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Super sting: how to stop Australians paying too much for superannuation

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## **Overview**

Australians pay far too much for superannuation. They pay about \$20 billion in fees and expenses in total. Fund customers pay \$1300 on average, every year. These payments to the superannuation industry can and should be reduced by at least half, saving Australians at least \$10 billion a year. It is the largest single opportunity for micro-economic reform in the economy.

High fees hurt account holders. They reduce the amount of superannuation at retirement by more than 20 per cent. High fees mean that on conservative assumptions a 50-year old Australian will have his or her super balance reduced by over \$80,000 in fees (in today's dollars) at retirement. A 30-year old will lose more than \$250,000, or over a quarter of the total balance. Under a fairer fee structure, at least half that money could be saved.

High fees also hurt taxpayers, who pay more for pensions when superannuation runs short. High fees are not justified by high returns: Australian funds that charge the highest fees consistently deliver lower returns than others once their fees are taken out.

Other countries show that superannuation can be managed at much lower cost. Australian funds charge fees that are three times the median OECD rate, on average. Many countries have superannuation pools much smaller than Australia's, yet their funds charge customers much less.

Costs are too high in Australia because the system assumes that account holders will make choices that will generate pressure for lower fees. Yet this approach has not worked for decades, nor has it worked overseas. Superannuation is inherently opaque, and few people can make or care to make an informed choice. Some argue that the complexity of Australia's superannuation regulations increases the cost of the system. If this is true, it exposes an urgent need to reduce regulation. Yet the wide variation in the fees charged by funds suggests that superannuation businesses are choosing to charge higher fees.

Recent reforms will not help much. MySuper — a more uniform set of products for people who do not actively choose their funds — makes funds somewhat easier to compare, but does little to increase the pressure on fees. SuperStream, a package of administrative reforms, will reduce some costs, but does nothing to address the costs of marketing, sales or asset management.

Overseas, the best superannuation systems establish tenders for the right to run the best-priced default fund — one that most employees, who don't manage their own accounts, automatically pay into. The Australian system should follow suit. Government should select a small number of default funds every few years with a tender based on fees. Unless they opt out, all new job starters would pay into these funds.

Second, to push down fees for existing accounts, tax time — from the end of June — should also be superannuation choice time. A new step in the tax return process should enable taxpayers to compare their current fund with the low-cost winners of the default tender.

These reforms may reduce the revenues of superannuation funds. More importantly, they will reduce the unpleasant sting of high fees on the superannuation balances of Australians.

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## 1. Australia's high super fees are hurting retirement

Australian superannuation fees are higher than those in most other OECD countries, and much higher than those in other systems of similar size. As the Australian system has expanded, fees charged to account holders have remained high, not fallen as would be expected in an industry with economies of scale.

Australian superannuation fees, and the expenses reported by funds, have long been above the OECD median expense ratio, as Figure 1 shows.<sup>1</sup> Australian fund expenses hardly moved over the last decade. Average fees have dropped slightly — from about 1.38 per cent in 2002 to 1.19 per cent in 2013 — mostly because higher-fee retail funds have lost share to self-managed funds.<sup>2</sup> Yet at that pace it will be 50 years before Australia attains even the median expenses achieved today by funded pension systems in OECD countries.

**Figure 1: The cost of running the Australian superannuation system is much higher than the OECD average** Superannuation fees and expenses, per cent of funds under management, annual



Note: Australian expense ratios are the costs reported by APRA-regulated funds, divided by the value of the assets they manage. Fees are the list charges incurred by account holders. The OECD expense ratio is the median of the average expense ratio for funded pension systems (including defined-benefit and defined-contribution). Source: Expense ratios: OECD.Stat (2014a), APRA (2014a), Fees in 2012-13: Grattan analysis of APRA (2014a), SuperRatings (2014); Rice Warner (2012) for fees 2002-2011.

<sup>&</sup>lt;sup>1</sup> Fees exceed reported expenses on average because some funds earn profit, pay commissions, or incur other costs. Australian expenses include some costs relating to the administration of insurance not incurred by some other systems. Industry sources suggest they could be as much as  $\frac{1}{3}$  of administrative expenses or around 0.1 per cent of funds under management (FUM) per year.

<sup>&</sup>lt;sup>2</sup> Rainmaker Information (2013), p. 5.

Other countries with large retirement savings systems have much lower operating expenses (Figure 2). That is usually the case with large systems. But some systems overseas are a tenth of the size of Australia's yet run on about half the expense.<sup>3</sup>

Total funds managed in the Australian system grew from around \$600 billion in 2004 to around \$1.7 trillion today.<sup>4</sup> Individual superannuation funds grew even faster, as many funds merged or closed. The average fund today manages \$4.2 billion, up from \$700 million in 2004 (in 2013 dollars).<sup>5</sup>

A larger system of larger funds should incur lower costs and charge lower fees, because big funds have lower costs. Accordingly, by 2013 the sixfold increase in average scale should have delivered cost reductions of over 20 per cent, worth almost \$2 billion a year.

But even as the system more than doubled in real terms and the average fund grew sixfold over the last decade, fees have only declined modestly and expense ratios hardly changed. The scale dividend has been fully absorbed by cost increases: the cost of managing a superannuation fund of a given size has increased by about 20 per cent over the last decade in real terms (Figure 3).

# Figure 2: Australia's superannuation system expenses exceed others of similar scale

Funded pension expense, per cent of funds under management, annual



Note: Year: 2012 or latest prior to 2012. For the purpose of this chart 'defined benefit' is a system where greater than 60% of assets are in defined benefit plans; others are allocated to defined contribution. The chart includes 22 countries, the US Thrift Savings Plan (the defined contribution fund for US public servants) and the Swedish private pension system. See Appendix 3 for a version of this chart with countries identified. Source: Thrift Savings Plan (2014), Swedish Pensions Agency (2013), Swedish Pensions Agency (2014a); OECD.Stat (2014a); OECD.Stat (2014b); OECD (2013).

<sup>&</sup>lt;sup>3</sup> 'Defined Contribution' (DC) systems typically report higher expenses than 'Defined Benefit' (DB) systems, because DB systems have less account reporting complexity and usually fewer investment products. But several defined contribution systems also achieve lower expenses.

<sup>&</sup>lt;sup>4</sup> ABS (2014b).

<sup>&</sup>lt;sup>5</sup> APRA-regulated funds only - excludes self-managed funds.



**Figure 3: The superannuation cost curve has shifted up** Expenses, per cent of funds under management, annual, 2004 & 2013

Note: Results of semilog regressions on APRA expense data. A doubling of funds under management reduces expenses by around 0.08 to 0.1 per cent of the funds under management. The 2013 and 2014 results are statistically significantly different. 2004 funds under management converted to 2013 dollars using the consumer price inflator. Source: APRA (2014a)

Account holders now pay much more than they did a decade ago, because accounts grew and fees did not fall much. Expenses per account holder rose by 50 per cent, from \$550 in 2004, to \$820 in 2013 (in 2013 dollars and excluding self-managed funds). Fees per account holder rose by 51 per cent, from about \$870 in 2004 to over \$1300 in 2013 (also in 2013 dollars, excluding self-managed funds).

### 1.1 High fees reduce net returns in Australia

High fees would not be a concern if Australians were getting value for money. But high fee funds are damaging our retirement savings. This section highlights the impact of fees using four different analyses.

First, it examines the impact of fees on retirement balances that can be expected from reasonable assumptions about returns and wage growth. They imply that Australia's current average fees reduce retirement balances by over 20 per cent, compared to a notional system that charges zero fees.

Second, it reviews average fees and returns in superannuation over the last decade. Fees consumed more than a quarter of gross superannuation earnings over that period.

Third, it examines whether, in practice, high fee funds destroy value or earn their keep. High-fee funds do indeed destroy returns: on average, high-fee funds do not generate higher gross returns and so generate much lower returns after fees than low fee funds. Fees charged by the more expensive funds absorbed well over half of gross earnings. Fourth, it examines whether fees or past performance are a better predictor of future performance. Low fees are the best guide to subsequent performance. Over the decade, the lowest-fee funds went on to earn returns that strongly exceeded not only those of the average fund but even the returns of funds that had previously performed best.

First, how big an impact can fees be expected to make on retirement balances? The precise impact depends on returns and income growth, but fees can make the difference between steak and spaghetti in retirement. Realistic assumptions imply that an apparently modest fee of one per cent every year accumulated over a working life — lower than the average Australian fee — can be expected to reduce retirement income by more than 20 per cent, as Figure 4 shows. A two per cent fee can be expected to reduce balances at retirement by almost forty per cent.

Another way to see the impact of fees is to consider how much they will reduce retirement balances for people at different career stages today (Figure 5). The impact of fees will be higher for younger workers as they will be part of the super system for longer. For someone aged 61 in 2010, and retiring at 65 in 2014 after a lifetime on median earnings, the average current fees of 1.2 per cent per year will have reduced their superannuation balances by about \$12,000, or 11 per cent. For someone aged 45 in 2010, fees of 1.2 per cent per year can be expected to reduce their balances at retirement by around \$80,000 in 2010 dollars, or 20 per cent. For someone entering the workforce at 25 in 2010, fees of 1.2 per cent per year can be expected reduce their retirement balances by over \$250,000 or 27 per cent.

## Figure 4: Even apparently small fees strongly reduce retirement balances

Retirement balances relative to fund with zero fees, per cent

![](_page_9_Figure_6.jpeg)

Note: Reduction in balance at retirement, assuming a 40-year contribution period, real wage growth of 1.8 per cent p.a., and real portfolio returns of 5 per cent. The assumptions and results used here are close to those used in OECD (2012). Source: Grattan modelling based on the parameters used to construct Table 6.3 in OECD (2012).

# Figure 5: Cumulative impact of fees will be high for those starting work now

Balances at retirement before and after fees, thousands of 2013 dollars

![](_page_10_Figure_3.jpeg)

Note: Fees of 1.2 per cent per annum paid over a working life. Superannuation balances accumulated at the Superannuation Guarantee rate applying in each year. Assumes actual real mean weekly earnings growth before 2010, and real wage growth of 1.4 per cent thereafter; age-specific earnings from the ABS Household Expenditure Survey. Real gross portfolio returns assumed at 5 per cent. Source: Grattan modelling; ABS (2011).

The impact of fees can also be seen in total Australian superannuation returns. From 2004 to 2013, fees consumed more than a quarter of gross earnings on superannuation balances invested from the start of the period (Figure 6). **Figure 6: Fees have absorbed over a quarter of returns since 2004** Annual real returns to superannuation, term deposits and equities: 2004 to 2013, per cent

![](_page_10_Figure_7.jpeg)

Note: Term deposits are the compounded returns of 3-year term deposits from July 2003 to July 2013, after 15 per cent annual tax as for superannuation. Superannuation is the compounded net return of APRA-monitored funds over the same period. Net superannuation returns are post-tax. Tax rates applicable to superannuation funds are lower than the corporate rate (10 per cent for capital gains, and 15 per cent for income). ASX 200 returns are the annualised returns of the S&P ASX 200 Net Total Returns Index over the same period. The index is post-tax (at rates applicable as withholding tax from the perspective of a non-tax-treaty country: unfranked dividends 30%; interest 10%; royalties 30%).

Source: APRA (2014a); S&P (2014); RBA (2014).

A dollar invested with the average fund from 2004 to 2013 earned returns averaging 4.25 per cent a year, before fees and after adjusting for inflation. Fees reduced these returns to just 3 per cent. After fees and taxes, superannuation on average has returned somewhat higher returns than the return on the longestavailable term deposits (taxed as if it were in superannuation), and well below the ASX 200 before tax (except international withholding tax). Over time, superannuation returns are sure to vary. But fees are a constant and substantial drag on returns.

Across the superannuation system in the decade from 2004 to 2013 (excluding the self-managed sector), gross earnings before fees were \$378 billion in 2013 dollars. Fees reduced net earnings by \$158 billion, over 40 per cent of gross earnings, to just \$220 billion (Figure 7).

Fees reduced balances by more than the sum of fees paid, because fees paid along the way are not available for reinvestment. Over a period when returns are low, the foregone investment income is low. But over a lifetime, it can add up to around half of the total burden of fees.

