The Effects of Audit Committee Characteristics on the Value Relevance of Accounting Information - Evidence from New Zealand

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ATTESTATION OF AUTHORSHIP

I hereby declare that the submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Mona Manon
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ABSTRACT

The purpose of this Dissertation is to examine the link between the characteristics of an audit committee and the value relevance of accounting information. The study is carried out in with a sample of 105 companies listed on the New Zealand Stock Exchange during 2007-2009.

This study uses primary variables audit committee financial literacy and audit committee independence to answer the research question - what is the effect of audit committee expertise on the value relevance of accounting earnings. Value relevance is measured by regressing stock prices on earning and book values following the Ohlson’s Model (1995) that has established an ideal relationship between share prices and accounting measures.

Findings from the present study of pooled regression do not support Ohlson’s hypothesis. Instead, they reveal a lack of affiliation between audit committee characteristics and the value relevance of accounting information in New Zealand. The results show no positive effect of audit committee expertise on the value relevance of accounting earnings.
1. INTRODUCTION

The rationale of this study is to examine the affiliation between characteristics of an audit committee and the value relevance of accounting information in New Zealand. International issues arising from scandals like WorldCom and Enron have affected domestic regulation and the level of oversight by professional bodies. Recently, the New Zealand Institute of Chartered Accountants (NZICA) reviewed the corporate governance practices for companies in New Zealand. In March 2003, New Zealand Stock Exchange issued new guidelines in regard of corporate governance for all listed companies to establish an audit committee. Consistent with NZICA, the New-Zealand Exchange Limited (NZX, 2003) adopted a Corporate Governance Best Practice Code on Oct 23rd, 2003. The Best Practice Code requires all listed companies to establish an audit committee with a minimum of three non-executive directors. Whilst the majority of directors should be independent, at least one member of an audit committee should have an accounting or financial background (NZX, 2003, Rule 3.6).

As a small market, New Zealand’s unique environment and context offer a good opportunity to assess the effect of audit committee characteristics on the value relevance of accounting information. On the down side, New Zealand is a small country with dissimilar characteristics and business practices from other OECD countries. Hence international corporate governance findings from large international markets cannot be extrapolated into the domestic environment. The market in New Zealand is less regulated and relies heavily on trade with other international economies. The corporate market is rather conservative in New Zealand and fraud or misappropriation is not very common. Although, having a unique system, New Zealand develops an attention to go for an enquiry of the corporate governance’s effect on the accounting measures.

This study hypothesises that there is a positive association between audit committee expertise and the value relevance of accounting earnings. In order to examine this relationship, primary
variables *audit committee financial literacy* and *audit committee independence* are used. Value relevance is measured by regressing stock prices on earnings and book values following the Ohlson’s Model that has established an ideal relationship between share prices and accounting measures. Further evidence of this as well the relationship between accounting information and share price can be found in extant research. For example, Francis and Schipper (1999) suggested that value relevance implied that accounting information and stock prices had statistical association. According to Collins, Pincus, and Xie (1997), accounting figures provide best measures for market prices. According to many other authors accounting information is reflected in stock prices (Ball & Brown, 1968; Beaver, 1968; Joseph, 1999; Landsman, Maydew, & Beaver, 2001). However, such a reflection is likely to be influenced by the relevance and reliability of financial statements prepared by corporate managers.

Reported income under the financial statements is a joint responsibility of auditors and managers, as auditors are responsible for the monitoring of management functions, whereby management is left some discretion. Investors rely on financial statements that are prepared by managers and monitored by the auditors. However, it is widely assumed that managers tend to manipulate accounting information in order to present attractive figures under the financial statements. Nevertheless, investors always change their decision based on the accounting information as, according to Hellstrom (2006) and Barth, Beaver, and Landsman (2001), the accounting information will be value relevant and reflect stock prices if users find it informative and relevant. Therefore, in order to increase the value relevance of accounting information and eliminate the effect of misleading function provided by the managers, effective and strong control mechanism, such as strong audit committee under the effective corporate governance should be mandatory.

Habib and Azim (2008) prove, following Ohlson’s accounting based valuation framework, the presence of higher value relevance of accounting information when subjected to strong
corporate governance with firm’s specific economic variables. Hence, effective firm-level
corporate governance is likely to ensure the reliability of such financial statements.

The findings from the prior research vary with respect to which audit committee
characteristics affect the financial reporting quality in a positive way. For instance, audit
committee expertise is highly associated with the effectiveness of financial reporting (Kalbers
& Fogarty, 1993). Similarly, Goodwin (2003) supported need for audit committee members to
have accounting or finance background in addition to being independent of management.
According to Rainsbury (2004), independent non-executive directors and directors with
financial expertise, are more likely to be the members of audit committee. According to
DeZoort, Hermanson, Archambeault, and Reed (2002) and Sharma and Iselin (2006) audit
committee stock ownership can influence the financial reporting quality. According to Francis
and Schipper (1999); Becker, Defond, Jiambalvo and Subramanyam (1998); and DeFond and
Jiambalvo (1991), qualitative external auditors should be preferred for quality accounting
information

Thus, there is overwhelming evidence that the independence of the audit committee plays a
major role in affecting the financial reporting quality. The audit committee independence
refers to the majority of non-executive directors in the total numbers of audit committee
members. Majority of independent directors will positively effect on firm’s value (Klein,
2002).

Inclusion of a financial expert in an audit committee can increase the value of the firm in the
market, which can be seen in the significantly increased stock prices after the appointment
announcements of members to the audit committees (Wallace, Biao, & Weihong, 2004).
Appointing audit committee members with financial expertise, enhances accounting
conservatism and enables critical evaluation of the managerial decisions (Krishnan &
Visvanathan, 2008).
To see the effect of audit committee characteristics on the value relevance of accounting information, in the present study pooled regressions are run, taking selective constructs, such as AC Financial literacy, AC Independence, Board Independence and Audit quality individually, followed by a regression of all factors combined. The present study uses data from 105 companies listed on New Zealand Stock Exchange for the period 2007-2009. Following prior research, organisations relating to banks, financial institutions, foreign companies, investment and insurance companies are not included due to their different regulation system. For robustness of results and extracting maximum variance, a principal component analysis is performed, so that the number of variables can be reduced. Three factor scores, whose eigenvalues are greater than unity, are retained and used in the final regression to capture the effect of corporate governance on the value relevance of accounting information.

The results reveal that there is no major change in value relevance after incorporating corporate governance constructs with baseline equation variables earning per share and book value per share. The major problem is that of co-linearity as these constructs are very heavily correlated with each other. Another minor reason is the small sample size used for analysis, making the conclusions not definitive. Mixed results are observed when these constructs are considered in regression individually, as some effect is indicated on the value relevance of accounting information. Collectively, the results do not support the hypothesis in its entirety.

The remainder of this dissertation presents firstly, literature review and develops the hypothesis. Secondly, Research methodology is outlined, including sample selection, operationalisation of variables, and regressions models. Thirdly, the results and findings are highlighted and finally, study concludes with potential limitations and possible path for future research.
2.0 LITERATURE REVIEW

2.1 Value Relevance

Earnings, equity and book values, and any other accounting items included in the income statement and balance sheet, are all recognized as accounting information or accounting measures. However, the question is how and up to what extent these accounting measures are important. Why the accounting information always is juxtaposed with the word ‘value relevance’? When accounting information provides its manifestation unswervingly in market prices and investors’ decisions, then it is said that information given in the financial statements is of high quality and it is deemed suitable to be acknowledged as value relevant.

Accounting figures possess the power to predict market prices and affect investors’ decisions. Hence, to measure the quality of accounting information and to judge the level of value relevance of accounting information, accounting items such as earning per share, equity book values etc. are regressed with share prices.

