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Accounting quality in pre-/post-IFRS adoption and the impact of audit committee expertise - evidence from Australia

1. Introduction

The purpose of our study is to examine whether accounting quality has improved following adoption of International Financial Reporting Standards (IFRS). It also investigates whether audit committees are more effective in promoting accounting quality under IFRS than previous Australian GAAP (Generally Accepted Accounting Principles). Due to the globalisation of international financial markets, a need has arisen to harmonise accounting standards worldwide. Potential investors and other market stakeholders require accurate and transparent information in order to make informed decisions. It is argued that a widely accepted set of accounting standards will likely improve the ability to compare financial reports prepared in different countries. Further it is expected that they will remove barriers to international capital flows by reducing differences in financial reporting requirements, and reduce financial reporting costs (Deegan, 2012; Nobes and Parker, 2012). Numerous efforts have been made by the International Accounting Standards Board (IASB) to harmonise accounting standards throughout the world since its establishment in 2001. The widespread adoption of IFRS is aimed at increasing the transparency and quality of financial statements. To date the IFRS have been adopted in over 120 countries (Deloitte Touche Tohmatsu, 2008).

However, many disagree with the notion that accounting quality will be enhanced due to the inherent differences between international financial reporting environments (Doupnik and Salter, 1995). Under this argument it is maintained that local GAAP best suits the local business conditions. This is evident when we consider the different cultures in which accounting standards are developed. For example, Japan and Australia produce very different standards due to the history, culture, beliefs and traditions held in both countries (Jones and Wolnizer, 2003). Therefore, a global adoption of IFRS may not be practical or appropriate. Another argument against the adoption of IFRS is the fact that the standards are principle-based which provides flexibility, in some cases excessive flexibility, to companies that may engage in earnings management, leading to a reduction in accounting quality (Barth et al., 2008; Jeanjean and Stolowy, 2008).

The actual success of IFRS in harmonising financial accounting is yet to be confirmed. Past researchers have attempted to evaluate the extent to which IFRS adoption has improved accounting quality. Previous research on IFRS adoption has mainly focused on countries in the European Union following their mandatory adoption of IFRS in 2005 (Van Tendeloo and Vanstraelen, 2005; Barth et al., 2008; Hung and Subramanyam, 2007; Beuselinck et al., 2007; Paananen and Lin, 2008; Chen et al., 2010). Goodwin et al. (2008), Chalmers et al. (2008), Jeanjean and Stolowy (2008), Chalmers et al. (2011) and Chua et al. (2012) appear to be the only studies to have considered the impact of IFRS adoption on value relevance and/or accounting quality in Australia. Goodwin et al. (2008), using value relevance as a proxy, find accounting quality remained stable after IFRS had been accepted in Australia. Similarly, Chalmers et al. (2008) observe no evidence of an increase in the value relevance of reported intangible assets under IFRS. In contrast, Chalmers et al. (2011) more recently find that value relevance for earnings improved post-IFRS adoption.

Only a few studies have examined whether accounting quality has been improved after the adoption of IFRS. Jeanjean and Stolowy (2008) observe that accounting quality remains unchanged pre-/post-IFRS adoption in Australia. However, due to timeframe and data issues, these studies do not use powerful earnings management and accruals quality measures, which largely motivate this study. Firstly, Jeanjean and Stolowy only consider earnings management in the first period affected by IFRS adoption (year-ending 2006). This range may be too small to analyse the true impact of IFRS adoption. Furthermore, due to the fact that for many companies 2006 was the first year of financial reporting under IFRS, the companies may not have yet understood the complexities of the new standards. Second, Jeanjean and Stolowy (2008) use the threshold approach to detect earnings management (Burgstahler and Dichev, 1997). This approach eliminates various entities due to the requirement of additional financial information prior to the years in question. Finally, the threshold approach is only aimed at detecting earnings management in order to avoid earnings losses. As earnings management is not only apparent in situations of loss avoidance this method will not capture all aspects of management interventions in the financial reporting process.

Recently, Chua et al. (2012) find that accounting quality did improve following the adoption of IFRS in Australia. The above studies provide inconsistent results which may be due to several reasons.

These include: mis-specified measures of accounting quality, an insufficient time series being studied, variations between mandatory and voluntary adoption of IFRS, and many other factors. Therefore, the first purpose of our study is to examine whether accounting quality has improved after the adoption of IFRS in Australia.

The harmonisation of international accounting standards has been an impetus for good corporate governance. The recent corporate collapses of Enron, WorldCom, HIH and other large firms have caused shareholder confidence to suffer. It is argued that one of the main causes for these business failures was poor corporate governance (Dhaliwal et al., 2006). Tang, Cheng and Tan (2013) find that poor corporate governance quality lead to severe earnings management. Consequently the Australian Securities Exchange (ASX) released the 'The Principles of Good Corporate Governance and Best Practice Recommendations' (2003), whilst in the U.S., the Securities and Exchange Commission (SEC) implemented Section 407 of the Sarbanes-Oxley Act (2002). These regulations set out more stringent obligations for large corporations, in particular over the formation of an audit committee which is of interest to this study. It is argued that a firm with effective governance mechanisms tends to reduce information asymmetry and increase management efficiency (Lee, Lin and Chang, 2011).

Following the corporate scandals in the U.S. and elsewhere, SOX (2002) was released which emphasises higher responsibility from the listed companies. Hence, policy makers have emphasized on the importance of the establishment of independent audit committees in order to improve investor confidence in reported accounting information (Woidtke and Yeh, 2013).

The audit committee is responsible for overseeing the accuracy and integrity of the financial reporting process (SOX, 2002). The SOX prescribes that the audit committee should consist of independent outside directors with at least one financial expert (Pandit et al., 2005). We therefore expect a strong audit committee to have a significant effect on the reliability of financial statements.

In response, many researchers find that entities who employ financial experts on their audit committee report higher quality earnings than those who do not (Felo et al., 2003; Bedard et al., 2004; Abbot et al., 2004; Abbott et al., 2003; Krishnan, 2005; Anderson et al., 2004). Dhaliwal et al. (2006) decompose audit committee member expertise into the following three groups: financial expertise,

accounting expertise and supervisory expertise. Dhaliwal et al. (2006) and DeFond et al. (2005) report that audit committees that employ accounting experts experienced high quality financial statements in the US. Baxter and Cotter (2009) observe that audit committees consisting of accounting expertise report higher accounting quality using the Dechow and Dichev model (2002). However, no significant results are found using the Jones model (1991).

The present study adds to the literature by testing for the moderating affect IFRS adoption had on audit committee effectiveness. Marra et al. (2011) find that audit committees are more effective in reducing earnings management under IFRS than the previous GAAP in Italy. Given the differences between the former Italian and Australian GAAP (AGAAP), we cannot assume that these results are generalisable. To the best of our knowledge, no studies have investigated the impact IFRS had on an audit committee's ability to improve accounting quality in Australia. Therefore, we also examine the relationship between audit committee characteristics and accounting quality, and how the association differs from AGAAP and IFRS.

Utilising two hundred companies listed on the ASX from 2003-2008 and employing univariate and multiple regression, we provide evidence that accounting quality is not significantly enhanced subsequent to the adoption of IFRS in Australia. Further, we find that audit committees are more effective in maintaining accounting quality under IFRS than under previous Australian GAAP (AGAAP).

