

VOLUNTARY AUDIT COMMITTEE CHARACTERISTICS IN FINANCIALLY DISTRESSED AND HEALTHY FIRMS: A STUDY OF THE EFFICACY OF THE ASX CORPORATE GOVERNANCE COUNCIL RECOMMENDATIONS

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Abstract

The aim of this paper is to address the impact of certain audit committee characteristics identified by the ASX Corporate Governance Council on improving the effectiveness of corporate audit committees on the likelihood of financial distress. Using a sample of 155 listed Australian firms, this paper finds support for the argument that the adoption of some, but not all, recommendations concerning the formation of an audit committee is beneficial for firms, which in this paper is reflected in a reduced likelihood of financial distress. In particular, the presence of a financial expert and solely non-executive directors on audit committee are associated with lower financial distress likelihood. By contrast, chairperson duality is significantly positively related to the probability of financial distress.

Keywords: Audit Committee, Financial Distress, Voluntary Governance System, Agency Theory, Corporate Governance

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1 Introduction

During the early 2000s, a spate of corporate collapses and frauds in Australia such as HIH Insurance, One Tel and Harris Scarfe, destroyed substantial amounts of shareholder wealth and weakened investor trust. As a result of these high profile corporate collapses, the pressure to strengthen corporate governance regulations intensified. In response, legislators in Australia introduced corporate governance law reform known as the Australian Securities Exchange Corporate Governance Council^[1] (hereafter referred to as ASX CGCs) 'Principles of Good Corporate Governance and Best Practice Recommendations' in 2003. The aim was to improve corporate accountability and restore shareholder confidence in financial reporting. In particular, the ASX CGC (2003) made several recommendations to enhance the effectiveness of the audit committee, an important corporate governance mechanism, in a firm. For example, recommendation 4.1 states that the board should establish an audit committee (ASX CGC, 2003). Furthermore, recommendation 4.2 states that the audit committee should be structured so that it: (1) consists only of non-executive directors; (2) consists of a majority of independent directors; (3) is chaired

by an independent chair, who is not chair of the board; and (4) has at least three members. Recommendation 4.2 also requires that an audit committee should have at least one member who has relevant qualifications and experience (i.e. a qualified accountant or other finance professional with experience of financial and accounting matters); and companies should disclose the number of meetings held by the audit committee annually in the corporate governance section of the annual report (ASX CGC, 2003). This paper seeks to examine the efficacy of these ASX CGC recommendations for establishing audit committees in the likelihood of financial distress occurring. The basic premise of this paper is that compliance with ASX CGC recommendations for enhancing the effectiveness of an audit committee will minimise a firm's financial distress.

The audit committee plays an important role in overseeing and monitoring a company's business operations, internal control system and the external audit, the aim being to protect shareholders' interests (De Zoort et al., 2002). The primary functions of an effective audit committee are to ensure the quality of financial reporting, provide input and recommendations to the board with regard to any financial or operational matters and help them meet

their legal responsibilities (Grice, 1993). Audit committee has also been described as a mechanism for focusing on the optimisation of shareholders' wealth and preventing the maximisation of personal interests by senior management (De Zoort et al., 2002). Over the past two decades in particular, audit committee has become one of the key governance mechanisms for strengthening the corporate governance structure of publicly listed companies' worldwide (Munro et al., 2008).

Prior research has suggested that agency costs are higher in Australia for listed companies compared to other western countries such as the US and UK (Fleming et al., 2005; Henry, 2010). Higher agency costs raise concerns about the extent and effectiveness of traditional monitoring and incentive mechanisms. This paper asserts that in light of this, a firm's audit committee may play an increasingly important role in monitoring and mitigating agency problems. Forker (1992), Xie et al. (2003) and Zhang et al. (2007) have provided evidence that an audit committee in a firm reduces firm-level agency costs. Furthermore, Calleja (1999) reports that companies with an audit committee tend to perform better than those without an audit committee. This paper expects that firms with lower agency costs will be less likely to experience financial distress. As the above literature suggests, creating an audit committee within a firm is closely linked to lower agency costs. Consequently, extending this relationship leads to the expectation that an effective audit committee in a firm will negatively impact on the likelihood of financial distress.

This paper specifically examines whether firms that voluntarily adopted the ASX CGC recommendations relating to audit committee are less likely to experience financial distress. In particular, this paper examines the audit committee characteristics of ASX listed financially distressed and healthy firms for the years 1999-2003. The reason for choosing this period is that it precedes the introduction of the ASX CGC's 'Principles of Good Corporate Governance and Best Practice Recommendations' in 2003. From 1999-2003, companies effectively voluntarily selected their own audit committee attributes when there were no specific compulsory guidelines that companies had to follow. This scenario provides this paper with an opportunity to directly assess whether there is any difference in the audit committee characteristics of financially distressed and healthy firms, given the much smaller variation in disclosure of audit committee characteristics post-2003.

The aim of this paper is two-fold. First, the paper examines whether there is any difference in the audit committee characteristics between financially distressed and healthy firms listed on the ASX. To date very little research has been done on the direct association between audit committee attributes and firms' financial distress status. The exception is Rahmat et al. (2009) who examined Malaysian firms.

However, this paper is different from prior study of Rahmat et al. (2009) who detected a relationship between audit committee characteristics and firm financial distress probability in an environment where a formal corporate governance code did exist. This latter setting introduces potential noise or bias resulting from firms implementing prescribed corporate governance platforms, including situations of non-mandatory compliance, rather than identifying voluntary corporate governance reform responses to firm-specific conditions. Thus, by evaluating audit committee characteristics in an ex-ante regulatory environment, the results of this paper will inform about the likely benefits from a financial health perspective, of adopting the CGC's recommendations.

Second, this paper extends the current literature by examining other audit committee characteristics, such as the independent chairperson of the audit committee who is not the chairperson of the board. This person's influence on firm financial distress has not previously been considered by other studies.

The results of this paper provide evidence that the presence of only non-executive directors and a financial expert on audit committee is significantly negatively related to the likelihood of financial distress. By contrast, chairperson duality is significantly positively related to the probability of financial distress. Audit committee size, independence and meeting frequency failed to reveal any association with financial distress of a firm.

The remainder of this paper is structured as follows: Section 2 describes audit committee regulation in Australia. Section 3 briefly reviews the prior literature and develops the hypotheses. Sample selection criteria and variables description are provided in Section 4. Research methodology is explained in Section 5. Descriptive statistics and empirical results are presented in Section 6. Section 7 discusses the major findings of the analysis. Implications for theory and practice are discussed in Section 8. Section 9 provides concluding remarks regarding the paper and the major themes that were covered. The final section explains the limitations of this paper.