# Figure 7: Over the decade to 2013, fees reduced superannuation balances by \$158b

Superannuation balances, contributions, earnings and fees, 2004-2013 Billions of 2013 dollars

![](_page_11_Figure_6.jpeg)

Note: Initial and terminal balances are from the aggregate APRA fund-level dataset (including self-managed funds) and scaled to 2013 dollars using the CPI (ABS, 2014). Fees are fund-weighted averages Rice Warner (2012) for 2004 – 2005, and SuperRatings (2014) for 2006-2013, applied to real funds under management at the midpoint of each year. Impact of fees includes foregone accumulation. Gross earnings are estimated by adding fees to the net FUM-weighted average rates of return from the APRA dataset. Source: APRA (2014a) (initial and end balances, contributions, net earnings), Rice Warner (2012) & SuperRatings (2014) (fees). Third, do high-fee funds earn their keep? The high fees charged by some funds would be harmless if these funds earned returns that more than paid for their fees, or were better at managing risk than their cheaper counterparts. But there is strong evidence that high fee funds do not earn their keep. The average high-fee fund earns much lower net returns and does not reduce investment risks.<sup>6</sup>

Figure 8 shows real net returns, fees and gross returns from 2006 to 2013. Funds are allocated to 10 groups, ranked by the fees they charge. Average fees charged in each group range from about 0.5 to over 2.5 per cent a year. The chart shows that fees sharply reduce net returns: the lowest-fee group of funds earned almost three per cent a year, while the highest fee group earned just under zero. In other words, an extra dollar of fees reduces returns by slightly more than a dollar: more expensive funds tend to earn less even before fees are deducted.<sup>7</sup>

#### **Figure 8: High-fee funds generate lower net returns** Real annual returns across funds, grouped by fee decile, 2006-2013

![](_page_12_Figure_4.jpeg)

Note: Returns are deflated by consumer price index. Fees are asset-weighted product fees at the fund level. Excludes self-managed funds. Source: Grattan analysis of APRA (2014a), SuperRatings (2014).

Fourth, are fees or previous returns the best guide to future returns? Fees are the best available predictor of future returns — even better than choosing a fund based on its historical performance.

<sup>&</sup>lt;sup>6</sup> See Appendix 2 for analysis of the risk-return profile of Australian superannuation funds.

<sup>&</sup>lt;sup>7</sup> There are two reasons. First, high-fee and low-fee funds have tended to invest in different asset classes. Industry funds tend to charge lower fees than retail funds and also had higher exposures to two asset classes that performed well over the period: unlisted property and infrastructure. Second, higher-fee funds with exposures to equities are more likely to use active investment management (that is, the asset managers may buy individual stocks or asset classes they expect to rise in price). Active asset managers tend to incur transaction costs related to frequent buying and selling of assets. In Australia, stated pre-fee "gross returns" for funds are in reality net of these unreported costs. Unreported transaction costs have been estimated as 0.23 per cent per year (see Sy and Liu (2010)) and as well over 1 per cent per year (as in Bogle (2014)).

Figure 9 shows the subsequent performance of three groups of funds — low-fee funds, previously high performing funds, and all funds — over the period 2007 to 2013. The returns of low-fee funds exceeded the returns of the average fund by 0.8 per cent a year. They also exceeded the returns of the previously highest-performing funds by 0.35 per cent a year. While superannuation account holders would do better than average if they chose a fund that had previously delivered high net returns, they would perform better still if they simply chose a superannuation fund with low fees.<sup>8</sup>

Fees are responsible for much of the strong performance of the group that previously attained high returns, as can be seen from the fee numbers along the base of Figure 9.

Others have also found that fees are critical to superannuation returns. In 2012, the Australian Prudential Regulatory Authority (APRA) summarised its research on investment performance and costs. APRA's head of research wrote:

Individual fund managers and individual asset classes may outperform others, but these effects are transient. Costs, on the other hand, are persistent. Between a strategy of pursuing gross returns and a strategy of minimising the difference between gross and net returns, the latter appears more fruitful.<sup>9</sup>

# Figure 9: Low fees are a better guide to future returns than are previous returns

Subsequent net real annual returns of funds based on previous fees and previous returns. 2006-2013, per cent, annual

![](_page_13_Figure_7.jpeg)

Note: In each year in the sample from 2006 to 2011, three sets of funds are compiled. The first are the 10 per cent of funds with the lowest fees. The second are the 10 per cent whose historical returns (for history back to 2004) are highest. The third is all funds. The orange bars indicate the average of the subsequent returns for all decision years. Source: Grattan analysis of APRA (2014a) & SuperRatings (2014).

Appendix 2 provides a more detailed discussion of how fees have affected returns in Australian superannuation funds over the last decade.

<sup>&</sup>lt;sup>8</sup> See Appendix 2 for a more detailed analysis.

<sup>&</sup>lt;sup>9</sup> Arnold (2012).

## 2. Why Australian superannuation fees are high

Fees in Australia are high for one main reason. The system relies on account-holders and employers to put pressure on fees, but many do not. While some account holders do pay attention to fees, because they tend to buy different products, such as those designed for people with large accounts, they put relatively little fee pressure on other products.

As a result, funds do not compete primarily on fees. Instead, they tend to compete on the basis of marketing campaigns, sales and distribution networks, member engagement services and on the breadth of their product ranges and investment options.

All these forms of non-fee competition cost money, which is passed on as fees. They do little to help account holders to understand what drives their long-run returns. The system remains inefficient and opaque, even as high fees erode account holders' net returns. The lack of fee pressure also allows other inefficiencies to persist.<sup>10</sup>

# 2.1 Many account holders are disengaged and do not focus on fees

Many Australians are not well informed about their superannuation or the fees they pay. Many do not actively select their fund, and very few switch funds except when they switch jobs. Many others who are more actively engaged in superannuation make poor decisions because they focus on measures other than fees.

Figure 10 summarises the findings of three surveys of what people know about their superannuation and how involved they are. About half of account holders do not know the fees they pay. Three-quarters do not know their investment returns.

Less than a third of people choose their own fund. A survey commissioned for the Australian Tax Office found that 69 per cent of people did not choose their own fund when they joined their most recent employer.<sup>11</sup> Similarly, an Australian Bureau of Statistics study found that 70 per cent of individuals have their primary superannuation with an employer-nominated fund. Of these, about two-thirds play no role in selecting their fund or product.<sup>12</sup> Other studies put the proportion of employees who play no role in selecting a superannuation fund at 80 per cent.<sup>13</sup>

Finally, very few people – about 2 per cent of Australians with a superannuation account, at most – switched funds in 2013 for reasons other than switching jobs or their employer switching default funds.<sup>14</sup>

<sup>&</sup>lt;sup>10</sup> Inefficiencies such as small funds, small tranches of assets under management, and manual handling of transactions are not rapidly removed when firms do not face intense fee competition.

<sup>&</sup>lt;sup>11</sup> Colmar Brunton (2010b).

<sup>&</sup>lt;sup>12</sup> ABS (2009).

<sup>&</sup>lt;sup>13</sup> See sources cited in Commonwealth of Australia (2010b), Endnote 4, p 36. Some of these studies appear to assume that being in a default product entails not having exercised any choice.

<sup>&</sup>lt;sup>14</sup> 3-9 per cent (Colmar Brunton (2010b), Roy Morgan (2013)) switch superannuation funds in each year. Around 80 per cent of them switch funds

Of those who actively choose a fund, many say they seek to minimise fees. When asked what mattered in their choice of superannuation funds, 68 per cent said low fees and 62 per cent said high or strong investment returns.<sup>15</sup> Nevertheless, the surveys show that in reality very few know, compare, or act on the fees they pay.

There is also a wide array of evidence that many account holders under-value the importance of fees and do not respond much to fees. As one recent study puts it, "underweighting of fees is pervasive and sticky, robust to demographic variation and investor experience."<sup>16</sup> Unresponsiveness to fees is commonly found in studies of Australian and other account holders.<sup>17</sup> There may be several reasons why. Individuals may find it hard to compare superannuation funds because they do not understand the financial basics that are needed to make a wise choice of fund.<sup>18</sup> They may also defer decisions that affect their future wellbeing.

## Figure 10: Few account holders are well-informed and fewer actively switch funds

Survey findings on superannuation account holders' knowledge and action on their accounts, per cent of respondents

![](_page_15_Figure_5.jpeg)

because they change jobs or their employers change funds providers (Commonwealth of Australia (2010a)).

<sup>15</sup> Colmar Brunton (2010b)

<sup>16</sup> Fisch and Wilkinson-Ryan (2013).

<sup>17</sup> Langford, *et al.* (2006), Choi, *et al.* (2010); references cited on p.4 and p.5 of Calderón-Colín, *et al.* (2008).

<sup>18</sup> Worthington (2008), Agarwal, *et al.* (2009); Capuano and Ramsay (2011); Lusardi and Mitchell (2011); Fisch and Wilkinson-Ryan (2013); Bateman, *et al.* (2014) Source: Q1: Financial Services Council and ING Direct (2013), Q2-3:Colmar Brunton (2010b), Q4: Colmar Brunton (2010b), Commonwealth of Australia (2010a).

# 2.2 Many employers are disengaged and do not focus on fees

Employers play an important role in selecting default funds. Many of them are no more engaged or informed about superannuation than are their employees. Some may select funds that offer a broad range of options at high cost to employees. Some may consider their own costs and benefits before benefits for their staff.

Many employers are poorly informed about the performance and fees of the default funds they have selected on behalf of their employees. In a survey commissioned by the ATO, 49 per cent of employers reported very little or no knowledge of their default fund's investment performance over the last year (Figure 11). Only 25 per cent said they had compared the investment performance of the employer-nominated default fund, and about 30 per cent said they had compared the fees with those of other funds. Of all employers interviewed, only 7 per cent had ever switched their default fund.

## Figure 11: Few employers are well informed or active in selecting default funds

Employer knowledge of and action on the funds they nominate for employees, per cent of respondents

![](_page_16_Figure_6.jpeg)

Employers may also be motivated to select a superannuation provider that offers a wide range of investment options to their employees, even though products with many investment options typically charge high fees.<sup>19</sup> Some employers may also select providers for reasons other than the best interests of their employees. Eleven per cent of large employers and four per cent of smaller ones report that the funds they chose had offered them incentives.<sup>20</sup> While incentives in the form of lower superannuation fees are in the interests of employees, some employers also said they had received offers of discounts on non-superannuation financial products such as credit cards and home loans.<sup>21</sup> The head of one bank-owned superannuation fund has noted that it is convenient for companies to have various services supplied by the one bank because "it makes relationship management seamless".<sup>22</sup> While efficient banking and superannuation relationships are a good thing, employers may in some instances pay more attention to their overall banking relationship than to the value-for-money of the superannuation fund that comes with that relationship.

# 2.3 Pressure from fee-sensitive customers has not cut fees much for others

Superannuation is simple in principle. It should offer exposure to assets that provide a good basis for accumulation of funds as the account holder nears retirement. Yet superannuation has come to

be sold as a broad range of superficially differentiated products. There are hundreds of funds, most offering multiple products that are sold directly to customers -- via telephone or the web, for example -- or via distribution networks such as bank branches and financial advisers. Some funds offer few investment options, others many. Funds charge fees in diverse ways, including fees upon entry and exit, and ongoing annual fees charged as flat dollar amounts and as a percentage of account value. They offer different online and other service options.

Such broad choice can benefit active and engaged account holders, and indeed, some look for and find lower superannuation fees. Others -- typically those with larger balances -- may find it beneficial to set up a self-managed fund. Some large firms may negotiate discounts, while workers in the public sector or in some industry funds also pay low fees.

But such product and price dispersion also separates feesensitive customers from the many who are disengaged. Disengaged customers get little, if any, benefit from pressure exerted by fee-sensitive shoppers. Those who have smaller balances, or whose employers choose a high-fee fund, or who simply do not appreciate the importance of fees can end up paying fees that are far too high.

<sup>&</sup>lt;sup>19</sup>Rainmaker Information (2013), p. 8

<sup>&</sup>lt;sup>20</sup> More than 100 staff.

<sup>&</sup>lt;sup>21</sup> Colmar Brunton (2010a)

<sup>&</sup>lt;sup>22</sup> Patten (2014)

Figure 12 shows that fees differ markedly. Many funds – mostly industry funds – charge fees at just under 1 per cent. The fees of retail funds range from around 1 to well over 2 per cent a year. Fees of individual products and investment options – not shown in the chart – vary even more.

Average fees have fallen modestly because in the mid-2000s higher-fee retail funds lost a few percentage points of market share to lower-fee self-managed and industry funds.<sup>23</sup> The rapid growth in the self-managed sector, where expenses are estimated to be in the range of 0.85-1.00 per cent per year, is a case in point.<sup>24</sup> People with larger balances effectively opt-out of the choice market, leaving behind less fee-sensitive account holders.