This study contributes to the literature and practice in several ways. First, this study complements the research examining the value relevance of earnings around IFRS adoption in Australia and adds to the literature by examining accruals and earnings management as a proxy for accounting quality pre- and post-adoption of IFRS in Australia. Moreover, the move towards IFRS adoption in Australia was questioned by a large number of accounting and regulatory professionals (Jeanjean and Stolowy, 2008). Our findings will confirm whether or not the move from the AGAAP to IFRS has changed accounting quality. Second, policymakers in countries who are yet to adopt IFRS (i.e., U.S. and Japan) may find the results useful for future decision making in the area of accounting principles and regulation. Furthermore, it demands whether international policymakers (IASB) should focus their energy on refining one general set of international standards or consider allowing exceptions to

countries in light of their respective reporting environment. Countries continuing to employ their national GAAP gain knowledge about the success of adopting the IFRS in Australia. In addition, the study sheds more light on the Corporate Governance paradigm. Effective internal controls over capital have been a major subject of interest in the early 21st century. This study examines whether audit committees are more effective under IFRS or the previous Australian GAAP. The results of this study aim to provide further credibility to the link between good corporate governance and accounting quality.

The remainder of the paper is structured as follows. Section 2 outlines the environment of audit committees in Australia while prior research and the development of hypotheses are presented in Section 3. Section 4 offers the research design and Section 5 describes the results of the study. Section 6 concludes the paper.

2. Audit committees in Australia

Following the collapses of OneTel and HIH in Australia, the ASX released the 'Principles of Good Corporate Governance and Best Practice Recommendations' guidelines in March, 2003. This document provided guidelines regarding the adoption and responsibilities of audit committees. The board should establish an audit committee and the audit committee should consist only of non-executive directors, consist of a majority of independent directors, should be chaired by an independent chair who is not chair of the board, and have least three members (ASX, 2003).

Subsequent to the release by the ASX, the Federal Government of Australia released the Corporate Law Economic Reform Program (CLERP 4) in 2004 which placed obligations on the top 500 Australian Listed Companies in regards to audit committees. Given CLERP 4 placed significant rules for the 500 listed companies in Australia to obey, the sample 200 firms in the present study are drawn from the top 500 companies listed on the ASX.

The ASX (2010, p. 2) provides the current responsibilities of the audit committee. Members of the audit committee are appointed from the board of directors along with a chairperson. The audit committee is mainly responsible for reviewing and monitoring the integrity of the company's financial reports and statements. It is also accountable for making recommendations regarding the adequacy and integrity of the companies' enterprise risk management framework and system of

internal control. Further, the audit committee monitors the performance and independence of the external auditor. Consequently the audit committee's role is becoming increasingly important in today's business environment. With increased speculation being placed on the internal management of firms, regulators such as the SEC and ASX are placing more stringent guidelines on entities and their audit committees.

3. Prior research and hypotheses development

Prior studies have examined the economic consequences of the voluntary adoption of IFRS. For example, Leuz and Verrecchia (2000) explore the economic consequences of voluntary IFRS adoption and find that voluntary adoption of IFRS reduces the cost of equity capital. Also Daske et al. (2007) examine the consequences of IFRS adoption on market liquidity and observe that the economic consequences of mandatory adoption remain largely unclear. These studies along with many others are concerned with the specific economic consequences of IFRS adoption as opposed to the change in accounting quality post-IFRS adoption.

The use of earnings management and accruals quality measures as proxies for accounting quality in both pre- and post-IFRS adoption periods is a relatively new field of accounting research. Limited studies have examined the impact of IFRS adoption on accounting quality. The findings from previous research in regard to the effects of IFRS adoption on accounting quality have been mixed. For example, Hung and Subramanyam (2007), Barth et al. (2008), Chen et al. (2010), Chalmers et al. (2011) and Chua et al. (2012) have concluded that the adoption of IFRS has led to improved accounting quality. In contrast, Van Tendeloo and Vanstraelen (2005) and Paananen and Lin (2008) find that accounting quality declined after the adoption of IFRS. Furthermore, some research suggests that the adoption of IFRS had little to no impact on accounting quality (Beuselinck et al., 2007; Jeanjean and Stolowy, 2008; Goodwin et al., 2008; Chalmers et al., 2008; Kabir et al., 2010). Soderstrom and Sun (2007) also posit that accounting quality likely depends on the firm's overall institutional arrangement such as the legal and political system of the country.

Previous literature regarding the impact of IFRS adoption on accounting quality in Australia is scarce. Prior to the adoption of IFRS in Australia, Jones and Wolnizer (2003) suggest that IFRS are not of

higher quality to that of AGAAP. This suggestion can only be analysed with post-IFRS adoption data, which is the aim of the present study.

To the best of our knowledge, Jeanjean and Stolowy (2008), Goodwin et al. (2008), Chua et al. (2012), Chalmers et al. (2008) and Chalmers et al. (2011) are the only studies that have analysed the impact of IFRS in the Australian context. These studies find that accounting quality generally remained stable or slightly improved subsequent to the adoption of IFRS. In addition, Goodwin et al. (2008), Chalmers et al. (2008) and Chalmers et al. (2011) use value relevance as a proxy for accounting quality in the pre- and post-IFRS adoption periods. However, as mentioned in Goodwin et al. (2008, p. 114) the transition phase for the adoption of IFRS may be significantly affected by earnings management. Therefore, earnings management proxies may provide additional insights as to the effect IFRS adoption has on accounting quality in Australia. Chua et al. (2012) very recently find that accounting quality in Australia is enhanced post-adoption of IFRS. The authors use three proxies for accounting quality (earnings management, timely loss recognition and value relevance) and find accounting quality has generally improved post-IFRS.

We extend these studies by considering accounting quality for the years 2003–2008 in Australia and regressing audit committee characteristics in order to examine the effectiveness of audit committees have during the pre- and post-IFRS adoption periods. Furthermore, we use measures for accruals quality and earnings management which have been found to be more robust measures as opposed to the threshold approach.

There are many contrasting results reported in the literature in relation to the changes in earnings management and accruals quality pre- and post-IFRS adoption. These differing conclusions may be due to the split in previous research studies between the ‘mandatory’ and ‘voluntary’ adoption of IFRS. Companies voluntarily adopting IFRS are more likely to experience an improvement in accounting quality since the likely reason they are adopting IFRS is in order to rid themselves of previously inadequate national GAAPs (Cai et al., 2012; Nina et al., 2009). In contrast, mandatory adopters of IFRS are likely to change their standards due to uncontrollable factors (political pressure, stock market rules, etc.). In this case, the previous GAAP may be adequate for quality financial reporting and the IFRS adoption may not change or may even, in some circumstances, lower

accounting quality. In line with this theory Christensen, Lee and Walker (2008) find significant evidence that throughout Germany voluntary IFRS adoption led to improved accounting quality, while mandatory IFRS adoption in Germany did little to change accounting quality.

Despite the fact that IFRS are principles-based and broadly similar to previous AGAAP, there are still some notable differences. It is useful to explore the effects adoption had on accounting quality, as these new principles may be contributing to or hindering accounting quality. In particular the major differences in adopting IFRS as opposed to AGAAP include the treatment of intangible assets, revaluations, property plant and equipment, revenue classification and goodwill (Deegan, 2012). However, due to the fact IFRS are principles-based, we expect the Australian setting will show evidence of a smoother transition to IFRS compared to other countries that previously adopted rules-based standards (Brown and Tarca, 2005).