Past research has provided several indicators as well as substantial evidence stating that the accounting information has power of value relevance. For example, Francis and Schipper (1999) suggest that value relevance implies that accounting information and stock prices have statistical association. Accounting amounts provide best measures for market prices (Collins et al., 1997; Barth et al., 2001). A consistent approach given by Hellstrom (2006) and Barth et al. (2001) postulates that the accounting information will be value relevant and reflect stock prices if users find them useful. Value relevance is not only beneficial for investors, but also for the other users and market practitioners.

Hence, there is strong relationship between accounting earning reports and common stock value (Miller & Modigliani, 1961; Graham, 1962). Furthermore, reported earnings have an explanatory power and ability to change the stock prices as a determining variable (Ball &
Brown, 1968; Naceur & Nachi, 2006). Investors perceive information as relevant and reliable if it can assist them in making their investment decision in firm’s stock. Financial Accounting Standards Board (1984) also supported and considered the relevance and reliability conditions for measuring and comparing the accounting options.

The well established fact, that accounting measures and share prices have strong alliance, is also supported with another indication that the historical accounting numbers of earnings, book value of equities have a very big and important role in valuation and judge the level of value relevance (Ohlson, 1995; Feltham & Ohlson, 1996). Nevertheless, the level of accounting information relevance depends on the number of internal and external factors that affect the explanatory power of the accounting measures. However, the value relevance of accounting information in researching, valuing accounting numbers whether historical, present or future forecasting has always been recognised (Richardson & Tinaikar, 2004). For example based on Ohlson (1995) Model, Bao and Chow (1999) reported high value relevance where there were more contents in accounting information for equity valuation based on international accounting standards, rather than China Domestic Accounting Regulations. Further it is also suggested that explanatory power of the equity book values and earnings has been increased due to change in accounting regulation.

Kousenidis, Ladas, and Negakis (2009) showed the effect of conservatism on the value relevance of accounting information with results of non linear association between conservative reporting and value relevance of earning. However, Kousenidis et al. (2009) argued that value relevance increased when there was a change from low conservative firms to medium ones and decreased with the change from medium conservative firms to high ones. Jenkin, Kane, and Velury (2009) demonstrated higher conservatism and value relevance during economic contractions. Furthermore, it is also suggested that value relevance of future expected earnings is higher during the periods of expansion when there are weak interactions between historical accounting information and future growth opportunities. Likewise,
accounting information defines better share returns after the introduction of the accounting system for business enterprises. Hence it is proven that value relevance of accounting information is improved with a new accounting system (Chalmers, Navissi, & Qu, 2010).

Furthermore, Cahan, Emanuel, and Sun (2009) suggest in their research across many countries that there is stronger and higher associations between the value relevance of earnings and earning quality in case of countries with high investor protection. It is also confirmed that the association between earning quality and value relevance of earnings will be higher where the country’s information environment is less opaque.

Above cited past studies provides adequate evidence that accounting information is reflected in stock prices (Ball & Brown, 1968; Beaver, 1968). However, such a reflection is likely to be influenced by the relevance and reliability of financial statements prepared by corporate managers. Reported income under the financial statements is a joint responsibility of auditors and managers, as auditors are responsible for the monitoring and oversight of all the management functions. Management, however, still has some discretion in the scope of their reporting, whereby it is assumed that managers use that discretion to adjust the figures in order to report better results. Thus, if regulation is in favour of shareholders then auditors and management have higher litigation risk and have incentive to be conservative (He, Teitel, & Brown, 2004).

Investors rely on financial statements that are prepared by managers and monitored by the auditors. To attract investors, managers present financial statements in such a way as to maximize their reported profits, misleading the investors. Investors in turn, rely on the presented accounting information in their decision making. In that case, accounting information cannot be value relevant. To validate the value relevance of accounting information and eliminate the effect of misleading information presented by the managers, an effective and strong control mechanism should be in place. Habib and Azim (2008) prove,
following Ohlson’s (1995) accounting based valuation framework, that there is higher value relevance of accounting information when subject to strong corporate governance with firms’ specific economic variables. Thus, effective firm-level corporate governance implemented by an independent and strict audit committee and based on precise characteristics, is likely to ensure the trustworthiness of financial statements. This in turn, creates a stronger relationship between stock price and accounting information. Thus, a strong audit committee work as an effective control mechanism of corporate governance (Habib & Azim, 2008).

The audit committee operates as an intermediary and a communicator between the internal and external auditors and management (Carcello & Neal, 2002). The audit committee plays an imperative role in the overseeing and controlling the financial reporting process very intimately. Furthermore, it needs to make sure that the financial statements prepared by the management are free from any material misrepresentations. To accomplish such an objective, the audit committee must be very strong and effective as a control device of corporate governance. Some particular features, such as audit committee independence, as well as its financial expertise, composition and meeting frequency are found to be very essential determinants for the value relevance of the financial accounting information (Charles, 2004; Krishna & Lee, 2009; Raghunandan & Rama, 2007; Krishna & Visvanathan, 2009; Sharma, Naiker, & Lee, 2009). If reported financial accounting information is of high quality then it is expected that the stock market will incorporate such high quality accounting information in setting the stock price.

Hence, to ensure that the financial accounting information should possess the power to predict the stock price, audit committee members should be experts in financial accounting literacy, truly independent and well experienced. In addition, by possessing these qualities, audit committee members can monitor and oversee the managers’ functions superbly and attentively owing to their broader knowledge and expertise. This gives a very little chance to the management for any fraud and the reported accounting information will be of good quality
with minimum errors. Next part summarizes the regulation of audit committee expertise in New Zealand and overseas.

2.2 Overseas Regulation of Audit Committee Expertise

Companies listed on the New York Stock Exchange and NASDAQ, are required to have an audit committee comprising entirely of independent directors (Sarbanes-Oxley Act, 2002). In the UK, it is suggested that all listed firms should have independent (The Smith Committee, 2003) rather than non-executive directors on the audit committee. Audit committee members must be knowledgeable of business environment and they must have the ability to read and understand the fundamental financial statements. Furthermore, audit committee should be comprised of a minimum of three directors, all of whom should be financially proficient. It is further required that at least one member, who must have accounting expertise in the related discipline, is approved by a relevant professional financial institute or an accounting body. This means that one audit member must have CPA qualification (The BRC, 1999; The Smith Committee, 2003; Giacomo, Akers, & Wall, 2009). If the audit committee members have CPA qualifications, then financial reporting problems in a company are less likely to occur (McMullen & Raghunandhan, 1996). SEC also implemented the rule that an audit committee must have at least one financial expert who must have CPA qualification. CPAs, whether they are doing public practice or work in the industry, are qualified to become audit committee experts (Scarpati, 2003). Owing to the influence from US and UK, in 2003, the Australian Stock Exchange issued a non-mandatory set of principles, titled ‘Principles of Good Corporate Governance and Best Practice Recommendations’. It suggests the audit committee should be comprised of non-executive directors with at least one independent director being the chairperson of the audit committee.
2.3 Audit committee Expertise in New Zealand

Prior to 2003, there were no hard and fast rules mandating the listed New Zealand Companies to have an audit committee, stipulating only that they had to disclose all the information in their financial reports regarding the corporate governance policies and practices. Until, the NZ Institute of Directors suggested the adoption of audit committees in its Code of Proper Practice for Directors (IOD, 1993), audit committees were not legally endorsed in NZ by either relevant regulatory or professional bodies.