2 Development of audit committee regulation in Australia

Since this paper focuses on the period prior to the introduction of formal recommendations for creating audit committees in Australian listed firms, it is important to provide some context for the development of this regulation. The development of audit committee regulation in Australia can be classified into three different phases (Munro et al., 2008). The first period from 1976-30th June 1993 is known as the 'Voluntary Audit Committee Formation and Non-disclosure Period'. During these decades listed Australian companies were not required to form audit committees; and there was no requirement to

publicly disclose in their annual reports whether they had an audit committee.

The second period 1st July 1993- 1st January 2003 is referred to as the 'Voluntary Audit Committee Formation and Mandatory Public Disclosure Period'. Like the previous period, listed companies were still not required to form an audit committee. However, according to listing rule 3C(3)(i) (which later became listing rule 4.10.3) companies were required by the ASX to publicly disclose in their annual reports whether they had an audit committee at the date of directors' report, while those without an audit committee were required to explain why an audit committee was unnecessary for their organisation (Ramsay, 2001). Subsequently in 1996 the ASX listing rule was amended by introducing listing rule 3C(3)(j), which required listed companies to include in their annual report a statement outlining the company's main corporate governance practices during the reporting period.

The third period which began on 1st January 2003 and continues to this day is known as the 'Mandatory Audit Committee Formation and Mandatory Public Disclosure Period'. It is now mandatory for the top 500 listed companies in the S&P/ASX All Ordinaries Index to have an audit committee under ASX listing rule 12.7. However, only the top 300 companies on the S&P/ASX All Ordinaries Index must comply with the ASX CGC requirement to establish an audit committee. Non-top 500 listed companies are not forced to have audit committees as they are not subject to the listing rule 12.7. Nonetheless these non-top 500 listed companies are subject to listing rule 4.10.3. In fact, these companies must either have an audit committee or must explain in corporate governance section of their annual report why the specific requirement of an audit committee had not been followed.

3 Prior literature and hypotheses development

As stated earlier, very little research has been done on the relationship between various audit committee characteristics and financial distress of a firm. Rahmat et al. (2009) did investigate the differences in the characteristics of an audit committee between financially distressed and non-distressed firms. The authors reported that committee members' lack of financial literacy is likely to result in financial distress. However, the size, composition and the frequency with which an audit committee meets failed to indicate any relationship with financial distress. This paper is the first to provide evidence on the association between various audit committee characteristics and likelihood of financial distress in firms operating in a voluntary corporate governance system. Consideration of voluntary governance enforcement allows this paper to draw more definitive conclusions regarding

the impact of the ASX CGC's recommendations regarding the formation of an audit committee.

3.1 Hypotheses development

In this section, this paper reviews the findings for six key audit committee characteristics: composition, independence, chairperson duality, size, financial expertise, and frequency of meetings.

3.1.1 Composition

Composition of an audit committee refers to the ratio of non-executive and executive directors. Agency theorists argue that due to their independence non-executive directors can monitor and control the actions of opportunistic executive directors (Jensen and Meckling, 1976). Numerous studies have also provided evidence that non-executive directors are able to provide independent opinions to senior management because they can potentially be more independent than executive directors (Weisbach, 1988; Vicnair et al., 1993). Non-executive directors are seen as useful because they are in a position to criticize management policies when and if necessary (McMullen and Raghunandan, 1996). Furthermore, they have incentives to develop reputations as experts in decision-making (Fama and Jensen, 1983). Non-executive directors play a significant role in strengthening the firm's corporate governance (Beasley, 1996). This paper suggests that the presence of more non-executive directors on audit committee will improve its independence and reputation as a good monitoring mechanism.

Numerous studies conclude that because executive directors are involved every day in operational activities, they will dominate the senior management's decision-making processes (Gilson, 1990; Yermack, 1996). Furthermore, Shivdasani (1993) provides evidence that executive directors reveal only small amounts of information to non-executive directors in order to prevent stakeholders from getting all the information. Consequently, having an audit committee 'stacked' with a majority of executive directors will lead to weak internal control mechanisms within the firm.

On the basis of the above findings, this paper argues that the presence of non-executive directors on an audit committee: firstly, enhances its independence; and secondly, improves the internal control mechanisms and monitoring environment. These factors should ultimately enable a firm to avoid becoming financially distressed. This argument is consistent with the ASX CGC recommendation (2003) that the audit committee should consist entirely of non-executive directors. Based on the above discussion, the following hypothesis is developed:

H1: There is a negative association between the presence of only non-executive directors on an audit

committee and financial distress among Australian firms.

3.1.2 Independence

Numerous studies have highlighted the benefit of having independent directors on the audit committee. For example, Carcello and Neal (2000) and Klein (2002b) provide evidence that audit committee members who are independent of management are better monitors of the firm's financial accounting process. Raghunandan et al. (1998) report that audit committees consisting of solely independent directors are more likely to have frequent meetings with the chief internal auditor, and review the internal audit program and its results, than audit committees with one or more insiders. In the case of a dispute between management and external auditors, the independence of the audit committee is important in enhancing external auditor independence (Knapp, 1987). Carcello and Neal (2003) noted that an independent audit committee is more effective in protecting the auditor from dismissal following the issuance of a going-concern report. Collier and Gregory (1999) found that the presence of insiders on the audit committee had a significant negative impact on audit committee activity. Additionally, the presence of independent directors on audit committees has been recommended by many governance reform efforts (BRC, 1999; NACD, 1999; SEC, 1999). Indeed, it has been suggested that having insiders on the audit committee may be worse than having no committee at all, because such an audit committee would mislead shareholders into believing that effective monitoring is taking place (Menon and Williams, 1994).

Klein (2002a) detected a negative relationship between audit committee independence and the firm's management of earnings. Klein (2002b) also noted that firms experiencing two or more consecutive losses have less independent audit committees. A number of other studies have also concluded that independent directors on audit committees increase their effectiveness and overall corporate governance (Abbott and Parker, 2000; De Zoort et al., 2002; Chen et al., 2005). For this very reason, in Australia the ASX CGC (2003) recommends that the standard audit committee should mostly consist of independent directors.

On the basis of these results, it is expected that audit committees comprising mostly of independent directors will make judgements that are in the best interests of shareholders. They will also provide more monitoring functions and thus improve, for example, corporate management's decision-making. The hypothesis is therefore as follows:

H2: There is a negative association between an audit committee consisting majority of independent directors and financial distress among Australian firms.

3.1.3 Chairperson duality

The audit committee plays an important role in businesses' governance frameworks by providing independent advice to the chief executive/board of directors. The chairperson of the audit committee is responsible for ensuring that it executes its responsibilities as outlined in the audit committee charter and maintains a regular dialogue with the chief executive/board about the committee's work. The ASX CGC (2003) recommends that the chairperson of the audit committee should not be serving as the chairperson of the board. In a business organisation, chairperson duality can lead to chairperson entrenchment and severely compromise audit committee independence from boards. Compared to this, appointing different people to as board chairperson and audit committee chairperson will improve the audit committee's ability to perform its advisory, oversight and monitoring roles. Hence, this paper expects that an audit committee chaired by an independent chairperson will provide better monitoring functions and thus enhance managerial decision-making.