Due to the contrasting findings in previous research in regard to the effects IFRS adoption has on accounting quality, this study employs the following null hypothesis:

H_1: Accounting quality is not affected by the adoption of IFRS in Australia.

Concerning the effect IFRS adoption had on the ability of the audit committee to promote accounting quality, in line with Marra et al. (2011), we expect audit committees to be more effective in ensuring accounting quality. Past research has indicated that the IFRS led to better quality of disclosure (Daske and Gebhardt, 2006). This increased disclosure will provide audit committees with more accurate information detailing the accounting policies and reports. This will eventually arm audit committees with a better understanding of accounting practices and place them in a position to better monitor earnings management and promote accounting quality (Bédard et al., 2004). Similar to SOX (2002), ASX (2010) requires that that the audit committee must consist of independent directors with at least one financial expert. Congruent with the findings of Marra et al. (2011), we expect audit committees in Australia to be more effective in ensuring accounting quality in the IFRS adoption period.

H_2: Audit committees are more effective in ensuring accounting quality under IFRS than under previous AGAAP.

4. Research design

4.1. Sample selection

An initial sample of the 500 top-listed companies on the ASX for the period between 2003 and 2008 (i.e., three years before and three years after the switch to IFRS which occurred at the end of 2005) is identified. All financial information is gathered from the OSIRIS and Bloomberg databases and 74 companies are eliminated due to missing data leaving 426 companies. The final sample consists of 200 companies selected from the above resulting in 1,200 firm year observations. The sample of firms remains constant in the pre-/post-IFRS adoption periods in order to control for firm-specific factors.

Insert Table 1 about here

4.2. Measures of earnings management

The measures of accounting quality employed by previous researchers in regard to IFRS adoption have varied. In this study, we use Dechow et al. (1995) and the modified Dechow and Dichev models (McNichols, 2002) to measure earnings quality which have generally not been employed by the IFRS literature. The probable reason for this is data constraints resulting from the relatively recent adoption of IFRS (Jeanjean and Stolowy, 2008). These models in the past have been found to be robust measures of accounting quality. Consequently, their use in the current study provides useful insights into the success or otherwise of IFRS adoption (Chen et al., 2010).

The Jones model (1991) captures earnings management by calculating total accruals for a business. Total accruals consist of non-discretionary accruals (NDA) and discretionary accruals (DA). Dechow et al. (1995) provide a modification to the Jones model (1991) for the detection of earnings management. Dechow et al. (1995) measure earnings management as follows:

$$TAcc_{ft}/TA_{ft-1} = \phi_f[1/TA_{ft-1}] + \phi_{2f}[\Delta REV_{ft}/TA_{ft-1} - \Delta REC_{ft}/TA_{ft-1}] + \phi_{3f}[PPE_{ft}/TA_{ft-1}] + \varepsilon_{ft} \ldots..(1)$$

where: $TAcc_{ft}$ = Total accruals in year *t* for firm; TA_{ft-1} = Total assets in year (*t*-1) for firm *f*; ΔREV_{ft} = Revenues in year *t* less revenues in year (*t*-1) for firm *f*; PPE_{ft} = Level of gross property, plant and equipment at year *t* for firm *f*; ΔREC_{ft} = Receivables in year *t* less receivables for year (*t*-1) for firm *f*; ε_{ft} = Error term in year *t* for firm *f*.

From this model the level of earnings management is calculated by the prediction error:

$$DA_{ft} = TAcc_{ft}/TA_{ft-1} - \phi_f[1/TA_{ft-1}] - \phi_{2f}[\Delta REV_{ft}/TA_{ft-1} - \Delta REC_{ft}/TA_{ft}] - \phi_{3f}[PPE_{ft}/TA_{ft-1}]_t \ldots(2)$$

where: DA_{ft} = the prediction error, the level of discretionary accruals.

4.3 Measure of accruals quality

Dechow and Dichev (2002) offer a model for analysing accruals quality. Their model measures the quality of working capital accruals and earnings over time. The authors argue that accruals shift the recognition of cash flows over time in order to better measure earnings. As accruals require estimations they are regularly inaccurate, and therefore they must be corrected in the future. This estimation error represents noise which reduces the quality of the accrual. Dechow and Dichev (2002) recognise that there is an inverse relationship between the magnitude of the estimation error and the quality of accruals. Their model focuses on working capital accruals and mapping these with future cash flows. In contrast to Jones (1991), Dechow and Dichev's (2002) model of accruals quality does not discriminate between NDAs and DAs. The researchers contend that accruals quality is not only affected by intentional manipulations (present in DAs) but also in unintentional errors (NDAs) due to firm characteristics and the reporting environment. Ultimately, Dechow and Dichev (2002) recognise that the effect of unintentional and intentional errors does not differ in impact on accruals quality. The measurement of working capital accruals is employed as these are easily workable, closing off accounts within one year as opposed to non-current accruals. Accrual estimation errors are measured by the residuals from the mapping of previous, current and future operating cash flows onto changes in working capital.

McNichols (2002) proposes a model for measuring accruals quality which is a modified version of the Dechow and Dichev model (2002). The present study uses a cross-sectional and time-series modified Dechow and Dichev model as suggested by Dechow and Dichev (2002), Chen et al. (2010), Francis et al. (2005) and McNichols. (2002). Below is the McNichols (2002) model for accruals quality:

$$\Delta WC_t = \phi_0 + \phi_1[CF_{t-1}] + \phi_2[CF_t] + \phi_3[CF_{t+1}] + \phi_4 \Delta SALES_t + \phi_5 PPE_t + \varepsilon_t \quad \text{.....(3)}$$

where: ΔWC_t = Working capital in year *t* less working capital in year (*t*-1); CF_{t-1} = Cash flows from operations received/disbursed relating to events in the previous period; CF_t = Cash flows from operations received/disbursed relating to events in the current period; CF_{t+1} = Cash flows from operations received/disbursed relating to events in the future period; $\Delta SALES_t$ = Sales in year *t* less sales in year (*t*-1); PPE_t = Level of gross property, plant and equipment at year *t*; ε_t = The error term in year *t*.

The residual is calculated by the discrepancy between changes in working capital and the accuracy in which they map onto previous, current and future cash flows. The standard deviations of these residuals (σRES) measure the quality of the accruals, where a higher standard deviation implies lower accruals quality.

4.5 Model specification

The following regression model is employed to explore the relationship between audit committee characteristics and accounting quality.

$$AQ = \beta_1 ACC_{it} + \beta_2 FIN_{it} + \beta_3 SUP_{it} + \beta_4 MEM_{it} + \beta_5 MEET_{it} + \beta_6 B\_SIZE_{it} + \beta_7 B\_IND_{it} + \beta_8 AUD_{it} + \beta_9 CEO_{it} + \beta_{10} \log TA_{it} + \beta_{11} GROWTH_{it} + \beta_{12} ROAi_t + \beta_{13} LEV_{it} + \beta_{14} dummyPP_{it} + \varepsilon \quad \ldots\ldots(4)$$

where: AQ = Accounting quality; *ACC* = 1 if the audit committee consists of at least one member with accounting expertise, 0 otherwise*; FIN* = 1 if the audit committee consists of at least one member with financial expertise, 0 otherwise; *SUP* = 1 if the audit committee consists of at least one member with supervisory expertise, 0 otherwise; *MEM* = the size of the audit committee; *MEET* = the number of audit committee annual meetings; B_SIZE = the size of the board; B_IND = the percentage of independent directors on the board; *AUD* = 1 if the company is audited by one of the big four accounting firms, 0 otherwise; *logTA* = the log of total assets for the firm; CEO = 1 if the CEO is the chair of the board, 0 otherwise; *GROWTH* = change in sales, lagged by total assets; *ROA* = the return on assets; *LEV* = the leverage of the firm (total liabilities divided by total assets); *dummyPP* = 1 if the year is post-IFRS adoption, 0 otherwise.