### **Figure 12: There is a broad range of superannuation fees** Fee range in superannuation, 2013; funds under management at each

40 Retail 30 Public sector Corporate 20 10 0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4 Fees (%) on \$50,000 balance

Note: Fees recorded for public sector and some corporate funds may not include all relevant costs as some are paid by the employer. Excludes some smaller products offering a broad range of investment options. Excludes self-managed superannuation funds. Source: Grattan analysis of SuperRatings (2014) (fee) and APRA (2014a) (FUM) data. For the past decade fees have remained highly differentiated.<sup>25</sup> Industry fund fees have risen slightly; fees on simpler retail products have fallen slightly, and risen on other retail products.

fee level

<sup>&</sup>lt;sup>23</sup> "In the past 5 years, the proportion of superannuation funds under management in the not for profit sector increased slightly from 36% to 38% and the proportion in the SMSF sector increased from 29% to 33%, while the proportion in the retail sector has fallen from 35% to 29%." Rainmaker Information (2013)

<sup>&</sup>lt;sup>24</sup> Rice Warner (2012), Table 3 p. 8 estimates fees in 2011 at 1.00 per cent; Rainmaker Information (2013) Figure 3, p. 5 estimates them at 0.83 in 2011 and 0.85 in 2013.

<sup>&</sup>lt;sup>25</sup> Rainmaker Information (2013).

# 2.4 Inattention to fees has permitted costs to grow largely unchecked

The inattention of many account holders to fees has driven providers to seek to differentiate themselves with a range of diverse products and services. They have developed sales and distribution activities to capture and protect profitable market share. They have developed a range of product and service features such as platforms that provide a broad range of investment options.

All these features drive up costs and fees. Competition on these features, rather than on fees, does not remove other inefficiencies such as excess pay, manual processes or overly active management of funds that further reduce net returns.

Funds bear the costs of distribution, sales, marketing and product differentiation.<sup>26</sup> These costs make sense for each fund but they hurt the net returns of investors. Funds report that marketing and distribution costs are about 7 per cent of total costs, though some commission costs appear to be omitted from APRA reporting.<sup>27</sup>

But the full costs of product differentiation and member engagement must be much higher than the reported cost of marketing and distribution alone. They would include many of the capital and operational costs of engaging members, creating product ranges and providing a choice platform that allows consumers to make decisions about where their money is

<sup>26</sup> Williams (2014)

invested. These costs are not reported separately but constitute a large fraction of the non-investment costs of super funds.

Funds also incur substantial costs when they actively manage their asset portfolio – in other words, when they move assets around in search of the best returns. Many Australian pension funds do this despite strong evidence that passively managed assets perform better in most asset classes. Active management drags down returns by incurring explicit costs for research, analysis and other services. In addition, the (unreported) costs of churn – the fact that the buy price of an asset is always higher than its sale price – have been estimated at between 0.23 and 1 per cent a year.<sup>28</sup>

Some funds incur other costs that further reduce net returns. Some retail trustees use related-party administrators and pay higher fees.<sup>29</sup> In some cases, there is evidence that fee negotiations do not extract reasonably expected value from external asset managers.<sup>30</sup>

As a result of all these factors, non-fee competition over the last decade has largely absorbed benefits from improvements in technology and scale. As Figure 3 in Section 0 shows, the anticipated scale advantage has not materialised even as the average size of a superannuation fund increased sixfold over the decade to 2013. Firms have incurred additional expenses that almost exactly consumed the scale dividend.

<sup>&</sup>lt;sup>27</sup> Arnold (2012)

<sup>&</sup>lt;sup>28</sup> Sy, et al. (2009); Sy and Liu (2010); Bogle (2014)

<sup>&</sup>lt;sup>29</sup> Liu and Arnold (2010)

<sup>&</sup>lt;sup>30</sup> Sy and Liu (2010)

## 3. Why Stronger Super will not lower fees much

Announcing the Stronger Super reforms in 2011, the Government predicted that they would reduce the average fees paid by members by up to 40 per cent, or around 0.5 per cent of funds under management a year.<sup>31</sup> But fee cuts of that size do not appear at all likely.

The reforms (see box) will modestly reduce costs and make products somewhat more comparable. But the reforms do little to shift the basis of competition towards fees. Widespread disengagement by both employees and employers is likely to persist. The product segmentation that prevents existing fee competition for engaged account holders from driving down fees for others is also likely to persist.

The early signs of reform do not suggest a new age of fee competition: available data show no signs of reduced fees. And while some retail funds have brought new, low-fee products to market, some have grandfathered products, closing them to new members, so that less engaged account holders continue to be charged higher fees. Stronger Super leaves Australia a long way from systems overseas that have delivered low fees.

### The Stronger Super reforms

The Stronger Super reforms, which are being phased in until 2017 after passing into law in phases from 2012, are intended to simplify default products, reduce administrative costs, improve governance of superannuation funds, and improve confidence in the self-managed superannuation sector. The two aspects of the reforms most relevant to fees are SuperStream and MySuper.

**SuperStream** is a package of administrative reforms intended to reduce costs. It includes the introduction of consistent data standards in order to reduce manual handling; the use of tax file numbers as a unique identifier to help administrative processes, and mandatory consolidation of accounts within a fund.

**MySuper** comprises a more uniform set of products intended for people who do not actively choose their fund. From January 2014 every new default superannuation account has to be in a MySuper product, and all default funds must be transferred into a MySuper product by July 2017.

Employers must make contributions to MySuper products for employees who have not chosen their own fund. Sales commissions cannot be paid on MySuper products. Some MySuper fees are limited to cost-recovery only; there must be a single investment product (which can be a lifecycle product), and standardised presentation of product information (including risk and fees) through a MySuper dashboard.

<sup>&</sup>lt;sup>31</sup> Commonwealth of Australia (2011), p.1.

### Stronger Super reform implementation timeline<sup>32</sup>

- From July, 2013: MySuper products are being introduced. Funds must notify members with multiple accounts.From January, 2014: Contributions for employees who do not
- nominate a super fund must be made to MySuper products.
- From July, 2014: Use of electronic data standards becomes mandatory for employers with more than 20 employees.
- From July, 2017: Existing default investments must be transferred to a MySuper account.

### 3.1 Savings will be modest

Stronger Super is likely to produce cost savings. Its proponents originally anticipated savings of about \$1 billion from back-office streamlining, plus a benefit from the removal of commissions from MySuper products (possibly worth up to \$400 million). But even if these were fully realised and passed through to consumers, they would take system fees down by just less than 0.1 percentage points a year, leaving fees far above international best practice. There are also reasons to expect that SuperStream costs will not fall by as much as \$1 billion, since the initial savings were calculated on a basket of reforms not all which have been implemented. As well, the initial modelling that generated the

<sup>32</sup> Swoboda (2014).

savings estimate assumed that cost savings were passed onto fund members. However, for many funds, there is little relationship between costs incurred and fees charged.<sup>33</sup>

These reforms involve account consolidation, the use of an individual's tax file number as a unique identifier, and the introduction of electronic data standards. Total savings were estimated at \$1 billion a year.<sup>34</sup> But industry analysts Rice Warner Actuaries expect that SuperStream will not save as much as anticipated because paper-based processes are not as widespread as assumed in the modelling.<sup>35</sup>

Additional savings from the removal of commissions on MySuper products are unlikely to be large. Commissions on default products are no more than \$400 million a year.<sup>36</sup> More importantly, as MySuper products are not the only products most employers select, funds may be able to achieve similar sales ambitions with a different profile of commissions across the portfolio.

Even if the cost-reducing reforms do lead to annual savings as large as the most optimistic estimates, and if the funds fully pass on the savings in reduced fees, this will only lower fees by about 0.1 per cent of funds under management a year. The cost savings

<sup>&</sup>lt;sup>33</sup> See Appendix 2.

<sup>&</sup>lt;sup>34</sup> The Super System Review based its estimates of potential savings in part on SuperChoice (2009) and Ernst & Young (2009).

<sup>&</sup>lt;sup>35</sup> Rice Warner (2012), p.32.

<sup>&</sup>lt;sup>36</sup> High end of range estimated by industry analysts; also see Rainmaker Information (2010).

from Stronger Super do not put Australian superannuation costs anywhere near best practice.

# 3.2 Stronger Super does not strongly increase fee-based competition

The Stronger Super reforms will not put pressure on fees because they do not sufficiently shift the nature of competition in the superannuation market. Most employees and employers will stay disengaged. Most sophisticated buyers will continue to buy different products than other buyers. As a result there will be little additional pressure on funds to lower their fees for most account holders. There is therefore little reason to expect reduced costs to be passed on as reduced fees. Costly non-fee competition is likely to offset cost savings from Stronger Super, just as it has largely absorbed the savings from increasing scale over the last decade.

The MySuper product may help those who want to compare superannuation products, but find it hard to do so. However, there are few in this category. Fewer than three per cent of people say that they do not compare the fees and charges of their superannuation account with other options because it is 'too difficult'.<sup>37</sup>

The MySuper product dashboard (a summary of product characteristics that all products must display) is unlikely to put pressure on fees. While it does improve the comparability with other MySuper products, it does little to improve the comparability of non-fee product features, such as the riskiness of the fund. The dashboard mandates the display of subjective information such as 'target returns' rather than objective information based on the assets in which the fund is invested. It also omits information that is important to net returns, such as the turnover of the assets held by the fund. And in any event, much of the difficulty faced by people in comparing funds lies in a lack of financial sophistication and is not easily solved by improved product information.

MySuper will make little difference for those who are not focused on retirement, are procrastinating or are not sufficiently focused on fees. MySuper does not provide any new mechanisms to encourage people to engage with their retirement savings.

There may be some benefits from fee disclosure if the original plans for detailed fee disclosure are carried out. Under Stronger Super, funds may be obliged to make fee data accessible to the Australian Prudential Regulation Authority. This would allow thirdparty providers to provide better breakdowns of fees. Again, however, the changes are not large. Comparison sites have been around for a long time. For engaged account holders who are prepared to go to the trouble of looking at the product disclosure statement or a comparison site, it is already possible to determine the fee structure.

The Stronger Super reforms have not changed the highly segmented market, in which people who are not fee sensitive get little benefit from any fee pressure. A large number of products are sold through multiple sales channels. Larger firms may still be able to negotiate lower fees. Fee sensitive individuals will still typically buy different products, through different channels, from those bought by disengaged individuals.

Grattan Institute 2014

<sup>&</sup>lt;sup>37</sup> Colmar Brunton (2010b).

# **3.3 Early signs suggest the reforms will not make a step change**

Stronger Super is still early in its implementation, but there is evidence it has not increased fee pressure. Fees for MySuper products offered by industry, corporate and public sector funds are not lower than their precursors. There is also strong evidence that the basis of competition has not changed. MySuper fees are highly dispersed, suggesting that producers do not regard fees as the main basis of competition.

In addition, the introduction of more comparable MySuper products has not reduced average fees. While it is not possible to create an average fee across all default and MySuper products, weighted by funds under management, it is possible to create a matched group of industry fund, corporate, and public sector products that have been authorised as MySuper products.<sup>38</sup> For this group, the introduction of MySuper in July 2013 (Figure 13) has not cut fees. Indeed, there is evidence of fee increases.

# Figure 13: MySuper fees are not lower than fees of previous default products

Fees for MySuper and direct precursor funds, per cent of funds under management, annual

![](_page_23_Figure_7.jpeg)

Note: Estimated FUM-weighted fees. All funds where data was available were included. The industry fund series (14 products; 2014 product FUM = \$116b) and public sector series (3 MySuper products; 2014 product FUM = \$43bn) are weighted by the FUM of products subsequently qualified as MySuper. The corporate series (12 MySuper products, 2012 fund-level FUM = \$38b) are weighted by fund FUM. For retail products, the estimated 2014 MySuper fee is 1.19%, assuming MySuper FUM is proportional to fund FUM.. It is not possible to construct a time series for retail default products because the 2014 data lacks retail product level MySuper FUM, possibly because retail funds have not yet rolled default accounts into MySuper products.

Source: Grattan analysis of SuperRatings (2014)

<sup>&</sup>lt;sup>38</sup> Some default products were previously selected by employers and not identified as defaults by funds in publicly available data, and many retail funds have introduced new MySuper products that have very little funds under management while large sums remain in previous products. All default funds must be transferred to MySuper products by July 2017.

Some funds have also charged members for capital expenditures and levies related to the Stronger Super reforms.<sup>39</sup> In markets where firms compete vigorously on fees, fee cuts, not increases, would normally accompany capital expenditure that is expected to reduce operating costs. While non-profit funds may have less latitude to absorb capital charges, several for-profit funds owned by entities with deep balance sheets are imposing transitional levies. The fact that funds have increased fees to cover capital expenditures suggests they are not very concerned about losing accounts based on fees or that they do not anticipate the expenditures to result in operating cost reductions. Neither explanation is encouraging.