H3: There is a positive association between chairperson duality and financial distress among Australian firms.

3.1.4 Size

An audit committee is a sub-committee of the board of directors and its size is one of the significant characteristics associated with the effective discharge of its duties (Cadbury Committee, 1992). It has been suggested that audit committees should be large enough to have members who have a good mix of business judgement and a wider knowledge base (Kalbers and Fogarty, 1993; Braiotta, 2000). Conversely, a small audit committee lacks the requisite knowledge and diversity of skills and hence fails to effectively discharge its duties (Rahmat et al., 2009). In Australia, consistent with Cadbury Committee (1992) and BRC (1999), the ASX CGC (2003) recommends that a firm's audit committee should at least have 3 members. On this basis it is expected in this paper that firms committing more directorial resources to their audit committees (in the form of three or more directors) will be less prone to financial distress. Hence, it is hypothesised that:

H4: There is a negative association between the presence of three or more directors on an audit committee and financial distress among Australian firms.

3.1.5 Financial expertise

An audit committee operating on behalf of a firm represents the full board and exchanges communication between the board, external auditors, internal auditors and finance directors and other

directors (Song and Windram, 2004). Given the increasingly complex accounting and auditing issues that now exist in the business world, audit committee members are expected to appropriately process and assess the information the management, internal auditors, and external auditors provide them with (Smith, 2006). It is evident that audit committees will be ineffective if their members lack the tools to understand accounting and reporting issues and related implications, and can intelligently discuss any problems with all interested parties. Thus, members' financial expertise is critical if an audit committee is to work effectively (Collier, 1993).

A significant number of studies have acknowledged the benefits of having a financial expert member on the audit committee (Hambrick and Mason, 1984; Abbott et al., 2004; Davidson et al., 2004). For example, Hambrick and Mason (1984) provide evidence that audit committee members with financial expertise are more professional in their approach and more adaptable to changes and innovation. Similarly, DeZoort (1998) and DeZoort and Salterio (2001) report that audit committee members with experience in the financial sector are more likely to make sound judgements than those without. Zhang et al. (2007) also highlighted that firms are more likely to be identified as having internal control problems if their audit committees have less financial expertise. Abbott et al. (2004) find a significantly negative association between an audit committee having at least one member with financial expertise and the incidence of financial restatement. The audit committee's oversight role may be discounted by the external auditor if the auditor believes the audit committee does not possess the knowledge necessary to understand technical auditing and financial reporting matters (Knapp, 1987). The BRC (1999) has recognised the need for at least one audit committee member with accounting or related financial management expertise if a firm's audit committee is going to function effectively. Similarly, in Australia, ASX CGC (2003) recommends that an audit committee should include at least one member who has financial expertise (i.e. qualified accountant, or other financial professional with experience of and skills in financial and accounting matters).

It is therefore argued that the presence of a member with financial expertise on the audit committee improves the monitoring environment and reduces agency costs. Having such an expert should ultimately negate the chances of a firm becoming financially distressed. The hypothesis is as follows:

H5: There is a negative association between the presence of at least one director with financial expertise on the audit committee and financial distress among Australian firms.

3.1.6 Meetings frequency

Since it is argued that audit committees play an important role in overseeing and monitoring the financial reporting processes, internal control mechanisms, and external auditing (Sharma et al., 2009), maintaining the integrity of these functions requires an audit committee to have frequent meetings as a proxy for diligence (Gendron and Bedard, 2006; Raghurandan and Rama, 2007). McMullen and Raghunandan (1996) contend that companies experiencing financial difficulties do not hold meetings as frequently as those without these problems. Furthermore, Abbott et al. (2003) find that an audit committee that meets at least four times a year is not associated with higher external auditing fees. Other researchers have also noted that the frequency of audit committee meetings is negatively associated with earnings management (Xie et al., 2003), fraudulent financial reporting (Beasley et al., 2000) and the likelihood of the Securities and Exchange Commission intervening in such matters (McMullen and Raghunandan, 1996). Stewart and Munro (2007) demonstrate that the frequency of audit committee meetings is significantly linked to a reduction in perceived level of audit risk. Thus, frequency of meeting has a significant positive relationship with audit committee effectiveness (Collier and Gregory, 1999).

Regular and well controlled meetings will assist audit committees in examining the accounting and related internal control systems, and in keeping senior management informed of the committee's careful actions (McMullen and Raghunandan, 1996). Maintaining the effectiveness of an audit committee requires that it meet at least three or four times a year. It must also be intelligently structured and well managed by the chairperson (Hughes, 1999). This finding is in line with guidelines proposed by the Cadbury Committee (1992) in the UK and the BRC (1999) in the USA. Both bodies recommend at least four meetings per year, while the Smith Report (2003) recommends no fewer than three meetings annually. In Australia, the ASX CGC (2003) is silent about the number of audit committee meetings that should take place in a year; companies are only required to provide a disclosure in their annual report about the number of meetings that were convened. However, in a study of Australian firms, Stewart and Munro (2007) report that external auditors advise that audit committees should meet at least four times annually. Using the audit committee as a mechanism for good corporate governance, this paper expects that a diligent audit committee will meet frequently and by doing so means that the chance of a business experiencing financial distress will decrease. The following hypothesis is therefore generated:

H6: There is a negative association between frequency of audit committee meetings and financial distress among Australian firms.

4 Sample selection and variables description

This paper collects accounting data from the Morningstar (formerly Aspect Huntley) DatAnalysis database. Financial information about firms is obtained from the Thomson Financial Company Analysis database. The initial population consists of all Australian Securities Exchange (ASX) listed firms for the years 1999-2003^[2]. This paper identifies financially distressed firms as those suffering five consecutive years of negative net income over this period. Selecting negative net income as a definition of financial distress, however, has its limitations. For example, it has been argued that senior management may deliberately reduce their company's reported earnings during labour negotiations to strengthen their bargaining position (DeAngelo and DeAngelo, 1991). In general, however, companies are more likely to increase rather than decrease earnings, and to create value, through earnings management. The fact that a firm reports losses, therefore, is taken as a sign that something important has happened and, as such, employing a very strict definition of consecutive negative net income for 5 years is likely to serve as a suitable proxy of financial distress. This definition has resulted in the identification of 215 financially distressed firms. The paper excludes 13 financial and

utilities firms because of their specifications and operating nature, thus leaving 202 firms to consider. In order to analyse the association between audit committee characteristics and firms' financial distress, the paper focuses on those companies maintaining audit committees and have complete data during the period 1999 to 2003. This requirement has resulted in a final sample of 59 financially distressed firms.