Issues arising from WorldCom, Enron and other recent financial scandals have affected the regulation bodies in New Zealand as well. As a result, the New Zealand Institute of Chartered Accountants (NZICA) has reviewed the corporate governance practices for New Zealand business community. In 2002, NZICA has suggested that audit committees should be fully resourced, provide quality expertise and effective oversight. In 2003, ICANZ proposed regulation, only as guidelines rather than mandatory, to all New Zealand listed companies for establishment of audit committees, as it was observed by ICANZ that due to the small size of public sector, the NZ public issuers were less able to bear the regulation cost.

Conversely, in March 2003, New Zealand Stock Exchange issued new guidelines in regard of corporate governance for all listed companies to establish an audit committee. It is mentioned in the guiding principles that for establishment of an audit committee, there should be a minimum of three members with majority of independent directors and as a minimum one of them is required to have financial qualification or expertise in the accounting field.

Consistent with ICANZ, the New-Zealand Exchange Limited (NZX) (2003) adopted a Corporate Governance Best Practice code on October 23rd, 2003, which requires all listed companies to establish audit committee with a minimum of three non-executive directors. The majority of directors should be independent and at least one director must have accounting or
financial background (NZX, 2003, Rule 3.6). NZX Section 3.6 defines that an audit committee member recognized as having financial or accounting background if she or he is a member of the Institute of Chartered Accountants of New Zealand, or a director who has held a position of Chief Financial Officer at a listed Company for two years or more and has completed an academic programme approved by NZX specifically for audit committee membership.

Subsequently, in 2004 Security Commission of New Zealand (NZSC) issued a report, named *Governance in New Zealand Principles and Guidelines*, which motivated boards to use audit committees. The report stipulates that listed companies must establish audit committee that will consist of a minimum of three members, of whom all should be non-executive independent directors and at least one must have financial expertise and a qualification such as Chartered Accountant.

The Institute of Directors in New Zealand (IOD) has also recommended a consistent approach with NZICA, NZX and NZSC regarding audit committee members attributes. However, qualifications for directors are not specified; instead it is mentioned that audit committees should be comprised of non-executive directors who are suitably qualified (IOD, 1996). IOD also stated in its Best Practice Statements that audit committee’s directors should have ability to interpret financial statements and financial information with a sound knowledge and understanding of legal, financial reporting standards and accounting principles and practice (IOD, 1998). Following part reviews the literature on the effects of the audit committee characteristics on the value relevance of accounting information.
2.4 The Effects of Audit Committee Characteristics on the Value Relevance of Accounting Information and Development of Hypothesis

Kalbers and Fogarty (1993) suggested that audit committee members with expertise in accounting and finance, enhances the effectiveness of the audit committee. Furthermore, it is also established that audit committee expertise enhances the quality of financial reporting. Similarly, according to Treadway (1987), audit committee expertise is a key determinant for the effectiveness of the audit committee.

Goodwin (2003) also supported the need for audit committee members to have accounting or finance background in addition to being independent of management. The independence and the accounting knowledge have a great impact on the audit committee relations with internal audit. However, the independence is associated with frequency, length and privacy of audit committee meetings with internal auditors, whereas the number of audit committee members with financial accounting background is closely linked to the extent to which the review and analysis will be conducted by internal audit. Hence, the more financial accounting knowledge, expertise and experience, the audit committee members have, the greater will be the impact on their quality and quantity of output.

According to Rainsbury (2004) independent non-executive directors and directors with financial expertise are more likely to be members of audit committee. However, not all financial experts are independent and directors with accounting expertise can hold non-executive positions.

Equally, having independent directors as a majority will positively reflect on firm’s value (Klein, 2002). Thus, the independence of the audit committee members has a key role in affecting the financial reporting quality, as it implies the majority of non-executive directors in the total numbers of audit committee members. Non executive directors are more objective
(McMullen & Raghuanandan, 1996) and act independently, as they are free from any influence from the management, thus reducing the chances of management manipulation. An independent audit committee tends to be more effective in controlling and monitoring the management functions, which enhances the reliability of financial statements and increases the firm’s value. Ultimately, the quality of financial accounting information improves and value relevance of accounting figures increases. If independent audit committee members act truly independently, the efficiency and intelligence of audit committee is enhanced, as they work more diligently and can prevent misreporting by management. Thus, there is significant relationship between the independence of the audit committee and correct management attitudes (Cohen, Krishnamoorthy, & Wright, 2004). In addition, more independent audit committee will also contribute to a higher quality audit, although at the expense of higher audit fees. In view of that fact, several questions must be asked: how can best practices of independent audit committee be achieved? What are the key characteristics of effective audit committee members? Does an increase in audit committee expertise affect the value relevance of accounting information? Does during the life cycle of a company, is there a need to restructure the composition of audit committee based on the requirement of specific industry sectors, such as like technical matters/particular skills, or in stable/volatile and regulated/unregulated industries (Cohen et al., 2004)?

Consequently, in order to work diligently and maintain independency, it is also required that the number of directors in the audit committee should be limited in order to prevent conflict of interest. Depending on the firm’s performance and its characteristics, directors can also be called for external directorships in other firms, where they will gain additional experience and expertise. This creates more demand for such individuals. But institutional investors are against such practices, claiming that multiple directorships can harm the firm’s value and make the directors less diligent in monitoring aggressive accounting. However, within the sample of 3190 firms on COMPUSTAT and Compact Disclosure, no evidence has been found
that multiple directorships affected responsibilities of those involved and their duties towards professional monitoring of financial reporting process (Feris, Jagannathan, & Pritchard, 2003). On the contrary, Sharma and Kuang (2008) suggested that multiple directorships were positively associated with aggressive accounting practices in NZ. Regulators in NZ permit limiting the number of directors’ other board seats in order to obtain high quality financial monitoring by the audit committee.

Similarly, with a sample of 692 public traded US firms negative associations have been found between earning management and proportion of outside directors and audit committee with a maximum composition of independent directors (Klein, 2002). This analysis prompts several important questions: What is an optimal number of independent directors required for the composition of audit committee? How can profit management be further improved even in cases where audit committee is free from any influence from the management (Klein, 2002)? Does it mean that audit committee are independent but in fact they are not acting truly independently? The following paragraphs will examine past research on some key aspects of audit committee structure, which can also enhance the effectiveness of audit committee.

If there is larger board size then allocation of members to the committees and board will also large. Besides, larger board and committee may be having a number of diverse areas of expertise, which can significantly improve financial reporting quality. Therefore, an immediate attention is required on the board size and board independence. That will be of best practice membership of corporate governance. Furthermore, does the composition of membership matter? Should regulation be mandatory or voluntary? Are firms ready for imposing such best practices membership despite significant high costs (Rainsbury, Bradbury, & Cahan, 2008)? Nevertheless, with a sample of 56 NZ firms, Rainsbury et al. (2008) found that firms who have small size of board and smaller number of independent directors could not afford larger size. In such cases, compliance costs would be higher if they had to follow the requirements of best practice membership guidelines.
Persistently, institutional ownership structure (type of ownership structure) is positively associated with audit meeting frequency as in the institutional ownership structure, shareholders demands high quality governance and effective monitoring of financial reporting process (Sharma et al., 2008). A similar studies by DeZoort et al. (2002) and Sharma and Iselin (2006) confirmed that the audit committee stock ownership could influence the financial reporting quality.

However, appointments of audit committee members make a big difference on its effectiveness. When making appointments of directors it is important to address all the criteria, such as experience, knowledge, training, incentives, accounting qualification, rather than only considering outside directors. Because of fiduciary relationship with management, outside directors are in management influence. That makes them less likely to monitor the company activities competently (Vafeas, 2001). Vafeas also examined the composition of audit committees from a sample of 310 firms listed on Fortune and a random non Fortune sample of 238 firms, concluding that audit committee appointments will increase with increase in the degree of outside directors.