The introduction of MySuper does not appear to have significantly affected competition in features other than fees. The fact that the fees of MySuper products are spread over a broad range, as Figure 14 shows, suggests that non-fee factors continue to be important in the market for default funds. While the fee dispersion of MySuper products is less than that of other superannuation products, their fees nevertheless range from about 0.6 to about 1.4 per cent a year, with a few much higher. A class of product that was intended for "members who simply want someone else to take care of it all for them" is now offered across a range of fees, and the fees many members will pay are high enough to reduce their retirement balances by well over 20 per cent.<sup>40</sup> For those who are allocated the high-fee MySuper products, someone else is arguably not "taking care of it all for them".

![](_page_24_Figure_3.jpeg)

![](_page_24_Figure_4.jpeg)

Notes: Not weighted by FUM as FUM is not available for 2014 given creation of new products. SuperRatings data captures 93 of 117 MySuper products. Bin width = 0.10%. Source: SuperRatings (2014).

The Stronger Super reforms leave Australia a long way from the overseas systems that have delivered low fees, the subject of the next chapter.

<sup>&</sup>lt;sup>39</sup> Business Spectator (2013).

<sup>&</sup>lt;sup>40</sup> Cooper (2010).

## 4. Lessons from other pension systems

Other countries have achieved much lower fees for retirement savers while retaining wide choice in superannuation products.

There are four main lessons from overseas. First, running a government default fund, or centralising the collection of funds and the maintenance of accounts, can significantly reduce costs. Second, making firms compete on fees for the right to manage default funds also achieves low fees. Third, while measures to promote the comparability of funds are widely practised, they do not alone lead to low fees.

Fourth, although many people know they should make an informed choice, they procrastinate in doing so. Outside retirement savings schemes, innovative mechanisms help people to overcome their reluctance to make a decision. These mechanisms should be introduced to help people choose superannuation funds.

### 4.1 Centralising default fund administration reduces costs

Many governments have achieved low fees by running a central default fund. They include the US Thrift Savings Plan (for employees of the US Federal Government), Sweden's AP7 Safa default fund and the UK's NEST fund. Central management of accounts coupled with competitively priced asset management reduces costs. The funds may auction some or all of their balances in large tranches that attract low cost bids from asset

managers.<sup>41</sup> The fees of funds that employ this model are radically lower than those that Australian superannuation investors pay. Investment management fees for the US TSP, the UK NEST, and Sweden's AP7 are 0.04, 0.38 and 0.22 per cent respectively.

Other arrangements use private default funds but centralise payment flows or account administration. These can also generate significant savings. In New Zealand, Sweden and Mexico, employers send pension contributions to the tax office or another central clearinghouse, which forwards the funds to private pension providers. This method can reduce costs by using existing tax payment systems. It enables employers to make a single payment to the clearinghouse rather than payments to multiple funds. It also enables the government to ensure each account holder has only one account.

In Sweden the government collects employer contributions when it collects payroll tax. The government administers individual accounts but individuals can choose any of the hundreds of pension funds on offer. The government aggregates individual monies and executes trades once a day in the wholesale funds market, securing discounts from the retail rate these funds usually offer. Centralisation has reduced the administration component of fees for Swedes to 0.14 per cent (with a cap at the equivalent of

<sup>&</sup>lt;sup>41</sup> In markets where there are no discounting advantages for large buyers, they select low-cost exposures to assets (such as through running a largely passive index fund themselves, or buying shares in exchange traded funds).

AUD \$19). Additional fees vary according to the private fund manager selected.

### 4.2 Government tenders for default status drive down fees

The most effective way to get superannuation fees down while retaining private provision is to make firms compete for the right to manage default funds. Variants of this model are used in Chile, New Zealand, and Mexico. In Chile, government tenders for the right to manage the default accounts of individuals as well as their money. Chile's default fund is awarded in a biennial tender to the firm that offers to manage funds for the lowest fees. Tenderers must offer five defined asset allocation options, each set at the same fee. The winning fund receives all new default accounts opened in the following two years. The account fee for the default fund is equivalent to about 0.2 per cent a year – less than onequarter of the Australian average default fee.

The experience of New Zealand and Mexico offers a counterpoint. They select private default funds but do not place as much weight on fees as Chile's system does, and their fees are not as low. Mexico, which selects a group of funds based on their previous net performance, achieves an average fee of 1.15 per cent a year.<sup>42</sup> New Zealand, which selects five default funds on a number of criteria, including fees, achieves average fees for default funds of 0.55 per cent a year.<sup>43</sup>

Figure 15 shows the annual fees charged under these fee-based and non-fee-based tenders, and compares them to Australia's average default fee and those achieved by government-run defaults. Government-run default funds (which may use private asset managers) achieve fees of 0.03 to 0.4 per cent a year. Chile achieves a comparable result by tendering out default accounts to private providers and selecting exclusively based on fees. The Mexican and New Zealand models do not use fees as the dominant selection criterion and as a result do not achieve low fees.

The Chilean, New Zealand and Mexican models treat asset allocation differently. In Chile, the winning fund must offer five products with different asset allocations but with identical fees. Mexican defaults use a life-cycle strategy, which involves shifting to less risky assets close to retirement, but they have been criticised for holding too high a proportion of assets in Mexican government bonds. In New Zealand, the default asset allocation has been criticised for over-emphasising low-risk assets and giving growth assets too little weight.

education and investment capability; and 30 per cent of the evaluation was on the providers' pricing levels."

<sup>&</sup>lt;sup>42</sup> CONSAR (2014b)

<sup>&</sup>lt;sup>43</sup> Government of New Zealand . "The tenders were evaluated according to technical criteria (70 per cent) such as organisational capability, member

## Figure 15: Government defaults and fee-based tenders achieve low fees

Fees on default defined-contribution products in a sample of comparable jurisdictions, per cent of funds under management, annual

![](_page_27_Figure_3.jpeg)

Note: 2014 or latest available. Conversion from percentage of contribution fees (for Chile and UK NEST) to funds under management fees done with following assumptions; 40-year contribution period, real wage growth of 1.8 per cent p.a., and real portfolio returns of 5 per cent as used in OECD (2012). NZ: Unweighted mean fees of nine default funds. Aus:

weighted mean fees of MySuper products detailed in Figure 13.

Source: Thrift Savings Plan (2014); Superintendencia de Pensiones (2014); Swedish Pensions Agency (2013); (2014c); Government of New Zealand (2014a), UK Nest (2014); APRA (2014a); SuperRatings (2014); CONSAR (2013). The experience of Chile shows that competition for the right to be a default fund can be a powerful force that drives down default fees. It also shows that without additional policy steps, lower default fees will not drive fees down much for non-default funds.

Fees in Chile's pension system were high for many years. In 2008 the Government responded with two key reforms. One was to only allow fees to be charged on contributions, in order to make fees easier to compare.<sup>44</sup> The change initially led to an 11 per cent fall in fees as the funds repriced their products, but this momentum was short-lived.

It was the other reform, the introduction of a tender for default funds as explained above, that really drove down fees. A provider that was new to Chile, Modelo, won the first tender in 2010. Modelo won with a fee 20 per cent below the weighted average fee in the market, and won again in 2012 with a fee 43 per cent below the average. In 2014, a small provider, Planvital, won the tender. Since the policy started, the fee paid by new default account holders has fallen by 65 per cent.

<sup>&</sup>lt;sup>44</sup> Members must remain in the fund for 18 months. The winning fund must charge the winning fee to all its prior default customers. The pension authority in Chile estimated that roughly 200,000 new members would join each year. Taking into account that new members are likely to have an average taxable income that is considerably lower than the nation's average, winning the tender entitles the winner to roughly 7% of total contributions over the two year period

# Figure 16: The tender system caused Chilean default fees to plummet

Average and default fees in Chile, 1991-2015f; per cent of contributions

![](_page_28_Figure_3.jpeg)

Note: Fees are per cent of contributions. Not directly comparable with fees on preceding chart. Conversion to per cent of FUM assumes 40-year contribution period, real wage growth of 1.8 per cent, and real portfolio returns of 5 per cent as used in OECD (2012). Source: Grattan analysis of Superintendencia de Pensiones (2014).

The winning default fund has also outperformed its more expensive competitors. Modelo's funds performed as well as other funds even before fees were deducted. Because its fees were far less than the competition, its members enjoyed better returns than any other fund. Figure 17 shows the performance of a hypothetical account at each of Chile's private pension funds, taking the introduction of the tender process as the starting date.

![](_page_28_Figure_6.jpeg)

![](_page_28_Figure_7.jpeg)

#### Source: Superintendencia de Pensiones (2014)

Each month, the hypothetical account member made gross contributions of \$100, from which their account fee was deducted. The monthly returns for each fund were then applied to the account balance for all asset-allocation categories available to Chilean savers (labelled Type A-E). In every single asset allocation category, the low-cost default outperformed all other funds. The low-cost default fund also had the least volatile returns. Yet the Chilean reforms have not lowered costs for all account holders. Large fund providers have so far refrained from competing, perhaps because winning the tender would require them to lower prices for existing members. Many incumbent account-holders (both default and non-default) continue to pay high fees even as the fee for new default accounts has fallen, since very few switch to cheaper funds despite it being free and relatively simple for customers to do so and the availability of clear information about fees. Account-holders in funds that have not previously won a tender are on average paying fees well over double those who have benefited from the tender system. The lesson from Chile is that creating a low-cost default fund is the most important reform. But it is not enough.

### 4.3 Disclosure and comparison alone are not enough

The third finding from cross-country experience is that while many countries have sought to make funds easier to compare, there is little evidence that comparability by itself improves choices much, especially for default account holders. At best, it provides the foundation for good pension outcomes that more aggressive policy tools, such as tenders for default status, can achieve.

Countries promote comparability between funds in three ways. First, they limit the types of charges that pension funds may impose on their members. Second, they mandate standard reporting of fees, asset allocation and returns in product disclosure statements and dashboards (tools that summarise the most important product information in a standardised way). Third, they provide choice platforms on which people can compare funds and even switch from one fund to another. To make it easier for people to compare products, many countries restrict the types of fees that can be charged. New Zealand and Sweden limit fees to fixed account fees and investment management fees that are a constant percentage of funds under management. Similarly, Australia's MySuper products may charge a fixed account fee and an investment charge as a percentage of funds under management, while other fees for switching investments or leaving a fund may be charged on a cost-recovery basis only. However, there are no limits on the types of fee that may be charged for other superannuation products in Australia.

Many countries also insist that the information on product disclosure statements and/or dashboard tools must be uniform. The goal is to make fund characteristics as comparable as possible. However, many systems do not mandate measures that would assist informed choice: few compare fees and returns to the best available benchmarks, or mandate the reporting of the hidden costs of buying and selling assets ("churn"). Some, including Australia's new MySuper dashboard, include largely uninformative metrics such as target returns and subjective riskreturn measures.

Some governments have built fund comparison tools or websites to aggregate comparison information. Some sites also permit people to switch funds. They may work reasonably well for those who seek them out and know how to interpret the information. The Swedish Pension Authority, for example, has built a fund comparison tool that shows key cost, return and risk measures for each fund. It allows account holders to drill down into each fund for more information.<sup>45</sup> The tool is hosted on the same website on

<sup>&</sup>lt;sup>45</sup> Swedish Pensions Agency (2014b).

which investment decisions are made and on which accounts can be checked. It also enables account holders to switch to a new provider.

New Zealand, similarly, has provided an accessible website for comparison.<sup>46</sup> It provides data on all Kiwisaver products, including default funds. It groups funds into risk categories, and fees are easy to compare using data that funds are required to provide. Yet the New Zealand site does not enable account holders to select, and switch to, a new provider.

These innovations to increase comparability are worthwhile. But there is extensive evidence that they do little to improve the choices investors make. Most people people remain disengaged even when comparability is high.<sup>47</sup> As the OECD put it,

"The main limitation of such initiatives, especially in countries that target lower income employees, is the general apathy among individuals towards retirement savings and a much greater response among individuals to providers' marketing strategies than to fee levels."<sup>48</sup>

Chile's reform experience, for example, shows that increasing comparability does not help much for choice products: fees were little affected by improved comparability. Similarly, the introduction of tendering for default status drove default fees down but has not generated much pressure to lower non-default fees.