Financially healthy firms are classified as those which have experienced consecutively positive net incomes from 1999 to 2003. After the initial screening of the financial statements of listed firms, this paper located 123 financially healthy firms. After dropping financial firms (9), the paper also excludes firms (18) that did not have audit committees during the period 1999 to 2003. Thus, the final sample comprised 59 financially distressed and 96 healthy firms, with 775 complete firm-year observations. In Table 1, the firms are classified into eight industries according to the Australian standard industry classification codes that incorporate the total number of financially distressed and healthy firms. A large proportion (76) of the financially distressed firms is concentrated in the Materials industry (27.11%). Healthy firms, however, are prominently represented from the Consumer Discretionary (30.21%), Industrial (25%), and Consumer Staples (15.62%) sectors.

Table 1. The final sample

Panel A: Sample firms		
Financially distressed firms:	59	
Healthy firms:	96	
Total firms:	155	
Panel B: Sample firms by Industry and groups		
Industries	Financially distressed	Healthy
Material	16	12
Energy	7	5
Industrial	9	24
Consumer Discretionary	3	29
Consumer Staples	1	15
Healthcare	8	9
Information Technology	10	1
Telecommunication	5	1
Total firms	59	96

Note: Financial and utilities firms are excluded from this sample

4.1 Variables description

To investigate the association between audit committee characteristics and sample firm financial distress probability, particular variables are employed and these are described in more detail below.

4.2 Dependent variable

The dependent variable in this study is a dichotomous variable coded '1' for financially distressed firms and

'0' for healthy firms, based on the consecutive-year net income definition outlined above.

4.3 Independent variables

The first variable of interest in this paper is audit committee composition (ACCOMP). Audit committee composition (ACCOMP) is coded '1' if the audit committee consists entirely of non-executive directors (per the ASX CGC's composition recommendation) and '0' if otherwise. Audit

committee independence (ACIND) is a dummy variable with a value of '1' if the audit committee consists of a majority of independent^[3] directors and '0' if otherwise. The audit committee chairperson duality (ACCHAIRDUALITY) is represented by a dummy variable as '1' if the audit committee chairperson is also chairperson of the board position, and '0' if otherwise. Audit committee size (ACSIZE) is coded '1' if the committee comprising of three or more directors and '0' if otherwise. The presence of a financial expert (ACFEXPERT) is represented by a dummy variable coded '1' if the audit committee includes at least one director who has professional certification and/or experience as public accountant, auditor, principal or chief financial officer, controller, principal or chief accounting officer, and '0' if otherwise. Audit committee meeting frequency (ACMEETF) is measured as the total number of meetings held during the year.

This paper also controls for a number of variables that previous studies have shown to be correlated with the financial distress probability of firms. It has been reported that larger firms are less likely to become financially distressed (Carey and Simnett, 2006). Therefore, to control for firm size (SIZE), a natural logarithm of total assets is employed. The variable LEVERAGE (i.e. total debt divided by total assets) is used to control for financial leverage. The sign for the LEVERAGE variable is expected to be positively related to the probability of financial

distress. This paper also controls for management efficiency (MGTEFF) using the Sales/Total Assets ratio, in which more efficient firms are less likely to experience financial distress. This aspect of firm activity is employed rather than profitability due to the sample selection being based on an earnings performance criterion. Previous studies provide evidence that large audit firms are more likely to issue a qualified audit opinion compared to their smaller counterparts (Warren, 1980). Furthermore, because they have more financial resources, they are more likely to disclose problems because of their greater risk exposure (Dye, 1993). On this basis it is expected that, due to fear of disclosure of financial problems, financially distressed firms are less likely to use one of the Big Four auditing firms. Therefore, to control for audit quality (AQUALITY), a Big Four auditing firm variable is employed, which is represented as a dummy variable coded '1' if the auditor is a member of one of the Big Four auditing firms, and '0' if otherwise. In the estimated regression model, year and industry dummies are included to control for fixed time and industry effects.

5 Research methodology

This paper uses the following logit regression model to test the association between audit committee characteristics and financial distress experienced by Australian firms:

$$DISTRESS_{it} = \alpha_0 + \beta_1 ACCOMP_{it} + \beta_2 ACIND_{it} + \beta_3 ACCHAIRDUALITY_{it} + \beta_4 ACSIZE_{it} + \beta_5 ACFEXPERT_{it} + \beta_6 ACMEETF_{it} + \beta_7 SIZE_{it} + \beta_8 LEVERAGE_{it} + \beta_9 MGTEFF_{it} + \beta_{10} AQUALITY_{it} + \sum_{m=1}^5 \beta_m Yr_{it} + \sum_{n=1}^8 \beta_n Ind_{it} + \varepsilon_{it}$$

where, for sample firm *i* and year *t*:

$DISTRESS_{it}$ = '1' when the firm is classified as being in financial distress, and '0' if otherwise

$ACCOMP_{it}$ = '1' when the audit committee consists entirely of non-executive directors and '0' if otherwise

$ACIND_{it}$ = '1' when the audit committee comprises a majority of independent directors and '0' if otherwise

$ACCHAIRDUALITY_{it}$ = '1' when the board chairperson and audit committee chairperson positions are held by the same person, and '0' if otherwise

$ACSIZE_{it}$ = '1' when the audit committee comprises three or more members and '0' if otherwise

$ACFEXPERT_{it}$ = '1' when the audit committee has at least one member who has professional certification and/or experience as public accountant, auditor, principal or chief financial officer, controller, principal or chief accounting officer otherwise, and '0' if otherwise

$ACMEETF_{it}$ = the total number of audit committee meetings held during the year

$SIZE_{it}$ = the natural logarithm of total assets

$LEVERAGE_{it}$ = the ratio of total debt/total assets at the end of the financial year

$MGTEFF_{it}$ = management efficiency as measured by the ratio of sales/total assets at the end of the financial year

$AQUALITY_{it}$ = '1' when the auditor is a member of one of the Big Four auditing firms, and '0' otherwise

Yr = year dummy variables for the years 1999-2003

Ind = industry dummy variables for materials, energy, industrial, consumer discretionary, consumer staple, health care, information technology and telecommunications industries.