The addition of an audit committee member, with financial expertise can increase the value of the firm in the market, which can be seen in the significantly increased positive stock prices after the appointment announcements of members to the audit committees (Wallace et al., 2004). Thus, investors seem to believe in audit committees comprised of members with financial expertise. This is not surprising, as investors cannot believe the managers alone, because the managers are not impartial and can even be expected to manipulate accounting reports to their advantage. Hence, for effective monitoring of the management functions and ensuring financial reporting quality, audit committee members should have financial expertise. However, audit committee members should have sufficient financial accounting knowledge for independent assessment of matters presented to them because matters and
transactions handed over to the audit committees are frequently of a highly technical nature (Bull & Sharp, 1989).

Moreover, audit committee members with adequate financial expertise enhance accounting conservatism and critically evaluate the managerial decisions (Krishnan & Visvanathan, 2008). The difference between having the financial experts on the audit committee, compared to basic financial literacy can be significant in terms of the number of issues raised and dealt with (Linda, Roger, & Laureen, 2002). Likewise, if the audit committee members have good financial knowledge then they can better understand auditor judgements and discern the substance of disputes between the external auditors and management (DeZoort et al., 2001).

Additionally, if there are accounting experts and greater board independence then there will be more demand for frequent audit committee meetings in case of aggressive accounting practices adopted by the management (Sharma & Kuang, 2008). More frequent audit meetings also enhance the effectiveness of audit committees. In larger institutional firms, larger audit committees with greater proportion of accounting experts are typically linked with more frequent audit committee meetings. However, there is a gap in extant literature on how director independence affects audit meeting frequency (Raghunandan & Rama, 2007). The larger audit committee can affect frequent audit meetings positively, which would, in turn, result in more relevant and productive ideas.

New audit committee members are expected to be more professional and to adopt high standards of accountability (Rahmet & Iskandar, 2009). There is evidence from the prior research for the significant role of financial expertise in enhancing the financial reporting quality. For example, according to Collier (1993), financial literacy plays an important role in enhancing the effectiveness of the audit committee. With expertises in accounting or finance, audit committee members can perform better in analysing and examining the financial information. Whereas, Kalbers (1992) suggested that lack of financial literacy was the cause
of poor financial performance and has made audit committee less effective in monitoring the financial and operational matters of the companies, which resulted in bad quality of accounting information. According to Musa and Richard (2005), there is great impact of audit committee’s characteristics on the monitoring effectiveness of the financial reporting process, which is evidenced by positive and significant relationship between audit committee financial expertises and interim disclosures.

In the same way, DeZoorts and Salterio (2001) and Carcello and Neal (2003) found that there was negative association between financial expertise and auditor dismissal in cases of disputes between auditor and management. Similarly, Abbott, Park, and Parker (2000) suggested that there was negative relationship between financial expertise and financial fraud. Further, according to Felo, Krishnamurthy, and Soloeri (2003), there is positive association between financial expertise and financial reporting quality.

Collectively, several prior studies have demonstrated and indicated that there are positive associations between the audit committee’s characteristics and financial reporting quality as some specific features determine a strong and effective audit committee, which enhances the quality and predicting power of reported financial accounting information. Furthermore, from the above presented research, it is established that there is considerable correlation between accounting information and stock prices, given that accounting information has the power of value relevance. Hence, the following hypothesis postulated:

\[ H1. \text{ Audit committee expertise is positively associated with value relevance of financial accounting earning.} \]
3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 Value Relevance

This is a cross sectional research study to examine the relationship between audit committee characteristics and the value relevance of accounting information. Following prior research, stock price is regressed on earnings and equity values to substantiate the relationship between accounting measures and market price (Ohlson, 1995). The base line regression equation is given as:

\[ P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} \]  

(1)

Where \( P_{it} \) is the share price of company. \( i \) denote a specific firm and \( t \) is the fiscal year. \( P \) is a dependent variable as a measure of value relevance of accounting earnings. Price is appropriate variable as a dependent variable because the right hand side variables (EPS, BVPS) are level variables not the first difference. Share price used in the equation is taken at the time three months from the end of fiscal years because effects of financial results take time to take effect, as outcomes from post year events also contribute. Many prior studies have given evidence of significant associations between accounting information and stock prices. Francis and Schipper (1999) suggested that value relevance implies that accounting information and stock prices have statistical association. Ball and Brown (1968) and Naceur and Nachi (2006) also state that accounting information is value relevant if it reflects stock prices and users find them reliable.

EARNING PER SHARE (EPS) is reported profit after tax but before abnormal items, divided by total number of outstanding shares at the year end.

BOOK VALUE PER SHARE (BVPS) is the shareholders’ equity divided by total number of outstanding shares at the year end.
3.2 Audit Committee Characteristics:

3.2.1 Audit Committee Expertise and Value Relevance

Audit committee financial literacy variable, denoted as ACFL, is measured by the ratio of members with financial literacy to the total number of audit committee members. Financial literacy does not necessarily require each director to have Certified Public Accounting (CPAs) designation. However, the code of best practice encourages all firms to appoint at least one member with accounting qualification in the related discipline, which is approved by professional financial or accounting body. Similar approach is given by other authors, who all agree that at least one member of audit committee must have CPA qualification (Giacomino, Akers, & Wall, 2009; Scarpati, 2003). Highly financially literate audit committee members are expected to be more professional, as they adopt high standards of accountability (Rahmet & Iskandar, 2009). Financial literacy plays an important role in enhancing the effectiveness of the audit committee (Collier, 1993). With expertises in accounting or finance, audit committee members can perform better in analysing and examining the financial accounting information. Lack of financial literacy is the cause of poor financial performance (Kalbers, 1992) and makes the audit committee less effective in monitoring the financial and operational matters of the companies, which results in low quality of accounting information.

The expression below presents the regression model used to assess the effect of financial literacy on the value relevance of accounting earnings:

\[ P_i = \beta_0 + \beta_1 \text{EPS}_i + \beta_2 \text{BVPS}_i + \beta_3 \text{ACFL} + \beta_4 \text{ACFL*BVPS} + \beta_5 \text{ACFL*EPS} \]  

Where ACFL is the audit committee financial literacy, and \( \beta_4 \text{ACFL*BV} \) and \( \beta_5 \text{ACFL*EPS} \) are earning and equity book values weighted by audit committee financial literacy. If there is a strong effect of audit committee financial literacy on the accounting information, then the coefficients of \( \beta_3 \) to \( \beta_5 \) should be positive and significant.
3.2.2 Audit Committee Independence and Value Relevance

Audit committee independence variable is denoted as ACINDPENDENCE and it is measured by the ratio of number of independent audit committee members to the total number of audit committee members. Audit committee independence refers to the majority of non-executive directors in the total number of audit committee members. Majority of independent directors will positively affect firm’s value (Klein, 2002). Non-executive directors are more objective (McMullen & Raghuanandan, 1996) and act independently as they are free from any influence from the management. Consequently, there is less chances of management manipulation when majority of members are non-executive directors. With independence, an audit committee becomes more effective in controlling and monitoring the management functions, which enhances the reliability of financial statements and also increases the firm’s value.

