

Effects of Corporate Governance on Not-for-Profit Financial Vulnerability: Evidence from the Australian Aged Care Sector

By

Dr Deshani C Hettiarachchi

Corresponding author : Dr Deshani C.H

E-mail: deshanihettiarachchi8@gmail.com

PhD (RMIT, Australia), MMS (Waikato, New Zealand), MSc (USJP, SL), BSc (1st Class, USJP, SL), CTHE (USJP, SL), MAAT (SL)

Department of Accounting, Faculty of Management Studies & Commerce, University of Sri Jayewardenepura, Sri Lanka
<https://orcid.org/0000-0001-9704-3573>

E-mail: deshanihettiarachchi8@gmail.com

Received: 22/11/2023 | Accepted: 29/11/2023

Published: x/11/2023

Abstract Financial vulnerability in the not-for-profit (NFP) sector has received little research attention compared to the broad literature in the for-profit sector. Hence, the purpose of the study is to examine the impact of board characteristics on the extent of NFP financial vulnerability (FV) in the Australian aged care sector. More specifically, the study attempts to contribute to the existing literature by addressing the following research question: *What is the effect of board characteristics on the extent of financial vulnerability?* Panel regression results indicate the extent of FV in the Australian aged care NFP sector is influenced by board independence, board gender diversity, board members' finances, and aged care-related competence, and the size of the NFP. The study contributes to resource dependency theory (RDT) literature of NFPs by identifying that independent directors bring more resources to an organisation due to their professional experience, expertise, competence, and relationships with other organisations in the external environment, which reduces resource dependency and the level of FV in the NFP sector. The policymakers can consider these factors for framing policies related to board composition in the NFP sector to improve financial health in the Australian aged care NFP sector.

Keywords: Not-for-profit organisations, Australian aged care sector, financial vulnerability, corporate governance, quantitative methods

Publish by IJAH 2023.

1. INTRODUCTION

Ongoing viability is a significant factor in not-for-profit organisations (NFPs) because financially vulnerable NFP entities cannot deliver their service obligations as society expects. NFPs face increasing threats and pressures on delivering services in an environment where resources are rapidly shrinking while social service needs are escalating. The Australian government depends mainly on NFPs to provide welfare services to vulnerable people (Zhai, Watson, Gilchrist, and Newby 2017). For instance, in Australia, the state has largely outsourced aged care services to aged care providers that mainly

operate as NFPs, and the NFP sector dominates the aged care industry in Australia. However, Australian NFPs have recently been highly impacted by prolonged drought, devastating bushfires, floods, and COVID-19. Moreover, NFPs cannot raise money by issuing shares or taking on debt, and so they are more exposed to unpredictable recessions. In addition, recent industry reports (such as the Royal Commission Final Report (RCACQS 2021)) agree that the aged care sector in Australia is not sustainable in the long run. Therefore, the concept of FV in this sector has received increased attention, especially

due to the strong impact of the recent economic downturn, which has had a hard impact on their financial stability. Indeed, identifying the key signs and determinants of FV assists “to prevent the collapse of non-profits through the timely application of appropriate interventions” (Zhai et al. 2017, p. 373).

FV in the NFP sector has received little research attention compared to the broad literature in the for-profit sector (Andres-Alonso et al., 2015; Prentice, 2016b; Zhai et al., 2017; Garcia-Rodriguez et al. 2021). Moreover, compared to US and UK, very little research has been conducted in the Australian context (Zhai et al. 2017). NFP scholars have contended that identifying FV is sector specific and empirical evidence drawn from different countries cannot be directly applied to Australia because the NFP sector’s nature differs from country to country (Andres-Alonso et al. 2016; Prentice 2016b), and thus the context for identification of FV is not truly comparable across countries (Andres-Alonso et al. 2015). Board failure is one of the most significant factors for organisational dissolution in the NFP arena (Garcia-Rodriguez et al., 2021).

Organisational activities depend on various board features (Garcia-Rodriguez et al., 2021), namely board size (Aggarwal, Evans, and Nanda 2012), board independence (Terjesen, Couto, and Francisco 2016), and multiple directorships of the board members (Bravo and Reguera-Alvarado 2017). Nevertheless, there is a lack of research linking the impact of board characteristics to the level of FV in the NFP sector (Garcia-Rodriguez et al. 2021). Further, prior studies regarding the impact of board characteristics on financial health in the NFP sector have reported mixed results. To address the gap in the literature, the purpose of the study is to examine the impact of board characteristics on the extent of not-for-profit FV in the Australian aged care sector. More specifically, the study attempts to contribute to the existing literature by addressing the following research question: *What is the effect of board characteristics on the extent of financial vulnerability?*

The present study draws insights from resource dependency theory (RDT) theory to identify the impact of board characteristics on the extent of FV in the Australian aged care NFP sector. Several theoretical perspectives help in understanding the association between the board and FV in the NFP sector. RDT provides a prominent explanation for how the board of directors (from now on referred to as BOD) contributes to improving an organisation’s financial performance (Bhatt and Bhattacharya 2015). One aspect of RDT, following Pfeffer and Salancik (2003), views the board as a provider of resources for the organisation. Subsequently, such resources will strengthen the financial performance of an organisation. Furthermore, the RDT perspective stresses the importance of acquisition and maintenance of financial, human, and other resources for organisational

survival (Pfeffer and Salancik 1978; 2003) and is the dominant theory employed to guide research studies on BODs (Bhatt and Bhattacharya 2015; McLeod et al. 2021). The board has a high level of links to the external environment which increases organisational access to various resources (McLeod et al. 2021), which in turn reduces the extent of FV in a NFP. Empirical research studies related to BODs support the notion of boards being responsible for providing the information and resources required to minimise an organisation’s resource dependency while creating inter-organisational relationships. To the resource dependency theorist, the organisation depends on highly complex environments for the resources to survive. The BOD governs organisations to minimise resource dependency by reducing environmental uncertainty (Pfeffer and Salancik 1978).

The present study utilised quantitative content analysis of 200 audited annual reports issued for the two consecutive years 2018 and 2019 by aged care service NFPs registered with the Australian Charities and Not-for-Profit Commission (ACNC). Panel regression results indicate that the extent of FV in the Australian aged care NFP sector is influenced by board independence, board gender diversity, board members’ finance, and aged care-related competence, and the size of the NFP. The study contributes to the limited literature on NFP governance. Further, the study contributes to resource dependency theory (RDT) literature of NFPs by identifying that independent directors bring more resources to an organisation due to their professional experience, expertise, competence, and relationships with other organisations in the external environment, which reduces the resource dependency and the level of FV in the NFP sector. The policymakers can consider these factors for framing policies related to board composition in the NFP sector to improve financial health in the Australian aged care NFP sector.

The rest of the chapter is organised as follows. Section 2.1 provides the study’s theoretical background and section 2.2 reviews the literature and develops hypotheses. Section 3 outlines the research methodology, and section 4 presents the empirical results. Section 5 discusses the findings. Finally, section 6 concludes the chapter.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Literature Review

Proper governance is important for NFP survival (Garcia-Rodriguez et al. 2021). According to Herman and Renz’s (2000) survey results, organisational effectiveness is directly related to board effectiveness, and board effectiveness shapes the financial health of an

organisation (Hodge and Piccolo 2011). Furthermore, Herman and Renz (2000) found that effective NFPs have more prestigious boards, and boards typically perform diverse and contradictory functions (McLeod et al. 2021). Moreover, board failure is one of the most significant factors for organisational dissolution in the NFP arena (Garcia-Rodriguez et al. 2021). Many studies have identified the board's significant influence in increasing organisational performance for for-profit organisations. However, attention to non-profit governance to date has been limited in the literature (Garcia-Rodriguez et al., 2021).