ε_{it} = error term

Table 2. Descriptive statistics and independent sample t-tests for the dependent, independent and control variables

Variables	N	Mean	Standard Deviation	Minimum	Maximum	Mean Difference ^a t value (p-value)
ACCOMP						
Distressed	295	0.480	0.500	0.000	1.000	
Healthy	480	0.680	0.469	0.000	1.000	-5.536
Total	775	0.600	0.490	0.000	1.000	(0.000)***
ACIND						
Distressed	295	0.050	0.220	0.000	1.000	
Healthy	480	0.140	0.351	0.000	1.000	-4.077
Total	775	0.110	0.311	0.000	1.000	(0.000)***
ACCHAIRDUALITY						
Distressed	295	0.460	0.500	0.000	1.000	
Healthy	480	0.380	0.485	0.000	1.000	2.405
Total	775	0.410	0.492	0.000	1.000	(0.016)**
ACSIZE						
Distressed	295	2.710	0.827	1.000	8.000	
Healthy	480	3.420	1.101	2.000	8.000	-9.003
Total	775	3.150	1.063	1.000	8.000	(0.000)***
ACFEXPERT						
Distressed	295	0.550	0.498	0.000	1.000	
Healthy	480	0.740	0.437	0.000	1.000	-5.604
Total	775	0.670	0.470	0.000	1.000	(0.000)***
ACMEETF						
Distressed	295	2.110	1.348	0.000	9.000	
Healthy	480	3.290	1.805	0.000	12.000	-9.681
Total	775	2.840	1.742	0.000	12.000	(0.000)***
SIZE						
Distressed	295	16.075	1.506	9.210	20.710	
Healthy	480	19.693	1.743	16.090	24.370	-29.511
Total	775	18.316	2.415	9.210	24.370	(0.000)***
LEVERAGE						
Distressed	295	0.311	1.198	0.000	17.000	
Healthy	480	0.223	1.308	0.000	0.569	1.600
Total	775	0.257	0.747	0.000	17.000	(0.110)
MGTEFF						
Distressed	295	0.410	0.687	0.000	4.140	
Healthy	480	1.267	1.120	0.000	7.820	-11.837
Total	775	0.941	1.063	0.000	7.820	(0.000)***
AQUALITY						
Distressed	295	0.500	0.501	0.000	1.000	
Healthy	480	0.760	0.429	0.000	1.000	-7.584
Total	775	0.660	0.474	0.000	1.000	(0.000)***

Notes: ^a Independent samples t-test for difference in means.

***, ** and * are significant at 1%, 5% and 10% respectively.

Definitions of included variables are as follows: ACCOMP is a dummy variable coded '1' if the audit committee consists entirely of non-executive directors and '0' if otherwise; ACIND is coded '1' if the audit committee consists of a majority of independent directors and '0' if otherwise; ACCHAIRDUALITY is represented by a dummy variable as '1' if the audit committee chairperson is also holding chairperson of the board position, '0' if otherwise; ACSIZE is coded '1' if the committee comprising three or more directors and '0' otherwise; ACFEXPERT is coded '1' if the audit committee has at least one member who has professional certification and/or experience as public accountant, auditor, principal or chief financial officer, controller, principal or chief accounting officer otherwise, and '0' if otherwise; ACMEETF is measured as the total number of audit committee meetings held during the year; SIZE is the natural logarithm of total assets; LEVERAGE is calculated as total debt/total assets; MGTEFF is calculated as sales/total assets; and AQUALITY is a dummy variable coded '1' if the auditing is undertaken by a Big Four auditing firm, and '0' if otherwise.

6 Descriptive statistics and results

Table 2 presents the descriptive statistics for the financially distressed and healthy firm sub-sample groups and results of independent sample t-test of group mean differences for the independent and control variables for 1999 to 2003. In terms of audit committee composition, results show that healthy firms have a higher percentage of solely non-executive directors working on audit committees (68% vs. 48% in distressed firms). Results indicate that 14% of healthy firms have a majority of independent directors on their audit committees compared to just 0.05% for distressed firms, with the mean difference being statistically significant. Financially distressed firms have a higher percentage of the same person holding both audit committee and board chairperson positions (46% vs. 38% in healthy firms). The mean of audit committee size for distressed firms is significantly lower than for healthy firms (3.42 in healthy firms vs. 2.71 in distressed firms). With reference to the presence of a financial expert on the audit committee, it is shown that 74% of healthy firms have a financial expert on their audit committees compared to just 55% of financially distressed firms. In healthy firms, audit committee members meet more often (3.29) than in financially distressed firms (2.11). Financially distressed firms are also smaller (16.07 vs. 19.69). This finding is consistent with Titman and Wessels (1988), suggesting that the presence of more resources and diversity leads to larger firms being less likely to end up financially distressed compared to smaller firms. Results show that distressed firms have a higher average leverage ratio (mean= 31.1%) than financially healthy firms (22.3%). Furthermore, it is evident that management is more efficient in healthy firms compared to financially distressed firms. The mean values of the AQUALITY variable for healthy and distressed firms are 76% and 50% respectively, which demonstrates that healthy firms are significantly more likely than distressed firms to use one of the Big Four auditing firms.

Table 3 presents the pair-wise Pearson correlations between the independent and control variables. The largest observed correlation for an independent and control variable is 0.470 between firm size (SIZE) and audit committee meeting frequency (ACMEETF). This outcome is consistent with Menon and Williams (1994) who argue when a company increases in size, the complexity of the monitoring function increases as well, resulting in more work for the audit committee and necessitating more meetings. The next significant correlation of 0.381 is between firm size (SIZE) and audit committee size (ACSIZE), which is explained by larger firms

having more resources available to fund a large audit committee. Another evident substantial positive correlation is 0.221 between the firm size (SIZE) and audit committee composition (ACCOMP). Additionally, the firm SIZE (SIZE) is positively correlated (0.215) with management efficiency variable (MGTEFF).

Table 4 presents the results of logit regression analysis for testing the relationship between audit committee characteristics and financial distress of sample firms. In model 1, the control variables are entered into the analysis. In model 2, the six predictors as well as four control variables are included in the analysis. The results show that the coefficient for the ACCOMP variable is negative (-1.041) and statistically significant at the 5% significance level. However, the results for the ACIND variable fail to support the contention that having a majority of independent directors on audit committees is statistically significant in explaining the financial distress status of the sample firms. The findings in Table 4 show that the ACCHAIRDUALITY variable is significantly positively related to the likelihood of financial distress at the 1% significance level. ACSIZE variable is not statistically significant indicating there is no association between audit committee size and financial distress probability of firms. Furthermore, the ACFEXPERT variable is negative (-1.420) and statistically significant at the 5% significance in the logit model, which suggests that a financial expert's presence on an audit committee strengthens board monitoring and mitigates agency costs. The lack of significant results in relation to the ACMEETF variable raises concerns about the efficacy of having frequent audit committee meetings when financial distress arises. However, the minimal predictive power of the ACMEETF variable is consistent with a previous financial distress study by Rahmat et al. (2009).

With respect to control variables, SIZE is negatively associated with financial distress likelihood of sample firms. The coefficient of LEVERAGE variable, on the other hand, is positively and statistically significant ($p \leq 0.01$), which suggests that financially distressed firms are highly leveraged. The MGTEFF variable is negative and statistically significant ($p < 0.01$) in Table 4, which implies that the higher management efficiency is, there is less likelihood of financial distress occurring. Similarly, the AQUALITY variable is negative and statistically significant ($p < 0.05$) indicating that the higher the audit quality, the less likelihood that financial distress will be experienced.

