Influence of Board Structure on the Performance and Governance Framework of Australia's Superannuation Funds

Elise Torunn Nisbet

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ELISE TORUNN NISBET
2055197

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Supervisor: Professor Sarath Delpachitra

Flinders Business School

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ABSTRACT

Extensive debate has occurred recently on the best type of Superannuation fund, especially since the Cooper Review (2010) and the MySuper reforms. Interestingly, much of the debate centres on transparency, reporting and governance, with little to no discussion on board structure. This project examines whether the structure of the trustee board has an influence on the performance of Australian superannuation funds. From a population of 200 of Australia's largest superannuation funds (by total asset holding), data was sourced from Retail and Industry classified funds to form a sample of 72. From this sample, a range of observations was made at two identical points in 2009 and 2012 respectively.

The Ordinary Least Squared Regression model was utilised, producing some significant findings. Independent directors who sat on Industry boards have a positive effect on observed performance, yet a negative effect on Retail funds. Operating costs and total assets had a negative effect on performance, possibly due to higher management costs. Retail funds performed significantly better over the two observed periods, with the year 2012 producing better results than 2009. A determination of 'Insider' structure was given for Retail funds featuring a majority of Executive or associated directors and 'Outsider' when more Non-Associated directors featured. 'Outsider' classified board structure outperformed 'Insider' classified boards.

The study also produced results indicating that women have a positive effect on Industry funds only, with the effect not significant for Retail funds. In light of the Cooper (2010) and recent debate as to the presence of Independent directors and women on boards, this study provides key insight into board structures that may assist with future policy development

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SECTION ONE

The Superannuation Industry

1.1 Introduction

A superannuation fund is essentially a system of savings through employer/employee contributions to a specific fund, for which access is granted upon retirement. Australia operates under a three pillar retirement system, comprising a Government based pension scheme, compulsory retirement savings (Superannuation) and Voluntary Superannuation contributions (Loughnane 2013). However, our system of retirement savings has been regularly developed and overhauled since mandatory superannuation contributions were introduced under a Labor government in 1992.

Superannuation has been a widely debated topic, particularly since the Global Financial Crisis caused a substantial decrease in investment wealth. The savings system underpins the sustainability of Government funds through reducing the dependence on Government Pension support (Loughnane 2013). There is widespread argument as to the best types of retirement plans, investment strategies, fund structures and in particular the impact of governance. The issue is also of economic importance, as Australia seeks to address the aging population matter. The Superannuation Industry Supervision Act ('SIS Act') s 62 defines that superannuation trustees must act in the 'best interest of members'. However, with $1.7 Trillion Dollars managed by Australian Pension Funds, there are crucial differences in performance of certain funds.

1.2 Australian Superannuation Industry

Australia has one of the most diverse superannuation systems in the world with numerous fund options, vast investment decisions, asset allocations, fund classifications and benefit structures (Liu 2013). The Australian Prudential Regulation Authority ('APRA') provides specific classifications for

superannuation funds. Industry funds are defined as those that draw members from an employment Industry and are typically non-public offer. Retail funds are those established by financial institutions for a commercial or profit basis. The differences in classification of funds, particularly contrasts between for-profit and not-for profit funds has led to vast differences in performance. There are also crucial differences in asset allocation, with various options including High Growth, Aggressive, Conservative, Balanced etc. This is an important distinction, as members must rely on the skill and expertise of Superannuation Trustees to manage their funds to ensure portfolio growth. Individuals must also choose between different funds and investment options, often without adequate knowledge of fund strategies. An interesting comparison is with the Swedish Pension scheme, a system with just four identical pension funds. It is asserted that such a scheme reduces strategic risk, improves performance, reduces market impact and political interference (Severison and Stewart 2012).

1.3 Role of Superannuation

The primary role of superannuation funds is to provide maximum benefit return to members. This benefit is ranked against other funds by performance indicators. Performance can be divided into both investment and operational performance. Investment performance is linked to fund return and asset performance. Operational performance links trustee governance and transparency of reporting. Development of an appropriate fund strategy to optimize risk adjusted returns is obviously a key strategy of pension funds (Laker 2012). However, vast differences in both returns and volatility indicators suggest there are other factors impacting upon performance. There is also very little research that underpins the reporting standards of performance, with widespread disagreement on the best risk adjusted performance measurement. However, under the MySuper and StrongerSuper reforms, funds must make performance data more accessible.

1.4 Efficiency and Governance

Good governance is the systems and relationships that underpin supervision framework, enhancing ethical and informed decision-making. The goal is to promote stakeholder trust, enhance clear role definition, reduce risk and agency issues, which in turn increases investment performance (Stewart and Yerno, 2008). The primary role of the board is to manage funds, advise and approve investment decisions, implement strategies and execute organizational design (Ammann and Zingg 2008). Often, boards seek external advice on investment issues that enable specialist asset management (Sy, 2008). The investment decisions a board makes are crucial to the performance of individual funds.

A review into the efficiency and governance of Australia's superannuation system was conducted in 2010. This review, commonly known as the "Cooper Review" proposed 177 recommendations in its final report. This review outlined the inherent failures of the current system and outlined the gaps in legislative guidance. Despite the SIS Act containing basic rules regarding board structure, there is very little guidance. Furthermore, the Corporations Act has no specific governance rules for companies that perform the role of Trustee for Superannuation Funds (Cooper 2010).

There are two modes of governance in Australia; Trustee Governance (generally falling under Trust Law) and Corporate Governance (governed by the Corporations Act 2001 (Cth). The fiduciary duties that underpin Trustee Boards are the relationship that is formed between Trustee and Beneficiary. This is contrasted to that of a corporation, where the fiduciary relationship forms between the Company and the Shareholders. The SIS Act attempted to formulate a hybrid model, yet this created a system of complexity and confusion. Australia currently operates under a Prescriptive system of Superannuation, whereby certain obligations (such as the sole purpose test) must be followed. Under the SIS Act, a list of covenants feature under sections 52 and 53 that form specific rules governing superannuation funds. Unfortunately, a breach of such covenant does not amount to an offence.

1.5 Superannuation Reforms

The central provision (s 29VN(1)(b) of the SIS Act) of the StrongerSuper reforms establishes a default investment strategy 'MySuper'. What this provision implements is a comparison obligation, where trustee boards must determine annually whether MySuper products are disadvantaged compared to other fund products. The Coalition[i] has always maintained support for the Cooper Review recommendations, so additional reforms may be expected under a Coalition Government. The goal is to promote stakeholder trust, enhance clear role definition, reduce risk and agency issues, which in turn increases investment performance (Stewart and Yerno, 2008). The primary role of a trustee board is to manage funds, advise and approve investment decisions, implement strategies and execute organizational design (Ammann and Zingg 2008). However, the link between performance and good governance is not always clear.

1.6 Board Structure

Board structure is the specific features of the board, including the presence of Committees, Separation of CEO and Chairman etc. Board Composition refers to the fundamental design of the board, such as the ratio of independent directors and the number of Executive and Non-Executive Directors (Stapledon and Lawrence 1997). Board structure and pension fund performance have been briefly explored in other countries, such as Poland (Kowalewski, 2012) and America (Adams, Mansi and Nishikawa, 2009). However, this issue has been largely ignored in Australian literature. Furthermore, the Cooper Review did not make a specific recommendation on board structure, citing lack of empirical evidence as an inhibitor.

Research into this subject is both timely and important and would provide insight into the superannuation industry that would assist developments to governance, adequacy of performance, sustainability and certainty in the retirement system. Currently, legislation provides little guidance for Superannuation funds on structure and governance frameworks. This study aims to draw out performance indicators, which can be linked to board

structure characteristics within the governance framework. Emphasis is placed on the presence of independent directors, separation of specific board roles and internal and external governance mechanisms (such as board representation).

This report provides an outline of the research findings and details the study conducted. Section 2 provides a theoretical background on superannuation data, calculation of returns and prior research into board structure. Section 3 outlines the methodology of the study and development of the regression model. Section 4 provides analysis of the data with Section 5 outlining the results.