The board influences the activities of an organisation depending on the board's features (Bhatt and Bhattacharya, 2015; Garcia-Rodriguez et al., 2021), such as board size (Garcia-Torea et al., 2016; Augusto, Pascoal and Reis, 2020), board independence (Fuzi, Halim and Julizaerma, 2016), multiple directorships of the board members (Brown, Dai and Zur 2019), and gender diversity in the board (Griffin, Li and Xu, 2021). The literature on NFPs has traditionally focused on the association between the board and the NFP's efficiency (Mwenja and Lewis, 2009). However, a few studies have linked board characteristics to FV in the NFP sector (Bhatt and Bhattacharya, 2015; Garcia-Rodriguez et al., 2021). Further, prior studies have reported mixed results regarding the impact of board characteristics on the financial health of an organisation.

Even though "there is some research on the influence of boards on NPOs' (i.e., NFPs') performance (or efficiency), in the context of financial concerns, the literature is almost non-existent" (Garcia-Rodriguez et al., 2021, p. 238). Further, while studies such as Hodge and Piccolo (2011) have examined the impact of board effectiveness and private philanthropy on NFPs suffering from FV, these scholars have focused on board functioning rather than composition. Again, the impact of the board on financial performance and bankruptcies has been widely studied in the for-profit sector, but few have studied the impact of board composition on NFP FV, and these provide inconclusive and mixed results (Garcia-Rodriguez et al., 2021). It is not altogether surprising then that no studies have been conducted to recognise the impact of board composition variables on the extent of FV in the Australian aged care NFP sector. Following on from the for-profit and limited NFP literature, the general hypothesis for this study is that board composition is related to the extent of FV of the NFPs in the Australian aged care NFP sector, and additional depth is given to this NFP governance research by considering five governance variables: board size, board independence, board diversity, board competence and multiple directorships.

2.2 Hypotheses Development

2.2.1 Board Size and not-for-profit FV

The number of members on the governance board represents an organisation's board size. As in the for-profit literature, the NFP literature related to board size provides mixed results. Sometimes a smaller board size is better, or a large board is better (Olson, 2000) or there is no relationship between board size and FV in the NFP sector (Garcia-Rodriguez et al. 2021). However, based on RDT, the present study argues that a large board size is preferred for a NFP to attract more resources from the external environment based on the contextual, educational, interpersonal, analytical, political, and strategic qualities of the board members. Furthermore, Pfeffer and Salancik (2003) argued that four primary benefits can be provided by directors to organisations: (a) advice and counsel; (b) channels for communicating information between the firm and external organisations; (c) preferential access to resources; and (d) legitimacy. Further, RDT argues that external environmental uncertainties on an entity's resources are likely to influence the board size of the organisation (Pfeffer and Salancik 1978). Furthermore, a large board brings a more diverse set of skills, talents, educational backgrounds, professional qualifications, and practical experience (Pfeffer and Salancik 2003; Olson 2000). Those skills are required to take correct decisions at the correct time, monitor activities, and communicate information to different stakeholders of an organisation. For instance, Olson (2000) explored the relationship between NFP financial performance and board size in higher educational institutions and concluded that organisations with larger board membership could attract more resources based on their variety of skills and linkages. Further, Aggarwal, Evans, and Nanda (2012) found that larger NFP boards are more effective at monitoring, resulting in better NFP performance. However, in contrast to the corporate sector, very few studies have been conducted on the impact of board size on FV in the NFP sector. Moreover, the relationship between NFP board size and FV remains unexplored in the Australian literature, let alone studies related to the Australian aged care NFP sector. So based on RDT, the first hypothesis is formulated as follows:

H1 (a): Board size is negatively associated with FV.

2.2.2 Board Independence and not-for-profit FV

A governance board consists of executive and non-executive directors. The proportion of non-executive

directors to total directors on the governance board represents the board independence of an organisation. Executive directors are normally involved with the daily operations. On the other hand, non-executive, independent or outside directors are not involved with the day-to-day operations (Fuzi, Halim and Julizaerma 2016) and have limited knowledge about the daily activities of an organisation. Much research has been done on the relationship between board independence and performance in the corporate sector. However, the findings from previous research are mixed. Some scholars have argued that board independence is not effective and reduces firm performance (Terjesen, Couto and Francisco, 2016).

However, several studies have identified a positive relationship between board independence and firm performance (Zhu, Ye, Tucker and Chan 2016). In the NFP context, Garcia-Rodriguez et al. (2021) found no relationship between board independence and FV among Spanish NFPs. Though it is argued that the presence of outside directors on the board increases monitoring, which improves the financial health of an organisation, some prior research has also found a negative impact of board independence on financial performance. For instance, Agrawal and Knoeber (1996) investigated the association between board independence and the financial performance of large US firms and found a negative relationship. They argue that independent directors, sometimes added to the board for political reasons, lack monitoring expertise, thereby affecting financial health. In contrast, Byrd and Hickman (1992) conclude that non-executive directors positively impact performance because of their independence, monitoring, and influence over the government. The findings of some other studies also suggest a negative relationship between board independence and financial performance in the corporate sector (Christensen, Kent and Stewart 2010). However, based on RDT the present study assumes that independent directors will bring more resources to the organisation because of their experience and relationships with other organisations in the external environment. When the number of independent directors on the board of an organisation increases compared to executive directors, the independence of monitoring and control of the organisation goes up (Muttakin 2012) for three reasons. First, outside board members have professional experience (Muttakin 2012), expertise and competence. Second, independent board members use their reputation to control and monitor the activities of an organisation (Barros, Boubaker and Hamrouni 2013). Finally, compared to executive board members, independent board members may be better positioned to control and monitor organisational activities and make the best decisions for the benefit of an organisation (Scherrer 2003). This is because non-executive directors are not directly involved with employees' organisational activities (Samaha et al. 2012) and do not have interests related to

career development and employability within the organisation. However, there is a shortage of studies conducted for the NFP sector to explore the impact of board independence on the level of FV. Hence, based on RDT, the following hypothesis has been developed regarding independent directors on a NFP board:

H2: Board independence is negatively associated with FV.

2.2.3 Board Gender Diversity and FV

Board gender diversity has been identified in the literature as one of the most important board characteristics (Kowalewska 2020) because "gender diversity improves the firms (firms') monitoring role" (Katmon, Mohamad, Norwani, and Al Farooque, 2019, p.466). The proportion of female board members to the total board members represents gender diversity in the governance board (Ward and Forker 2017). Even though gender diversity plays a greater role in NFP boards, little research has been conducted on the association between gender diversity and the level of FV in the NFP sector (Garcia-Rodriguez et al. 2021). Ward and Forker (2017) mention that "to our knowledge, only two other studies have empirically examined the link between board diversity and financial management in the context of NP organisations (NFPs)" (p. 353). Also, the relationship between board gender diversity and financial performance is complex, and again prior studies have provided mixed results, as previously discussed. Furthermore, women's representation provides a variety of advantages in the context of the NFP sector. Studies have found that women on boards provide direct benefits that enhance the careers of women subordinates, such as mentoring and access to networks (Kowalewska, 2020) and influence the establishment of flexible working arrangements within an organisation. Furthermore, a higher level of women in board roles is more likely to influence the organisation's bargaining power (Kowalewska, 2020) with resource providers, and Bertrand et al., (2019) found a positive influence of female representation on leadership and organisational effectiveness (Fernandez-Feijoo et al. 2012). Similarly, Adler (1997) finds that female representation gives benefits, such as transformational leadership skills and cross-cultural awareness. Previous research from Burton and Peachey (2009) and Eagly et al. (2003) stresses that women are more likely to display transformational leadership styles than transactional leadership skills. In addition, Wang and Kelan (2013) concluded their findings by stating, "The event of quota legislation enactment in Norway has had a consistent and positive effect on the pressure of top female leaders" (p. 463). Bradshaw Murray and Wolpin (1996) suggested that women positively contribute to board effectiveness. Some studies found that women on NFP boards play a greater role in