Table 3. Pearson correlation matrix for the independent and control variables during the period 1999-2003

VARIABLES	ACCOMP	ACIND	ACCHAIRDUALITY	ACSIZE	ACFEXPERT	ACMEETF	SIZE	LEVERAGE	MGTEFF	AQUALITY
ACCOMP	1.000									
ACIND	0.115**	1.000								
ACCHAIRDUALITY	-0.224**	-0.122**	1.000							
ACSIZE	-0.140**	0.137**	-0.055	1.000						
ACFEXPERT	-0.006	0.094**	-0.008	0.181**	1.000					
ACMEETF	0.148**	0.123**	-0.176**	0.264**	0.016	1.000				
SIZE	0.221**	0.205**	-0.243**	0.381**	0.129**	0.470**	1.000			
LEVERAGE	-0.081*	0.064	0.087*	0.001	-0.001	-0.057	-0.107**	1.000		
MGTEFF	0.110**	0.053	-0.109**	0.131**	0.208**	0.176**	0.215**	0.063	1.000	
AQUALITY	0.077*	0.110**	-0.172**	0.203**	0.090*	0.060	0.318**	-0.057	0.013	1.000

Notes: ** and * denotes significance at the 1% and 5% level respectively.

Definitions of included variables are as follows: ACCOMP is a dummy variable coded '1' if the audit committee consists entirely of non-executive directors and '0' if otherwise; ACIND is coded '1' if the audit committee consists of a majority of independent directors and '0' if otherwise; ACCHAIRDUALITY is represented by a dummy variable as '1' if the audit committee chairperson is also holding chairperson of the board position and '0' if otherwise; ACSIZE is coded '1' if the committee comprising three or more directors and '0' if otherwise; ACFEXPERT is coded '1' if the audit committee has at least one member who has professional certification and/or experience as public accountant, auditor, principal or chief financial officer, controller, principal or chief accounting officer otherwise, and '0' if otherwise; ACMEETF is measured as the total number of audit committee meetings held during the year; SIZE is the natural logarithm of total assets; LEVERAGE is calculated as total debt/total assets; MGTEFF is calculated as sales/total assets; and AQUALITY is a dummy variable coded '1' if the auditing is undertaken by a Big Four auditing firm, and '0' if otherwise.

Table 4. Logit regression results for the relationship between audit committee characteristics and financial distress probability for 155 sample firms during the period 1999- 2003

Explanatory Variables	Predicted Relation	Model 1 Coefficient (p-value)	Model 2 Coefficient (p-value)
Constant (Intercept)	?	46.887 (0.000)***	60.214 (0.000)***
SIZE	-	-2.040 (0.000)***	-2.606 (0.000)***
LEVERAGE	+	6.692 (0.000)***	8.523 (0.000)***
MGTEFF	-	-3.741 (0.000)***	-4.213 (0.000)***
AQUALITY	-	-0.670 (0.070)*	-1.121 (0.021)**
ACCOMP	-		-1.041 (0.027)**
ACIND	-		0.384 (0.656)
ACCHAIRDUALITY	+		2.431 (0.000)***
ACSIZE	-		0.723 (0.176)
ACFEXPERT	-		-1.420 (0.005)**
ACMEETF	-		0.131 (0.318)
Industry dummies	Yes		Yes
Year dummies	Yes		Yes
Model summary			
Chi-square:		818.648***	857.196***
Wald statistic:		43.299***	43.299***
Nagelkerke R ² :		0.887	0.910

Notes: ***, ** and * denote significance at 1%, 5% and 10% levels respectively.

The sample composed of 59 financially distressed and 96 financially healthy firms. The dependent variable is financial distress status (DISTRESS), represented by a dichotomous variable coded '1' for financially distressed firms and '0' for healthy firms. The study covers the period 1999-2003 using a sample of 775 firm year observations.

Definitions of included variables are as follows: SIZE is the natural logarithm of total assets; LEVERAGE is calculated as total debt/total assets; MGTEFF is calculated as sales/total assets; AQUALITY is a dummy variable coded '1' if the auditing is undertaken by a Big Four auditing firm, and '0' if otherwise; ACCOMP is a dummy variable coded '1' if the audit committee consists entirely of non-executive directors and '0' if otherwise; ACIND is coded '1' if the audit committee consists of a majority of independent directors and '0' if otherwise; ACCHAIRDUALITY is represented by a dummy variable as '1' if the audit committee chairperson is also holding chairperson of the board position and '0' if otherwise; ACSIZE is coded '1' if the committee comprising three or more directors and '0' if otherwise; ACFEXPERT is coded '1' if the audit committee has at least one member who has professional certification and/or experience as public accountant, auditor, principal or chief financial officer, controller, principal or chief accounting officer otherwise, and '0' if otherwise; and ACMEETF is measured as the total number of audit committee meetings held during the year. Year and Industry dummies are also included in the regression model.

7 Discussion of findings

Results of this paper indicate a number of interesting relationships between various voluntary audit committee characteristics and likelihood of financial distress. First, the results of this paper indicate that the presence of only non-executive directors on audit committee is significantly negatively related to

financial distress likelihood for sample of Australian firms chosen in this paper. This suggests that the presence of entirely non-executive directors on an audit committee alleviates agency problems and the likelihood of financial distress. Prior literature also suggests that non-executive directors are effective monitors (Keasey et al., 1997); and have an important role in questioning decisions of management

(McMullen and Raghunandan, 1996). Thus, the findings provide further support for the empirical observation in the corporate governance literature that it is important to have non-executive directors on audit committee for improving the internal control mechanisms and monitoring environment of a firm. These findings also provide support to the ASX CGC recommendation relating to the presence of only non-executive directors on an audit committee.

The results of this paper do not support the argument that presence of only independent directors on audit committee will predict the likelihood of financial distress. Although more audit committees in healthy firms comprise independent directors as shown in Table 2, there is no statistically significant difference in the likelihood of financial distress between healthy and distressed firms. This finding is consistent with Rahmat et al. (2009) who also did not detect any difference between financially distressed and non-distressed firms regarding the independence of audit committees.

Results reported in Table 4 provide evidence that the presence of chairperson duality significantly increases the likelihood of financial distress. Based on the sample chosen in this paper, it is concluded that in a business organisation, chairperson duality can lead to chairperson entrenchment and severely compromise audit committee independence from boards which ultimately increases the likelihood of financial distress. Thus, the findings provide support to the ASX CGC recommendation relating to the separation of audit committee chair and board chair positions.

The sample of this paper does not provide any evidence that size of an audit committee is associated with likelihood of financial distress. This finding is consistent with Rahmat et al. (2009) who also did not detect any difference between the audit committee sizes of financially distressed and healthy firms. Similarly, the results do not provide any support that the frequency of an audit committee meetings has any association with likelihood of financial distress of a firm.

The findings in the Table 4 provide support to the argument that presence of a member with financial expertise on the audit committee improves the monitoring environment and enhances decision-making. Subsequently, firms with a financial expert on their audit committee function better and thus are free from financial distress, compared to companies without any financial expert on their audit committees. Hence, the findings also provide support to the ASX CGC recommendation relating to the presence of at least one financial expert on an audit committee.