SECTION TWO

Theoretical Background for Research

2.1 Prior Research

The recent Cooper Review recommended a Code of Trustee Governance after linking almost all concerns with the Australian superannuation system to governance practices (Tan and Cam 2011). Current literature on governance and superannuation fund performance is quite varied and often contradictory. Although many authors, including Liu (2013), Sy (2008) and Ambachtscheer (2008) provide interesting analysis of the superannuation performance parameters and influencers, no specific studies on board structure within Australia have featured. The main areas of research tend to be on pension fund performance and links to governance, reporting measures, costs and the impact of independent directors. General concepts of "performance" are difficult to analyse due to a magnitude of possible influences (Clare 2009). Thus, it is difficult to draw specific conclusions as to whether external or internal influencers affect performance.

A large proportion of literature focuses on corporate governance, particularly with large corporate entities or mutual funds. Chou, Ng and Wang (2007) assert that increased governance mechanisms have a positive affect on mutual fund performance. A study utilising board data by Ding and Wermers (2009), assert that good-governance enables fiduciaries to act in the best interests of shareholders and can assist to reduce agency costs. However, the structures of mutual funds are different to that of superannuation fund boards. This is distinct as mutual funds mainly oversee or monitor, yet superannuation fund boards play an active role in monitoring, developing and implementing both investment and risk management strategies (APRA, 2005).

Furthermore, trustee boards are far more involved in the organisation's day to day activities than a corporate board (Hess and Impavido 2003). This distinction identifies that corporate boards mainly monitor the overall strategy

of the organisation and monitor management behaviour. For superannuation funds, a high degree of active management is involved, such as recruitment of external advisors and delegation to fund managers.

Pension fund governance involves specific management and control of internal regulation, accountability and supervision with the goal to minimise agency conflicts and promote pension fund wealth. Internal agency issues arise as trustees interests can conflict with that of beneficiaries. There are also significant differences between the interests of beneficiaries and asset managers (Kowalewski, 2012).

2.2 Board structure linked to performance

In 2005, Yang and Mitchell linked the composition of the board of trustees to individual fund performance. This confirms the previous work of Mitchell and Hsin (1994), who found that the composition of the pension fund board is 'significantly associated with performance'. This evidence is not uniformly accepted, as Useem and Mitchell (2000) found no direct relationship between governance quality and investment performance. However, the authors did suggest that the investment strategy is crucial to the performance of individual superannuation funds.

2.3 Independent Directors

Insider directors are associated with the company or hold management positions, whilst Outsider or non-associated directors do not (Tricker, 1994). These directors do not hold an Executive role with an employer-sponsor and are considered to be unrelated to the organisation. The fundamental characteristic of an Insider director is that they are managers of the firm, enhancing board governance due to enhanced knowledge of firm operations (Hess and Impavido 2003).

This creates a fundamental problem of agency conflict, as it is thought that such directors will protect the interest of the CEO over other stakeholders. Hess et al. (2003) details that in a Corporation, it is the CEO that has control

over the trajectory of the Directors careers and this leads to agency conflicts. It is argued that only through appointment of outsider directors that shareholder interests can be adequately protected. However, the impact of independent directors has been contentious, with Kowalewski (2012) and Brown and Caylor (2004) finding a positive link between independence and performance. Earlier evidence from Bhagot and Black (1999), Klein (1998) and Yermack (1996) failed to find such correlation, with Agrawl and Knowber (1996) asserting that increasing the number if independent directors does not help performance. A key recommendation in Cooper (2010) was that one third of all seats be held by independent directors. Within the Retail sector, only 19% of directors are appointed from outside the board (Sy, 2008). This can be contrasted with Industry sector funds that appoint 88% of external directors (Sy, 2008).

There is also criticism over the scope and value of the definition of 'Independence', despite the SIS Act providing minor details it only accounts for present associations. Hwang and Kim (2009) found that true independence is rare as many Directors have social ties with each other. Most notably, only 62% of those directors classified as independent have no social or conventional ties.

2.4 The Equal Representation Model

Under the SIS Act s89, the 'Equal Representation Model' requiring an equal number of employee and employer representatives on the board binds Industry funds. Cooper (2010) asserted that this model does not achieve the desired objective of democracy, as many directors are nominated by third parties. Additionally, the model was viewed to be rigid and ineffective in enabling good governance practices.

The Labour Government did not adopt Cooper Review recommendation 2.7 that the equal representation model (50:50 representation of employee and employer representative directors) be amended in favour of a one third associated, one-third non-associated model (See Appendix Table A2). The

new Coalition Government has supported this recommendation (Boyce, Cormann et al. 2013).

2.5 Gender

Gender diversity has been a contentious issue recently, with an industry wide push to appoint more female directors onto Trustee Boards. Two arguments exist for appointing women on the board; a 'Business Case' argument suggesting enhanced performance and a 'social justice' argument explaining that the rules of equality should dictate appointment (McCann and Wheeler 2011) There is a common view that women bring a more collaborative approach to the Boardroom, are often more analytical, diligent and do not participate in the notion of "groupthink". McCann and Wheeler (2011) concluded that women directors are more prevalent on Boards of consumer sector companies, rather than technical or physical ones. A study of 2500 Danish firms by Smith et. al (2006) revealed that firms with a higher proportion of women on the board had a positive effect on performance. This finding is not unanimous, with Darmadi (2013) suggesting females have a negative impact on ROA.

2.6 Fund Classification

Theory suggests that Industry funds outperform Retail funds due to their ability to exploit competitive advantages and through large investment in infrastructure. Sy (2008) asserts that differences in superannuation fund classifications lead to different governance practices. For-Profit Retail funds are tied to financial organizations and may have to adopt certain governance principles in accordance with industry standards. Industry funds were set up specifically to cater for individual industries and are not-for-profit. However, as noted by Rafe (2013) most Industry funds are tied to service providers from for-profit organizations. What Rafe (2013) suggested is that Industry funds no longer have the same competitive advantage and that the market environment is changing, so that Industry sector's dominance with returns is unlikely to continue.

SECTION THREE

Methodology

3.1 Research Design

The research was designed with the assumption that board structure has an effect on operating performance, which effects financial performance. Figure 3.1 highlights this assumption illustrating the link between structure and performance.

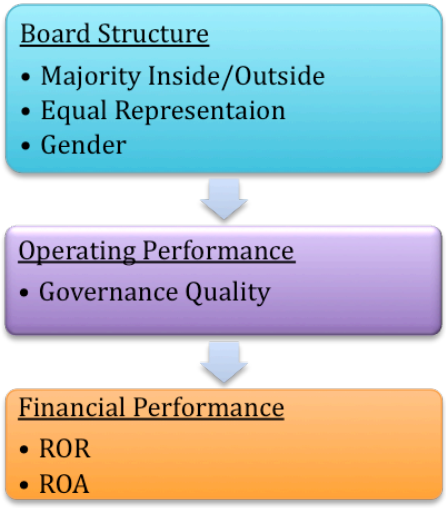


Figure 3.1 Research Model and relationship between board structure and performance

3.2 Data Collection

Secondary data was sourced from the Australian Prudential Regulation Authority publication *'Superannuation Fund-Level Profiles'* and its expanded data set *'Superannuation Fund Level Rates of Return'*. In 2009, the regulator released the first publication of individual performance profiles to the public. This data set contains fund performance from 2004-2012 and provides information on assets, income, expenses, memberships and other financial information (Power 2012). The information within the publication represents 200 of the largest by total assets APRA regulated funds in Australia. This is

representational of 99.7% of APRA regulated funds and 59.2 % of the total assets managed by the superannuation industry (Power 2012).

APRA data contains whole of fund Rate of Return (ROR) calculations, representing the net earnings on Superannuation assets. This calculation measures returns across all investment options, despite many funds offering numerous investment options (such as high growth, balanced, conservative, etc.). Whole of fund returns are comprised by the weighted average of all investment returns offered by the fund. This calculation simplifies the complex data and enables funds to be ranked in accordance with performance. However, the formula has no risk or return parameters and does not feature a performance benchmark (Power 2012). In order to ensure the model output was robust, the researcher utilised both ROR and ROA as the dependent variable.