attracting volunteers to the organisation (Themudo 2009). Women play a more significant role in strategic planning than men on corporate boards (Fondas 2000). Daily and Dalton (2003) mention that women directors may add unique perspectives, experiences and work styles compared to male directors. These studies imply a low impact on FV from women's participation on male-dominated boards in improving decision-making and better access to resources. Even though there is a cavity of studies related to gender diversity in the NFP sector, much of the research has been conducted to identify the association between board diversity and performance in the for-profit sector. For instance, Vafaei et al. (2012), based on a study of the top 500 ASX, listed firms, found a positive association between board diversity and performance. Similarly, Campbell and Minguez-Vera (2008) found that board gender diversity significantly and positively impacts firm value in Spain. Again, Brahma, Nwafor and Boateng (2021) explore the impact of the proportion of female directors on financial performance and find a positive relationship between gender diversity and the financial performance of companies in the UK. To my knowledge, there is no literature to be found on gender diversity and its impact on FV in the NFP sector. RDT views board diversity as one of the instruments that management uses to facilitate access to the critical resources essential for organisational success (Wicker et al. 2020). Hillman et al. (2000) extend RDT to suggest that a more diverse board represents a valuable set of resources and may assist in achieving better economic outcomes. Also, gender-diverse boards are associated with low-risk behaviours (Elmagrhi et al. 2018). Further, RDT predicts that boards with diversified genders positively impact building communication channels and relationships with external stakeholder networks (Pfeffer and Salancik 1978). Empirical evidence on the relationship between women on boards and the extent of FV is largely missing in the NFP literature and there have been no studies on this conducted for the Australian aged care NFP sector. Based on RDT, the following hypothesis relating to board gender diversity has been developed:

H3: Board gender diversity is negatively associated with FV.

2.2.4 Board Members' Finance and Aged Care Related Competence, and FV

Board competence is regarded as a vital factor for board effectiveness and RDT argues that a BOD's linkage with the external environment can bring a variety of skills and knowledge to the organisation. Board competence is generally measured by members' educational background and industrial experience. Board members with higher educational backgrounds demonstrate greater decision-making skills (Graham and Harvey 2001). If the expertise of board member's increases, it will improve

organisational ability to carry out its activities. According to Arshad, Bakar, and Othman (2016), "the composition of an effective board should include a variety of personalities, with a range of skills and experience to enable them to discharge their duties and responsibilities effectively" (p. 1319). For instance, RDT suggests that board members with professional backgrounds bring various resources to an organisation because of their greater decision-making skills (Pfeffer and Salancik, 1978). Further, board members with professional backgrounds help NFPs understand and analyse the complex external environment (Mwenja and Lewis, 2009), which is also useful for attracting resources into the organisation. The educational level of the BOD is significant because board members with higher educational qualifications demonstrate better skills in taking decisions for the benefit of an organisation (Graham and Harvey 2001). A governance board requires the right mix of board members in terms of knowledge, skills, and experience (Garcia-Rodriguez et al. 2021), and financial competence (i.e., accounting-related qualifications and experience) is considered a minimum skill. Also, many scholars suggested that the education type or major study area improves a firm's decision-making process (Oehmichen, Schrapp and Wolff, 2017). The literature on NFP board competence is limited (Garcia-Rodriguez et al. 2021). Also, a literature review shows that studies exploring the influence of board competence on the level of FV in the NFP sector are even more limited. Moreover, the literature related to the relationship between board competence and financial performance in the corporate sector provides mixed and inconclusive results. For instance, some studies found a positive relationship (Boadi and Osarfo 2019), while other empirical works found a negative relationship (Kagzi and Guha, 2018), and Garcia-Rodriguez et al. (2021) found no relationship between board competence and FV in the NFP sector. To develop a hypothesis, which measures the impact of board competence on its level of FV, the present study considers a diversified competence in terms of financial competence (i.e., accounting-related qualification and work experience) and qualification and experience related to aged care activities for two main reasons. First, the financial and sector specific competence is a prerequisite for board members, as previously mentioned. Second, the current study considers FV in the aged care sector. So based on the focus of this study, both financial competence and competence related to the aged care sector are explored. Hence, the following hypothesis is proposed:

H4: Board members' financial and aged care related competence is negatively associated with FV.

2.2.5 Multiple Directorships of Board Members and FV

Multiple board directorships occur when board members are members of more than one governance board simultaneously. This helps board members gain more skills, experience (Courtois, Gombart, Pignatell and Brown 2011), expertise, and reputation (Nicolson and Keil, 2004). Multiple directorships help them develop more networks and greater reputation (Nicolson and Keil 2004). Further, directors with multiple directorships bring different types of resources regarding skills, experience, expertise, reputation, and networks (Harris and Shimizu 2004), which will help to reduce the organisation's FV. According to Reguera-Alvarado and Bravo (2017), "directors who sit on several boards usually acquire a broader knowledge about corporate strategies, and this can be a valuable resource in order to contribute toward board firm performance" (p. 592).

Nevertheless, multiple directorships have disadvantages because when a board member is a member of many boards, their ability to carry out organisational activities can be undermined (Lipton and Lorsch 1992). Also, "the quality of directors with multiple appointments can be compromised if the number of directorships is too high" (Bravo and Reguera-Alvarado 2017, p. 704). Further, Kor and Sundaramurthy (2009) mentioned that multiple directorships could reduce firm performance because of a lack of proper functions. Additional appointments can make directors overcommit and reduce their ability to monitor the firm's management effectively. The literature on NFP multiple directorships is limited. Also, the literature review shows no studies have explored the influence of NFP multiple directorships on the level of FV in the NFP sector. Some scholars in the corporate sector (e.g., Harris and Shimizu 2004) reported a positive relationship between directors with multiple appointments and financial performance. Kor and Sundaramurthy (2009) conclude that multiple directorships increase firm growth. Based on the above discussion, it is proposed that, consistent with RDT, multiple directorships have the potential to provide meaningful contributions and lower the level of FV. Therefore, the next hypothesis is:

H5: Multiple directorships of the board members of a NFP are negatively associated with FV.

3. RESEARCH METHODOLOGY

3.1 Research Method, Sample, Sample Period and Econometric Model

Research Method

The present study utilised quantitative content analysis of audited annual reports to collect the data. The success of content analysis depends on the data coding

(Hsieh and Shannon 2005). Data coding is the process of transforming raw data into "analysable representation" (Krippendorff, 2004, p. 84) or "organise (organising) large quantities of text into much fewer content categories" (Hsieh and Shannon 2005, p. 1285). Categories are "patterns or themes that are directly expressed in the text or are derived from it through analysis" (Hsieh and Shannon 2005, p. 1285). Under quantitative content analysis text data is coded into clear categories then described using statistical tools (Hsieh and Shannon, 2005).

Sample and Sample Period

An examination of the ACNC database disclosed that 58,381 NFPs were registered and regulated by the ACNC at the time of data collection (April 2020). However, of these only 2203 NFPs were registered as providing aged care services, and these then represent the total population of the current study. The population then comprises 1377 small, 340 media and 486 large, aged care NFPs according to ACNC's size criteria. The study uses a sample of 200 aged care NFPs registered with the ACNC. Data was collected from the audited annual reports of individual NFPs for two years, 2018 and 2019, which were the latest available at the time of data collection.

The study uses a purposive sampling technique and for a NFP to be included in the sample it must meet all elements of the following criteria:

- (1) The NFP should be registered as a charity with the ACNC and have reported "aged care" as its main activity. Note that many charities engage in aged care activities but not as their main activity.
- (2) It produced an audited financial statement and annual report for each of the three years from 2017 to 2019.

In accordance with these criteria the 1377 small, aged care NFPs were eliminated because they do not publish audited annual reports. Out of the 340-medium sized NFPs (revenue more than \$250,000 but less than \$1 million), only 225 issued publicly available audited financial statements for the three consecutive years of the research period, namely 2017, 2018 and 2019. Even though it is compulsory for all large NFPs to submit audited financial statements to the ACNC, some did not issue annual reports. In line with the second criterion, only 339 large, aged care NFPs (i.e., large, very large and extra-large in ACNC terminology) issued annual reports in addition to their audited financial statements. So even though the ACNC database includes 2203 NFPs who engage solely in aged care activities, only 564 NFPs satisfied the research criteria.

