Risk-return correlation affected by cost

Market Indices and Sector Benchmarks Volatility vs Return (Sep 2013 to Sep 2016)



Industry 20/27 vs Retail 9/38 (Property & infrastructure/Cash & bonds)

Sector Value Added and *RAVA* (% pa, 3 Years to Sept 2016)

	Corporate	Industry	Public sector	Retail	Large APRA
Net investment return	7.5	8.9	8.3	6.5	7.7
Benchmark return	8.2	8.9	8.4	7.8	8.3
Value added	-0.7	0	-0.1	-1.3	-0.6
<i>RAVA</i> (%)	-13	0	-2	-24	-11

$$RAVA(\%) = 100 \times \frac{\text{Value added}}{\text{Benchmark volatility}}$$

Public Offer Pre-tax Return Attribution (% pa, 3 Years to Sept 2016)

	Industry	Retail	Difference
Benchmark return	8.9	7.8	1.1
Investment cost	0	1.3	1.3
Operational cost	0.5	0.8	0.3
Pre-tax return	8.4	5.7	2.7

**Over 45 years, typical worker nest-egg halved
From \$2.1 million to \$1.1: loss of one million dollars**

Governance: Stakeholders vs Service Providers

- **Industry trustees mostly stakeholders**
- **Retail trustees mostly service providers**

Retail members are regarded as consumers in competitive market of super products
Engaged members trade and switch short-term

**Information Asymmetry =>
Wealth transfer from beneficiaries to shareholders**

\$12 to 16 billion pa loss

Conclusion

Retail trustees mismanage conflicts of interest

SIS Act: Section 52 (2):

(d) **where there is a conflict** between the duties of the trustee to the beneficiaries, or the interests of the beneficiaries, and the duties of the trustee to any other person or the interests of the trustee or an associate of the trustee:

- (i) to **give priority to the duties to and interests of the beneficiaries** over the duties to and interests of other persons; and
- (ii) to ensure that the duties to the beneficiaries are met despite the conflict; and
- (iii) to ensure that the **interests of the beneficiaries are not adversely affected by the conflict**; and
- (iv) to comply with the prudential standards in relation to conflicts;

For-profit trustees should be banned