To capture the effect of audit committee independence on the value relevance of accounting information, following regression equation is used:

\[
P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \beta_3 \text{ACINDEPENDENCE} + \\
\beta_4 \text{ACINDEPENDENCE} \times \text{BV} + \beta_5 \text{ACINDEPENDENCE} \times \text{EPS} \quad (3)
\]

Where \( \beta_3 \text{ACINDEPENDENCE} \) is the audit committee independence, and \( \beta_4 \text{ACINDEPENDENCE} \times \text{BV} \) and \( \beta_5 \text{ACINDEPENDENCE} \times \text{EPS} \) are interactive variables with audit committee independence. If audit committee is strong and effective due to ACINDPENDENCE and results in high value relevant accounting information, these coefficients should be statistically significant and positive.
3.3 Board variables:

3.3.1 Board Independence and Value Relevance

Board independence is denoted as BINDEPENDENCE and it is measured as the ratio of number of independent board members to the total number of board members. Board independence is the key element of the strength of corporate governance (Wesbach, 1988). Greater board independence demands frequent audit committee meetings in case of aggressive accounting practices adopted by the management (Sharma & Kuang, 2008). To investigate the effect of board independence on the value relevance of accounting information, following regression model is used:

\[ P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \beta_3 \text{BOARDINDEPENDENCE} + \]

\[ \beta_4 \text{BOARDINDEPENDENCE*BVPS} + \beta_5 \text{BOARDINDEPENDENCE*EPS} \]  

(4)

Where \( \beta_3 \text{BOARDINDEPENDENCE} \) is board independence and \( \beta_4 \text{BOARDINDEPENDENCE*BVPS} \) and \( \beta_5 \text{BOARDINDEPENDENCE*EPS} \) are interactive variables. If board independence has a greater effect on the value relevance of accounting information then these coefficients should be positive and significant.

3.4 Audit Quality and Value Relevance

Big 4 Audit is denoted as AUDITQUALITY and is coded as 1 if audited by ‘BIG4’ firms otherwise zero. According to Francis and Schipper (1999), Becker et al. (1998), and DeFond and Jiambalvo, (1991) high quality external auditors such as BIG4 should be preferred for quality accounting information with minimum errors.
To estimate the effect of high quality audit on the value relevance of accounting information, the following regression model is used:

\[ P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \beta_3 \text{AUDITQUALITY} + \beta_4 \text{AUDITQUALITY}^*\text{BVPS} + \beta_5 \text{AUDITQUALITY}^*\text{EPS} \]  

(5)

If audit quality has a positive effect on the value relevance of accounting information then these coefficients should be positive and significant.

### 3.5 Other corporate governance variables:

#### 3.5.1 Audit committee size

Audit committee is measured by the actual number of audit committee members and denoted as ACSIZE.

#### 3.5.2 Board Size

Board size is measured by the actual numbers of board members and denoted as BOARDSIZE.

#### 3.5.3 Audit committee meeting

Audit committee meeting is measured as the actual number of meetings held by the audit committee members during the fiscal year. This variable denoted as ACMeeting.

#### 3.5.4 Board Meeting

Board meeting is denoted as BOARDMEETING and it is measured as the actual number of meetings held by the board members during the fiscal year.

#### 3.5.5 CEO Duality

CEO duality variable is denoted as CEODUALITY. Measurement of CEO duality is adopted from the study of Habib and Azim (2008), whereby if the person holding position of a CEO, also held the position of Chairperson of the board (COB), then CEO duality is coded 1, and if those positions are held by different persons, the value for CEO duality is 0.
3.6 Corporate Governance and Value Relevance

To capture the collective effect of corporate governance variables (that are used in the above regressions individually) on the value relevance of accounting information, all the variables are combined in the following regression equation:

\[ P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \beta_3 \text{ACFL} \times \text{BVPS} + \beta_4 \text{ACFL} \times \text{EP} + \beta_5 \text{AUDITQUALITY} \times \text{EPS} + \beta_6 \text{AUDITQUALITY} \times \text{BVPS} + \beta_7 \text{ACINDEPENDENCE} \times \text{BVPS} + \beta_8 \text{ACINDEPENDENCE} \times \text{EPS} + \beta_9 \text{BOARDINDEPENDENCE} \times \text{BVPS} + \beta_{10} \text{BOARDINDEPENDENCE} \times \text{EPS} \]  

(6)

All the variables in the above regression model have the same meaning as before. If strong corporate governance results in high value relevant accounting information then all these coefficients should be positive and statistically significant.

A factor analysis is performed on the corporate governance variables for identifying and underlying those components from which maximum variance is extracted to substantiate the effect of audit committee characteristics on the value relevance of accounting information.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulai %</td>
</tr>
<tr>
<td>1</td>
<td>2.24</td>
<td>27.961</td>
<td>27.961</td>
</tr>
<tr>
<td>2</td>
<td>1.50</td>
<td>18.702</td>
<td>46.663</td>
</tr>
<tr>
<td>3</td>
<td>1.28</td>
<td>15.913</td>
<td>62.576</td>
</tr>
</tbody>
</table>
Table 1A presents total variance. This variance analysis results in three factors with approximately 63 per cent of the total variance in the original sample. All factors with an eigenvalue greater than 1 are retained for final regression analysis.

Table 1B reports rotated component matrix. Three components are named, based on rotated component matrix. Factor 1 is named as STRUCTURE, which represents ACSIZE, BOARDSIZE and AUDIT QUALITY loading positively on the STRUCTURE dimension. Factor 2 is named as EXPERTISE. Under this dimension, ACINDEPENDENCE and BOARDINDEPENDENCE are loaded positively but AC FINANCIAL LITERACY is loaded on both EXPERTISE and STRUCTURE dimension, but more strongly on EXPERTISE dimension. Hence, Factor 2 is EXPERTISE capturing ACINDEPENDENCE, BOARDINDEPENDENCE and AC FINANCIAL LITERACY. Factor 3 is denoted as MEETING, detaining ACMEETING and BOARDMEETING, which are loaded positively on this dimension.

<table>
<thead>
<tr>
<th>Table 1B: Rotated Component Matrix(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPONETS</strong></td>
</tr>
<tr>
<td>AUDIT COMMITTEE SIZE</td>
</tr>
<tr>
<td>FINANCIAL LITERACY</td>
</tr>
<tr>
<td>AUDIT COMMITTEE INDEPENDENCE RATIO</td>
</tr>
<tr>
<td>BOARD SIZE</td>
</tr>
<tr>
<td>BOARD INDEPENDENCE RATIO</td>
</tr>
<tr>
<td>AUDIT COMMITTEE MEETING</td>
</tr>
<tr>
<td>BOARD MEETING</td>
</tr>
<tr>
<td>AUDIT QUALITY</td>
</tr>
</tbody>
</table>
Three factor scores from the component factor analysis, named as STRUCTURE, EXPERTISE and MEETINGS are used in following final regression model to confine the effect of corporate governance on the value relevance of accounting information:

\[ P_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \beta_3 \text{STRUCTURE} + \beta_4 \text{EXPERTISE} + \]

\[ \beta_5 \text{MEETINGS} + \beta_6 \text{STRUCTURE} * \text{BVPS} + \beta_7 \text{STRUCTURE} * \text{EPS} + \beta_8 \text{EXPERTISE} * \text{EPS} + \beta_9 \text{EXPERTISE} * \text{BVPS} + \beta_{10} \text{MEETINGS} * \text{EPS} + \]

\[ \beta_{11} \text{MEETINGS} * \text{BVPS} \]  

(7)

Where \( \beta_3 \text{STRUCTURE} \) is the factor score from factor analysis and is computed from the reliable items named ACSIZE, BOARDSIZE and AUDIT QUALITY that are loaded positively under STRUCTURE component. \( \beta_8 \text{EXPERTISE} \) is also a factor score and is computed based on the variables of items named as ACINDEPENDENCE and BOARDINDPENDENCE. Similarly, factor score \( \beta_5 \text{MEETINGS} \) is computed from ACMEETING and BOARDMEETING.

Note: \( \beta_0 \text{STRUCTURE} * \text{BVPS} \), \( \beta_7 \text{STRUCTURE} * \text{EPS} \), \( \beta_8 \text{EXPERTISE} * \text{EPS} \), \( \beta_9 \text{EXPERTISE} * \text{BVPS} \), \( \beta_{10} \text{MEETINGS} * \text{EPS} \), and \( \beta_{11} \text{MEETINGS} * \text{BVPS} \) all are interactive variables of EPS and BVPS interacted with STRUCTURE, EXPERTISE and MEETING.