The regression is run for both earnings management and accruals quality measures (measures of accounting quality). Therefore *AQ* is replaced with |*DA*| (earnings management measure) and $sdRES$ (accruals quality measure). The absolute value of DAs is used because earnings management can be both upwards and downwards (for example when financial statement smoothing is needed). Therefore negative and positive values have the same effect on accounting quality.

5. Results

5.1. Descriptive statistics

Univariate statistics are employed to test whether accounting quality has been improved after the adoption of IFRS in Australia. Table 2 provides the descriptive statistics for the prediction error (level

of earnings management) over each year in order to analyse any changes to earnings management levels post-IFRS adoption. The table indicates that as a whole the mean level of discretionary accruals between pre-IFRS 2003-2005 and post-IFRS 2006-2008 is one where level earnings management has marginally decreased. For pre-and post-IFRS adoption periods, the mean discretionary accruals are 0.4408 and .4290, respectively. However, the paired sample t-test indicates that the change in mean levels of discretionary accruals is not significant.

Insert Table 2 about here

The accruals quality measure is also used pre-/post-IFRS adoption to identify any changes in the standard deviation of firm specific residuals. Table 3 presents the descriptive statistics for the standard deviation of residuals in the pre-/post-IFRS adoption in Australia. According to Dechow and Dichev (2002), higher firm-specific standard deviations in residuals imply inferior accruals quality. It can be seen from Table 3 that the mean standard deviation in residuals increases from 0.3942 (pre-IFRS) to 0.3952 (post-IFRS) adoption in Australia. However, a paired sample t-test shows that the standard deviation of residuals is not significantly different between the pre-/post-IFRS adoption periods.

The little change in levels of earnings management and accruals quality suggests that IFRS adoption had a negligible effect on accounting quality (H1). This result is consistent with Jeanjean and Stolowy (2008) who also find that accounting quality remained stable in Australia for the post-IFRS adoption period. They employ the pervasiveness of earnings as a proxy for accounting quality. The reason accounting quality did not increase significantly is most likely attributable to the theory of mandatory vs. voluntary adoption of IFRS. Since Australia is a mandatory user of the international standards it is likely that the previous GAAP was sufficient in providing adequate controls on the management of firms. This is in line with the fact Australia adopted IFRS in order for its listed companies to maintain relationships with international markets. It is more likely that accounting quality will increase for voluntary adopters as the need for change may be sparked by inadequate national GAAP (see Subramanyam, 2007; Christensen et al., 2008; Barth et al., 2008).

Insert Table 3 about here

Table 4 presents the descriptive statistics for the audit committee effectiveness and other variables of which the level of accounting quality is regressed upon. The table demonstrates that on average, 57%

sample companies employ at least one accounting expert in their audit committee, while the percentage of the companies with audit committees employing at least one finance or one supervisory expert are 42% and 65%, respectively. Dhaliwal et al. (2006) report much lower numbers of experts on audit committees from their sample. This is most likely due to the fact their study incorporated a vast majority of non-listed companies. As previously explained, top listed companies face more stringent rules on audit committees and are more likely to have stronger provide audit committees. Table 4 also reports that 59% of the companies have independent directors on the board and 8% companies maintain a CEO who is also Chair of the Board. It is also found that 82% companies are audited by one of the big four accounting firms. Pre-/post-IFRS adoption (dummy PP) is used as a dummy variable to explain any changes in accounting quality due to the adoption of IFRS in Australia. The minimum and maximum values for these dichotomous variables are 0 and 1, respectively.

Log of total assets (logTA), growth of the firm (GROWTH), return on assets (ROA), leverage (LEV), board size (B_SIZE), board independence (B_IND) and CEO duality (CEO) are control variables used in the regression analysis.

Insert Table 4 about here

Due to the increasing pressure put on firms to enhance audit committee resources and commitments (CLERP 4 and SOX) it is expected that audit committee characteristics would increase in the post-IFRS adoption period. These characteristics are measured using the frequency of audit committee meetings and the number of audit committee members. This is confirmed by a comparison of the means pre- and post-IFRS of each audit committee characteristic. While the mean number of audit committee members increases from 3.31 in pre-IFRS adoption to 3.57 in post-IFRS adoption, the mean number of annual audit committee meetings rises from 3.82 in pre-IFRS adoption to 4.08 in post-IFRS adoption. A paired sample t-test is used to clarify the significance of the change in means for both audit committee meetings and members (see Table 5). This indicates that the number of meetings and members forming part of an audit committee did in fact increase in post-IFRS adoption in Australia.

Insert Table 5 about here

5.2. Correlation matrix

The results for the Pearson correlation are reported in Table 6. The table shows a significant negative correlation between accounting expertise (ACC) and the level of discretionary accruals (|DA|), suggesting earnings management is lower for firms with audit committees when accounting expertise is present. Consistent with Dhaliwal et al. (2006), we also find that financial (FIN) and supervisory (SUP) expertise are not related to the level of earnings management. No significant correlation is reported between the adoption of IFRS (dummyPP) and the level of discretionary accruals (|DA|), which indicates the adoption of IFRS had an insignificant effect on accounting quality in Australia. In contrast, the dichotomous variable dummyPP is positively correlated with the number of audit committee members. Furthermore the frequency of meetings signifies the prominence of audit committees in post-IFRS adoption.

Insert Table 6 about here

Table 7 shows the Pearson correlation results for the standard deviation of accrual residuals (sdRES) and the independent variables. Table 7 reports a statistically significant negative correlation with audit committees in the presence of accounting experts at the 1 per cent level. The table also shows that the standard deviation of accrual residuals are significantly and negatively correlated (5 per cent level) with audit committees that employ at least one finance expert. This indicates audit committees that employ finance experts report higher accruals quality.

Past research such as Field et al. (2001) and Street and Bryant (2000) suggest that multicollinearity can affect the credibility of a regression analysis when it exceeds the critical level of 0.8. Tables 6 and 7 indicate that no correlation coefficient between independent variables is higher than 0.8. This suggests that multicollinearity does not constitute a problem in the models.[1] To further examine the possibility of multicollinearity the variance inflation factor (VIF) is analysed and no problems were found for the independent variables.

Insert Table 7 about here

[1] In a correlation test, Cooper and Schindler (2008) suggest that p-value greater than 0.8 collinearity should be treated.

5.3. Multiple regression analysis results

Table 8 demonstrates the pooled multiple regression results to show the relationship between earnings quality, proxied by absolute discretionary accruals (|DA|) and standard deviation of accrual residuals (sdRES), and audit committee effectiveness.

We find a statistically significant negative association between audit committees in the presence of accounting expertise and the levels of discretionary accruals. However, we do not find any significant association between either supervisory or finance expertise and discretionary accruals. This allows us to infer that audit committees with accounting expertise maintain higher accounting quality (using discretionary accruals as a proxy). This adds strength to the findings of the correlation matrix (Table 6) and suggests audit committees with accounting experts report higher accounting quality.