Table 1: Sample Description

Number of NFPs registered with the ACNC as carrying out aged care activities exclusively	2,203
(Less) Small-sized aged care NFPs, due to non-availability of data	(1,377)
(Less) Medium aged care NFPs without audited financial statements for both years	(115)
(Less) Large aged care NFPs without audited financial statements for both years	(147)
Remaining	564
Sample (random selection)	200

Different types of data analyses require certain minimum sample sizes (Davis 2005), although Ticehurst and Veal (2000) assert that it is the “absolute size of the sample that is important, and not its size relative to the population” (p. 164). In general, a sample size of 100 to 200 is regarded as appropriate for regression analysis (Hair et al. 2006). Likewise, Hoelter (1983) suggests a sample size of between 100 and 200 for quantitative research. In addition, Hair et al. (2019) state that the sample size for exploratory factor analysis (EFA) should be 100 or larger and a much larger sample size (i.e., 200 or larger) is needed when the number of variables increases. After considering all these factors, 200 aged care NFPs (medium, large, very large and extra-large) out

of the remaining 564 NFPs were randomly selected to form the sample. Moreover, the above process of selecting NFPs for the sample minimised any potential for selection bias, representing as it does approximately ten per cent of the total population of the present study.

The researcher collected data from 200 aged care NFPs for the two years, 2018 and 2019, giving 400 expected cases in total. Before the data analysis, missing data and outliers were assessed to get the data set ready for the final multivariate analysis (Hair et al. 2019). Forty-two cases (aged care NFPs) were removed from each year of the sample due to missing data (i.e., 84 cases for two years), and thus 316 observations were analysed for the two years, 2018 and 2019.

Table 2: Panel data sample selection and description by size after missing data

	Number of NFPs
Expected panel data sample size (2018 and 2019)	400
Removal of cases (NFPs) due to missing observations	84
Total number of observations	316

Econometric Model

The dependent variable of the study is the extent of FV in the Australian aged care NFP sector, and the model includes two independent variables and two control variables:

$$EXT_FV_t = \beta_0 + \beta_1 BOSIZE_{it} + \beta_2 BOIND_{it} + \beta_3 BOGD_{it} + \beta_4 BOCOM_{it} + \beta_5 BOMD_{it} + \beta_3 SIZE_{it} + \beta_4 AGE_{it} + \varepsilon$$

Equation 1

3.2 Definition and Measurement of Variables

3.2.1 Dependent Variable (EXT_FV)

The dependent variable of this study is the extent of FV that has been measured using the proposed multi-dimensional FV framework. As yet there is no common understanding of FV measurement in the NFP sector, with no common agreement on the dimensions of FV and what the financial measures in the NFP sector should be

measuring (Prentice 2016a). Hettiarachchi (2023) identified the lack of a consistent framework to measure the extent of FV in the Australian aged care NFP sector. The present study uses three FV measurement tools – the multi-dimensional FV framework, an FV index, and FV scores proposed in Hettiarachchi (2023) study to identify the extent of FV in the Australian aged care NFP sector.

3.2.2 Independent Variables

BOSize represents board size. Consistent with prior studies (such as Garcia-Rodriguez et al. 2021), board size is measured as the natural log of NFPs. Board size is measured through the number of members on the governance board (Muttakin 2012). BOIND represents board independence and is measured as a percentage of non-executive directors (i.e., independent) to total directors on the governance board. BOGD refers to board gender diversity. In accordance with prior studies

(Muttakin 2012; Ward and Forker 2017), board gender diversity is measured as the proportion of female board members to the total board members on the governance board. BOCOM represents board members' financial and aged care-related competence. Prior studies (Garcia-Rodriguez et al. 2021) have quantified a board's educational level according to the number of members with at least a graduate degree and relevant experience to the total number of members on the board. Consistent with these studies, the present study measured board members' financial and aged care related competence as the proportion of board members with either financial competence (i.e., an accounting related qualification and work experience) or aged care related competence (qualification and experience related to aged care activities) to the total directors on the governance board. BOMD represents multiple directorships on the board. Consistent with prior studies (Reguera-Alvarado and Bravo 2017) measured the number of multiple directorships on the board was measured as the proportion of board members with memberships on other boards to the total number of directors on this governance board.

3.2.3 Control Variables

3.2.3.1 Organisation Size

The first control variable used in this study is the size of the organisation. Kalleberg and Leicht (1991) concluded that small organisations face many difficulties

in attracting the required funds and offering competitive services to customers. Further, they struggle to develop collaborations with other organisations. Salimath and Raymond (2011) mention that "government regulation might have more impact on smaller organisations than larger ones" (p. 877). Further, in the NFP context, Trussel and Parsons (2007), and Zietlow (2012) have found that large organisations have less financial risk and more financial sustainability.

For this study the size of an aged care NFP is set based on the ACNC categorisation, as explained in Chapter 2. Size of aged care NFPs (SIZE) is quantified as medium size = 1, large size = 2, very large = 3, and extra-large = 4.

3.2.3.2 Organisation Age (AGE)

Several prior studies have considered an organisation's age to be a control variable (Trussel and Parsons 2007; Zietlow 2012). Salimath and Jones (2011) state that young organisations have higher failure rates. Previous studies have recognized mixed results for the relationship between the age and the extent of FV of an organisation. However, most studies (Trussel and Parsons, 2007; Zietlow 2012; Bowman, 2011) found older organisations have a lower level of FV and greater financial sustainability. Organisation age (AGE) is measured as the natural log of the firm's incorporation age, in accordance with prior studies (Reheul, Caneghem, Bogaerd and Verbruggen, 2018; Garcia-Rodriguez et al., 2021).

Table 3: Definitions of variables in the research model

Variable in the model	Measurement
Dependent Variable	
Extent of FV (EXT_FV).	Proposed FV Framework
Independent Variables	
Board Size (BOSIZE).	Natural log of number of board members
Board Independence (BOIND).	Percentage of non-executive directors on the board
Board Gender Diversity (BOGD).	Percentage of female directors on the board
Board Competence (BOCOM).	Percentage of directors with finance and aged care related qualifications
Multiple directorships (BOMD).	Percentage of directors with multiple directorships
Control Variables	
Size of aged care NFP (SIZE).	Medium=1, Large=2, very large=3, extra-large=4
Age of aged care NFP (AGE).	Natural log of a firm's age

In addition to the content analysis, future research (both in Australia and elsewhere) may consider a case study approach to understand the level and impact of board characteristics on the extent of FV in the NFP sector, or

more specifically in the Australian aged care NFP sector. An extension of this study could examine other board factors, such as board planning, board meetings, board attendance, board political connections, the presence of

major donors on the board and board finance committees, board interlocking or rotation of members, which might influence the extent of FV in the Australian aged care NFP sector. These board characteristics are not addressed in the current study largely because the necessary data is not provided in annual reports. Perhaps a survey or interviews could be conducted to gather such data.

4. DATA ANALYSIS AND RESULTS

The study uses both descriptive and inferential statistical analyses. For the inferential statistics, the study analyses the research model using multiple regression analysis. The researcher collected data from 200 aged care NFPs for the two years, 2018 and 2019, giving 400 expected cases in total. Before the data analysis, missing data and outliers were assessed to get the data set ready

for the final multivariate analysis (Hair et al. 2019). Forty-two cases (aged care NFPs) were removed from each year of the sample due to missing data (i.e., 84 cases for two years), and thus 316 observations were analysed for the two years, 2018 and 2019.

1.1. Descriptive Data Analysis

Table 1 presents descriptive statistics for the full sample. The table provides mean, median, standard deviation, maximum and minimum values for the main variables in the full sample. From the table the average board size is 2.093 (natural logarithm of board size), of whom 39 per cent are independent directors, 44 per cent are female directors, 47 per cent are aged care and finance-related competent directors, and 34 per cent are directors with multiple directorships.