3.3 Sample Selection

The sample of superannuation funds was selected from the top 200 superannuation funds, based on asset size. The researcher only examined Industry and Retail APRA classified funds. Exempt public sector schemes, small APRA funds, single-member approved deposit funds, Self-Managed Super funds and pooled superannuation funds were not included in the population. Any funds that featured a listed wind-up date or an end of year different to June 30th were removed from the sample.

The researcher gathered cross sectional panel data by collecting specific information on individual funds at two distinct points. The information is a snap shot and is collected as at 30th June 2009 and 2012. This method enables the study to account for director resignations and terminations. The sample size was reduced to 72 (29 Retail and 43 Industry Funds) once data was sourced for the year 2009 and 2012. Although this is a relatively small sample, compared to other research, Australia has a large number of small funds that may skew data. Additionally, the study was focused on structural differences between Retail and Industry funds and featured a large number of observations.

3.4 Research Questions

Research Question 1: Does the structure of the board have any influence on the performance and governance of Australian superannuation funds?
Research Question 2: To what extent does the presence of female board members affect performance and governance of Australian superannuation funds?
Research Question 3: Is there a difference between retail and industry funds when consulting the characteristics of the structure of the board and the performance of Australian superannuation funds?

3.5 Variables and Definitions

Data was divided into three cross sections, each featuring a certain variable. These included data from APRA (such as ROR, specific classifications and board structures), data relating to corporate governance (specific to Industry and Retail classified funds). The third is general information sought from financial reports and calculations of performance indicators (Return on Assets, Sharpe, Mean and Standard Deviation).

Control Variables;

1. Ratio of Net Assets to Total Assets (Capital Structure)
2. Total Assets (a Logarithm measuring scale)
3. Ratio of Operating Costs to Total Assets (Operating Costs)
4. Year (2009 or 2012)

Independent Variables;

1. Board structure
2. Fund classification (Retail or Industry)
3. Number of Directors
4. Number of Independent Directors
5. Chair Independence
6. Ratio of Women on the Board

7. Gender of the Chair

Dependent Variables

1. Performance expressed as Return on Assets (ROA)
2. Performance expressed as Rate of Return (ROR)

3.5.1 Measuring Board Structure

1. Board structure; Discrete classification was given and the specific structure of the board as given by Table 3.1;

Table 3.1 : Board Structure Classification

Majority Inside	Majority Outside	Equal Representation
•RETAIL CLASSIFICATION •A majority of the Board can be considered as Executives or associated with the organisation •Tricker (1994) defines that an Executive director is one who is directly associated with the organisation.	•RETAIL CLASSIFICATION •A Majority of the Board can be considered as Non-Executive or un-associated with the organisation. This is inclusive of a Board that largely features Independent Directors	•INDUSTRY CLASSIFICATION •A Board must feature 50% Employer nominated Directors and 50% Employee or Member nominated directors. •Deviations from this model are only through vacancies (due to resignations or appointments throughout the year) or with approval from APRA •This is a statutory requirement under the SIS Act 1993

2. Type of Fund: Determined from APRA classifications as Retail or Industry.
3. Number of Directors; Numerically recorded by noting the number of directors as at 30th of June 2012 and 2009.
4. Number of independent directors: Numerically recorded by frequency and noting the stated number of independent directors. A director is taken to only be independent from the organisation if specifically stated. Non-Executive directors are not automatically presumed to be independent.

5. Chairman Independence: A discrete classification of Yes or No was recorded as to whether the Chair was Independent.
6. Ratio of Women on the Board: The number and ratio of female gender directors on the board was noted by frequency. Percentages were calculated from this number to represent the percentage of female to male directors on the board.
7. Chair Gender: The gender of the Chair was noted as either Male or Female. This is a discrete form of data.

3.6 Regression Analysis

Utilisation of this model based on Ordinary Least Squared (OLS) Regression assumes that y is the dependent variable and x is the independent variable. The relationship between *x* and *y* is assumed to be linear (although inexact) and also influenced by a random component or error, known as *e*. To examine the effects of board structure on supplementation funds' performance, the following econometric model is specified by Equations 3.1-3.3.

$$Performance = \alpha + \beta_1 Type + \beta_2 B\_Size + \beta_3 In\_Director + \beta_4 In\_Chair + \beta_5 W\_Share + \beta_6 Gender\_Chair + \gamma CV + \theta T + \varepsilon$$

Equation 3.1

$$Performance = \alpha + \beta_1 Structure + \beta_2 B\_Size + \beta_3 In\_Director + \beta_4 In\_Chair + \beta_5 W\_Share + \beta_6 Gender\_Chair + \gamma CV + \theta T + \varepsilon$$

Equation 3.2

$$Performance = \alpha + \beta_1 B\_Size + \beta_2 In\_Director + \beta_3 In\_Chair + \beta_4 W\_Share + \beta_5 Gender\_Chair + \gamma CV + \theta T + \varepsilon$$

Equation 3.3

Equation 3.1 is based on the whole sample including both Retail and Industry funds. Besides, the Retail fund sub-sample is investigated separately in Equation 3.2. Finally, the Industry fund sub-sample is regressed separately in Equation 3.3.

The variables with explanation as to appointment of dummy variables are given below.

$Performance$ is funds' performance proxying by ROA and ROR indicators.

$Structure$ is the share of independent members on board.

$Type$ equals 1 if retail fund and 0 if otherwise.

B_Size is the number of board members.

$In\_Director$ equals 1 if funds have independent directors and 0 otherwise.

In_Chair equals 1 if funds have independent chairmen and 0 otherwise.

W_Share is the share of female members in the board.

$Gender\_Chair$ equals 1 if funds have chairwomen and 0 otherwise.

CV is a vector of control variables, including the ratio of net asset to total asset which proxies for funds' capital structure ($K\_structure$); natural logarithm of total asset which measures the scale of funds ($LnTA$); the ratio of operating cost to total asset which measures the management efficiency of funds (Op_cost).

T is the time dummy, equals 1 with the year 2012 and 0 with the year 2009.

ε is the normal distribution error.

When applying OLS method to the regression based on cross section data, it is often troubled by the Heteroskedasticity problem. This is because observations are from different entities and each entity has its own characteristics. Although Heteroskedasticity does not make OLS estimated coefficients biased, it causes variance estimates to be over- or under-estimated. Biased variance could consequently lead to incorrect inferences of estimation output. For example, t-test results could be misleading and it tends to support the alternative hypothesis, so increases the possibility of making a type II error. In this study, the test developed by Breusch and Pagan

(1979) and Cook and Weisberg (1983) is conducted and the result indicates the existence of the Heteroskedasticity problem. Subsequently, the robust variance estimate technique (Huber 1967); (White 1980, White 1982) White 1980, 1982) is applied to attain an unbiased variance estimate.

3.7 Benchmarking

The researcher found that there is no consensus in the industry on the best performance parameters. Despite Liu (2013) developing the RAVA metric to take into account asset allocation and benchmark return data, the author did not use this metric for analysis due to the absence of testing and complexity. To date, there is no standard metric to measure risk-adjusted performance for Superannuation funds.

The researcher found it appropriate to utilise Rate of Return (ROR) when it can be compared to the SR50 Index for Superannuation funds. This is a median measure of the top 50 (largest by total assets) Balanced portfolio of Super funds (Power 2013). What this information provides is another comparative tool in order to estimate the average fund performance over given time periods. The average return for each Industry sector was also compared to the requisite performance by each fund in order to weight and analyse overall financial performance. This data was computed into a chart detailing the performance of the SR 50, 10 Year Treasury bond Rate and Industry and Retail fund performance.

3.8 Descriptive Statistics

Standard Deviation

In the study, the standard deviation is used as a metric to highlight the risk of the superannuation fund. It was compared to other funds in order to highlight previous investment performance and was not utilised to directly predict future performance. The advantage of its use is that it expresses results in the same metric measure as the raw data (Reichenstein 1987).