If a strong and effective audit committee acts as a solid control mechanism of corporate governance, which results in high value relevant accounting information, then all the coefficients in the final regression equation presented above should be statistically significant and positive.
4.0 FINDINGS AND RESULTS

4.1 Sample Selection
This study uses data from New Zealand’s 105 listed companies for the period 2007-2009. Following prior research, organisations related to banks, financial institutions, foreign companies, investment and insurance companies are not included in the analysis as these type of companies are managed under different regulatory accounting environments (Habib & Azim, 2008).

Due to the lack of information regarding corporate governance and missing stock price information, the sample is reduced. The final sample consists of 272 firms’ year observations from 2007, 2008 and 2009 with 90, 91, and 91 firms respectively.

The Audit committee information and financial data for companies come from the NZX Deep Archive database, which consists of annual reports and provides comprehensive data for all New Zealand Companies. Finally, stock prices are taken from DATASTREAM.

4.2 Descriptive Data
Table 1 presents descriptive statistics of all the variables included into analysis - financial statements variables, market variable, and corporate governance variables. Mean and median (given in parentheses) share price is 2.1035 (1.2400), EPS is .0981(.0600), whereas BVPS is 1.5662(1.0673).

Corporate governance variables statistics show that average AC size is 3.28, with meetings held on average 2.44 times in a year, whilst average size of board is 6.04, with corresponding average meeting frequency 6.88 times in a year.
Table 2: Descriptive Statistics on Financial statements variables, market variables and corporate governance variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>St.Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share price</td>
<td>2.10</td>
<td>1.24</td>
<td>2.22</td>
<td>0.01</td>
<td>12.78</td>
</tr>
<tr>
<td>EPS</td>
<td>0.10</td>
<td>0.06</td>
<td>0.19</td>
<td>-1.50</td>
<td>1.00</td>
</tr>
<tr>
<td>BVPS</td>
<td>1.57</td>
<td>1.07</td>
<td>1.58</td>
<td>-0.05</td>
<td>6.52</td>
</tr>
<tr>
<td>AC Size</td>
<td>3.28</td>
<td>3.00</td>
<td>1.15</td>
<td>0.00</td>
<td>8.00</td>
</tr>
<tr>
<td>ACFL</td>
<td>0.21</td>
<td>0.00</td>
<td>0.25</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>AC Independence</td>
<td>0.75</td>
<td>0.75</td>
<td>0.32</td>
<td>0.00</td>
<td>1.33</td>
</tr>
<tr>
<td>Board Size</td>
<td>6.04</td>
<td>6.00</td>
<td>1.56</td>
<td>0.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Board Independence</td>
<td>0.62</td>
<td>0.67</td>
<td>0.25</td>
<td>0.00</td>
<td>1.33</td>
</tr>
<tr>
<td>Board Meeting</td>
<td>6.88</td>
<td>8.00</td>
<td>5.21</td>
<td>0.00</td>
<td>26.00</td>
</tr>
<tr>
<td>AC Meeting</td>
<td>2.44</td>
<td>2.00</td>
<td>2.50</td>
<td>0.00</td>
<td>12.00</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Audit quality</td>
<td>0.85</td>
<td>1.00</td>
<td>0.36</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

On the audit committee, about 75% members were independent and about 21% were financially literate. On the board, 61.87 % members were independent members. All the companies in the sample had different individuals appointed as CEO and Chairman. Furthermore, 85 % of the sample was audited by the ‘BIG 4’ indicating a high quality of external auditor.

4.3 Basic regression results

Table 3 reports the pooled regression result of Equation 1. Consistent with value relevance research (Ohlson Model) both earnings and equity book values enter into the regression equation with positive and statistically significant coefficients. Together, EPS and BVPS explain 50.1 per cent of the cross-sectional variation in stock prices.

The regression estimates the variation effect of EPS and BVPS on the value relevance of accounting information. The earning coefficients of .20 and book value coefficient of .60 provide basis for assuming a significant relationship and their effect on share price, based on
Ohlson’s (1995) accounting based valuation framework. These findings are consistent with the evidence established by Francis and Schipper, (1999), Collins et al. (1997) and Barth et al. (2001).

**Audit committee characteristics and value relevance of accounting information:**

**4.4 Audit Committee Expertise and Value Relevance**

In Table 3, the regression results of Equation 2 are presented. This regression equation incorporates audit committee characteristic financial literacy along with earning per share and book value per share. The adjusted R$^2$ is 53.2, which is slightly higher than the results of baseline equation (50.1), and predicts this proportional variation in share price as a result of the combined effect from ACFINANCIAL LITERACY, EPS and BVPS, as well as the interaction amongst those variables. However, the regression analysis provides mixed results. ACFINANCIAL LITERACY enters into the regression with negative coefficient, but when its interaction with EPS is entered, the coefficient is positive (.24) and statistically significant, resulting in a better predicting power of the regression model. Again, when ACFINANCIAL LITERACY is entered after including the interaction with BVPS, the coefficient of this interaction is negative. Having negative coefficients of ACFINANCIAL LITERACY and interaction variable of FINANCIAL LITERACY with BOOK VALUE PER SHARE, this equation is not substantiating the effect of financial literacy on the value relevance of accounting information.

Hence, results are not supporting the hypothesis of this study that audit committee expertise has a positive effect on the value relevance of accounting information. Thus, these unexpected results suggest that there is a disclosure problem stemming from the lack of information on financial expertise of the audit committee members. This is evident in the study sample, as only some companies have disclosed the information regarding financial qualifications of audit committee members. Audit committee financial literacy mean is only 21 per cent,
indicating that only 21 per cent of total members on the audit committee have relevant financial qualifications. If more information on financial expertise of audit committee members is made publicly available, the results of the above regression analysis would likely be very different. NZX Section 3.6 gives definition of audit committee member with adequate financial or accounting background as a member of the New Zealand Institute of Chartered Accountants or a director who has held a position of Chief Financial Officer at a listed Company for two years or more or has completed an academic programme approved by NZX, specifically designated for audit committee membership. I believe that most of the New Zealand’s companies have audit committee members with relevant accounting qualifications, as required by NZ. But this information is not fully disclosed in the financial reports. Investors have right to see and analyze all the corporate governance information. Thus, all the information should be stated completely. As there is lack of information regarding accounting qualifications of the audit committee members, the results of the regression analysis above are not as definitive as they should be. Hence, results do not support the hypothesis.