Table 4: Descriptive statistics for full sample

Variables	N	Mean	Median	Standard Deviation	Minimum	Maximum
EXT_FV	316	0.692	0.710	0.131	0.330	0.950
BOSIZE	316	2.093	2.079	0.212	1.609	2.639
BOIND	316	0.394	1.000	0.182	0.000	1.444
BOGD	316	0.444	0.400	0.181	0.125	1.000
BOCOM	316	0.443	0.500	0.209	0.000	1.000
BOMD	316	0.339	0.380	0.358	0.000	1.000
SIZE	316	2.241	2.000	1.072	1.000	4.000
AGE	316	3.533	3.584	0.624	1.609	4.691

4.2 Panel Regression Results

In Table 2, the study reports the panel regression results for the effects of board characteristics variables hypothesised as causes of FV in the Australian aged care NFP sector.

Table 5. Panel regression results: The effects of Board Characteristics on FV (EXT_FV)

Variables	Coefficient	t value	Sig
Constant	0.915	12.410	0.000***
BOSIZE	-0.012	-0.350	0.725
BOIND	-0.072	-2.070	0.039**
BOGD	-0.115	-2.920	0.004***
BOCOM	-0.140	-4.420	0.000***
BOMD	0.002	0.820	0.414
SIZE	0.043	4.820	0.000***
AGE	-0.010	-0.850	0.397
Year	Included		

F value	11.59
ProbF	0.000
Adjusted R ²	0.291
Observations	316

The above table reports the regression results. The variables are defined as follows: EXT_FV is measured through a multi-dimensional FV framework; BOSIZE is natural log of board members on the board; BOIND is the percentage of independent members on the board; BOGD is percentage of female directors; BOCOM is the percentage of board members with aged care and finance related competence; BOMD is percentage of board members with multiple directorships SIZE is measured as per the ACNC guidelines; AGE is natural log of NFP's age in years.

***p < 0.01, **p < 0.05, *p < 0.1

4.3 Additional Analysis:

In approximately 74% of NFPs women are in the minority on the board and in the most common outcome women make up between 31%–40% of the board members.

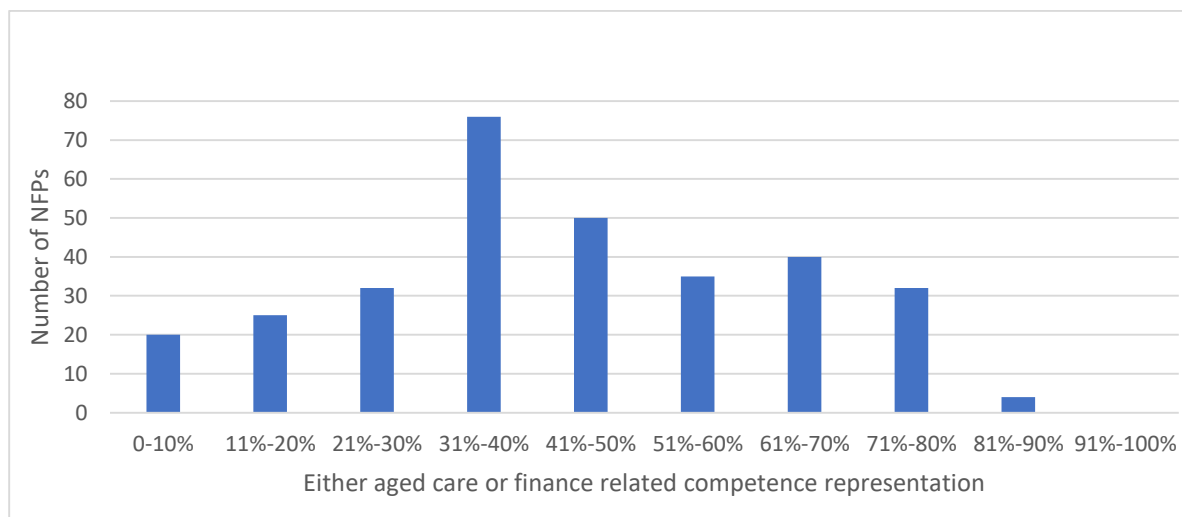


Figure 5.3: Aged care and finance related board competence

For the majority of NFPs (i.e., approximately 65% of the sample) less than half their board members have either aged care or finance related competence – or more worryingly more than half their board has neither finance nor aged care competence. Further, approximately 24% of NFPs currently have 31%–40% of their board members with either aged care or finance related competence.

Table 6: Robustness Test results

Variables	Coefficient	t value	Sig
Constant	0.695	23.813	0.000***
Governance Index	-0.001	-0.457	0.648
SIZE	0.050	6.263	0.000***
AGE	-0.010	-0.238	0.812
F value	12.27		
ProbF	0.000		
Adjusted R ²	0.242		
Observations	316		

This study uses random effects panel model which “is a regression-based analytical technique designed to handle cross-sectional analyses of longitudinal or time-series data” (Hair et al. 2019, p. 328). These analyses are performed using STATA software. Further, the researcher has performed complementary analyses, such as a robustness test using an index for governance variables. However, the results show an insignificant relationship with the extent of FV. As shown in Table 5, the five variables have different impacts (i.e., board size and board multiple directorships are not significantly related to the extent of FV. However, board independence, diversity, and competence are significantly related to the extent of FV). Therefore, the index is not a better measure than the individual variables. Including the individual governance variables in the model is a better approach as it provides a better measure for the impact of individual variables.

5. DISCUSSION OF FINDINGS

This study has examined the effects of board characteristics on the extent of FV in the Australian aged care NFP sector. The study employed RDT to establish the research hypotheses. The study results lead the researcher to conclude that the extent of FV in the Australian aged care NFP sector is influenced by board independence, board gender diversity, board members’ finance, and aged care-related competence, and the size of the NFP. A more detailed discussion of these research findings follows.

H1 (b): Board independence is negatively associated with FV.

The negative and significant relationship which has been observed between board independence and the extent of FV (the higher the board independence, the lower the extent of FV and vice versa) is consistent with RDT. If an organisation has a higher number of independent directors as compared to executive directors, the independence of monitoring and control of the organisation goes up and it can attract more resources from the external environment. Non-executive board members use their reputation and professional experience to control and monitor the activities of an organisation (Barros et al. 2013). Compared to executive board members, independent board members may be better positioned to control and monitor organisational activities (Forker 1992) and make the best decisions for the benefit of an organisation (Garcia-Rodriguez et al. 2021). This is because non-executive directors are not directly involved with employees’ organisational activities (Samaha et al. 2012) and do not have interests related to career development and employability within the organisation. The corporate literature confirms this

relationship. For instance, Liu, Miletkov, Wei and Yang (2015), and Zhu et al. (2016) found a positive relationship between board independence and firm performance from the for-profit perspective. Several industry reports, such as that of the 2019 Not-for-Profit Governance and Performance Study (AICD 2019) and the Royal Commission Final report (RCACQS 2021), identified board independence as an important factor for organisational performance in the aged care sector. Indeed, the Royal Commission Final Report (RCACQS 2021) recommended that the governing body of aged care organisations “must have a majority of independent non-executive members, unless an exemption has been granted” (p.133).

H1 (c): Board gender diversity is negatively associated with FV.