Sharpe

This study doesn't specifically analyse volatility of returns, so Sharpe's measure adds to analysis of performance by providing a simple comparison. The risk free parameter was devised from the Reserve Bank of Australia 10 Year Bond Return for each year (2009 and 2012). The ratio gives a simple indication of risk-return parameters that are useful in comparing differences in fund's risk-adjusted returns (Sharpe 1966).

Return On Assets

As superannuation funds are trustees for member's savings, this is an important indication for performance. How the fund utilises assets to generate income is directly relevant to performance as it highlights the fund's efficiency utilising assets to generate return. Although there is no metric to analyse good or bad ROA, it is useful in this context to highlight how superannuation funds utilise their Assets. It is also a useful indicator on reliance on Assets to generate profit and was used as a dependent variable in this study.

SECTION FOUR

Data Analysis

4.1 Descriptive Statistics

In order to further explore the relationship between structure and performance, each fund's ROA and ROR was utilised in the OLS Regression model. Although an analysis of risk did not form part of the main analysis, it is necessary to depict the volatility of each fund's returns in order to formulate an opinion on sound financial performance. The following Table 4.2 summarises sector results with full individual fund results depicted in Appendix table A1.

Table 4.1: Summary of Performance Results

Sector Sample	ROR 2009	ROR 2012	SD	SHARPE	ROA 2009	ROA 2012
Industry	-12.32	0.05	8.75	-1.45	-0.05	0.04
Retail	-9.98	-0.63	6.65	-1.47	-0.06	-0.03
Sample	-11.41	-0.21	7.92	-1.46	-0.05	0.01

4.1.1 Rate of Return

Results highlight the differences for ROR between the years 2009 and 2012. As communicated in Appendix Table A1, many funds had significant losses in 2009, namely Bookmakers with -16.9%, Statewide Super with -17.2% and MTAA with -23.3%. All of these funds are Industry sector, performing worse than both the Industry sample average and sample average. The best performing funds in 2009 were both Retail sector funds (Challenger with 5.1% and Macquarie ADF with 3.6%), significantly outperforming the sample sector average. In 2012, many funds noticed a significant recovery, although many still produced negative returns. Industry funds performed the best

overall for 2012. However, Challenger again produced strong returns with 5.4%, Macquarie ADF recorded a 2.9% profit and Vision Super was the best of the Industry funds with 3.2% Return. The worst performing fund was again Bookmakers with a loss of -14.5% despite many Industry funds recording an average of 0.05% Profit. What this suggests is that Challenger seemed to be immune to the effects of the GFC, being the only fund to produce consistent positive returns, whilst Bookmakers failed to improve between the years. ROR is not a great estimator overall, thus, it must be considered in light of other statistics.

4.1.2 Standard Deviation

Standard Deviation is a useful measure of volatility of fund returns with a higher result indicating high levels of dispersion. Interestingly, Bookmakers, Macquarie ADF and Challenger had the lowest Standard Deviation, with 1.70, 0.84 and 0.21 respectively. This is because these funds produced relatively similar results between the two years. The most volatile funds were MTAA, Statewide and First Super, which were all Industry funds. Table 5.2 highlights that Retail funds overall had a lower Standard deviation, thus, lower volatility than Industry Funds overall. Although this highlights differences in performance between the funds, it is important to consider that larger volatility may be due to large improvements within funds. For example, MTAA improved significantly between 2009 and 2012, resulting in a higher Standard Deviation than other funds.

4.1.3 Sharpe

Sharpe is a useful estimator of whether returns are due to smart investment decisions or due to acquiring excess risk. Many funds in Appendix Table A1 produced a negative Sharpe, which indicates that investment in a Risk Free Asset[ii] is better than investment in that particular fund. A useful comparison of the Risk free rate is illustrated in Figure 4.2. Industry and Retail sector funds on average performed worse than the Risk free Rate of Return in 2009, yet in 2012 both sectors outperformed the Risk Free Rate. Challenger was the only fund to produce a positive Sharpe, indicating it is a solid

Superannuation fund with a significant Sharpe of 2.78. This suggests the fund had greater Risk Adjusted performance than any of the other funds in the sample. Overall, Industry funds had a slightly more favourable Sharpe than Retail funds, but both sectors in the sample were negative.

4.1.4 Return on Asset

ROA is useful when compared between two different points for the same fund. The higher the ROA, the more efficient the fund is at utilising its assets to generate profit. Bookmakers produced a ROA that was slightly better in 2012, suggesting a slight increase in efficiency of utilisation of Assets. This result was mirrored for BT Classic Super. Media Super had a ROA of 0.32 in 2009 and 0.02 in 2012, signifying that they became less efficient with using Assets to generate profit. Wealth Personal Superannuation and Vision Super had a decent ROA in 2009, but this declined in 2012. This is despite a notable increase in Return between the years. Challenger recorded an improvement in ROA between 2009 and 2012, with a result of 0.31 suggesting it was the most efficient fund in 2012.

4.2 Influence of the structure of the Board

OLS Regression analysis was utilised in order to explore the effect of different board's characteristics on fund performance. Independent variables consisted of board size, fund structure (for Retail only) and the share of female directors on a trustee board. Dummy variables were used to measure other independent variables. Not applicable or N/A features for Industry funds as there is a statutory requirement that they operate only under the Equal Representation Model.

In order to produce accurate and reliable results, analysis was repeated using both ROA and ROR as the Dependent variable in order to ensure that significant findings were evident across both outputs. Each output confirms the significant findings and supports the results. Table 4.2 depicts the Regression results when ROA was used as the Dependent variable with table 4.3 depicting results using ROR.

Table 4.2*:* Regression Analysis Results Return on Assets measuring Performance

RETURN ON ASSETS (ROA)	RETAIL	INDUSTRY	SAMPLE
TYPE	4.757	N/A	2.496
	(0.023)*	N/A	(0.005)**
BOARD SIZE	-0.086	-0.096	-0.486
	(0.823)	(0.465)	(0.62)
INDEPENDENT DIRECTOR	-4.756	1.097	-0.235
	(0.019)*	(0.04)*	(0.787)
CHAIR INDEPENDENT	-0.759	-0.870	-0.147
	0(.617)	(0.294)	(0.868)
WOMEN	-4.108	3.962	0.919
	(0.416)	(0.059)*	(0.678)
CHAIR GENDER	2.798	-0.876	-0.126
	(0.305)	(0.105)	(0.871)
CAPITAL STRUCTURE	1.879	-13.293	-12.890
	(0.985)	(0.186)	(0.221)
SCALE OF FUNDS	-0.985	0.360	-0.136
	(0.003)**	(0.358)	(0.595)
OPERATING COSTS TO TOTAL ASSETS	-383.476	-336.877	-369.987
	(0.001)**	(0.041)*	(0)**
D	9.853	12.883	11.684
	(0)**	(0)**	(0)**
_cons	7.268	-3.038	5.002
	(0.939)	(0.79)	(0.632)

**Statistical significance p value 0.000 – 0.005
* Statistical significance p value 0.005 – 0.099

Table 4.3 Regression Analysis Results Rate of Return measuring Performance

RATE OF RETURN (ROR)	RETAIL	INDUSTRY	SAMPLE
TYPE	4.036	N/A	2.166
	(0.041)*	N/A	(0.003)**
BOARD SIZE	-0.132	-0.066	-0.063
	(0.699)	(0.524)	(0.475)
INDEPENDENT DIRECTOR	-4.130	0.808	-0.392
	(0.036)*	(0.055)*	(0.613)
CHAIR INDEPENDENT	-0.467	-0.774	-0.008
	(0.735)	(0.229)	(0.992)
WOMEN	-3.436	3.025	0.570
	(0.457)	(0.055)*	(0.76)
CHAIR GENDER	1.930	-0.683	-0.182
	(0.442)	(0.119)	(0.792)
CAPITAL STRUCTURE	5.934	-5.961	-4.870
	(0.946)	(0.408)	(0.574)
SCALE OF FUNDS	-0.877	0.291	-0.140
	(0.004)**	(0.32)	(0.504)
OPERATING COSTS TO TOTAL ASSETS	-368.195	-251.115	-328.677
	(0.001)**	(0.029)*	(0)**
D	8.879	12.066	10.781
	(0)**	(0)**	(0)**
_cons	2.715	-8.814	-1.795
	(0.974)	(0.295)	(0.835)

**Statistical significance p value 0.000 – 0.005
* Statistical significance p value 0.005 – 0.099

The Coefficient and p-value scores are detailed with statistically significant results highlighted with an asterix. When controlling for a ratio of Net Assets: Total Assets (Capital structure), a logarithm of Total Assets (measuring scale of the fund) and Operating costs (measuring fund efficiency), there are specific characteristics of the structure of the board that effect performance.