Our results also show that there is a significant negative association between the number of audit committee members and the level of discretionary accruals. This signifies that firms with higher numbers of audit committee members are more likely to have less earnings management through discretionary accruals due to having more members analysing accounting practices. Similarly, we find a statistically significant negative association between the number of audit committee meetings and the level of discretionary accruals suggesting higher frequency of meetings are related to lower levels of discretionary accruals. Table 8 reports a significant positive relationship between the level of discretionary accruals and CEO duality. This indicates entities that employ a CEO who is also the chairman of the board report higher levels of discretionary accruals. However, we do not find a significant relationship between the independent variable AUD and the level of discretionary accruals (|DA|). This indicates that whether or not a company is audited by one of the Big 4 audit firms will have no significant impact on the level of discretionary accruals. The variable logTA maintains a positive association with the level of discretionary accruals. This is predicted and confirmed that firms with higher total assets are likely to be larger firms dealing with higher levels of accounting accruals. Furthermore, as inferred from the regression, highly levered firms are likely to deal with higher levels of discretionary accruals due to the innate characteristics of reporting for liabilities.

Finally, Table 8 reports no statistically significant association between pre- or post-IFRS reporting and the level of discretionary accruals. This suggests that the level of discretionary accruals is not significantly affected by the adoption of IFRS in Australia. The likely factor contributing to this is the nature of Australia's adoption of IFRS. Australia is a mandatory adopter of IFRS and therefore it is likely that the previous Australian GAAP was sufficient in providing adequate controls on earnings management. This finding confirms the paired t-test in Table 2.

Insert Table 8 about here

Similarly, we also find that the sdRES is significantly negatively associated with audit committees in the presence of accounting expertise. The likely reason for this is that accounting experts are equipped with adequate skills which allow for the successful oversight of the reporting process. Consistent with the discretionary accruals (|DA|) proxy, the MEM is found to have a significant negative relationship with the sdRES at the 10 per cent significance level. As mentioned previously this may be attributed to the theory that increased frequency of audit committee meetings may lead to improved oversight controls on accrual reporting. Furthermore, the MEET is found to have a significant relationship with the accounting quality measure at the 5 per cent significance level.

Table 8 reports no significant relationship between the standard deviation of accrual residuals (sdRES) and the auditing firm of a company (AUD). This result is corroborated when the magnitude of discretionary accruals (|DA|) is used as a proxy for accounting quality. Ultimately our study confirms that companies being audited by one of the Big 4 firms will experience no benefit (harm) to accounting quality. The size of the auditing firm may not affect the quality of accounting in Australia due to the principles-based standards it employs. As principles-based standards offer firms significant flexibility, the auditing company may not have the power to significantly guide the accuracy of financial information.

The control variables, logTA and LEV maintain positive relationships with the dependent variable sdRES at the 1 per cent significance level. These independent variables generally are higher for top listed firms, which suggest that larger firms have inherent difficulties reporting for accruals. This finding may be attributed to the fact that larger firms are prone to higher levels of accruals which may be more complex then smaller firms, to the detriment of their accrual quality. Interestingly, in contrast

the discretionary accrual measure, the standard deviation of accrual residuals measure reports a statistically significant positive association with the control variable GROWTH. This may be due to the theory that firms experiencing significant growth report highly volatile working capital accruals through accounting items such as accounts receivable and accounts payable.

The dummy variable for pre-/post-IFRS adoption (dummyPP) reports no significant association with the dependent variable sdRES. This suggests that the adoption of IFRS by Australian firms has little impact on the quality of accounting when the standard deviation of accrual residuals is used as a proxy. This is also corroborated in Table 3 where a paired t-test finds no significant change in mean sdRES pre- and post-IFRS adoption in Australia.

With reference to the effect IFRS adoption had on the ability on the audit committee to promote accounting quality, the study employs four regression models as evident in Tables 9 and 10. For each of the two measures of accounting quality, i.e., discretionary accruals and standards deviation of accrual residuals, the present study splits the sample between pre- (2003-2005) and post- (2006-2008) IFRS adoption. Each accounting quality metric is provided in a separate table, partitioning pre- and post-IFRS adoption in order to view the impact the new standards had on audit committee effectiveness.

Table 9 reveals that audit committee expertise and size of audit committee are considered to be determining factors for financial reporting quality after the adoption of IFRS. Interestingly, regarding discretionary accruals (|DA|), it can be seen that audit committees that have accounting experts considerably reduced the level of discretionary accruals. Notably, the association remained significant at the 1 per cent significance level in the pre- and post-IFRS adoption periods.

Financial and supervisory experts lead to significantly improved accounting quality only in the post-IFRS adoption period at the 5 per cent and 10 per cent significance levels, respectively. This is in line with H2 and suggests that IFRS adoption makes audit committees' experts more effective. This result is consistent with Bedard et al. (2004) and Marra et al. (2011) who argue that the adoption of IFRS will provide audit committee members with higher quality information that will improve their ability to constrain earnings management or improve financial reporting quality.

When the level discretionary accruals is used as a proxy for accounting quality, audit committee members (MEM) are more effective in improving accounting quality in the post-IFRS adoption period. Similarly, audit committees who meet more regularly (MEET) are marginally more effective in contributing to accounting quality in the post-IFRS adoption period. This supports H2, that audit committees are more effective in the post-IFRS adoption period.

Insert Table 9 about here

When we consider the standard deviation of accrual residuals (sdRES), we observe that the effectiveness of audit committees in the presence of accounting expertise significantly (at the 10 per cent significance level) improve accruals quality in the post-IFRS adoption period. This can be compared with the pre-IFRS adoption period, where similarly a negative correlation is found; however, the relationship is not significant, which is consistent with H2.

Audit committees employing finance experts and/or supervisory experts generally report higher accruals quality (however, marginally insignificant) in the post-IFRS adoption period. This suggests that audit committees with financial and/or supervisory expertise are found to report higher accruals quality under IFRS compared to previous AGAAP (H2).

Table 10 reports that audit committee members are more effective in maintaining quality accruals under IFRS than under AGAAP. Furthermore, audit committees who meet more regularly are more effective in the post-adoption period. Similar to the discretionary accruals quality measure, this suggests that IFRS adoption leads to improved audit committee effectiveness (H2). While the negative relationship between the two independent variables (MEM and MEET) and the dependent variable (sdRES) increase in the post-IFRS adoption period, it is marginally insignificant.

Insert Table 10 about here

5.4. Robustness checks

Endogeneity and issues surrounding causality constitute a potential problem for corporate governance research (Bhagat and Bolton, 2008). We employ a Hausman test to test for the possible instance of endogeneity in the independent variables. The test results indicate that all independent variables are exogenous and, therefore, endogeneity does not constitute a problem.

We undertook a number of robustness tests in order to ensure the validity of the results. In particular, the regressions are run with dichotomous variables to control for industry effects. This robustness check is important as the effects of IFRS among industries (Goodwin et al., 2008). No significant relationship is found between the level of discretionary accruals or the standard deviation of accrual residuals and the entities within an industry. By controlling for industry effects, our results confirm that the complexity of accruals for certain industries had no significant on the results of the study.

Due to the transitional provisions provided to entities during the transition phase, the financial results may be anomalous for the immediate years prior to and after the adoption of IFRS. Moreover, the first year reporting under IFRS may have been 2005 for entities who report on the ASX with a financial year end date of 31 December.[2] Adding to this issue, entities may have voluntarily adopted full IFRS during 2004 or 2005. Consequently, the regressions for the level of discretionary accruals are run without the 2005-2006 results[3]. The results of this robustness check are congruent with those in the full pre- and post-IFRS adoption period.[4] Therefore the robustness check confirms that any transitional provisions did not lead to any bias in the results of this study.