The negative and significant relationship which has been observed between female directors and the extent of FV (the higher the number of female directors, the lower the extent of FV, and vice versa) is consistent with RDT. RDT views board gender diversity as one of the instruments that management uses to facilitate access to the critical resources essential for organisational success. Further, RDT suggests that boards with diversified genders positively build communication channels and relationships with external stakeholder networks. However, the descriptive analysis shows that, on average, the actual representation of female directors on the boards is 44% and it is clear from the additional analysis (refer to Figure 5.2) that most of the aged care NFPs in the sample have male dominated boards. These findings are consistent with the 2019 Not-for-Profit Governance and Performance Study (AICD 2019), which found that boards in the Australian NFP sector were generally male dominated although “female representation on NFP boards continues to grow” (p. 22). Therefore, the benefits that could have been derived from board diversity were not available to the aged care NFPs in the sample. Poor women’s representation on the boards shows up as low gender diversity on the boards of aged care NFPs, resulting in and is a contributing cause of the high level of FV in the sector. Even though there is a lack of studies related to gender diversity in the NFP sector, studies such as Vafaei et al. (2012) and Campbell and Minguez-Vera (2008) have found that board gender diversity has a significant and positive impact on firm value in the corporate sector. However, my findings contrast with those of Garcia-Rodriguez et al. (2021), who studied the relationship between board composition and FV for 64 NFPs in Spain. They analysed the impact on FV of five board variables – board size, board independence, CEO duality, the presence of founders, and board gender diversity. They found no significant differences in the board composition of financially vulnerable and healthy

NFPs in Spain. However, the authors of that study did acknowledge that H1 (d): Board members' financial and aged care related competence is negatively associated with FV. The negative and significant relationship observed between board's aged care and finance related competence, and the extent of FV (the higher the number of board members with finance and aged care related competence, the lower the extent of FV, and vice versa) is consistent with RDT. The findings show that education type or major study area directly impacts the level of FV in the NFP sector. RDT suggests that board members with professional backgrounds bring various resources to an organisation because of their greater decision-making skills. Hence, board members with a finance background attempt to achieve financial sustainability and know the areas where the organisation has financial difficulties. At the same time, board members with age care related qualifications and/or experience have a deeper understanding of its complex environment. All these factors are eventually useful for attracting resources into the organisation. All board members should have at least some minimum finance related qualifications (education or experience), which help them to understand financial statements produced by an organisation. They should also have sector related qualifications in terms of education or experience to better understand the sector's strengths, weaknesses, opportunities, and threats.

The descriptive statistics show that, on average, 44% of members on the board currently have either financial or aged care related competence, although "some boards and governing bodies lack professional knowledge about the delivery of aged care" (RCACQS 2021, p. 75). Moreover, the Royal Commission's recommendations to the government to improve the quality and safety of the current aged care system highlighted the need for establishing skilled, capable, and independent boards to oversee each organisation (Recommendation 90). 21 The Australian government's response to the RCACQS Final Report (DOH 2021) includes a substantial investment in the governance of aged care providers, which includes investment to improve board competence on finance and aged care related activities (DOH 2021). Furthermore, the NFP Governance and Performance Study Report (AICD 2019) highlighted the importance of board competence in improving organisational performance across the Australian NFP sector. Although the research in this area is limited for the NFP sector, this finding is consistent with some of the corporate literature where for instance Johl, Kaur and Cooper (2015), Kamukama, Kyomuhangi, Akisimire and Orobia (2017), and Kijjambu and Kyomuhendo (2022) found a positive relationship between board competence and financial performance in the corporate sector.

The size of an aged care NFP has a statistically significant positive relationship with the extent of FV. This relationship indicates that as the size of an aged care NFP

increases (as measured based on the NFP revenue as per the ACNC guidelines), the extent of FV also increases. This finding is inconsistent with prior NFP studies (such as Trussel and Greenlee 2004; Trussel and Parsons 2007; Zietlow 2012), which found that large organisations have less financial risk than small ones. However, the present study's finding is consistent with the Royal Commission Final Report (RCACQS 2021), which highlighted more issues due to financial unsustainability in residential care than in home care providers, and typically residential care providers are large NFPs, and home care providers are medium.

6. CONCLUSION AND IMPLICATIONS

The study has explored the effects of board characteristics on the extent of FV in the Australian aged care NFP sector. The theoretical framing relies mainly on the lens of RDT, which highlights organisational practices to attract resources from the competitive environment to reduce the level of FV in the NFP sector. For a start the present study contributes to the limited literature on the measurement of FV in the NFP sector.

As Garcia-Rodriguez et al. (2021, p. 239) contend, "financial vulnerability has scarcely been studied in the nonprofit sector in comparison with the broad literature related to bankruptcy and financial distress in for-profit companies". The study contributes to the limited literature on NFP governance, and the study initially examined the impact of governance variables (such as board size, board independence, board members' finance and aged care related competence, board gender diversity and multiple directorships on the board) on the extent of FV in the Australian aged care NFP sector. This is vital as the existing governance literature provides less evidence on the association between board composition and FV in the NFP sector (Garcia-Rodriguez et al. 2021). Furthermore, the study's results validate Zhai et al.'s (2017) findings on the causes of NFP vulnerability. They identified that poor board governance is one of the reasons for NFP vulnerability among NFPs in the social services sector in Australia. However, the present study extends Zhai et al.'s (2017) study using a large Australian data set to identify three specific board characteristics (board independence, board gender diversity, and board members' finance and aged care related competence) that influence NFP FV in Australia. More importantly, the study supports the findings of the Royal Commission Final Report (RCACQS 2021), which suggests a closer look into the impact of board governance on FV in the aged care sector in Australia.

The study contributes to RDT literature of NFPs by identifying that independent directors bring more resources to an organisation due to their professional experience, expertise, competence, and relationships with other organisations in the external environment,

which reduces the resource dependency and the level of FV in the NFP sector. The study further contributes to RDT literature on NFPs by identifying that having board members with finance and aged care related competence helps to attract more resources from external resource providers and reduce the level of FV in the NFP sector. This is because board members with professional backgrounds use their expertise and decision-making skills to bring various resources to an organisation. For instance, board members with a finance background attempt to achieve financial sustainability for the organisation and identify areas where the organisation has financial difficulties. Similarly, board members with age care-related qualifications and experience have a deeper understanding of the complex aged care environment. All these factors are eventually useful for attracting resources into the organisation, which then reduces resource dependency and the level of FV of an organisation. The finding is novel and identifies education type as an important factor which impacts the extent of FV in the Australian aged care sector.

Moreover, the study contributes to RDT literature by identifying that gender diverse boards also bring in more resources to reduce resource dependency in the NFP sector. Out of the present study's findings, several practical implications can be formulated for aged care NFP boards by suggesting that these findings on governance factors should be considered when recruiting members for their boards, and, at a practical level, that more independent board members, more members with finance and aged care related qualifications and experience, and more women members should be recruited to boards to improve board effectiveness, which then reduces the level of FV in the NFP sector. Hence, the study provides guidance to NFPs to reconsider these board governance factors before undertaking recruitment to their boards. Whilst framing policies relating to board independence, board competence and board gender diversity, policymakers should take note of the relationship of these factors with the level of FV in the NFP sector, and especially in the Australian aged care sector.

At a practical level the study suggests recruiting more independent board members, more members with finance and aged care related qualifications, and more women members to boards to improve board effectiveness, which then reduces the level of FV in the NFP sector. Hence, the study provides guidance to NFPs to reconsider these board governance factors before undertaking recruitment to their boards. Whilst framing policies relating to board independence, board competence and board gender diversity, policymakers should take note of the relationship of these factors with the level of FV in the NFP sector, and especially in the Australian aged care sector. The policymakers can also consider these factors for framing policies related to board composition in the NFP sector, especially to improve financial health in the Australian aged care NFP sector.

Overall, the thesis will inform policymakers, particularly the Australian Charities and Not-for-Profit Commission, the Department of Health, and the Royal Commission into Aged Care Quality & Safety, on how to better detect financial risks related to the quality and safety of aged care services in aged care organisations.