Type variable results communicate a significant p-value score and a positive coefficient value, suggesting that Retail funds with an Outsider structure had a positive effect on performance. Results were the same when ROA and ROR were utilized. Independent directors have a statistically significant p value, but negative coefficient for Retail funds. This indicates that in this study, *Independent Directors* have a negative effect on performance. However, the results are directly opposite when analyzing Industry fund Boards. *Independent Directors* have a positive Coefficient, indicating that they have a significant positive effect on performance for Industry funds.

The results for *Women* indicate that women have a positive effect on performance for Industry funds only, with a positive Coefficient and statistically significant p-value. However, the results were statistically insignificant for Retail funds. For *Scale of Funds*, Total Assets has a negative effect on performance for Retail funds, represented by a significant p-value and a negative Coefficient. *Operating Costs to Total Assets* has a negative effect on both Industry and Retail funds. This suggests that Total Assets has a negative effect on performance. *D* or the control for year highlights that the year 2012 was a better year for performance than 2009.

Board Size, Chairman Independence, Capital Structure and *Chair Gender* variable produced no significant findings. *_Cons* is the constant or intercept, so it is not relevant for discussion.

The Regression results also suggest that for the sample, Retail funds outperformed Industry funds. This is illustrated by the fact the Coefficient variable is greater than 0. However, it is important to reiterate that for the sample there were only 29 Retail funds compared to 43 Industry funds.

Challenger changed their board structure between 2009 an 2012, with the fund moving from a Majority Outside structure to a Majority Inside structure. This is despite the results of the study suggesting that a Majority Outsider structure is linked to better performance. However, this could be linked to the strong performance by Challenger in 2009, where the Board was classified as Majority Outside and performed significantly better than other funds. Other changes in board structure that were noted were AMG, AMP, Clearview and Nationwide who changed from Inside to Outside structure, with notable increases in ROR.

The data collected also presents some interesting insight into the influence of Independent directors. Challenger and Clearview had zero independent directors in 2009, adding between 1 and 5 in 2012. Both of these funds are Retail and had positive returns in 2012. However, independent directors influence in Retail funds was not statistically significant overall. BT Lifetime and BT Classic reduced the number in independent directors on the board, noticing an improvement in ROR for 2009-2012, but still recording poor ROA. For Industry funds, there were large additions of independent directors to Boards, particularly from Quadrant, Statewide and Bendigo who made their first additions of independent directors. Quadrant, Statewide and Bendigo also made significant improvements in ROR and ROA.

4.3 Women and performance

The Regression model results convey that women make a significant positive impact on performance, but this needs to be considered in light of additional data on boardroom gender diversity. The influence of women on the board was measured by analysis of the ratio of female: male directors on each superannuation board. The results provide some interesting insights into the changing trends of gender on trustee boards. The following Table 4.4 presents the differences between the percentage of women on Trustee Boards in 2009 and 2012, as featured from Retail and Industry sectors.

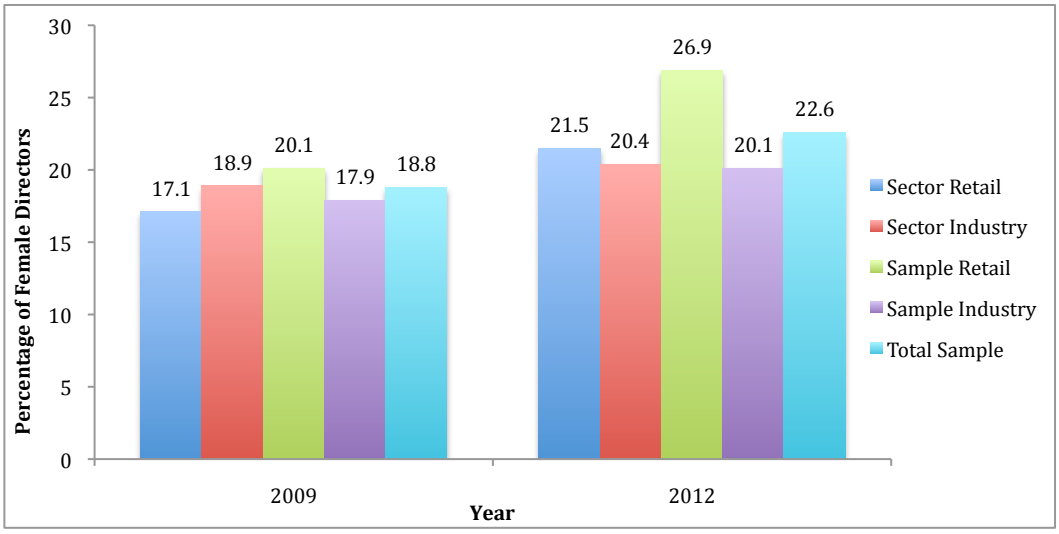
Table 4.4: Percentage of Women on Boards – Year Comparison

DATA	TYPE	2009	2012
Sector Whole	Retail	17.1%	21.5%
	Industry	18.9%	20.4%
Sample	Retail	20.1%	26.9%
	Industry	17.9%	20.1%
Total Sample	Both	18.8%	22.6%

* Information taken from Women on Boards Diversity Index (2012) and (2009)

There is a downward trend as reported by WOB organisation and their Boardroom Diversity Index. When comparing the results of 2011 and 2012, Industry Funds have a small decline (21.9% in 2011 to 20.4% in 2012). Retail sector funds continue the strong upwards trend with 18% in 2011, increasing to 21.5% in 2012. This is a positive step forward when consulting the specific gender ratio of Directors on Superannuation Boards. Figure 4.1 illustrates the changing trends.

Figure 4.1: Representation of Women on Superannuation Boards by Sector



This study highlights the quantifiable effect appointing a female on a board has on performance. It was noticed that a significant number of superannuation funds in the sample increased the ratio of women on their board. In particular, Retail funds were noted to have appointed more female directors between 2009 and 2012, increasing the percentage from 20.1 to 26.9 (See Table 4.4). A similar, yet slightly less increase was noticed within Industry funds. Within the whole sector, the percentage increased for both Retail and Industry funds.

Challenger increased the number of women from 0 to 22% and saw an increase in ROR of 0.3% and an improved ROA. Macquarie ADF and Macquarie both increased the ratio of women to 30%, up from 16 and 22% respectively. BT Classic and BT Lifetime increased the ratio from 16% to 60%. For Industry funds, Health Industry Plan maintained a particularly high ratio with approximately 50%. MTAA increased the number of women on their board by 20% and noticed significant improvements in both ROR and ROA. Law Employees reduced the ratio from 50% in 2009 to 25% in 2012 yet noted small increases in ROR and ROA (although they still recorded negative results).

DPM reduced the percentage of women on their Board from 30% to 25% and recorded a decline in ROA between 2009 and 2012. This same result was also noticed for Premium choice, which recorded a weaker ROA after reducing the number of women on their board.