4.5 Audit Committee Independence and Value Relevance

Model 3 in Table 3 provides the results for the regression equation which is incorporating ACINDEPENDENCE and interaction with EPS and BVPS. The adjusted $R^2$ is 55%, which is an improvement on the baseline regression (50.1) as predicting high value relevant accounting information. The coefficients of EPS and BVPS remain positive and statistically significant, very similar to the first baseline equation. ACINDEPENDENCE enters into the regression with positive coefficient of .07 but is not statistically significant, which is not an expected result. Conversely, when entered into the regression with interaction of BVPS, it has negative coefficients, which are contradicting the value relevance concept by implying that independence does not affect value relevance of accounting information.
However, only the interactive variable ACINDEPENDENCE with EPS has positive and significant coefficient. This result supports the hypothesis that audit committee characteristics have a positive impact on the value relevance of accounting information. This is also in line with extant literature, where most authors agree that, with the feature of independency, the audit committee can work more diligently and can prevent earning management. For example, it is mentioned that there is an association between the independence of the audit committee and earning management (Cohen et al., 2004). A more independent audit committee will contribute to a higher quality audit. But the question is how best practices of independence audit committee can be achieved? We never know if a director is truly independent, as even the published documentation can be misleading. The question, thus, becomes, what is truly independence of the audit committee members? It can be seen that even for companies with independent directors on their audit committees the published results may not necessarily be true. In such cases, accounting information is influencing market prices, but only because the share price is affected by the shareholders, whose interest in the company is not based on factual information.
# Table 3: Pooled Regression results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
<th>t</th>
<th>sig</th>
<th>Coeff.</th>
<th>t</th>
<th>sig</th>
<th>Coeff.</th>
<th>t</th>
<th>sig</th>
<th>Coeff.</th>
<th>t</th>
<th>sig</th>
<th>Coeff.</th>
<th>t</th>
<th>Sig</th>
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</thead>
<tbody>
<tr>
<td>Constant</td>
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<td>0.</td>
<td>3.76</td>
<td>0.</td>
<td>0.00</td>
<td>0.22</td>
<td>0.82</td>
<td>0.00</td>
<td>0.50</td>
<td>0.62</td>
<td>1.52</td>
<td>0.13</td>
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<td></td>
</tr>
<tr>
<td>EPS</td>
<td>0.20</td>
<td>4.20</td>
<td>0.</td>
<td>0.17</td>
<td>3.73</td>
<td>0.00</td>
<td>0.16</td>
<td>3.51</td>
<td>0.00</td>
<td>0.18</td>
<td>3.89</td>
<td>0.00</td>
<td>0.12</td>
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<tr>
<td>BVPS</td>
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<td>12.8</td>
<td>0.</td>
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<td>9.27</td>
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<td>0.65</td>
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<tr>
<td>ACFL*EPS</td>
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<tr>
<td>ACFL*BVPS</td>
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<td>0.85</td>
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<tr>
<td>AC INDEPENDENCE</td>
<td>0.07</td>
<td>1.26</td>
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<tr>
<td>ACINDPEDENCE*EPS</td>
<td>0.24</td>
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<tr>
<td>ACINDPEDENCE*BVPS</td>
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<tr>
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<td>0.50</td>
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</tr>
<tr>
<td>BOARDINDEPENDENCE*EPS</td>
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<td>4.06</td>
<td>0.00</td>
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<tr>
<td>BOARDINDEPENDENCE*BVPS</td>
<td>-0.09</td>
<td>-0.83</td>
<td>0.41</td>
<td></td>
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<tr>
<td>AUDIT QUALITY</td>
<td>0.01</td>
<td>0.15</td>
<td>0.88</td>
<td></td>
<td></td>
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<tr>
<td>AUDIT QUALITY*EPS</td>
<td>0.34</td>
<td>7.59</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUDIT QUALITY*BVPS</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>50.1</td>
<td>53.2</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
4.6 Board Independence and Value Relevance

Table 3 shows results for Model 4, where BOARDINDEPENDENCE is integrated with interaction variables of EPS and BVPS. It highlights mixed results, similar to ACFINANCIAL LITERACY and ACINDEPENDENCE models. Coefficients of EPS and BVPS are better than base line regression. BOARDINDEPENDENCE enters into the regression with positive coefficient of .05 but is not significant. Coefficients of BOARDINDEPENDENCE with interactive variable of EPS and BVPS are negative, thus predicting lower explanatory power of the variables. Once again, the results are unexpected, as the extant literature suggests that board independence is the key element of the strength of corporate governance (Weisbach, 1988). Greater board independence demands for frequent audit committee meetings in case of aggressive accounting practices adopted by the management (Sharma & Kuang, 2008). The Adjusted R² is 52.8, which is not much different from base line regression adjusted R² of 50.1. This implies that there is not much variation in value relevance of accounting information when there is a large number of independent board members, as in this sample about 62 per cent board members are independent. Likewise for AC INDEPENDENCE, the result is not validating the fact that strong corporate governance enhances high value relevance of accounting information. Previous research of Hermalin and Weisbach (2003) suggests that board directors’ member selection, responsibilities and performance should affect company value, further identifying number of factors that affect director’s performance. In equilibrium, the authors state that there is no relationship between corporate governance and accounting measures.

4.7 Audit Quality and Value Relevance

Model 5 regression results are listed in Table 3. Findings of Equation 5 are indicating that adjusted R² is 58.8 per cent, a significant difference compared to the baseline regression with 50.1 per cent. This implies that share price has 58.8 per cent variance from the combined of AUDITQUALITY and Interaction with EPS and BVPS. Coefficients of EPS and BVPS are
less predictive than baseline regression. Coefficients of AUDIT QUALITY and interactive variables of AUDIT QUALITY with EPS and BVPS are all positive, but not all significant. Maximum variance is extracted from the BVPS AUDITQUALITY*EPS with high significance level. However, audit quality interactive with EPS is statistically significant. This could be due to the cross section variation among the sample companies, as given by from external audit firms, but again this may be ambiguous as the sample size of this study is very small and cannot fully explain the cross variation. Collectively, this model does not substantiate the effect of corporate governance on the value relevance. Hence, results are mixed and do not support the supposition completely that effective and high quality audit as a control mechanism of corporate governance can provide the best oversight and create credible financial statements, which further enhance the value relevance of accounting information. May be this is because of nature and size of New Zealand market, as well as due to the legal system, investor protection and active corporate governance, which all contribute to a less environment. Hence, it could be that the phenomenon of value relevance concept is not towel recognised in to NZ and value relevance is not affected by the variance in corporate governance variables. The results are contradictory, considering that 85 per cent of companies are using BIG4 external auditors but predicting that there is no significant change in the market prices due to change in accounting information, even when audited by first class auditors.

4.8 Corporate Governance and Value Relevance
Table 4 presents pooled regression result of Model 5. All the interactive variables of corporate governance are combined for this regression analysis in order to assess their interaction and collective effect on the value relevance of accounting information. The coefficient of EPS still remains positive and significant as in the baseline regression analysis. However, coefficient of BVPS is insignificant. This is may be due to the effect of interaction variables. The adjusted $R^2$ is 63.1 per cent, clearly greater than 50.1 per cent obtained in baseline regression. $R^2$ is
predicting improvement in the value relevance of accounting information from the effect of all interactive variables. On the other hand, the coefficients statistics of regression are suggesting completely diverse findings.

Table 4: Pooled Regression Results

<table>
<thead>
<tr>
<th>Model 6</th>
<th>Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>Beta</td>
<td>3.440</td>
<td>.001</td>
</tr>
<tr>
<td>EARNING PER SHARE</td>
<td>.068</td>
<td>1.588</td>
<td>.113</td>
</tr>
<tr>
<td>BOOK VALUE PER SHARE</td>
<td>.336</td>
<td>2.070</td>
<td>.039</td>
</tr>
<tr>
<td>FINANCIAL RATIO EARNING PER SHARE</td>
<td>-.063</td>
<td>-.704</td>
<td>.482</td>
</tr>
<tr>
<td>FINANCIAL RATIO BOOK VALUE PER SHARE</td>
<td>.067</td>
<td>.862</td>
<td>.390</td>
</tr>
<tr>
<td>AUDIT COMMITTEE INDEPENDENCE EPS</td>
<td>.233</td>
<td>1.627</td>
<td>.105</td>
</tr>
<tr>
<td>AUDIT COMMITTEE INDEPENDENCE BVPS</td>
<td>.104</td>
<td>.996</td>
<td>.320</td>
</tr>
<tr>
<td>BINDEPENDENCE EPS</td>
<td>-.583</td>
<td>-4.70</td>
<td>.000</td>
</tr>
<tr>
<td>BINDEPENDENCE BVPS</td>
<td>.230</td>
<td>2.36</td>
<td>.019</td>
</tr>
<tr>
<td>AUDIT QUALITY EPS</td>
<td>.720</td>
<td>7.40</td>
<td>.000</td>
</tr>
<tr>
<td>AUDIT QUALITY BVPS</td>
<td>-.200</td>
<td>-1.27</td>
<td>.207</td>
</tr>
</tbody>
</table>

Coefficient of FINANCIAL LITERACY* EPS, AUDIT QUALITY*BVPS, and BOARD INDEPENDENCE*EPS are negative. Coefficients of FINANCIAL LITERACY*BVPS, AC INDPENDENCE*EPS, AC INDPENDENCE*BVPS, BOARD INDEPENDENCE*BVPS, and AUDIT QUALITY*EPS are .067, .233, .104, .230, .720 respectively, but not all are statistically significant.