6. Conclusion

In this paper we empirically examine whether the accounting quality has been improved after the adoption of IFRS and investigate whether audit committees are more effective in promoting accounting quality under IFRS than previous Australian GAAP. We use 1,200 annual reports of 200 listed companies on the ASX over a 6-year period (2003-2008) and employ both univariate and multivariate testing.

Our univariate results provide evidence that accounting quality is not significantly enhanced subsequent to the adoption of IFRS in Australia. Most notably, we find that both measures of accounting quality are reported to be stable under AGAAP and IFRS. The likely reason for this is that Australia is a mandatory adopter of IFRS and previously utilised principles-based accounting

[2] IFRS application was mandatory for reporting periods beginning on or after 1 January 2005.

[3] Due to data requirements for calculating the standard deviation of accruals, the robustness check could not be conducted using this proxy for accounting quality.

[4] Most notably, ACC variable reported estimated coefficient of -.185 (sig. 0.01); MEM variable reported estimated coefficient of -.064 (sig. 0.10); MEET variable reported estimated coefficient of -.073 (sig. 0.05); and CEO variable reported estimated coefficient of .084 (sig. 0.05).

standards. Countries considering adopting IFRS that are in a similar position to Australia can use this study to contribute to their decision-making. The insignificant effect IFRS adoption has had on accounting quality in Australia can be seen by possible future adopters such as the U.S. and Japan as they weigh up the advantages and disadvantages of IFRS.

In addition, we find that audit committees are generally more effective in promoting accounting quality under IFRS than previous Australian GAAP. In particular, both proxies generally reported a more significant negative association with audit committee variables in the post-IFRS adoption period (2006-2008). Therefore, we can infer that audit committees with accounting expertise, more members and meeting more regularly are better able constrain earnings management and ensure accruals quality under IFRS.

The findings of this study will help regulators in jurisdictions considering future adoption of IFRS and the impact of audit committees on earnings quality. Past research has found that accounting quality is not merely based on the adequacy of reporting standards but also the effectiveness of laws and business incentives. Future research may consider law enforcement and its links with accounting quality. This will provide useful insights for policymakers and regulators which could help drive true accounting quality.

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Table 1

Sample by Industry

GICS	Industry	Total	Percentage
1010	Energy	8	4%
1510	Materials	45	22.5%
2010	Capital Goods	21	10.5%
2020	Commercial & Professional Services	4	2%
2030	Transportation	3	1.5%
2510	Automobiles & Components	4	2%
2520	Consumer Durables & Apparel	13	6.5%
2530	Hotels Restaurants & Leisure	3	1.5%
2540	Media	8	4%
2550	Retailing	16	8%
3010	Food & Staples Retailing	2	1%
3020	Food, Beverage & Tobacco	3	1.5%
3030	Household & Personal Products	4	2%
3510	Health Care Equipment & Services	13	6.5%
3520	Pharmaceuticals & Biotechnology	7	3.5%
4010	Banks	3	1.5%
4020	Diversified Financials	3	1.5%
4030	Insurance	14	7%
4510	Software & Services	4	2%
4520	Technology Hardware & Equipment	6	3%
5010	Telecommunication Services	8	4%
5510	Utilities	8	4%
	N	200	100%

Table 2

Descriptive statistics for levels of discretionary accruals (prediction error) and paired sample t-test. Table 2 presents the descriptive statistics for the prediction error (level of earnings management) over each year in order to analyse any changes to earnings management levels post-IFRS adoption. It also shows whether absolute discretionary accruals are significantly different in the post-IFRS adoption.

	Pre IFRS			Post IFRS		
EM	Year	Year	Year	Year	Year	Year
	2003	2004	2005	2006	2007	2008
N	200	200	200	200	200	200
Mean	.4239	.4225	.4760	.3971	.4619	.4279
Std. Dev.	.4545	.3907	.5458	.4785	.4863	.4304
Minimum	0.0122	0.0005	0.0000	0.0024	0.0029	0.0034
Maximum	4.1429	2.2400	4.0708	5.2027	2.9636	2.7190

Paired samples statistics

	Mean	N	Std. dev.	Std. error in mean
Pair: |DA|1	.4408	600	.4679	.0191
|DA|2	.4290	600	.4656	.0190

Paired samples test

			95% C.I of the difference				
Pair	Mean	Std. Dev.	Lower	Upper	t	df	Sig (2-tailed)
|DA|1 / |DA|2	.0019	.5837	-.0350	.0587	.498	599	.619

where: |DA|1 is the value of absolute discretionary accruals 'pre' IFRS adoption in Australia. |DA|2 is the value of absolute discretionary accruals 'post' IFRS adoption in Australia.

Table 3

Descriptive statistics for the standard deviation of residuals and paired t-test. Table 3 illustrates the descriptive statistics for the standard deviation of residuals in the pre-/post-IFRS adoption in Australia. The table also reports whether the standard deviation of accrual residuals are significantly different in the post-IFRS adoption.

	Pre-IFRS adoption (2003-2005)	Post-IFRS adoption (2006-2008)
N	200	200
Mean	0.3942	0.3952
St. Dev.	0.6350	0.7792
Min	0.0000	0.0392
Max	5.7503	9.1921

Paired samples statistics

	Mean	N	Std. Dev.	Std. Error in Mean
Pair: sdRES1	0.3942	200	0.6350	0.0449
sdRES2	0.3952	200	0.7792	0.0551

Paired samples test

			95% C.I of the Difference				
Pair	Mean	Std. Dev.	Lower	Upper	t	df	Sig (2-tailed)
sdRES1/ sdRES2	-.0011	0.8344	-0.1174	0.1153	-0.018	199	0.986

where: sdRES1 is the standard deviation of accrual residuals 'pre' IFRS adoption in Australia. sdRES2 is the standard deviation of accrual residuals 'post' IFRS adoption in Australia.

Table 4
Descriptive statistics. This table reports the descriptive statistics for the audit committee effectiveness and other variables of which the level of accounting quality is regressed upon.

	N	Min	Max	Mean	Std. Dev.
Continuous variables					
MEM	1200	2	7	3.44	0.95
MEET	1200	2	8	3.93	1.33
B_SIZE	1200	3	15	6.36	1.94
logTA	1200	3.167	8.112	6.02	0.91
GROWTH	1200	-3.613	6.558	0.21	0.56
ROA	1200	-81.91	76.760	5.68	31.41
LEV	1200	0.024	73.242	0.81	3.18
Dichotomous variables					
ACC	1200	0	1	0.57	0.50
FIN	1200	0	1	0.42	0.49
SUP	1200	0	1	0.65	0.48
B_IND	1200	0	1	0.59	0.19
AUD	1200	0	1	0.82	0.38
CEO	1200	0	1	0.08	0.28
Dummy PP	1200	0	1	0.50	0.50

where: ACC= if the audit committee has accounting expertise of not; FIN= if the audit committee has financial expertise or not; SUP= if the audit committee has supervisory expertise or not; MEM= number of audit committee members; MEET= number of annual audit committee meetings; B_SIZE= size of the board; B_IND= board independence; AUD= audited by the Big 4 or not; CEO= CEO is chairman of the board; logTA= log of total assets; GROWTH= growth of the firm; ROA= return on assets; LEV= leverage of the firm; dummyPP= pre- or post-IFRS adoption.