4.4 Differences between Retail and Industry funds and characteristics of Board Structure

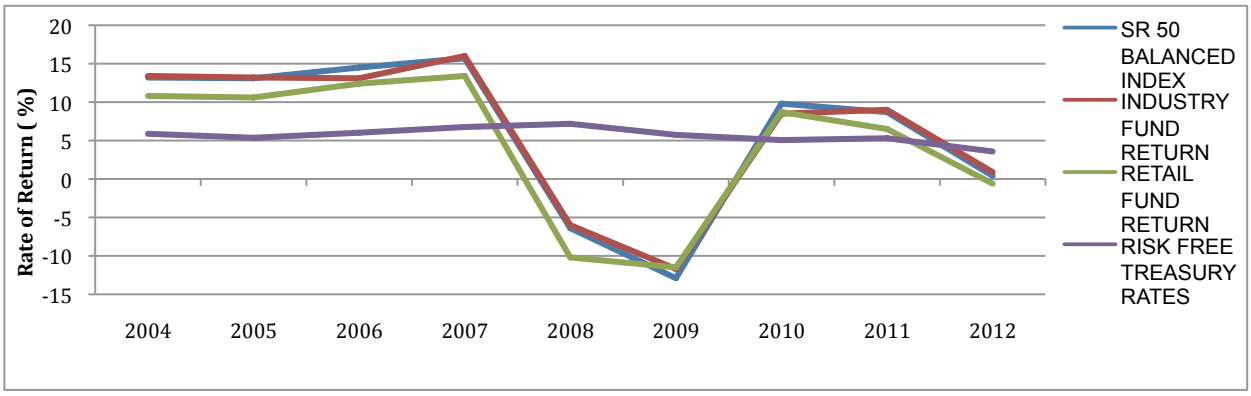
Table 4.5 and Figure 4.3 illustrate the aggregate returns noted between 2004 and 2012 to highlight differences in returns. It is observed that predominantly, Retail funds underperform in terms of ROR when compared to Industry funds. In this study however, Retail funds outperformed Industry, but this may be due to the small sample size of 29 Retail funds compared to 43 Industry.

Table 4.5: Rate of Return by Sector: Comparison with Risk Free rate and SR 50

YEAR	SR50 BALANCED INDEX	INDUSTRY FUND ROR	RETAIL FUND ROR	RISK FREE TREASURY RATE
2004	13.2	13.4	10.8	5.88
2005	13.1	13.2	10.6	5.36
2006	14.5	13.1	12.4	6.02
2007	15.7	16	13.4	6.76
2008	-6.4	-6	-10.2	7.18
2009	-12.9	-11.7	-11.5	5.74
2010	9.8	8.5	8.7	5.06
2011	8.7	9	6.5	5.3
2012	0.4	0.9	-0.6	3.58

* Information collected from the Australian Prudential Regulation Authority (2012),SuperRatings (2013)[iii] and the Reserve Bank of Australia

Figure 4.2: Illustration of Benchmarked Returns Comparison



SECTION FIVE

Final Results

5.1 Summary of Results

The results suggest that board structure is significant with particular characteristics of gender diversity amongst directors, independent directors, governance differences between Retail and Industry funds and also the effect of operating costs, total assets and year having an impact on the performance of superannuation funds. The conclusion is that board structure has a direct influence on both Operational and Financial performance.

5.2 Women and their effect on performance

Results indicate that women have a positive effect on performance for Industry funds, yet the results were not significant for Retail funds. This is despite the strong increase in appointment of women on Retail fund boards in recent years. The largest Industry funds also tend to be from Education, Healthcare and Nursing. It was also suggested that women are less prevalent on technical boards, which may assist to explain why Retail funds had no significant effect for women on the board. This assertion is supported by the results of this study, but it is interesting that sector representation for 2012 was higher for Retail funds than Industry.

Women on Retail boards may not have a significant impact, possibly due to internal characteristics and the impact of "groupthink" or the desire for conformity. Women on Retail boards may also be appointed as their interests align with the existing directors. Many arguments have been made that women tend to be more collaborative, but results suggest this depends on the sector and structure of the board.

Although there has been a steady increase in the number of women appointed boards, there may not be a Quantifiable effect yet, as they may not

have a direct impact on decision-making in meetings. The percentage of female directors compared to male is still relatively low when considering that a board is representing approximately 45.6% of the Australian Working Population (Australian Bureau of Statistics 2012). Industry funds have a history of incorporation of women into boardrooms and the findings suggest a positive impact. Perhaps women who feature on Boards tend to offer the same benefits as an independent director, which is why results illustrate beneficial impacts for more gender diversity and the appointment of independent directors for Industry funds only.

5.3 Independent Directors influence on performance

The results of this study show that there is a divide in how the appointment of independent directors on a board appears to effect financial performance. The results highlight the beneficial impact of independent directors on Industry Boards, but the relative independence of directors has a negative impact on Retail Boards.

The relative ratio of independent directors may not be as beneficial on these boards as they do not offer as much value as originally perceived by earlier literature. Although the director may be classified as independent, they may not be truly independent in their thought processes and may possibly find it difficult to adequately monitor the operations of the board. Another suggestion may be that Boards with Independent Directors may not have the requisite knowledge of internal logistics, meaning that it takes more time for boards to isolate problems and design solutions.

Contrastingly, the beneficial impact of independent directors on Industry boards gives great weight to the Cooper recommendation for appointment of one-third independent directors. The results also highlight the impact that sector and board structure has on the effectiveness of independent directors.

5.4 Retail and Industry fund comparisons

Retail funds outperformed Industry funds in this research. Retail funds tend to be tied to financial institutions and employ more Advisors for funds. Shareholders of for-profit institutions also have an effect, placing increased pressure on managers and trustees to perform. The same pressure is not noticed from members of Industry funds. What this reveals is a divide in the investment strategy and offers insight into how Industry funds were able to exploit their competitive advantage. Although operating costs erode profits, overall sustainability and return is greater for Retail funds when compared to Industry funds that are heavily reliant on infrastructure Investment.

5.5 Outsider and Insider structure comparisons

The outcome of this study suggests that Majority Outside structure of Retail funds was more beneficial than Majority Insider structures. This is a similar finding to Cooper (2010), recommending that a board should have a majority of non-associated directors. In fact, the results indicate trustee board structure does matter and there is a significant benefit to having more Non-Executives on the board. However, it is important to reiterate that Non-Executive directors are not automatically classified as independent. What the results suggest is that having more Non-Executive rather than Executive Directors is beneficial.

Remuneration may also be a larger part of results. If it's too easy, you see no result or development. If there is an incentive to perform than there are different ideals. Pleasing the Board and not creating internal disharmony may go towards a positive perception of skill within the company. This may explain why Majority Outside board structure is linked to positive financial performance.

5.6 Total Assets and Operating Costs

Total Assets and Operating Costs have a negative effect on performance, as it is clear that larger asset holdings will require more management and as such more inclusion of professional advice, thus, increasing fund expenditure.

Larger funds have more assets to manage and as such incur higher costs for management. In 2012, Retail funds held 25% of Total Assets, compared to Industry funds that held 18% (See Appendix Diagram A1)

5.7 Implications of Research

The effect of gender diversity was noted for Industry funds where results show women had a positive effect on performance. The answer to attracting more women to Retail boards and as such Corporate ASX boards may be to develop an incentive scheme for funds that incorporate a certain percentage of women on their boards. For example, it could be included in the policy of the board that the number of female directors must be directly proportionate to the percentage of female members. Although, both Sweden and Norway have legislated a percentage requirement of female directors, this may not be the answer to increasing diversity. Results suggest varied effects for different sectors and funds, so if a blanket ratio was applied many women may be appointed as 'token females' just for boards to be compliant. If there was some performance incentives linked to gender ratio then we may see an increase in the number of women on boards.

Another concern is that trustee directors need to be appointed based on skill and merit, not just because of their gender. Expanding the talent pool should be a focus where training, development and attending networking events is offered to women interested in pursuing Directorships on superannuation boards. This could be funded or subsidized by the Australian Government. However the Researcher was not able to ascertain the specific reason why women had a negative effect on performance for Retail funds. More research is required into the specific psychological and performance impact of females on Australian superannuation boards.

Results from this study also contribute to the debate on Independent Directors and their influence on boards. Independent directors had a positive effect for Industry funds, but a notably negative effect for Retail. This may be explained, as Retail funds may not see direct benefits as previously thought from independent directors, and perhaps more insight is needed into how

independence is classified. Industry funds on the other hand benefit from appointment of independent directors. This gives greater support to the Cooper Review Recommendations and also supports the view that the Equal Representation model needs to be reformed.