# 4.4 Trigger events help overcome procrastination, but are rarely used

Mandated defined contribution pensions are designed in part to overcome discounting, procrastination and inertia. But tools that protect choice while overcoming the widespread tendency of people to put off comparing funds have not been widely used.<sup>49</sup>

Outside of mandated savings systems, some efforts to overcome procrastination have shown signs of success. For example there is an approach to increasing saving known as 'Save More Tomorrow', in which people commit to increase the share of their pay packets allocated to pension funds in future. It has been implemented at some companies with some success. In this way, they are encouraged to overcome their tendency to delay decisions affecting their future wellbeing. Similarly, GPs may recommend tests to patients when they reach certain ages. In some states of the United States, people renewing a driving licence or registering a vehicle may be asked whether they wish to join an organ donation register, or register to vote.

Yet few systems have created regular opportunities for people to be confronted with information about their superannuation products, and to act on that information. For example, it appears that other systems have not linked pension comparison to other regular administrative obligations such as tax filing. In Australia, workers often have the opportunity to change superannuation when they change jobs, but new employees see only the options provided by their employer. Little objective information is presented to help them compare.

<sup>&</sup>lt;sup>46</sup> Government of New Zealand (2014b).

 <sup>&</sup>lt;sup>47</sup> One fund manager increased the comparability of its PDSs but those reporting the PDS was 'too hard to understand' barely changed. AXA (2009).
<sup>48</sup> OECD (2012).

<sup>&</sup>lt;sup>49</sup> O'Donoghue and Rabin (1999).

## 5. How to get superannuation fees down

Australia urgently needs to get superannuation fees down. We are used to accepting fees of 1 or even 2 per cent of balances a year as reasonable figures. We need to learn from international experience and target fees at 0.5 per cent of funds under management, at most. How can this be done?

Two simple reforms will work together to sharply intensify pressure on fees and push the industry to become much leaner. They build on existing regulations and create options to further improve the system.

The first reform will cut fees for account holders who are disengaged. The government should introduce wholesale price pressure on default superannuation products. It should hold a feebased tender to select one or more non-government funds to be the default fund.

The second reform will make it much easier for Australians to select a better superannuation product. Government should make tax time super choice time. The Australian Tax Office should add a stage in the annual tax return process at which taxpayers can compare their current superannuation fees with the fees charged by the winner of the wholesale tender, and switch on the spot if they so desire.

### 5.1 Select default funds in a fee-based tender

The Commonwealth Government needs to unleash the power of wholesale competition to push down fees for default products. The best way to do so is to run a tender. One or more funds that tender the lowest fees would win the right to be offered as a default for a period. All other funds would be excluded from consideration until the next auction, and would have to compete in the market as choice products. APRA would continue to assess candidate funds to ensure they meet prudential standards.

Figure 18 sets out the issues that would need to be addressed in defining the tender. Government would first need to define the default product or products. Using the MySuper product definitions as a base, it should narrow the range of products that can be put forward as candidates for default status. It should specify an asset allocation range or ranges, to prevent a race to the bottom in which providers offer funds that offer exposure only to assets, such as term deposits, that cost least to manage but are inappropriate as a prime vehicle for lifetime savings. It could, for example, specify a single asset allocation -- perhaps a life-cycle product that adjusts asset allocation as people approach retirement.

Alternatively, the government could hold several tenders for a range of asset allocations, and let other parties, such as employers and Fair Work Australia (should it retain a role) select from the list of funds that bid lowest in each class. It will also need to set limits on trading volumes, or include the cost of churn in the

fees and have funds commit to not exceed the cost of churn they include in their bid. Finally, it will need to hold a separate competitive tender for any insurance that is to be offered through the fund.

Government should also define the period during which the winners of the tender would manage accounts, and the funds they would manage. The Chilean experience shows that a period of about two years creates sufficiently intense competitive pressure. Allocating tender winners the right to manage all new default accounts opened during the period is the most practical option, because it does not disrupt the management of the 'back book' of default funds. Over time, successive winners would capture a large fraction of default funds as people switched jobs.

Third, the tender process should be designed to elicit competitive bids. As the details of tenders and auctions are critical to results, further careful work will be needed to design the process.

Fourth, the roles of APRA, employers, and Fair Work Australia would need to be defined. APRA would likely retain its current role of pre-qualifying candidates for default status. If the tender produces multiple candidates (for example, one in each of a number of asset allocation classes), employers or FWA could continue to play a role in selecting from a shortlist of winning default options. Figure 18: Elements of the proposal to hold a tender for default funds.

![](_page_32_Figure_6.jpeg)

#### Source: Grattan analysis.

Finally, supporting reforms will be needed. Changes to protect account holders on what will become legacy MySuper products may be required. These may include limits to fee increases at least for some period of time. Over time, funds managed by previous winners of the default tender would be subject to similar rules. The winner of the default would be prohibited from attempting to induce default customers to buy other products for a period of time. While the winning fees in the tender cannot be predicted precisely, fees of around 0.4 per cent a year appear to be an upper limit, based on the experience in the smaller Chilean market and on the most competitively priced funds, with appropriate asset allocations, that are active in the Australian market today.

Figure 19: Annual savings from a tender for default funds could reach \$3b at today's system scale.

![](_page_33_Figure_3.jpeg)

Fee curve by industry segment, per cent of funds under management

Note: Estimated default FUM only. FUM is mid-2013. Assumes default products are 70 per cent of public sector, industry, and corporate funds under management, and 20 per cent of retail funds under management.

Source: Grattan analysis; industry analyst judgement (default shares); APRA (2014a); SuperRatings (2014).

If the default volumes remain at today's figure of a third of total system funds, the savings will rise over time to well over \$2.8 billion dollars a year at today's system size. As the system grows, so will the potential for savings.

### 5.2 Make tax time super choice time

The second major reform to intensify pressure on fees is designed to make it much easier for account holders to compare their current fund to the winner of the default tender. The ATO should host a superannuation choice platform that taxpayers visit when they submit their tax returns.

The proposal would add a step to the tax return process. Taxpayers would get an opportunity to review their superannuation product, compare it to the tender-winning default fund or funds, and, if desired, switch providers. Figure 20 sets out the main elements of the proposal.

The choice platform should become a routine part of the tax return process. It should provide both the information found on the product dashboard of the account holder's current fund and that of the winning default funds. It should contain information to educate users of the importance of the different aspects of products (fees, risk, asset allocation, historical returns, and so on). It should also enable account holders to switch funds on the spot.

The choice platform would help to reach customer groups that currently are not actively assessing their superannuation options, including those on defaults and others. It may help to engage customers who remain on high-fee products. Figure 20: Elements of the proposal to 'make tax time super choice time'.

![](_page_34_Figure_2.jpeg)

![](_page_34_Figure_3.jpeg)

#### Source: Grattan analysis.

While the savings from a choice platform of this type are difficult to estimate, Figure 21 indicates the size of the opportunity by setting out the current estimated funds under management for non-default funds. Up to \$10 billion is paid today in superannuation fees (including expenses of self- managed funds) over and above the rate that could be achieved by a competitively tendered default product. The competitive pressure exerted by the default may induce funds to cut fees and expenses in their choice product lines. Figure 21: Making tax time super choice time could highlight large fee disparities.

Non-default funds: funds under management and estimated fees

![](_page_34_Figure_8.jpeg)

Note: Estimated choice FUM only. FUM is mid-2013. Assumes 30 per cent of public sector, industry, and corporate funds under management, and 80 per cent of retail funds under management (and 100 per cent of self-managed) are non-default products. Source: Grattan analysis; industry analyst expert judgment of default shares; APRA (2014a); SuperRatings (2014).

## 6. Conclusion

The Superannuation Guarantee, Australia's universal and compulsory system of superannuation, was introduced in 1992 to ensure that workers made adequate provision for their retirement. As the population ages, compulsory super also seeks to take the pressure off Age Pension payments and the Commonwealth Budget. Excessively high fees substantially erode both these policy goals.

A redesign of the superannuation system in order to reduce fees is long overdue. There is no reason why Australians should pay fees of 1.2 per cent of their superannuation balances, on average, when superannuation account holders across the OECD pay on average a third of that amount. The unfairness is particularly acute when the Australian funds that charge the highest fees actually produce the lowest returns – in some cases, zero return.

This report proposes reforms that have the potential to save \$10 billion a year in excessive fees. The reforms will sharpen competitive pressure on superannuation fees by making funds tender for the right to run a low-cost default fund that all new job starters will pay into unless they make other arrangements. A second key reform will make the system transparent by enabling account holders to easily compare the cost of their fund to the new default fund at tax time – and to switch on the spot if they so choose.

The reforms will help to address a fundamental threat to the adequacy of retirement incomes in Australia. They will also reduce pressure on the Age Pension and the taxpayer's dollar.

The simpler, lower-cost superannuation system that will result will also increase the size of the economic pie by freeing up workers, managers, and capital goods to produce more value elsewhere.

## Appendix 1: How superannuation fees relate to expenses

This appendix provides additional details on the relationship between fees and expenses in Australian superannuation funds. It also provides details on how the estimates of list fees used in this report were created.

Box 1 summarises the relationship between fees (charged to account holders) and expenses (reported to the regulator).

Figure 22 shows that list fee estimates calculated in the course of preparing this report, based on data provided by the superannuation research firm SuperRatings, are similar to those calculated by two other research firms, Rice Warner and Rainmaker. All of them have trended down slightly since 2002, from just under 1.4 per cent of funds under management, to around 1.2 per cent.

Australian superannuation expenses have remained around 0.8 per cent of funds under management since 2004, even as the scale of the superannuation system has grown. APRA reports costs by category, shown in Figure 23. It can be seen that overall reported costs have not declined, while cost components have varied somewhat.

### **Box: Fees and fund expenses**

Account fees are charged by superannuation funds to their members. They may include a dollar-per-year 'membership fee', and other fees, such as investment management fees, which are expressed as a proportion of total funds in the account. These fees exclude insurance premiums. Some accounts pay lower than list fees because some funds provide discounts to members based on account balance, or employment with a particular employer.

**Fund expenses** are incurred by superannuation funds to administer and manage retirement savings. They include investment expenses, payments to trustees and directors, professional services from auditors and actuaries, administration expenses, and other management expenses. They may include expenses incurred by the superannuation fund in administering insurance (likely to be at most 0.1 per cent per year). This report uses fund-level expense data collected by the Australian Prudential Regulation Authority (APRA).

The difference between fund expenses reported to APRA and fees received is profit (on in the case of non-profit funds, surplus), and a range of expenses not reported.<sup>50</sup>

<sup>&</sup>lt;sup>50</sup> APRA notes that reported fund expenses may be below the total expenses incurred by superannuation funds. The three categories they highlight are indirect investment expenses (such as the costs of buying and selling assets

**Figure 22: Fee estimates are similar and exceed expenses** Fees and expenses In Australian superannuation, 2003-2014 Per cent of funds under management

![](_page_37_Figure_2.jpeg)

Note: Grattan analysis of product fee data. Weighted by FUM. Expense ratios are for APRA regulated funds only. Fee estimates include self-managed superannuation funds at 1.0 per cent (Rice Warner), 0.85 per cent (Rainmaker) and 0.925 (Grattan). Source: Rice Warner (2012); APRA (2014a); Grattan analysis of APRA (2014a) and SuperRatings (2014); Rainmaker Information (2013). **Figure 23: Fund expense ratio has changed little; some components have varied** Superannuation fund expenses, 2004-13 Per cent of funds under management,

![](_page_37_Figure_5.jpeg)

Note: Expenses exclude commissions, and trading costs such as buy-sell spreads. Costs are weighted by funds under management. APRA regulated funds only - excludes SMSF and some public sector funds. Source: APRA (2014b).

where there is a buy-sell spread); entry and exit fees; and front-end and ongoing commissions. See APRA (2014b).

Fund expenses and account fees are quite closely related for many not for profit funds. Many funds in the retail sector have account fees significantly higher than their reported fund expenses (Figure 24).

This report uses fee estimates at the fund created from productlevel fee data collected by SuperRatings on the balanced investment options of each funds. Those products are usually the largest, by FUM, managed by each fund. The data included 134 products in 2006, 177 in 2007, 219 in 2008, 264 in 2009, 293 in 2010, 304 in 2011, 313 in 2012 and 317 products in 2013.

90 per cent of the products in the SuperRatings data were matched to a fund in the APRA data for 2013, and 44 per cent of APRA funds had a product in the SuperRatings dataset. In 2006, this sample reflects about 35 per cent of funds under management in APRA funds, and by 2013 accounts for 75 per cent of funds under management. Where a fund had multiple products in the data, the fees of these products were weighted by their funds under management, and applied to the matched fund. There is no statistically significant difference in the cost characteristics between the funds that were matched and those that were not. Neither is there a statistically significantly difference between the fees of products that were matched and those that were not. The fees from these products were calculated for an account size of \$50,000.<sup>51</sup> **Figure 24: Retail fund list fees are well above reported expenses** List fees and reported expenses, 2013 Per cent of funds under management

![](_page_38_Figure_6.jpeg)

Source: Grattan analysis of APRA (2014a); SuperRatings (2014).