Hence, again, the results are not supporting the hypothesis that the strong audit committee with strong determinants as effective control mechanism of strong corporate governance
results in high value relevant accounting information. This paradoxical result may stem from the colinearity problem, as all these variables are heavily correlated with each other. Hence, when all the variables are combined into the regression to capture the effect on value relevance, the results are yielding less explanatory power to support the evidence. Past research used different variables and provided results in support of the demand for strong and effective corporate governance. However, in the context of NZ Small Market, we cannot generalise results of other big markets due to its unique system and other factors discussed above.

Table 5: Final pooled Regression Results:

<table>
<thead>
<tr>
<th>Model 7</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.567</td>
<td>.571</td>
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<tr>
<td></td>
<td>EARNING PER SHARE</td>
<td>.065</td>
<td>.415</td>
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<tr>
<td></td>
<td>BOOK VALUE PER SHARE</td>
<td>.593</td>
<td>4.669</td>
</tr>
<tr>
<td></td>
<td>STRUCTURE</td>
<td>.045</td>
<td>.514</td>
</tr>
<tr>
<td></td>
<td>EXPERTISE</td>
<td>.076</td>
<td>1.157</td>
</tr>
<tr>
<td></td>
<td>MEETING</td>
<td>.077</td>
<td>.405</td>
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<tr>
<td></td>
<td>STRUCTUREEPS</td>
<td>.230</td>
<td>.969</td>
</tr>
<tr>
<td></td>
<td>STRUVCTUREBPS</td>
<td>-.071</td>
<td>-.497</td>
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<tr>
<td></td>
<td>EXPERTISEEPS</td>
<td>-.036</td>
<td>-.157</td>
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<td></td>
<td>EXPERTISEBPS</td>
<td>-.125</td>
<td>-.599</td>
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<tr>
<td></td>
<td>MEETINGEPS</td>
<td>.110</td>
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<td></td>
<td>MEETINGBPS</td>
<td>.001</td>
<td>.009</td>
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</table>
4.9 Final Regression Results of Corporate Governance and Value Relevance

Following factor analysis, three factor scores STRUCTURE, EXPERTISE and MEETING are incorporated into the regression with interactive variables of EPS and BVPS. Table 5 presents results of Model 7. Adjusted $R^2$ is 51 per cent, which almost identical to baseline regression (50.1). $R^2$ statistics showing no change in the explanatory power of Model 7, which implies that there is no change in the value relevance of accounting information from the corporate governance variables incorporated with interaction of EPS and BVPS. The coefficient of BVPS is .593 and is statistically significant. However, the coefficient of EPS is also positive, but not significant. The coefficients of STRUCTURE, EXPERTISE, and MEETING are .045, .076 and .077 respectively, and none are statistically significant. STRUCTURE dimension represents ACSIZE, BOARD SIZE, and AUDIT QUALITY. EXPERTISE dimension captures ACFINANCIAL LITERACY, ACINDEPENDENCE, and BOARD INDEPENDENCE, whereas MEETING dimension includes ACMEETING and BOARD MEETING. As in Model 6, colinearity remains an issue. Thus, the results of Model 7 do not support the hypothesis. The regression result proves that there is no significant relationship between the audit committee characteristics and value relevance of accounting information. All the coefficients are negative and insignificant, which implies that governance structure has no effect on the credibility of accounting information.

In contrast, many previous studies suggested that strong and effective corporate governance had a positive effect on the value relevance of accounting information. For example, research of Habib and Azim (2008) proved that firms with strong governance structure exhibited higher value relevance of accounting information, based on their large sample of 500 Australian Companies where 73 per cent of audit committee members had financial qualifications as per required by regulations. In contrast, the present study was based on a very small sample and out of that only 21 per cent audit committee members have financial literacy. In addition, New Zealand is a small market, different from Australia, UK and US. In
NZ corporate sector is not well developed and is less regulated. New Zealand market still relies on international economy and offers less protection to investors. Furthermore, its legal system differs significantly from that in place in other well researched countries. Hence, finding from other world economies cannot be generalized to include New Zealand and its small market.

The present study’s results are consistent with the study of Cahan (2009), which suggested, based on their research across many countries, that there is a stronger and higher association between the value relevance of earnings and earning quality in case of countries with high investor protection than in countries with less investor protection. In New Zealand, investor protection is not alert and corporate governance is still active, which is why there is less influence of corporate governance and corresponding control devices on the value relevance of accounting information.
5.0 CONCLUSION

The present study aimed to investigate the relationship between audit committee characteristics and the value relevance of accounting information based on the prior research identified through the literature review, which suggested that effective audit committee characteristics, as a control device of corporate governance, have a positive effect on the value relevance of accounting information. Value relevance was measured by adjusted $R^2$ following Ohlson’s Model (1995) with regressing stock prices on earning values and equity book values. The value relevance of accounting information was always recognised for researching, valuing accounting numbers whether historical, present or future forecasting (Richardson & Tinaikar, 2004). Investors believe that relevant and reliable information is that which can assist them to decide for their investment decision in firm’s stock.

For the regression analysis, audit committee size, board size, audit committee financial literacy, audit committee independence, board independence, audit meetings, board meetings, and audit quality constructs were used. These variables were used individually and then pooled into the regression collectively to capture the variance on the value relevance on accounting earnings. In addition, for the robustness of results and extracting maximum variance, a principal component analysis was performed. Three factor scores were named as STRUCTURE, EXPERTISE, and MEETING and were used in the final regression to capture the effect on the value relevance of accounting information.

The results suggest that there is no change in the value relevance after incorporating the corporate governance constructs with EPS and BVPS. The major problem is that of colinearity, as these constructs are very heavily correlated with each other. Furthermore, New Zealand is a very small economy and has a distinctive legal and regulatory system from US, UK or Germany, as well as in respect of investor protection with holding status of less regulated and inactive corporate sector market. Consequently, past research focusing on other world economies and nations cannot be generalised to such a small size market. However,
when corporate governance constructs are taken individually in the regression, the results from separate regression are showing sustainability to a certain degree. Nevertheless, the hypothesis is not fully supported.

As New Zealand Companies do not sufficiently disclose information on corporate governance, the non mandatory status of corporate governance disclosures regarding audit committee members’ expertise has narrowed the scope of analysis. In addition, companies with absent data or inadequate information were removed from the sample to improve the validity of the models, which has further limited the analysis. Finally, as variables are operationalised and measured by proxies, the power of the proxies affects the results of the study. It is recommended that the current conservative approach to capital markets i.e. lower risk for low rates of return, continue. Imposing further stringent standards would reflect in higher costs for governance, auditing and human capital. A future research is suggested on the effect of audit committee expertise on the value relevance of accounting information on a larger sample when disclosure of all corporate governance information has obligatory status. The disclosure norms should clearly specify that the background, qualifications and expertise of board members be communicated to the investors. This would help identify the effectiveness of the implemented changes.
6.0 REFERENCES (APA 5th)


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American Accounting Association Mid-Year International Accounting Conference, San Diego, U.S.A. earning management.