However, it is particularly notable that with regard to board structure, Majority Outside structures with more non-associated directors faired better than Retail funds that had a Majority Inside or more associated directors. This is despite the negative impact of independent directors on Retail funds. The main implications from this study suggest that further research is needed to study the influence of independent directors, specifically looking at individual sector differences. Although there were no significant findings regarding the impact of an Independent Chair, perhaps this model needs to be explored where the Chair is independent but the directors are Executives or associated directors. Increased research is needed into the classification of independence and the impact of Outsider compared to Insider board structures.

Retail funds are established on a for-profit basis and are not required to operate under the Equal Representation Model. However, the imposition of the Majority Independent Directors model by the Financial Services Council, of which most funds are a member, could produce significant changes in Operational and Financial performance results.

The long debate on the superiority of Industry funds was refuted by this study, but more work needs to be conducted in order to support this finding. The recent Rafe (2013) report suggests that the competitive advantage enjoyed by the Industry sector is over and future results may support this analysis. APRA also has new powers to apply governance standards to superannuation trustees. In light of the MySuper reforms, research into board structure and specific Governance frameworks will enable APRA to develop and highlight crucial areas that impact performance, with a consideration of specific sector differences.

5.8 Limitations

In order to limit external factors that may impact results, the number of observations was widened to include snap shot analysis of the year 2012 and 2009. Simply basing analysis on 2012 data would not enable strong causal relationships to be developed, raising ambiguity as to the causal direction. Increasing the scope to include a comparison of performance and structures over a period of 10 years could be a topic for future research.

Another challenge with this area of research is that there is no standard metric in order to measure board structure and performance. The researcher applied concepts associated with corporate governance to superannuation funds. More research and development of guidelines (such as that contained within the MySuper reforms) will enable effective future comparisons.

Another limitation is that data on specific funds was collected from Annual Reports and fund websites. This may lead to differences in interpretation as some funds may classify independence differently. Classification parameters meant that there were specific requirements for board structure classifications as 'Majority Inside', 'Majority Outside' 'Equal Representation' and 'All Executive'. As outlined in the literature, some researchers classify independent directors as including 'Non-Executive Directors'. Future legislation could narrow the definition of independence, so that it is explicit whether a director is associated with an organisation, past or presently.

5.9 Future Research

This study was not able to incorporate results of the MySuper reforms, so there may differences if the same method was applied to future returns. Comparing results in 2009 during a major market downturn and 2012 has challenges with ascertaining a link between board structure changes and returns due to external market influences. The sample size was also quite small due to availability of information, so it may be necessary to test findings with a larger sample.

The MySuper reforms and governance standards, in particular the new dashboard disclosure requirements will enable the market to be more informed about different investment default options (Taylor 2013). What this suggests is that a more transparent and regulated industry will enable consumers to be more informed, thus limiting the environment that Industry funds have been previously able to exploit. The heightened reporting requirements will make replication of future analysis much simpler and more efficient with a requirement that information be publicly available on Superannuation fund websites.

Perhaps what the future will reveal is a different superannuation environment where the most efficient funds will be able to outperform others, regardless of sector classification. These changes offer rich grounds for conducting further research into board structure, particularly where certain structural characteristics have been imposed, such as the introduction of independent directors and the imposition of the Coalition's 3+3+3 model.

APPENDIX

Table A1: Descriptive Statistics and performance results: Individual funds.

FUND NAME	TYPE	ROR 2009	ROR 2012	SD 2009-2012	SHARPE 2009-2012	ROA 2009	ROA 2012
Auscoal Superannuation Fund	Industry	-10.7	1.6	8.70	-1.06	-0.07	0.05
AMG Universal Super	Retail	-10.6	-2.9	5.44	-2.10	0.02	0.14
AMP Superannuation Savings Trust	Retail	-13.4	-0.3	9.26	-1.24	-0.10	0.01
AON Master Trust	Retail	-13.3	-0.3	9.19	-1.25	-0.10	0.03
Australian Catholic Superannuation and Retirement Fund	Industry	-12.2	-0.8	8.06	-1.38	-0.07	0.04
Australian Ethical Retail Superannuation Fund	Retail	-4.4	-0.8	2.55	-2.85	0.02	0.03
Australian Meat Industry Superannuation Trust	Industry	-13.3	0.4	9.69	-1.15	-0.08	0.03
AustralianSuper	Industry	-12.4	1.1	9.55	-1.08	-0.05	0.08
Austsafe Superannuation Fund	Industry	-13.7	-0.3	9.48	-1.23	0.01	0.04
AvWrap Retirement Service	Retail	-13.2	-0.7	8.84	-1.31	0.04	-0.06
Bookmakers Superannuation Fund	Industry	-16.9	-14.5	1.70	-12.00	-0.59	-0.51
BT Classic Lifetime	Retail	-12.9	-1.9	7.78	-1.55	-0.33	-0.24
BT Lifetime Super	Retail	-12.8	-1.3	8.13	-1.44	-0.14	-0.10
Building Unions Superannuation Scheme (Queensland)	Industry	-12	0.9	9.12	-1.12	-0.03	0.06
Care Super	Industry	-9.5	1.9	8.06	-1.05	-0.03	0.07
Catholic Superannuation Fund	Industry	-10.3	0.4	7.57	-1.27	-0.07	0.05
Challenger Retirement Fund	Retail	5.1	5.4	0.21	2.78	0.01	0.31
Christian Super	Industry	-13.6	-0.1	9.55	-1.21	-0.07	0.06
ClearView Retirement Plan	Retail	-10	1.6	8.20	-1.08	-0.19	-0.09
Club Plus Superannuation Scheme	Industry	-9.5	-0.5	6.36	-1.52	-0.06	0.03
Club Super	Industry	-15.3	-1.2	9.97	-1.29	-0.12	0.02
Construction & Building Unions Superannuation	Industry	-11.8	1.6	9.48	-1.03	-0.04	0.07
DPM Retirement Service	Retail	-10.2	-1.3	6.29	-1.65	-0.09	-0.20

FUND NAME	TYPE	ROR 2009	ROR 2012	SD 2009-2012	SHARPE 2009-2012	ROA 2009	ROA 2012
Energy Super	Industry	-11.1	0.8	8.41	-1.17	-0.09	0.04
equipsuper	Industry	-8.8	0.4	6.51	-1.36	-0.07	0.02
Fiducian Superannuation Fund	Retail	-11.4	-3.8	5.37	-2.28	-0.17	-0.14
First Super	Industry	-13.8	2.1	11.24	-0.93	-0.11	0.02
Health Employees Superannuation Trust Australia	Industry	-11.8	1.5	9.40	-1.04	-0.04	0.07
Health Industry Plan	Industry	-14.7	-0.5	10.04	-1.22	-0.11	0.01
HOSTPLUS Superannuation Fund	Industry	-13	0.6	9.62	-1.13	-0.04	0.08
Intrust Super Fund	Industry	-14.7	-1.3	9.48	-1.34	-0.08	0.03
IOOF Portfolio Service Superannuation Fund	Retail	-10.5	-1.3	6.51	-1.62	-0.06	-0.03
Labour Union Co-Operative Retirement Fund	Industry	-12.7	1.1	9.76	-1.07	-0.07	0.07
Law Employees Superannuation Fund	Industry	-10.5	-0.4	7.14	-1.42	-0.07	-0.02
legalsuper	Industry	-13	-0.8	8.63	-1.34	0.13	0.04
Macquarie ADF Superannuation Fund	Retail	3.6	2.9	0.49	-2.85	-0.10	-0.14
Macquarie Superannuation Plan	Retail	-11.5	-1.5	7.07	-1.58	-0.08	0.03
Maritime Super	Industry	-7.2	0.7	5.59	-1.42	0.32	0.03
Meat Industry Employees Superannuation Fund	Industry	-11.4	1.9	9.40	-1.00	-0.11	-0.01
Media Super	Industry	-10.4	-0.2	7.21	-1.38	0.32	0.02
MTAA Superannuation Fund	Industry	-23.3	-1.1	15.70	-1.07	-0.18	0.00
National Mutual Retirement Fund a	Retail	-10.7	-0.8	7.00	-1.49	-0.04	*
Nationwide Superannuation Fund	Retail	-14.7	-2.5	8.63	-1.54	-0.11	0.01
New South Wales Electrical Superannuation Scheme	Industry	-12.4	-0.2	8.63	-1.27	-0.06	0.05
NGS Super	Industry	-10	-1.5	6.01	-1.73	-0.04	0.11
Perpetual's Select Superannuation Fund	Retail	-11.2	-0.6	7.50	-1.41	-0.16	-0.07
Premiumchoice Retirement Service	Retail	-13	-3.2	6.93	-1.84	-0.08	-0.10
Prime Superannuation Fund	Industry	-16.1	-0.4	11.10	-1.16	-0.12	0.06
Professional Associations Superannuation Fund	Industry	-13.5	0.7	10.04	-1.10	-0.03	0.09