There is wide dispersion in both costs and fees across superannuation funds. Figure 25 and Figure 26 chart expenses and fees on the vertical axis and cumulative funds under management on the horizontal axis.

<sup>&</sup>lt;sup>51</sup> This approach may induce an upward bias of up to 0.05 per cent in average fee estimates for later years, as actual balances per account holder has doubled in the last decade. Offsetting this, the estimates do not allow for the growing number of accounts per account holder.

**Figure 25: Not-for-profit funds' fees and expenses are similar** Superannuation expenses and list fees, not-for-profit funds, 2013 Per cent of funds under management

![](_page_39_Figure_2.jpeg)

Note: Expense ratios are from APRA fund-level dataset. Includes public sector, not-forprofit corporate plans and industry funds. Fees are for default investment options within each fund, sourced from SuperRatings. Fees are not available for all APRA funds. Dark red areas denote funds for which estimated list fees are below expenses reported to APRA.

Source: Grattan analysis of APRA (2014a); SuperRatings (2014).

**Figure 26: For-profit funds' expenses vary widely and fees are high** Superannuation expenses and list fees, for-profit funds. 2013 Per cent of funds under management

![](_page_39_Figure_6.jpeg)

Note: Expense ratios are from the APRA fund-level dataset. Includes retail funds (including employer plans offered by for-profit funds). Fees are for default investment options within each fund, sourced from SuperRatings. Fees are not available for all APRA funds. Dark red areas denote funds for which estimated list fees are below expenses reported to APRA.

Source: Grattan analysis of APRA (2014a); SuperRatings (2014).

## **Appendix 2: Fees and returns in superannuation**

This appendix presents a more detailed assessment of the relationship between expenses, fees and returns in Australian superannuation summarised in Chapter 1 of the main report.

### Why fees typically reduce returns

Chapter 1 showed that Australian superannuation funds that charged high average fees generated lower average net returns over the period 2004-2013.

The weight of evidence from longer time periods and other markets is in line with these findings. A recent study by Morningstar, a large research firm, ranked US mutual funds according to various metrics (including fees, past performance, and Morningstar's own ratings) in 2005-2008, and followed the performance of those funds over time. Their main conclusion:

*"If there's anything in the whole world of mutual funds that you can take to the bank, it's that expense ratios help you make a better decision. In every single time period and data point tested, low-cost funds beat high-cost funds."*<sup>52</sup>

Nobel laureate William Sharpe showed that it is logically impossible for actively managed funds -- funds that tend to charge higher fees -- to collectively outperform lower-fee passive funds that are invested in the same market. A low-fee passive fund--one that holds all securities according to their weight in the market --

<sup>52</sup> Kinnel (2010).

will have performance before fees equal to the market as a whole. As the average passive fund will earn market returns before fees, so too must the average active fund, because only active funds own the part of the market not covered by passive funds.<sup>53</sup> Consequently, actively managed funds, whose costs are higher, must underperform the market in aggregate after fees. Summarising the implications, Sharpe writes:

*"Properly measured, the average actively managed dollar must underperform the average passively managed dollar, net of costs. Empirical analyses that appear to refute this principle are guilty of improper measurement."*<sup>54</sup>

It is impossible for the average high-fee fund to outperform the market, but individual high-fee funds can do so, at least for a while. Some superannuation funds have consistently outperformed their peers.<sup>55</sup> But as shown in Chapter 1, persistent outperformance among Australian superannuation funds from 2004 to 2012 was largely due to low fees. Over that period, fees proved a more reliable predictor of future net returns than did previous net returns.

<sup>&</sup>lt;sup>53</sup> To test whether the 'bad end' of the active management distribution (the funds that underperform) are held by foreigners, we checked the returns on foreign-held equity investments in Australia available in ABS (2014a). A Kolmogorov-Smirnov test on foreign returns and the ASX 200 does not reject the hypothesis that foreigners earn equivalent returns as domestic investors.

<sup>&</sup>lt;sup>54</sup> Sharpe (1991)

<sup>&</sup>lt;sup>55</sup> Deloitte Access Economics Pty Ltd (2012).

This finding has been replicated many times across financial markets. Most professional fund managers cannot outperform market indexes for long after fees, and high-fee funds are more likely than others to perform less well in future.<sup>56</sup> Nobel laureate Eugene Fama describes the phenomenon:

"After costs, only the top 3% of managers produce a return that indicates they have sufficient skill to just cover their costs, which means that going forward, and despite extraordinary past returns, even the top performers are expected to be only as good as a low-cost passive index fund. The other 97% can be expected to do worse."<sup>57</sup>

Fama explains why few managers who are paid to pick stocks, bonds, and other assets can systematically add value for their investors after fees. Fama's insight is that virtually all publicly available information about the value of an asset is already incorporated into its price.<sup>58</sup> Fama's insight has been described as "the closest thing finance has to Newton's laws".<sup>59</sup> While a given manager may have a good run, this may be more luck than skill.

The only caveat is that high fee funds may offer investment in asset classes that low-fee funds cannot. If there are not welldeveloped and liquid markets in an asset class (such as in private equity, venture capital, property, infrastructure or in less developed economies), it may be possible for active management to exceed the returns from a passive portfolio with exposure to other asset classes for a while. But these opportunities tend to be riskier than others and excess returns are usually eroded over time.

### Fees and returns in superannuation performance.

This section provides additional detail behind the findings reported in Chapter 1 on the relationship between fees and returns from 2004-2013. In summary: there is modest persistence in the outperformance of individual funds. Almost all of the outperformance is due to persistent differences in fees. On average, high-fee funds earn lower net returns than others, without reducing risk. Many funds achieve lower returns or higher risk than could have been achieved by a low-cost diversified holding of the same asset classes.

Savers should prefer saving into funds that are likely to earn higher returns. To this end, many product dashboards allow potential members to compare funds based on their historical return. This is for a good reason: funds with good historical returns tend to have good returns in the future. In the language of economists, net returns have serial correlation.

Figure 27 shows that funds that had high net returns in one year, on average, had high net returns in the following year. The slope of the regression line is about  $\frac{1}{3}$ , so the persistence is not strong: a fund with returns one per cent about the average of all funds in one year could be expected, on average, to deliver just  $\frac{1}{3}$  of one

<sup>&</sup>lt;sup>56</sup> Fama and French (2010); Barras, *et al.* Ibid.

<sup>&</sup>lt;sup>57</sup> Fisher (2012).

<sup>&</sup>lt;sup>58</sup> Malkiel and Fama (1970).

<sup>&</sup>lt;sup>59</sup>Smith (2013).

per cent outperformance in the following year.<sup>60</sup> In addition, while the relationship is statistically significant, there is a lot of noise: many funds that outperform in one year do not outperform the following year.

Figure 27: Outperformance of net returns shows some persistence over time

![](_page_42_Figure_3.jpeg)

![](_page_42_Figure_4.jpeg)

Source: Grattan analysis of APRA (2014a); SuperRatings (2014).

Previous studies into the serial correlation of superannuation returns in Australia exclude the impacts of fees, perhaps because constructing a panel dataset that contains both net returns *and* average fees for funds is a difficult and expensive process.<sup>61</sup> Such a dataset was constructed for this report.

Fees and returns are strongly correlated: high-fee funds underperform others. Figure 28 charts the average fees of each fund over the period 2006-2013 against its average net returns over the same period.

It can be seen that the relationship between fees and returns is a strong one. The slope of the line is about -1.4: a fund with fees one percentage point below average could be expected to generate returns about 1.4 per cent above average.

That is because high-fee and low-fee funds differ by more than just their fees. High-fee funds tend to have lower gross returns, either because they incur additional unreported costs (such as the costs of frequently buying and selling assets for which buy prices are above sell prices at each point in time), or because they hold asset classes that experienced lower returns over the period. Together, lower gross returns and higher fees reduce net returns.

<sup>61</sup> Source: Deloitte Access Economics Pty Ltd (2012); Basu and Andrews (2014).

<sup>&</sup>lt;sup>60</sup> Figure 27 is a textbook case of 'regression to mediocrity', the origin of the expression 'regression line'. An early finding was that sons were usually closer to average height than their fathers. Galton (1886).

**Figure 28: Fees strongly reduce superannuation funds' returns** Net returns, annualised average outperformance and fund-level fees, 2006-2013

![](_page_43_Figure_2.jpeg)

Source: Grattan analysis of APRA (2014a); SuperRatings (2014)

## Figure 29: Outperformance of gross returns shows little persistence over time

Annual gross returns, deviation from weighted average across funds, 2006-2013

![](_page_43_Figure_6.jpeg)

Source: Grattan analysis of APRA (2014a); SuperRatings (2014)

Do funds that outperform consistently do so mostly because their gross returns are consistently high, or mostly because their fees are consistently low? The answer is the latter. Gross returns have little persistence over time (Figure 29). It can be seen that the slope of the line is little different from zero. A fund that beats the market (before fees) in one year is barely more likely than chance to do it again the next year. The persistence in net returns is explained instead by persistence in fees. Figure 30 shows that fees are highly persistent. Expensive funds tend to stay expensive, while cheap funds stay cheap.

The analysis above shows that most of a fund's performance deviation from average returns over time is due to the deviation in its fees from the average. More sophisticated econometric methods show the same. A panel autoregressive model suggests that an increase in lagged after-fee returns of 1 percentage point is associated with higher after-fee returns today, of about 0.25 per cent (statistically significantly different from zero). However, when the same model is run on gross (before-fee) returns, the impact of an increase in gross returns last year of 1 per cent on this year's gross returns falls to 0.07 per cent (p = 0.08; not significantly different from zero at 95 per cent confidence level).

The gross returns of retail funds, corporate funds and public sector funds do not have any significant serial correlation.<sup>62</sup> Industry funds do appear to have slightly persistent gross returns: an increase in an industry fund's gross returns of 1 per cent last year is associated with an increase in gross returns of 0.13 per cent this year (p=0.01). This is consistent with previous research and may be explained by differences in asset allocation and trading practices.<sup>63</sup>

![](_page_44_Figure_7.jpeg)

#### Figure 30: Fees are highly persistent over time

Fees in successive years, per cent of funds under management, 2006-2013

The above analysis shows that while historical net returns are helpful in selecting funds, they are not nearly as helpful as knowing the fees alone. Historical returns are a noisy signal of a fund's potential to achieve good future returns; fees are a much clearer signal. A superannuation account holder or a selector of default funds should use fees as the main guide to fund selection, in selecting between diversified funds with similar asset classes.

<sup>&</sup>lt;sup>62</sup> A Wald test on the panel AR(1) coefficient has p of 0.53 for corporate, retail and public-sector funds, implying that any serial correlation in returns is not significantly different from zero.

<sup>&</sup>lt;sup>63</sup> Cummings and Ellis (2011).

Source: Grattan analysis of APRA (2014a); SuperRatings (2014)

How well does the strategy of selecting funds based on their fees perform? Figure 31 charts the subsequent returns of two groups of funds, selected afresh in each year. The first group is the cheapest 10 per cent of funds in that year. The second group is funds with the highest annual average historical return in prior years. Both of these rules were followed for each year from 2006 to 2011.<sup>64</sup>

Figure 31 illustrates how these two groups performed against the average of all funds in each year. Both groups tend to outperform the average of all funds. There is significant variation from year to year. For example, in 2008 and 2009, when there were large shifts in share market values, the historical returns of funds in each year were very poor predictors of future returns. In three of the six years, the best previous performers subsequently outperformed funds with the lowest fees, by under 0.2 percentage points per year. In the other three years, the lowest-fee group outperformed the best previous performers by at least 0.3 per cent, and up to 1 per cent per year.

Figure 9 in Chapter 1 summarises the average outcomes of these rules from 2006 to 2011. It shows that on average, low-fee funds went on to perform better than funds that previously had high net performance.

# Figure 31: Low fees better predict later returns than do previous high returns

Subsequent outperformance of fund groups, 2006-2013. Performance since decision year relative to all funds, per cent annual

![](_page_45_Figure_6.jpeg)

Note: In each year in the sample from 2006 to 2011, three sets of funds are compiled. The first is all funds; the second are the 10 per cent whose prior returns (for history back to 2004); the third are the 10 per cent with the lowest fees. The chart shows the subsequent outperformance in remaining years to June 2013 of the low-fees and highperformance group of each year.