8 Implications for theory and practice

This paper highlights the important relationship between various audit committee characteristics and likelihood of financial distress. The results of this paper have important implications for the evaluation

of financially distressed firms and on the ongoing corporate governance reform process in Australia. Firstly, in relation to the evaluation of financially distressed firms, these findings will benefit investors, financial analysts, accounting professionals and practitioners in enhancing their decision-making processes. They will also lead to further reforms in the regulatory environment and reporting practices of corporate entities. Investors and analysts will be able to incorporate audit committee attributes in their information set when evaluating the underlying risk and investment attractiveness of firms. Audit committee policy-makers will be able to confirm that a given company's financial health is influenced by trusted and skilled audit committee attributes. Finally, the results suggest that adherence to the best practice recommendations that were introduced by the ASX CGC, with specific reference to the presence of having only non-executive directors and at least one financial expert on audit committees, and independent audit committee chairperson who is not chairperson of the board, should mitigate the likelihood of financial distress. The findings of this paper are also supportive of agency theory.

9 Conclusions

This paper provides the first evidence on the relationship between audit committee characteristics and firm financial distress in Australia. The focus is on a voluntary governance systems and decision-making by sample firms prior to the ASX's introduction in 2003 of the formal requirement for firms to establish an audit committee. The findings here suggest the importance of the presence of solely non-executive directors and at least one financial expert on the audit committee in a firm. The results also provide evidence that chairperson duality increases the likelihood of financial distress.

10 Limitations

To examine the association between audit committee characteristics and likelihood of financial distress, this paper is conservative in its sample selection to ensure that only truly financially distressed and healthy firms are identified. Furthermore, the scope of this paper is restricted to Australian firms and the sample focused only on a specific period of time. Consequently, the results may not be generalised to other companies that are facing financial difficulties but are not classified as financially distressed under the criteria chosen in this paper. Furthermore, it is not the scope of this paper to examine the reasons for financial distress, but rather to examine the relationship between various audit committee characteristics and financial distress of firms by employing basic econometrics in the dataset.

11 Notes

1. To improve good corporate governance practices in Australia, the Australian Stock Exchange established the ASX Corporate Governance Council in 2002. The ASX Corporate Governance Council consists of members from 21 different business, shareholder and industry groups. This body published the first edition of its Corporate Governance Principles and Recommendations in 2003.

2. The reason for selecting only publicly traded firms is that the information compiled in annual reports filed with the Australian Securities Exchange is available for analysis. Private companies were excluded because they are not subject to the ASX Corporate Governance Council requirements.

3. During 1999-2003, the definition of what independence actually meant was still evolving and had not been properly defined at this point. Hence, for the purpose of this study, where companies have not disclosed the independence status of their directors, this has been taken to indicate non-compliance, due to non-disclosure. Consequently, directors are treated as non-independent.

References

- Abbott, L. and Parker, S. (2000), "Auditor selection and audit committee characteristics", *Auditing: A Journal of Practice and Theory*, Vol. 19 No.2, pp. 47-66.
- Abbott, L., Parker, S., Peters, G. and Raghunandan, K. (2003), "An empirical investigation of audit fees, non-audit fees and audit committees", *Contemporary Accounting Research*, Vol. 20 No. 2, pp. 215-234.
- Abbott, L., Parker, S. and Peters, G. (2004), "Audit committee characteristics and restatements", *Auditing: A Journal of Practice and Theory*, Vol. 23 No.1, pp. 69-87.
- Australian Stock Exchange Corporate Governance Council (ASX CGC) (2003), *Principles of Good Corporate Governance and Best Practice Recommendations*, First edition.
- Beasley, M. (1996), "An empirical analysis of relation between the board of director composition and financial statement fraud", *The Accounting Review*, Vol. 71 No. 4, pp. 443-465.
- Beasley, M., Carcello, J., Hermanson, D. and Lapides, P. (2000), "Fraudulent financial reporting: consideration of industry traits and corporate governance mechanisms", *Accounting Horizons*, Vol. 14 No.4, pp. 441- 454.
- Blue Ribbon Committee (BRC) (1999), *Report and recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees*. New York: New York Stock Exchange and National Association of Securities Dealers.
- Braiotta, L. (2000), *The Audit Committee Handbook*, 2nd edition. New York: John Wiley & Sons, Inc.
- Cadbury Committee (1992), *Report of the Committee on the Financial Aspects of Corporate Governance*, Gee and Co., London.
- Calleja, N. (1999), "To delegate or not to delegate: board committees and corporate performance in Australia's 100 companies", *Sydney Law Review*, Vol. 21 No. 1, pp. 5-35.
- Carcello, J.V. and Neal, T.L. (2000), "Audit committee composition and auditor reporting", *The Accounting Review*, Vol. 75 No. 4, pp. 453-467.
- Carcello, J.V. and Neal, T.L. (2003), "Audit committee characteristics and auditor dismissals following "new" going-concern reports", *The Accounting Review*, Vol. 78 No. 1, pp. 95-116.
- Carey, P. and Simnet, R. (2006), "Audit partner tenure and audit quality", *The Accounting Review*, Vol. 81 No. 3, pp. 653-676.
- Chen, M.Y., Moroney, R. and Houghton, K. (2005), "Audit committee composition and the use of industry specialist audit firm", *Accounting and Finance*, Vol. 45 No. 2, pp. 217-239.
- Collier, P. (1993), "Audit committees in large UK Companies", *Managerial Auditing Journal*, Vol. 8 No. 3, pp. 25-30.
- Collier, P. and Gregory, A. (1999), *Audit Committee in Large UK companies*, The Institute of Chartered Accountants, London.
- Davidson, W.N., Xie, B. and Xu, W. (2004), "Market reaction to voluntary announcements of audit committee appointments: the effect of financial expertise", *Journal of Accounting and Public Policy*, Vol. 23 No. 4, pp. 279-293.
- DeAngelo H. and DeAngelo L. (1991), "Union negotiations and corporate policy: a study of labour concessions in the domestic steel industry during the 1980s", *Journal of Financial Economics*, Vol. 30 No. 1: pp. 3-44.
- DeZoort, F.T. (1998), "An analysis of experience effects on audit committee members' oversight judgments", *Accounting, Organizations and Society*, Vol. 23 No. 1, pp. 1-21.
- DeZoort, F. T., and Salterio, S. E. (2001), "The effects of corporate governance experience and financial reporting and audit knowledge on audit committee members' judgments", *Auditing: A Journal of Practice & Theory*, Vol. 20 No. 2, pp. 31-47.
- DeZoort, F.T., Hermanson, D.R., Archambeault, D.S. and Reed, S. (2002), "Audit committee effectiveness: a synthesis of the empirical audit committee literature", *Journal of Accounting Literature*, Vol. 21, pp. 38-75.
- Dye, R. A. (1993), "Auditing standards, legal liability, and auditor wealth", *Journal of Political Economy*, Vol. 101 No. 5, pp. 887-914.
- Fama, E. and Jensen, M. (1983), "The separation of ownership and control", *Journal of Law and Economics*, Vol. 26 No. 2, pp. 301-325.
- Fleming, G., Heaney, R. and McCosker, R. (2005), "Agency costs and ownership structure in Australia", *Pacific Basin Finance Journal*, Vol. 13 No.1, pp. 29-52.
- Forker, J.J. (1992), "Corporate governance and disclosure quality", *Accounting and Business Research*, Vol. 22 No. 86, pp.111-124.
- Gendron, Y. and Bedard, J. (2006), "On the constitution of audit committee effectiveness", *Accounting, Organisations and Society*, Vol. 31 No. 3, pp. 211-239.
- Gilson, S. (1990), "Bankruptcy, boards, banks and blockholders: evidence on changes in corporate