FUND NAME	TYPE	ROR 2009	ROR 2012	SD 2009-2012	SHARPE 2009-2012	ROA 2009	ROA 2012
Quadrant Superannuation Scheme	Industry	-13.1	1.1	10.04	-1.06	-0.09	0.03
Queensland Independent Education & Care Superannuation Trust	Industry	-12.8	-0.3	8.84	-1.27	-0.04	0.07
Rei Super	Industry	-11.5	1.7	9.33	-1.02	-0.07	0.04
Retail Employees Superannuation Trust	Industry	-7.9	1.1	6.36	-1.27	0.00	0.07
Retirement Wrap	Retail	-10.4	-0.6	6.93	-1.47	-0.04	0.16
Statewide Superannuation Trust	Industry	-17.2	0.5	12.52	-1.04	-0.11	0.04
Suncorp Master Trust	Retail	-9.1	0.7	6.93	-1.28	-0.15	-0.06
Sunsuper Superannuation Fund	Industry	-11.4	-0.3	7.85	-1.34	-0.01	0.07
TAL Superannuation and Insurance Fund a	Retail	-11.9	-1.5	7.35	-1.54	0.02	*
Tasplan Superannuation Fund	Industry	-8.5	0.4	6.29	-1.38	0.00	0.05
The Allied Unions Superannuation Trust (Queensland)	Industry	-12.5	-0.9	8.20	-1.38	-0.11	0.00
The Bendigo Superannuation Plan	Retail	-6.9	1	5.59	-1.36	-0.14	0.02
The Retirement Plan	Retail	-12.1	-2.6	6.72	-1.79	-0.13	-0.16
The Transport Industry Superannuation Fund	Industry	-14.8	-1.3	9.55	-1.33	-0.11	0.01
The Universal Super Scheme	Retail	-14.7	-0.5	10.04	-1.22	-0.18	0.05
TWU Superannuation Fund	Industry	-13.4	0.3	9.69	-1.16	-0.09	0.04
Unisuper	Industry	-9.5	2.2	8.27	-1.00	-0.05	0.05
Victorian Superannuation Fund	Industry	-10.9	0.8	8.27	-1.17	-0.01	0.07
Virgin Superannuation	Retail	-15.2	-0.8	10.18	-1.24	0.00	0.06
Vision Superannuation Fund	Industry	-9	3.2	8.63	-0.88	0.30	0.23
Wealth Personal Superannuation and Pension Fund	Retail	-4.2	0.4	3.25	-2.02	0.83	0.03
Westpac Mastertrust - Superannuation Division	Retail	-11.1	-0.7	7.35	-1.44	-0.18	-0.05
Westpac Personal Superannuation Fund	Retail	-9	0	6.36	-1.44	-0.18	-0.10

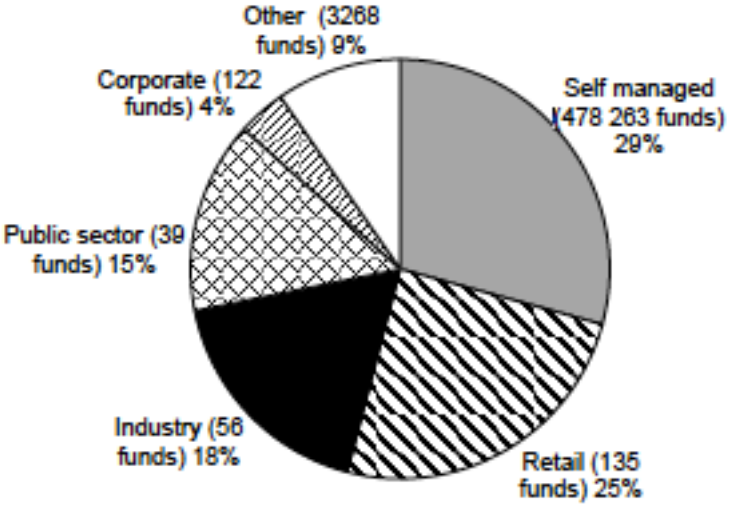
Table A2: Summary of applicable Cooper Recommendations and Government Response

Cooper Recommendation	Government Response (LABOR)
Recommendation 2.1 The SIS Act should be amended to create a distinct new office of 'trustee-director' with all statutory duties (including those which would otherwise be in the Corporations Act) to be fully set out in the SIS Act, along with re-focused duties for trustees.	**Support in Principle**
Recommendation 2.4 The SIS Act should be amended so that it is no longer mandatory for trustee boards to maintain equal representation in selecting its trustee-directors. The Panel expects that trustees would review and amend corporate constitutions to ensure consistency with this recommendation.	**Do Not Support** Current Arrangement appropriate
Recommendation 2.6 The SIS Act should be amended so that if a trustee board does not have equal representation, the trustee must have a majority of 'non-associated' trustee-directors (as described in chapter 2).	**Do not support** The Government considers that, beyond the existing regulatory framework, the composition of a trustee board is a matter for the board to determine, but will refer to APRA the need for guidance on managing conflicts of interest.
Recommendation 2.7 For those boards that have equal representation because their company constitutions or other binding arrangements so require, the SIS Act should be amended so that no less than one-third of the total number of member representative trustee-directors must be non-associated and no less than one-third of employer representative trustee-directors must be non-associated.	**Do not support** The Government considers that, beyond the existing regulatory framework, the composition of a trustee board is a matter for the board to determine, but will refer to APRA the need for guidance on managing conflicts of interest.
Recommendation 2.19 If industry cannot work together to establish such a council, or cannot finalise a Code of Trustee Governance within two years, then APRA should create the Code.	**Support in principle**
Recommendation 4.2 In addition to whole of fund reporting, APRA should publish investment return performance data for MySuper products.	**Support**

Recommendation 4.3 All funds should be required to publish on their websites an investment option performance table (as shown in table 4.1 in chapter 4) showing investment returns and costs at investment option level, in accordance with an outcomes reporting standard to be developed by APRA in consultation with ASIC and the industry.	**Support in principle**
Recommendation 4.6 It should be mandatory, when referring to past performance of a MySuper product or a choice investment option, to disclose a standardised measure of the uncertainty or volatility associated with the return (an example of which is shown in table 4.1 in chapter 4). This requirement, and the volatility measure to be used, should be in an outcomes reporting standard to be developed by APRA in consultation with ASIC and the industry.	**Support in principle**
Recommendation 4.15 APRA should have explicit power to collect Superannuation data on a 'look-through' basis so that it can achieve an understanding of the fund asset allocation returns and costs.	**Support**

Diagram A1: Percentage share of Superannuation funds by sector

(Number of funds, per cent share of assets), June 2012



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[i] In 2013, Australia had a Federal Election that saw a change in government from Labour to the Coalition. Labour was in power when the Cooper Review was released and did not support some of the main recommendations. The Coalition has communicated support for the 3+3+3 model as suggested by the Cooper Review.

[ii] Risk Free Asset is an Asset that has certain returns. Treasury Bonds and T-Bills are considered Risk-Free as they are backed by the Australian Government.

[iii] The SR50 is published by SuperRatings to provide a better representation of return medians, ensuring that small funds (with few members) do not have a major impact on the median result.