Source: Grattan analysis of APRA (2014a); SuperRatings (2014).

<sup>&</sup>lt;sup>64</sup> If a fund that was selected in a given year closed down, the hypothetical investment in that fund was carried across to the other funds that initially satisfied the same rule on an equal-weighted basis.

### Fees, returns, asset allocation and volatility.

This section shows that Australian funds that charged higher fees over the period 2004-2013 delivered lower average returns and did not compensate with lower volatility.

Figure 32 shows the implied after-fee, after-tax and after-inflation performance achieved by the full range of asset classes in which Australian superannuation funds are invested.<sup>65</sup> It shows that some asset classes delivered high real returns and high risk (shares and property); others delivered low real returns and low risk (bonds and cash). Combinations of the best asset classes define an (ex-post) risk-return frontier, which is the upper left hand side of the grey box. Other asset classes (international bonds; unlisted property) delivered lower returns or higher volatility than a combination of the best asset classes would have delivered. The implied average real return of each asset class in Figure 32 should be expected to be lower than index returns as it is net of fees and churn costs.

#### **Figure 32: Asset returns and risk define an efficient frontier** Implied risk/return characteristics of assets held by Australian superannuation funds, 2004-2013. Per cent, annual, real

![](_page_46_Figure_5.jpeg)

Source: Grattan analysis of APRA (2014a).

<sup>&</sup>lt;sup>65</sup> The implied returns for each asset class are obtained by regressing fund-level net returns on the average asset allocation weights for each asset class, using OLS, for each year. The risk metric is the standard deviation of implied asset-level returns.

Figure 33: High fee funds have lower returns than low fee funds and almost identical volatility

Risk-return performance of funds, 2004-2013 Per cent, annual, real

![](_page_47_Figure_3.jpeg)

Source: Grattan analysis of APRA (2014a); SuperRatings (2014). Q1 is the lowest-fee quintile of funds; Q5 the highest-fee.

Figure 33 above shows the performance of superannuation funds relative to the performance of the assets they hold. It shows that high fees are the major driver of low net returns at the fund level over the period: few funds outside those in the lowest-fee 40 per cent of funds achieved returns close to the efficient frontier.

### **Concluding remarks**

This appendix has shown that fees account for the bulk of the variation in returns of individual superannuation funds. Average future returns are higher for funds with low past fees than they are for funds with high past net returns. Funds with low average returns have not compensated with lower risk.

These findings imply that account holders, or those responsible for selecting defaults, should select low-fee, low-tax, low-churn funds with diversified exposure to the asset allocation (or in the risk-return class) appropriate to the risk appetite of the account holder.

## **Appendix 3: Country system vignettes**

There are many defined-contribution (DC) systems. Many of them are small or have higher expenses than Australia's. Figure 34 shows the size and average fees charged across the range of DC systems. It also includes a set of defined-benefit systems.<sup>66</sup> Australia is one of the largest systems but has costs higher than 18 of the 24. It is the largest defined-contribution system, but has costs that are only exceeded by systems 10 or 100 times smaller.

This appendix provides vignettes on four DC pension systems that have adopted innovative approaches to reducing fees or have institutional similarities to Australia.

The two systems with government-run defaults have achieved low fees. Sweden uses a government-run default and has centralised of account administration while retaining a wide range of investment choice. The US Thrift Savings Plan, the defined-contribution plan for US Federal Government employees, was analysed due to the exceptionally low fees it charges.

The two systems that retain full private provision have adopted innovative tendering arrangements. New Zealand has institutional similarities to Australia. Chile introduced the first mandatory DC system and has been an innovator in creating price pressure on default products. Other Latin American countries have tended to model themselves on Chile.

<sup>66</sup> See Impavido, *et al.* (2010) and the vignettes compiled in Productivity Commission (2012), Appendix 2 for discussions of many of these DC systems.

## Figure 34: Australia's superannuation system expenses exceed others of similar scale

Funded pension expense, per cent of funds under management, annual

![](_page_48_Figure_9.jpeg)

Note: Year: 2012 or latest prior to 2012. For the purpose of this chart 'defined benefit' is a system where greater than 60% of assets are in defined benefit plans; others are allocated to defined contribution. The chart includes 22 countries, the US Thrift Savings Plan (the defined contribution fund for US public servants) and the Swedish private pension system. See Appendix 3 for a version of this chart with countries identified. Source: Thrift Savings Plan (2014), Swedish Pensions Agency (2013), Swedish Pensions Agency (2014a); OECD.Stat (2014a); OECD.Stat (2014b); OECD (2013)

### The US Thrift Savings Plan

Employees of the US federal government, including uniformed forces, are eligible to enrol in the Thrift Savings Plan (TSP). The TSP is an optional, defined-contribution government-run retirement savings plan that offers a limited range of options and charges exceptionally low account fees.

The TSP aggregates account balances before tendering out large tranches of funds to private-sector fund managers. The result is an annual fee of 0.029%. In part, the low fees reflect scale economies that are difficult to replicate in more decentralised systems given all account holders share the same, very large employer. It has been asserted that the fees charges do not reflect the true cost of the scheme are as some costs are borne by employing government agencies and not by the TSP itself.67

Account holders who do select an investment option are allocated to a product that is wholly invested in government securities. Those who wish to select a fund have six options, including a 'lifecycle' option that shifts asset exposures towards lower-risk assets towards retirement. The options are set out in Table 1. Table 1: US TSP: Product options/asset allocation matrix

Fund	Investment Style	Objective	Risk	Fee
G	Government securities	Interest income without risk of loss of principal	Inflation risk	0.027%
F	Government, corporate, and mortgage- backed bonds	To match the performance of the Barclays Capital U.S. Aggregate Bond Index	Market risk, Credit risk, Prepayment risk, Inflation risk	0.039%
С	Stocks of large and medium- sized U.S. companies	To match the performance of the Standard & Poor's 500 (S&P 500) Index	Market risk, Inflation risk	0.029%
S	Stocks of small to medium-sized U.S. companies	To match the performance of the Dow Jones U.S. Completion TSM Index	Market risk, Inflation risk	0.026%
I	International stocks of 21 developed countries	To match the performance of the Morgan Stanley Capital International EAFE Index	Market risk, Currency risk, Inflation risk	0.029%

Source: Federal Retirement Thrift Board (2014)

<sup>67</sup> Investment Company Institute (2007).

### The Swedish premium pension system

Swedes make mandatory contributions of 2.5% of wages to a 'premium pension' in addition to their larger notional defined contribution system.<sup>68</sup>

The premium pension system offers a government run default and a broad range of private sector choice, supported by centralised account administration. Account holders' balances are aggregated by a government clearing house and allocated 'wholesale' to private fund managers.

These amounts are paid by employers along with payroll tax and collected through a government-run clearing-house. The Swedish Pensions Agency (SPA) is the sole provider of individual account administration and is also the manager of public pensions. The centralisation of administration leads to large economies of scale - the administrative fee for private pension accounts in 2012 was 0.14% per year, with a cap at the equivalent of AUD \$19, which reduced the average administration cost to just 0.10%.<sup>69</sup>

If Swedes abstain from choosing, their account balances are placed in a government-run life-cycle fund. This fund allocates individuals wholly into equities until they turn 56 whereby it starts transitioning them into fixed income. The fund's annual investment fees vary according to the exposure to equities, from 0.05-0.12% of funds under management.<sup>70</sup> As a result, total costs of the

government run default are at most 0.26 per cent of funds under management. Most people are paying less.

Swedes may elect to invest their premium pension in a number of funds. Doing so is made easy by the single investment-choice platform provided on the SPA website.<sup>71</sup> Rather than individuals having direct relationships with their chosen fund/s, the SPA aggregates member transactions and negotiates fees for choice products that are substantially lower than if the products were offered directly to individuals.<sup>72</sup>

68	OECD	(2012).
		(2012).

<sup>69</sup> Swedish Pensions Agency (2013).

<sup>71</sup> Ibid.

72 Ibid.

<sup>&</sup>lt;sup>70</sup> Swedish Pensions Agency (2014c).

### New Zealand's KiwiSaver

The New Zealand Government introduced an opt-out, defined contribution pension scheme called KiwiSaver in 2007. Employers must enrol all eligible employees in a suitable pension fund. The minimum contribution is 6% of wages.<sup>73</sup> Employees may opt out of the scheme altogether if they wish.

Employees are advised of the employer-chosen pension scheme. If both employer and employee fail to choose a fund, the employee is allocated to one of nine government-chosen default funds.<sup>74</sup> Default funds are chosen through a government-run tender that selects funds on the basis of a range of fund characteristics, including fees. The New Zealand Government determines the asset allocation of the defaults through a consultation process with the industry. Default products must hold between 12-25% of their portfolio in growth assets

If employees wish to exercise choice of fund, they can select from a broad range of private options. The government has built a comparison website on which funds are categorised so that retail account holders can compare them.<sup>75</sup>

Annual fees achieved for the default products range from 0.38% to 0.65% of funds under management.  $^{76}$ 

<sup>74</sup> Effective 1 July 2014, Government of New Zealand .

Table 2: New Zealand asset allocation by product (2014)Per cent in growth assets

Fund Type					
Defensive	Conservative	Balanced	Growth	Aggressive	
0 - 10	10-35	35 - 63	63 - 90	90 - 100	

Source: Government of New Zealand (2014b)

<sup>&</sup>lt;sup>73</sup> Government of New Zealand (2012).

<sup>&</sup>lt;sup>75</sup> Government of New Zealand (2014b)

 $<sup>^{76}</sup>$  For a \$50,000 account. Fees range from 0.38%-0.99% for an account with a \$7,000 balance.

### The Chilean defined-contribution system

Chile introduced a privately provided, mandatory definedcontribution system in 1980/81. In 2008, after years of high fees, it introduced a tender for the right to manage default accounts. The tender design and other institutional features are summarised in Chapter 4.

Within the default fund, new members are assigned, based on their age, to one of the five investment products offered by the default fund. Individuals can change products within a fund and they are also free to switch to one of the non-default private providers after a period of time.

Funds can only offer five products that must adhere to asset allocation rules. Table 3 shows maximum investment limits by asset class for each of the five product types in the Chilean system. As well as maximum investment limits, the Chilean system has minimum investment limits, offshore investment limits and other limits for its differing risk-return categories (see footnote for further details).<sup>77</sup>

Annual fees for the default product are equivalent to 0.2 per cent of funds under management per year.<sup>78</sup>

77 Hormazába (2010).

Table 3: Chilean product asset allocation maximum limits (2010)Maximum investment per asset class, per cent

	Fund Type				
Maximum allocation	Α	в	С	D	Е
Government securities	40	40	50	70	80
Term deposits, bonds and other securities representing issues by financial institutions	40	40	50	70	80
Securities guaranteed by financial institutions	40	40	50	70	80
Letters of credit issued by financial institutions	40	40	50	60	70
Public and private corporate bonds	30	30	40	50	60
Public and private corporate convertible bonds	30	30	10	5	-
Shares in publicly traded corporations and publicly traded real-estate corporations	60	50	30	15	-
Other*	3	3	1	1	-
Units in domestic investment funds and mutual funds	40	30	20	10	-
Commercial paper issued by companies with a maturity of no more than one year, non-renewable	10	10	10	20	30
Investment in foreign currency without hedging	40	25	20	15	10

Note: Fund type A is the most risky and, fund type E the least risky. Source: Hormazába (2010).

<sup>&</sup>lt;sup>78</sup> Effective August 2014. Conversion of contribution fees to annual fees assumes wage growth of 1.8 per cent, 40 year contribution period, and 5 per cent real returns.