Even though the study provides new insights into the causes of FV in the Australian aged care NFP sector, the results need to be interpreted in view of the following limitations, which also provide avenues for future research. Firstly, the study is limited only to aged care charities registered as NFPs with the ACNC, and unregistered aged care NFPs were considered beyond the scope of the current study. However, in general, access to Australian NFP data is very limited (Ryan & Irvine 2012; Booth 2016; Zhai et al. 2017), which is why the ACNC database was identified as the most pertinent sample frame for answering the research questions of the study. Furthermore, the study focuses only on those medium and large aged care NFPs which issued audited financial and annual reports for two consecutive years (2018 and 2019) and ignores the small, aged care NFPs because the necessary data was not available. Second, the study was based on data from secondary sources, the annual reports and AISs of individual aged care, and uncovered some inconsistencies in reporting. These limitations provide avenues for future research. Future study might be expanded to identify the organisational and environmental factors affecting FV in all sizes of aged care NFPs. Also, interviews and other survey methods might be utilised in the future to get a more in-depth understanding of the causes of FV in the Australian aged care NFP sector.

REFERENCES

- Adler NJ (1997) 'Global leadership: Women leaders', *MIR: Management International Review*, 37:171-196.
- Aggarwal RK, Evans ME and Nanda D (2012) 'Nonprofit boards: size, performance and managerial incentives', *Journal of Accounting and Economics*, 53(1):466-487.
- Agrawal A and Knoeber CR (1996) 'Firm performance and mechanisms to control agency problems between managers and shareholders', *Journal of Financial and Quantitative Analysis*, 31(3):377-397.
- AICD (Australian Institute of Company Directors) (2019) The 2019 not-for-profit governance and performance study: 10 years on, AICD website, accessed 8 September 2020. <https://www.aicd.com.au/corporate-governance-sectors/not-forprofit/studies/2019-nfp-governance-and-performance-study-summary.html>

- Andres-Alonso P, Garcia-Rodriguez I and Romero-Merino ME (2015) 'The danger of assessing the financial vulnerability of non-profits using traditional measures', *Non-profit Management and Leadership*, 25(4):371-382.
- Andres-Alonso P, Garcia-Rodriguez I and Romero-Merino ME (2016) 'Disentangling the financial vulnerability of nonprofits', *Voluntas*, 27: 2539-2560.
- Arshad R, Bakar NA, and Othman F (2016) 'Board competencies, network ties, and risk management disclosure practices in non-profit organisations', *Journal of Applied Business Research*, 32(5): 1319-1328.
- Augusto M, Pascoal R and Reis P (2020) 'Firms' performance and board size: A simultaneous approach in the European and American contexts', *Applied Economics Letters*, 27(13):1039-1043.
- Barros CP, Boubaker S and Hamrouni A (2013) 'Corporate governance and voluntary disclosure in France', *Journal of Applied Business Research (JABR)*, 29(2):561-578. Baum JAC and Shipilov AV (2006) 'Ecological approaches to organizations', in Clegg, S. (eds), *Handbook of Organization Studies*, Sage, Thousand Oaks, CA, accessed 7 July 2020. <https://www.torrossa.com/en/resources/an/4913717#page=80>
- Bertrand M, Black SE, Jensen S and Lleras-Muney, A (2019) 'Breaking the glass ceiling? The effect of board quotas on female labour market outcomes in Norway', *The Review of Economic Studies*, 86(1):191-239.
- Bhatt RR and Bhattacharya S (2015) 'Do board characteristics impact firm performance? An agency and resource dependency theory perspective', *Asia-Pacific Journal of Management Research and Innovation*, 11(4): 274-287.
- Boadi I and Osarfo D (2019) 'Diversity and return: the impact of diversity of board members' education on performance', *Corporate Governance: The International Journal of Business in Society*, 19(4):824-842.
- Bowman W (2011) 'Financial capacity and sustainability of ordinary non-profits', *Nonprofit Management and Leadership*, 22(1): 37-51.
- Bradshaw P, Murray V and Wolpin J (1996) 'Women on boards of nonprofits: What difference do they make?', *Nonprofit Management and Leadership*, 6(3):241-254.
- Brahma S, Nwafor C and Boateng A (2021) 'Board gender diversity and firm performance: The UK evidence', *International Journal of Finance and Economics*, 26(4):5704-5719.
- Bravo F and Reguera-Alvarado N (2017) 'The effect of board of directors on R & D intensity: board tenure and multiple directorships', *R and D Management*, 47(5):701-714.
- Brown AB, Dai J and Zur E (2019) 'Too busy or well-connected? Evidence from a shock to multiple directorships', *The Accounting Review*, 94(2):83-104.
- Burton LJ and Peachey JW (2009) 'Transactional or transformational leadership preferences of division III athletic administrators', *Journal of Intercollegiate Sport*, 2 (2), 245-259.
- Byrd JW and Hickman KA. (1992) 'Do outside directors monitor managers? Evidence from tender offer bids', *Journal of Financial Economics*, 32(2):195-221.
- Campbell K and Mínguez-Vera A (2008) 'Gender diversity in the boardroom and firm financial performance', *Journal of Business Ethics*, 83(3):435-451.
- Christensen J, Kent P and Stewart J (2010) 'Corporate governance and company performance in Australia', *Australian Accounting Review*, 20(4):372-386.
- Courtois S, Gombart C, Pignatelli I and Brown AM (2011) 'Multiple directorships and CAC-40 natural environmental disclosures', *Journal of the Asia-Pacific Centre for Environmental Accountability*, 17(1):28-45.
- Daily CM and Dalton DR (2003) 'Women in the boardroom: A business imperative', *Journal of Business Strategy*, 24(5):8-9.
- DOH (Department of Health) (2021) Australian Government Response to the Final Report of the Royal Commission into Aged Care Quality Safety, Australian Government, accessed 29 June 2021. <https://www.health.gov.au/sites/default/files/documents/2021/05/australiangovernment-response-to-the-final-report-of-the-royal-commission-into-aged-carequality-and-safety.pdf>
- Eagly AH, Johannesen-Schmidt MC and Van Engen ML (2003) 'Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men', *Psychological Bulletin*, 129(4):569-591.
- Elmagrhi MH, Ntim, CG, Malagila J, Fosu S. and Tunyi A.A (2018) 'Trustee board diversity, governance mechanisms, capital structure and performance in UK charities', *Corporate Governance: The International Journal of Business in Society*, 18(3):478-508.