- ownership and control when firms default”, *Journal of Financial Economics*, Vol. 27 No. 2, pp. 355-387.
28. Grice, B. (1993), “Institute position on audit committees” *Charter*, Vol. 64 No. 11.
 29. Hambrick, D. and Mason, P. (1984), “Upper echelons: the organization as a reflection of its top managers” *Academy of Management Review*, Vol. 9 No. 2, pp. 193-206.
 30. Henry, D. (2010), “Agency costs, ownership structure and corporate governance compliance: a private contracting perspective”, *Pacific-Basin Finance Journal*, Vol. 18 No.1, pp. 24-46.
 31. Hughes, R. (1999), “The rise and rise of audit committee”, *Accountancy*, Vol. 23 No. 1266, pp. 56.
 32. Jensen, M.C., and Meckling, H.W. (1976), “Theory of the firm: managerial behaviour, agency costs, and ownership structure”, *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.
 33. Kalbers, L.P. and Fogarty, T.J. (1993). “Audit committee effectiveness: an empirical investigation of the contribution of power”, *Auditing: Journal of Practice and Theory*, Vol. 12 No. 1, pp. 24-49.
 34. Keasey, K., Thompson, S. and Wright, M. (1997), *Corporate Governance: Economic and Financial Issues*, Oxford University Press, Oxford.
 35. Klein, A. (2002a), “Audit Committee, board of director characteristics and earnings management”, *Journal of Accounting and Economics*, Vol. 33 No. 3, pp. 375-400.
 36. Klein, A. (2002b), “Economic determinants of audit committee independence”, *The Accounting Review*, Vol. 77 No. 2, pp. 435-452.
 37. Knapp, M.C. (1987), “An empirical study of audit committee support for auditors involved in technical disputes with client management”, *The Accounting Review*, Vol. 62 No. 3, pp. 578-588.
 38. McMullen, D.A. and Raghunandan, K. (1996), “Enhancing audit committee effectiveness”, *Journal of Accountancy*, Vol. 182 No. 2, pp. 79-81.
 39. Menon, K. and Williams, J. (1994), “The use of audit committee for monitoring”, *Journal of Accounting and Public Policy*, Vol. 13 No. 2, pp. 121-139.
 40. Munro, L. and Buckby, S. (2008), “Audit committee regulation in Australia: how far have we come?”, *Australian Accounting Review*, Vol.18 No. 4, pp. 310-323.
 41. National Association of Corporate Directors (NACD) (1999), *Report of the NACD Blue Ribbon Commission on Audit Committees: A Practical Guide*. Washington, DC: NACD.
 42. Raghunandan, K., Rama, D. (2007), “Determinants of audit committee diligence”, *Accounting Horizons*, Vol. 21 No. 3, pp. 265-279.
 43. Raghunandan, K., Rama, D. and Scarbrough, D. (1998), “Accounting and auditing knowledge level of Canadian audit committees: some empirical evidence” *Journal of International Accounting, Auditing and Taxation*, Vol. 7 No. 2, pp. 181-194.
 44. Rahmat, M.M., Iskander, T.M. and Saleh, N.M. (2009), “Audit committee characteristics in financially distressed and non-distressed companies”, *Managerial Auditing Journal*, Vol. 24 No. 7, pp. 624-638.
 45. Ramsay, I. (2001), *Independence of Australian Company Auditors: Review of Current Australian Requirements and Proposals for Reform*, Commonwealth of Australia, Canberra, ACT.
 46. Securities and Exchange Commission (SEC) (1999), *Final Rule: Audit Committee Disclosure*, Washington, DC: SEC.
 47. Sharma, V., Naiker, V. and Lee, B. (2009), “Determinants of audit committee meeting frequency: evidence from a voluntary governance system”, *Accounting Horizons*, Vol. 23 No. 3, pp. 245-263.
 48. Shivdasani, A. (1993), “Board composition, ownerships structure and hostile takeovers”, *Journal of Accounting and Economics*, Vol. 16 No. 1-3, pp. 167-198.
 49. Smith, L. (2006), “Audit committee effectiveness: did the Blue Ribbon Committee recommendations make a difference?”, *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 3 No. 2, pp. 240-251.
 50. Smith Report (2003), *Audit Committees: A Report and Proposed Guidelines*, London: Financial Reporting Council.
 51. Song, J. and Windram, B. (2004), “Benchmarking audit committee effectiveness in financial reporting”, *International Journal of Auditing*, Vol. 8 No. 3, pp. 195-205.
 52. Stewart, J. and Munro, L. (2007), “Auditors perceptions of the impact of audit committees and the frequency of audit committee meetings on the external audit” *International Journal of Auditing*, Vol. 11 No. 1, pp. 51-69.
 53. Titman, S., Wessels, R. (1988), “The determinants of capital structure choice”, *Journal of Finance*, Vol. 43 No. 1, pp. 1-19.
 54. Vicknair, D., Hickman, K. and Carnes, K. (1993), “A note on audit committee independence: evidence from the NYSE on ‘grey’ area directors”, *Accounting Horizons*, Vol. 7 No. 1, pp. 53-57.
 55. Warren, C. S. (1980), “Uniformity of auditing standards: A replication”, *Journal of Accounting Research*, Vol. 18 No. 1, pp. 312-324.
 56. Weisbach, M. (1988), “Outside directors and CEO turnover”, *Journal of Financial Economics*, Vol. 20, pp. 421-460.
 57. Xie, B., W. Davidson, and DaDalt, P. (2003), “Earnings management and corporate governance: the role of the board and audit committee”, *Journal of Corporate Finance*, Vol. 9 No. 3, pp. 295-316.
 58. Yermack, D. (1996), “Higher valuation of companies with a small board of directors”, *Journal of Financial Economics*, Vol. 40 No. 2, pp. 185-213.
 59. Zhang, Y., Zhou, J. and Zhou, N. (2007), “Audit committee quality, auditor independence, and internal control” *Journal of Accounting and Public Policy*, Vol. 26 No. 3, pp. 300-327.