## References

- ABS (2009) *Employment Arrangements, Retirement and Superannuation, Australia, Apr to Jul 2007,* catalogue number 6361.0, Australian Bureau of Stattistics
- ABS (2011) Household Expenditure Survey, Australia: Summary of Results, 2009-10, catalogue number 6530.0, Australian Bureau of Statistics
- ABS (2014a) Balance of Payments and International Investment Position, Australia, catalogue number 5302.0 Table 27, Australian Bureau of Statistics
- ABS (2014b) *Managed Funds, Australia, December 2013,* catalogue number 5655.0, ABS
- Agarwal, S., Driscoll, J. C., Gabaix, X. and Laibson, D. (2009) 'The Age of Reason: Financial Decisions over the Life Cycle and Implications for Regulation', *Brookings Papers on Economic Activity*, p 51-101
- APRA (2014a) 2013 Superannuation Fund Level Profiles and Performance,
- APRA (2014b) *Quarterly Superannuation Performance*, Australian Prudential Regulation Authority from <u>http://www.apra.gov.au/Super/Publications/Documents/December 2013</u> Quarterly Superannuation Performance.pdf
- Arnold, B. (2012) 'Insight into superannuation research', *APRA Insight*, 1, p 46-61
- AXA (2009) Submission to the Review into the governance, efficiency, structure and operation of Australia's superannuation system from <u>http://www.supersystemreview.gov.au/content/submissions/downloads/</u> <u>AXA\_091217.pdf</u>
- Barras, L. R., Scaillet, O. and Wermers, R. (2010) 'False Discoveries in Mutual Fund Performance: Measuring Luck in Estimated Alphas', *The Journal* of Finance, 65(1),

- Basu, A. and Andrews, S. (2014) 'Asset Allocation Policy, Returns and Expenses of Superannuation Funds: Recent Evidence Based on Default Options', *Australian Economic Review*, 47(1), p 63-77
- Bateman, H., Eckert, C., Geweke, J., Louviere, J., Satchell, S. and Thorp, S. (2014) 'Financial competence, risk presentation and retirement portfolio preferences', *Journal of Pension Economics and Finance*, 13(01), p 27-61
- Bogle, J. C. (2014) 'The Arithmetic of "All-In" Investment Expenses', *Financial Analysts Journal*, 70(1),
- Business Spectator (2013) 'Supers to charge fees to cover Labor super reform costs: report', *Business Spectator*, 13 July 2013, accessed 2/2/2014, from https://<u>http://www.businessspectator.com.au/news/2013/7/13/financial-</u> services/supers-charge-fees-cover-labor-super-reform-costs-report
- Calderón-Colín, R., Domínguez, E. E. and Schwartz, M. J. (2008) *Consumer Confusion: The Choice of AFORE in Mexico*, Working paper 08/177, IMF, from https://http://www.imf.org/external/pubs/ft/wp/2008/wp08177.pdf
- Capuano, A. and Ramsay, I. (2011) *What Causes Suboptimal Financial Behaviour? An Exploration Of Financial Literacy, Social Influences And Behavioural Economics*, Financial Literacy Project, University of Melbourne
- Choi, J. J., Laibson, D. and Madrian, B. C. (2010) 'Why does the law of one price fail? An experiment on index mutual funds', *Review of Financial Studies*, 23(4), p 1405-1432
- Colmar Brunton (2010a) Investigating Superannuation: Quantitative Investigation with Employers Final Quantitative Report, Prepared for Australian Tax office, Colmar Brunton, from <u>http://archive.treasury.gov.au/documents/1885/PDF/Report\_ATO\_Supe</u> <u>r\_Qualitative\_Employer\_Report.pdf</u>

- Colmar Brunton (2010b) Investigating Superannuation: Quantitative Investigation with Superannuation Consumers Final Quantitative Report, Prepared for Australian Tax office, Colmar Brunton, from <u>http://archive.treasury.gov.au/documents/1885/PDF/Report\_ATO\_Supe</u> <u>r\_Qualitative\_Report\_Consumers.pdf</u>
- Commonwealth of Australia (2010a) *Super System Review Final Report: Overview and Recommendations,*
- Commonwealth of Australia (2010b) *Super System Review Final Report: Recommendation Packages,*
- Commonwealth of Australia (2011) *Stronger Super Information Pack*, from <u>http://strongersuper.treasury.gov.au/content/publications/information\_pack/downloads/information\_pack.pdf</u>
- CONSAR (2013) Procesos de asignación y reasignación de cuentas 2013, from https://<u>http://www.consar.gob.mx/sala\_prensa/pdf/boletines/2013/BP\_3\_2013.pdf</u>
- CONSAR (2014a) *Comisiones y servicios*, from https://<u>http://www.consar.gob.mx/compara\_afore/comisiones\_y\_servicio\_s.aspx</u>
- CONSAR (2014b) Website of the Chilean pension administator, from <u>http://www.consar.gob.mx/principal/info\_gral\_trabajadores-</u> <u>imss\_procesos\_asignacion\_cuentas.aspx</u>
- Cooper, J. (2010) 'Super for members: a new paradigm for Australia's retirement income system', *Rotman International Journal of Pension Management*, 3(2), p 8-15
- Cummings, J. R. and Ellis, K. (2011) 'Risk and return of illiquid investments: A trade-off for superannuation funds offering transferable accounts', *APRA Working Paper*,
- Deloitte Access Economics Pty Ltd (2012) *Persistence in Superannuation Fund Returns*, Industry Super Network,
- Ernst & Young (2009) Submission to Australia's Superannuation System Review, Ernst & Young, accessed 3/2/2014, from <u>http://www.supersystemreview.gov.au/content/submissions/downloads/</u> Ernst and Young 091211.pdf

- Fama, E. F. and French, K. R. (2010) 'Luck versus Skill in the Cross-Section of Mutual Fund Returns', *The Journal of Finance*, 65(5), p 1915-1947
- Federal Retirement Thrift Board (2014) *Fund Comparison Matrix*, accessed 30 March 2014, from https://<u>http://www.tsp.gov/investmentfunds/fundsoverview/comparisonM</u> atrix.shtml
- Financial Services Council and ING Direct (2013) *Superannuation Australia's View*,
- Fisch, J. E. and Wilkinson-Ryan, T. (2013) *Why do retail investors make costly mistakes? An experiment on mutual fund choice*, CFS Working Paper
- Fisher, D. (2012) 'Eugene Fama On Inflation, The Crisis, And Why You Can't Beat The Market After Fees', accessed January 2014, from <u>http://www.forbes.com/sites/danielfisher/2012/12/02/eugene-fama-on-inflation-the-crisis-and-why-you-cant-beat-the-market-after-fees/</u>
- Galton, F. (1886) 'Regression towards mediocrity in hereditary stature', *Journal* of the Anthropological Institute of Great Britain and Ireland, p 246-263
- Government of New Zealand (2012) *Tax Changes Budget 2012*, accessed March 4, 2014, from <u>http://www.ird.govt.nz/changes/employers/</u>
- Government of New Zealand (2014a) *Questions and Answers: KiwiSaver default* scheme providers, from <u>http://www.med.govt.nz/business/business-</u> <u>law/current-business-law-work/changes-to-kiwisaver/default-provider-</u> <u>arrangements/q-and-a.pdf</u>
- Government of New Zealand (2014b) *Sorted*, Website, from <u>http://www.sorted.org.nz</u>
- Hormazába, S. (2010) *Multi-funds in the Chilean Pension System*, BBVA from <u>http://serviciodeestudios.bbva.com/KETD/fbin/mult/WP 1028 tcm348-</u> <u>274420.pdf?ts=2112014</u>
- Impavido, G., Lasagabaster, E. and Garcia-Huitron, M. (2010) *New Policies for Mandatory Defined Contribution Pensions*, The World Bank
- Investment Company Institute (2007) *The Federal Thrift Savings Plan: A Model for the Private Sector?*, accessed March 12, 2014, from <u>http://www.ici.org/pdf/ppr\_tsp.pdf</u>

Grattan Institute 2014

- Kinnel, R. (2010) 'How Expense Ratios and Star Ratings Predict Success', accessed January 2014, from <u>http://www.morningstar.co.uk/uk/news/66497/how-expense-ratios--star-ratings-predict-success.aspx</u>
- Langford, B. R., Faff, R. W. and Marisetty, V. B. (2006) 'On the Choice of Superannuation Funds in Australia', *Journal of Financial Services Research*, 29(3), p 255-279
- Liu, K. and Arnold, B. R. (2010) 'Australian superannuation outsourcing: fees, related parties and concentrated markets', *Australian Prudential Regulation Authority Working Paper*, 12,
- Lusardi, A. and Mitchell, O. S. (2011) 'Financial literacy around the world: an overview', *Journal of Pension Economics and Finance*, 10(04), p 497-508
- Malkiel, B. G. and Fama, E. F. (1970) 'Efficient capital markets: A review of theory and empirical work\*', *The Journal of Finance*, 25(2), p 383-417
- O'Donoghue, T. and Rabin, M. (1999) 'Procrastination in Preparing for Retirement', in *Behavioral dimensions of retirement economics*, p 125
- OECD (2012) OECD Pensions Outlook 2012, from http://dx.doi.org/10.1787/9789264169401-en
- OECD (2013) Pensions at a Glance: OECD and G20 Indicators,
- OECD.Stat (2014a) Funded Pension Indicators Autonomous pension funds' assets, Database, Organisation for Economic Co-operation and Development, accessed 16-04-2014, from <u>http://stats.oecd.org/FileView2.aspx?IDFile=2bf6e2aa-f3cb-4186-804a-154e441e3b1c</u>
- OECD.Stat (2014b) Funded Pension Indicators Operating Expenses, Database, Organisation for Economic Co-operation and Development, accessed 16-04-2014, from <u>http://stats.oecd.org/FileView2.aspx?IDFile=992d633b-c7e6-4ad9bec5-d0b33feee19e</u>
- Patten, S. (2014) 'Super Suffers as Some Bosses Settle for Bank Favours', *Australian Financial Review*(10 April),

- Productivity Commission (2012) *Default Superannuation Funds in Modern Awards,* Productivity Commission Inquiry Report,
- Rainmaker Information (2010) *Commissions Revenue Report*, Prepared for Industry Super Network, April 2010, version 2 from <u>http://www.industrysuperaustralia.com/wp-</u> <u>content/uploads/2010/04/Rainmaker\_Commissions\_Rev\_Rpt\_-</u> Apr 2010 v3.pdf
- Rainmaker Information (2013) 2013 Super fund fee survey, Rainmaker Information
- RBA (2014) *RETAIL DEPOSIT AND INVESTMENT RATES,* catalogue number F4,
- Rice Warner (2012) Superannuation Fees Research,
- Roy Morgan (2013) On the money: Australians' changing attitudes to wealth, debt, superannuation and plans for their financial future,
- Sharpe, W. F. (1991) 'The Arithmetic of Active Management', *The Financial* Analysts' Journal, 47(1), p 7-9
- Smith, N. (2013) 'If Fama were Newton, would Shiller be Einstein?', accessed Feb 2014, from <u>http://noahpinionblog.blogspot.com.au/2013/10/if-famawere-newton-would-shiller-be.html</u>
- SuperChoice (2009) Submission to the Super System Review, from <u>http://www.supersystemreview.gov.au/content/submissions/downloads/</u> <u>SuperChoice\_091214.pdf</u>
- Superintendencia de Pensiones (2014) 'AFP Planvital presentó oferta con comisión más baja en licitación de afiliados nuevos: 0,47%', accessed 30-03-2014, from http://www.safp.cl/portal/prensa/579/w3-article-10430.html

SuperRatings (2014) SuperRatings dataset,

Swedish Pensions Agency Swedish Pensions Agency (2013) Orange Report -Annual Report of the Swedish Pension System 2012, from https://secure.pensionsmyndigheten.se/OrangeReport2012.html Swedish Pensions Agency (2014a) 'Current and Past Funds', accessed 16-04-2014, from

http://pensionsmyndigheten.se/NuvarandeOchTidigareFonder.html

- Swedish Pensions Agency (2014b) *Fund comparison site*, from https://secure.pensionsmyndigheten.se/Fondjamforelse.html
- Swedish Pensions Agency (2014c) 'SokFonder', accessed 16-04-2014, from http://pensionsmyndigheten.se/SokFonder.html
- Swoboda, K. (2014) *Chronology of major superannuation and retirement income changes in Australia*, Parliamentary Library, Parliament of Australia
- Sy, W. and Liu, K. (2010) 'Improving the Cost Efficiency of Australian Pension Management', *Rotman International Journal of Pension Management*, 3(1), p 38-47
- Sy, W., Liu, K. and Researchers, S. (2009) 'Investment performance ranking of superannuation firms', *APRA Working Paper, APRA*, 23,
- Thrift Savings Plan (2014) 'Expense Ratio', accessed 16-04-2014, from https://<u>http://www.tsp.gov/investmentfunds/fundsoverview/expenseRatio</u>.<u>.shtml</u>
- UK Nest (2014) What does NEST cost, from <u>http://www.nestpensions.org.uk/schemeweb/NestWeb/public/NESTforS</u> <u>avers/contents/what-does-nest-cost.html</u>
- Williams, M. (2014) 'Australian super too costly, too good', *Asia-Pacific Banking* and Finance, March 26, 2014,
- Worthington, A. C. (2008) 'Knowledge and Perceptions of Superannuation in Australia', *Journal of Consumer Policy*, 31(3), p 349-368