- Fernandez-Feijoo B, Romero S and Ruiz S (2012) 'Does board gender composition affect corporate social responsibility reporting', *International Journal of Business and Social Science*, 3(1):31-38.
- Fondas N (2000) 'Women on boards of directors: gender bias or power threat?', in Burke RJ and Mattis MC (eds) *Women on corporate boards of directors*, Springer, Dordrecht.
- Forker JJ (1992) 'Corporate governance and disclosure quality', *Accounting and Business research*, 22(86):111-124.
- Fuzi SFS, Halim SAA. and Julizaerma MK (2016) 'Board independence and firm performance', *Procedia Economics and Finance*, 37:460-465.
- Garcia-Rodriguez I, Romero-Merino ME and Santamaria-Mariscal M (2021) 'The role of boards in the financial vulnerability of nonprofit organisations', *Financial Accountability and Management*, 37(3):237-261.
- Garcia-Torea N, Fernandez-Feijoo, B and de la Cuesta, M (2016) 'Board of director's effectiveness and the stakeholder perspective of corporate governance: Do effective boards promote the interests of shareholders and stakeholders? *BRQ Business Research Quarterly*, 19(4):246-260.
- Graham JR and Harvey CR (2001) 'The theory and practice of corporate finance: Evidence from the field', *Journal of Financial Economics*, 60(2-3),187-243.
- Griffin, D Li, K and Xu, T (2021). 'Board gender diversity and corporate innovation: International evidence', *Journal of Financial and Quantitative Analysis*, 56(1):123-154.
- Hair JF, Black WC, Babin BJ and Anderson RE (2019) *Multivariate data analysis*, 8 th edn, Boston: Cengage.
- Harris I C and Shimizu K (2004) 'Too busy to serve? An examination of the influence of overboarded directors', *Journal of Management Studies*, 41 (5): 775-798.
- Herman RD and Renz D (2000) 'Board practices of especially effective and less effective local nonprofit organisations', *The American Review of Public Administration*, 30(2):146-160.
- Hettiarachchi DC (2023) 'Assessing the financial vulnerability of not-for-profit organisations in the Australian aged care sector', *Vidyodaya Journal of Humanities and Social Sciences*, 8(2):157-179.
- Hillman AJ, Cannella AA. and Paetzold, R.L., (2000). 'The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change', *Journal of Management studies*, 37(2):235-256.
- Hodge MM and Piccolo RF (2011) 'Nonprofit board effectiveness, private philanthropy, and financial vulnerability', *Public Administration Quarterly*,35(4):520-550.
- Hsieh HF and Shannon SE (2005) 'Three approaches to qualitative content analysis', *Qualitative Health Research*, 15(9):1277-1288. [https://www.gen-agedcaredata.gov.au/Resources/Factsheets-andinfographics/Spending-factsheet.pdf?ext=.](https://www.gen-agedcaredata.gov.au/Resources/Factsheets-andinfographics/Spending-factsheet.pdf?ext=)
- Johl SK, Kaur S and Cooper BJ (2015) 'Board characteristics and firm performance: Evidence from Malaysian public listed firms', *Journal of Economics, Business and Management*, 3(2):239-243.
- Kagzi, M. and Guha, M. (2018) Does board demographic diversity influence firm performance? Evidence from Indian-knowledge intensive firms. *Benchmarking: An International Journal*, 25(3), 1028-1058.
- Kamukama N, Kyomuhangi DS, Akisimire R and Orobia LA (2017) 'Competitive advantage: Mediator of managerial competence and financial performance of commercial banks in Uganda', *African Journal of Economic and Management Studies*, 8(2):221-234.
- Katmon, N, Mohamad, ZZ, Norwani, NM, and Farooque, OA (2019) 'Comprehensive board diversity and quality of corporate social responsibility disclosure: Evidence from an emerging market', *Journal of Business Ethics*, 157(2), 447-481.
- Kijjambu NF and Kyomuhendo C (2022) 'Internal Controls, Managerial Competence and Financial Performance of Abu Sacco', *American Journal of Finance*, 7(2):34-63.
- Kor YY and Sundaramurthy C (2009) 'Experience-based human capital and social capital of outside directors', *Journal of Management*, 35(4):981-1006.
- Kowalewska H (2020) 'Bringing women on board: the social policy implications of gender diversity in top jobs', *Journal of Social Policy*, 49(4):744-762.
- Krippendorff K (2004) 'Reliability in content analysis: Some common misconceptions and recommendations', *Human Communication Research*, 30(3):411-433.
- Lipton M and Lorsch JW (1992) 'A modest proposal for improved corporate governance', *The Business Lawyer*, 48(1):59-77.

- Liu Y, Miletkov MK, Wei Z and Yang T (2015) 'Board independence and firm performance in China', *Journal of Corporate Finance*, 30:223-244.
- McLeod J, Shilbury D and Ferkins L (2021) 'Board roles in Scottish football: An integrative stewardship-resource dependency theory', *European Sport Management Quarterly*, 21(1):39-57.
- Muttakin MB (2012) Family firms, board structure, political connections and performance: Evidence from Bangladesh [PhD dissertation], Deakin University.
- Mwenja D and Lewis A (2009) 'Exploring the impact of the board of directors on the performance of not-for-profit organisations', *Business Strategy Series*, 10 (6): 359-365.
- My Aged Care (2020) Commonwealth home support programme, Australian Government, accessed 6 February 2020. <https://www.myagedcare.gov.au/help-at-home/commonwealth-home-support-programme>
- Nicholson GJ and Kiel GC (2004) 'A framework for diagnosing board effectiveness', *Corporate Governance: An International Review*, 12 (4): 442-460.
- Oehmichen J, Schrapp S and Wolff M (2017) 'Who needs experts most? Board industry expertise and strategic change—a contingency perspective', *Strategic Management Journal*, 38(3):645-656.
- Olson DE (2000) 'Agency theory in the not-for-profit sector: Its role at independent colleges', *Nonprofit and Voluntary Sector Quarterly*, 29 (2): 280-296.
- Pfeffer J and Salancik GR (1978) The external control of organisations: A resource dependence perspective, New York: Harper and Row.
- Pfeffer J and Salancik GR (2003) The external control of organisations: A resource dependence perspective, Stanford University Press.
- Prentice CR (2016a) 'Why so many measures of non-profit financial performance? Analysing and improving the use of financial measures in non-profit research', *Nonprofit and Voluntary Sector Quarterly*, 45 (4):715-740.
- Prentice CR (2016b) 'Understanding non-profit financial health: Exploring the effects of organisational and environmental variables', *Nonprofit and Voluntary Sector Quarterly*, 45 (5): 888-909.
- RCACQS (Royal Commission into Aged Care Quality & Safety) (2021) RCACQS Final report (Care, Dignity & Respect, Volume 1: Summary & Recommendations), RCACQS website, accessed 10 March 2021. <https://agedcare.royalcommission.gov.au/publications/financial-report>
- Reguera-Alvarado N and Bravo F (2017) 'The effect of independent directors' characteristics on firm performance: Tenure and multiple directorships', *Research in International Business and Finance*, 41:590-599.
- Salimath MS and Raymond J (2011) 'Population ecology theory: implications for sustainability', *Management Decision*, 49(6):874-910.
- Samaha K, Dahawy K, Hussainey K. and Stapleton P (2012) 'The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt', *Advances in Accounting*, 28(1):168-178.
- Scherrer PS (2003) 'Directors' responsibilities and participation in the strategic decision making process', *Corporate Governance: The International Journal of Business in Society*, 3(1):86-90.
- Terjesen S, Couto E and Francisco PM (2016) 'Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity', *Journal of Management and Governance*, 20(3):447-483.
- Themudo NS (2009) 'Gender and the nonprofit sector', *Nonprofit and Voluntary Sector Quarterly*, 38(4):663-683.
- Trussel J and Parsons L (2007) 'Financial reporting factors affecting donations to charitable organisations', *Advances in Accounting*, 23: 263-285.
- Trussel JM and Greenlee J (2001). 'A financial risk rating system for non-profit organisations', Working paper. Aspen Institute, Washington, D.C.
- Trussel JM and Greenlee JS (2004). 'A financial rating system for charitable non-profit organisations', *Research in Governmental and Nonprofit Accounting*, 11: 93-116.
- Tuckman H P and Chang C F (1991) 'A methodology for measuring the financial vulnerability of charitable non-profit organisations', *Nonprofit and Voluntary Sector Quarterly*, 20(4): 445-460.
- Vafaei A, Mather PR and Ahmed K (March 2012) 'Board gender diversity and its effect on firm financial performance: A panel study of top 500 ASX listed firms', 2012 Financial Markets & Corporate Governance Conference, accessed 13 December 2019. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2029140

Wang M and Kelan E (2013) 'The gender quota and female leadership: Effects of the Norwegian gender quota on board chairs and CEOs', *Journal of Business Ethics*, 117(3):449-466.

Ward A and Forker J (2017) 'Financial management effectiveness and board gender diversity in member-governed, community financial institutions', *Journal of Business Ethics*, 141(2):351-366.

Wicker P, Feiler S and Breuer C (2022) 'Board gender diversity, critical masses, and organisational problems of non-profit sport clubs', *European Sport Management Quarterly*, 22 (2): 251-271

Zhai RL, Watson J, Gilchrist D and Newby R (2017) 'Non-profit vulnerability: An exploratory study', *Financial Accounting and Management*, 33:373-390.

Zhu J, Ye K, Tucker JW and Chan KJC (2016) 'Board hierarchy, independent directors, and firm value: Evidence from China', *Journal of Corporate Finance*, 41:262- 279.

Zietlow JA (2012) 'Financial health index for achieving nonprofit financial sustainability, Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2049022