Table 5

Paired sample t-test to compare the mean number of audit committee members and meetings pre-/post-IFRS adoption**.** This table presents a paired sample t-test provide evidence whether or not the number of meetings and members forming part of an audit committee has been increased in the post-IFRS adoption in Australia.

Paired samples statistics

	Mean	N	Std. dev.	Std. Error in mean
Pair: MEM1	3.3050	200	0.8808	0.0623
MEM2	3.5750	200	1.0047	0.0710
Pair: MEET1	3.8200	200	1.3627	0.0964
MEET2	4.0800	200	1.2891	0.0912

Paired samples test

			95% C.I of the Difference				
Pair	Mean	Std. Dev.	Lower	Upper	t	Df.	Sig. (2-tailed)
MEM1 / MEM2	-0.2700	1.1374	-0.4286	-0.1114	-3.3573	199	0.001**
MEET1 / MEET2	-.02600	1.1219	-0.4164	-.10356	-3.2773	199	0.001**

where: MEM1 and MEET1 are the number of audit committee members and meetings, respectively, 'pre' IFRS adoption in Australia. MEM2 and MEET2 are the number of audit committee members and meetings, respectively, 'post' IFRS adoption in Australia.

Table 6

Pearson correlation coefficients. This table demonstrates Pearson correlation between discretionary accruals and independent variables.

	|DA|	ACC	FIN	SUP	MEM	MEET	B_SIZE	B_IND	AUD	CEO	logTA	GROWTH	ROA	LEV	dummyPP
abdDA	1	-.181**	-.023	-.016	-.091**	-.059*	.075**	-.030	.014	.075**	.112**	.015	.012	.018	-.013
		.000	.422	.585	.002	.041	.009	.306	.628	.009	.000	.601	.669	.540	.660
ACC_EXP		1	.069*	.102**	.080**	.170**	-.005	.117**	-.012	-.004	.106**	-.037	.004	.000	.086**
			.016	.000	.006	.000	.867	.000	.674	.902	.000	.194	.890	.996	.003
FIN_EXP			1	-.020	.212**	.142**	.124**	.090**	.136**	-.010	.082**	-.017	.021	.049	.107**
				.486	.000	.000	.000	.002	.000	.737	.004	.547	.459	.091	.000
SUP_EXP				1	.114**	.139**	.072*	.079**	.058*	-.042	.238**	-.020	-.006	-.052	.115**
					.000	.000	.012	.006	.046	.145	.000	.486	.838	.072	.000
AUD_MEM					1	.177**	.258**	.165**	.154**	-.080**	.078**	-.016	.085**	-.049	.140**
						.000	.000	.000	.000	.006	.007	.573	.003	.087	.000
AUD_MEET						1	.211**	.202**	.097**	-.078**	.339**	-.067*	-.081**	-.005	.108**
							.000	.000	.001	.007	.000	.021	.005	.863	.000
BOARD_SZ							1	.101**	.215**	.022	.425**	.009	.073*	-.073*	.089**
								.000	.000	.456	.000	.765	.011	.011	.002
IND_DIR								1	.141**	-.184**	.127**	.018	.090**	-.030	.131**
									.000	.000	.000	.534	.002	.294	.000
AUD									1	-.039	.236**	-.017	.015	-.035	.085*
										.174	.000	.552	.601	.230	.041
CEO										1	.082**	.006	-.014	-.023	.018
											.004	.840	.636	.425	.531
logTA											1	-.048	.017	-.193**	.103**
												.099	.547	.000	.000
GROWTH												1	-.001	.008	-.001
													.967	.792	.968
ROA													1	-.022	.058*
														.457	.044
LEV														1	-.002
															.931

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed)

where: |DA|= the absolute value of the level of discretionary accruals; ACC= if the audit committee has accounting expertise of not; FIN= if the audit committee has financial expertise or not; SUP= if the audit committee has supervisory expertise or not; MEM= number of audit committee members; MEET= number of annual audit committee meetings; B_SIZE= size of the board; B_IND= board independence; AUD= audited by the Big 4 or not; CEO= CEO is chairman of the board; logTA= log of total assets; GROWTH= growth of the firm; ROA= return on assets; LEV= leverage of the firm; dummyPP= pre- or post-IFRS adoption.

Table 7

Pearson correlation coefficients. This table exhibits the Pearson correlation between standard deviation of residuals and independent variables

	sdRES	ACC	FIN	SUP	MEM	MEET	B_SIZE	B_IND	AUD	CEO	logTA	GROWTH	ROA	LEV	dummyPP
sdRES	1	-.172**	-.101*	-.097	-.085	-.093	-.023	-.030	-.102*	-.048	.299**	.282**	-.061	.305**	-.090
		.001	.044	.052	.084	.066	.648	.546	.042	.335	.000	.000	.224	.000	.072
ACC_EXP		1	.069*	.102**	.080**	.170**	.071*	.117**	-.012	-.004	.168	.008	.001	-.011	.086**
			.016	.000	.006	.000	.014	.000	.674	.902	.001**	.875	.985	.819	.003
FIN_EXP			1	-.020	.212**	.142**	.124**	.090**	.136**	-.010	.188	-.049	.102	.048	.107**
				.486	.000	.000	.000	.002	.000	.737	.000**	.329	.042*	.336	.000
SUP_EXP				1	.114**	.139**	.072*	.079**	.058*	-.042	.238	-.122	.007	.051	.115**
					.000	.000	.012	.006	.046	.145	.000**	.015*	.891	.312	.000
AUD_MEM					1	.177**	.258**	.165**	.154**	-.080**	.188	-.099	.055	-.115	.140**
						.000	.000	.000	.000	.006	.000**	.048*	.270	.022*	.000
AUD_MEET						1	.211**	.202**	.097**	-.078**	.407	-.101	.003	.010	.108**
							.000	.000	.001	.007	.000**	.044	.953	.847	.000
BOARD_SZ							1	.101**	.215**	.022	.466	.026	.107	-.111	.089**
								.000	.000	.456	.000**	.598	.032*	.027*	.002
IND_DIR								1	.141**	-.184**	.192	.061	.121	-.040	.131**
									.000	.000	.000**	.220	.016	.431	.000
AUD									1	-.039	.254	-.013	-.061	-.058	.085*
										.174	.000**	.801	.224	.244	.041
CEO										1	.058	.036	.020	-.033	.018
											.249	.476	.683	.517	.531
logTA											1	-.066	.033	-.232	.293
												.190	.511	.000**	.000**
GROWTH												1	.002	-.004	.000
													.966	.932	.998
ROA													1	-.048	.027
														.342	.597
LEV														1	-.019
															.708

**Correlation is significant at the 0.01 level (2-tailed) *Correlation is significant at the 0.05 level (2-tailed)

where: sdRES= the standard deviation of accrual residuals; ACC= if the audit committee has accounting expertise of not; FIN= if the audit committee has financial expertise or not; SUP= if the audit committee has supervisory expertise or not; MEM= number of audit committee members; MEET= number of annual audit committee meetings; B_SIZE= size of the board; B_IND= board independence; AUD= audited by the Big 4 or not; CEO= CEO is chairman of the board; logTA= log of total assets; GROWTH= growth of the firm; ROA= return on assets; LEV= leverage of the firm; dummyPP= pre- or post-IFRS adoption.

Table 8

Pooled regression results (2003-2008) for association between accounting quality measures and independent variables**.** This table presents the relationship between earnings quality, proxied by absolute discretionary accruals (|DA|) and standard deviation of accrual residuals (sdRES), and audit committee effectiveness using pooled data.

Accounting Quality Measure		|DA|	sdRES
	Predicted Sign	Coefficient (t value)	Coefficient (t value)
ACC	-	-.185***	-.104**
		(-6.646)	(-2.291)
FIN	/	-.030	-.037
		(-1.049)	(-.816)
SUP	/	-.008	-.017
		(-.279)	(-.368)
MEM	-	-.095***	-.086*
		(-3.214)	(-1.816)
MEET	-	-.078***	-.117**
		(-2.618)	(-2.302)
B_SIZE	/	.018	.053
		(.575)	(1.121)
B_IND	/	.002	.050
		(.073)	(1.076)
AUD	/	-.013	-.060
		(-.443)	(-1.302)
CEO	+	.071**	-.045
		(2.543)	(-.982)
logTA	+	.247***	.189***
		(7.488)	(3.203)
GROWTH	+	.012	.241***
		(.403)	(5.430)
ROA	/	-.013	-.054
		(-.465)	(-1.225)
LEV	+	.131***	.268***
		(4.584)	(5.857)
dummyPP	/	-.027	.015
		(-.979)	(.308)
R Square		.142	.282
Adjusted R Square		.131	.254
F		13.017	10.062

*** Significant at .01 level; ** Significant at the .05 level; * Significant at the.10 level

$$AQ = \beta_1 ACC_{it} + \beta_2 FIN_{it} + \beta_3 SUP_{it} + \beta_4 MEM_{it} + \beta_5 MEET_{it} + \beta_6 B\_SIZE_{it} + \beta_7 B\_IND_{it} + \beta_8 AUD_{it} + \beta_9 CEO_{it} + \beta_{10} \log TA_{it} + \beta_{11} GROWTH_{it} + \beta_{12} ROAi_{t} + \beta_{13} LEV_{it} + \beta_{14} dummyPP_{it} + \varepsilon$$

where: |DA|= the absolute value of the level of discretionary accruals; sdRES= the standard deviation of accrual residuals; ACC= if the audit committee has accounting expertise or not; FIN= if the audit committee has financial expertise or not; SUP= if the audit committee has supervisory expertise or not; MEM= number of audit committee members; MEET= number of annual audit committee meetings; B_SIZE= size of the board; B_IND= board independence; AUD= audited by the Big 4 or not; CEO= CEO is chairman of the board; logTA= log of total assets; GROWTH= growth of the firm; ROA= return on assets; LEV= leverage of the firm; dummyPP= pre- or post-IFRS adoption.

Table 9

Regression results for discretionary accruals pre- (2003-2005) and post- (2006-2008) IFRS adoption**.** This table reports the relationship between earnings quality, proxied by absolute discretionary accruals (|DA|) and audit committee effectiveness.

Dependent Variable: |DA|	Predicted Sign	AGAAP Coefficient (t-value)	IFRS Coefficient (t-value)
ACC	-	-.203***	-.148***
		(-5.115)	(-3.789)
FIN	/	-.050	-.097**
		(-1.266)	(-2.350)
SUP	/	-.048	-.065*
		(-1.185)	(-1.653)
MEM	-	-.061	-.133***
		(-1.478)	(-3.057)
MEET	-	-.121***	-.124***
		(-2.895)	(-2.986)
B_SIZE	/	.088**	-.040
		(1.966)	(-.876)
B_IND	/	.004)	.019
		(.090)	(.470)
AUD	/	-.012	-.003
		(-.283)	(-.075)
CEO	+	.032	.117***
		(.778)	(3.003)
logTA	+	.220***	.265***
		(4.612)	(5.665)
GROWTH	+	.015	.012
		(.392)	(.323)
ROA	/	-.067	.037
		(-1.660)	(.913)
LEV	+	.082**	.172***
		(1.999)	(4.360)
R Square		.145	.177
Adjusted R Square		.125	.157
F		7.100	8.974

*** Significant at .01 level; ** Significant at the .05 level; * Significant at the.10 level

$$|DA| = \beta_1 ACC_{it} + \beta_2 FIN_{it} + \beta_3 SUP_{it} + \beta_4 MEM_{it} + \beta_5 MEET_{it} + \beta_6 B\_SIZE_{it} + \beta_7 B\_IND_{it} + \beta_8 AUD_{it} + \beta_9 CEO_{it} + \beta_{10} \log TA_{it} + \beta_{11} GROWTH_{it} + \beta_{12} ROAi_t + \beta_{13} LEV_{it} + \beta_{14} dummyPP_{it} + \varepsilon$$

where: |DA|= the absolute value of the level of discretionary accruals; ACC= if the audit committee has accounting expertise of not; FIN= if the audit committee has financial expertise or not; SUP= if the audit committee has supervisory expertise or not; MEM= number of audit committee members; MEET= number of annual audit committee meetings; B_SIZE= size of the board; B_IND= board independence; AUD= audited by the Big 4 or not; CEO= CEO is chairman of the board; logTA= log of total assets; GROWTH= growth of the firm; ROA= return on assets; LEV= leverage of the firm; dummyPP= pre- or post-IFRS adoption.

Table 10

Regression results for standard deviation of accrual residuals pre- (2004) and post- (2007) IFRS adoption**.** This table reports the relationship between earnings quality, proxied by standard deviation of accrual residual and audit committee effectiveness.

Dependent Variable: sdRES	Predicted Sign	AGAAP Coefficient (t-value)	IFRS Coefficient (t-value)
ACC	-	-.043	-.142*
		(-.779)	(-2.066)
FIN	/	.010	-.088
		(.181)	(-1.266)
SUP	/	.008	-.093
		(-.134)	(-.176)
MEM	-	-.067	-.088
		(-1.146)	(-1.203)
MEET	-	-.054	-.105
		(-.884)	(-1.306)
B_SIZE	/	.066	.032
		(1.126)	(.469)
B_IND	/	.055	.037
		(.927)	(.531)
AUD	/	-.005	.042
		(-.134)	(.596)
CEO	+	-.028	-.020
		(-.839)	(-.290)
logTA	+	.199***	.172**
		(2.522)	(2.120)
GROWTH	+	.243***	.232***
		(4.321)	(3.413)
ROA	/	-.015	-.081
		(-.267)	(-1.196)
LEV	+	.118*	.130*
		(1.419)	(1.651)
R Square		.213	.224
Adjusted R Square		.153	.165
F		3.576	3.818

*** Significant at .01 level; ** Significant at the .05 level; * Significant at the.10 level

$$sdRES = \beta_1 ACC_{it} + \beta_2 FIN_{it} + \beta_3 SUP_{it} + \beta_4 MEM_{it} + \beta_5 MEET_{it} + \beta_6 B\_SIZE_{it} + \beta_7 B\_IND_{it} + \beta_8 AUD_{it} + \beta_9 CEO_{it} + \beta_{10} \log TA_{it} + \beta_{11} GROWTH_{it} + \beta_{12} ROAi_t + \beta_{13} LEV_{it} + \beta_{14} dummyPP_{it} + \varepsilon$$

where: sdRES= the standard deviation of accrual residuals; ACC= if the audit committee has accounting expertise of not; FIN= if the audit committee has financial expertise or not; SUP= if the audit committee has supervisory expertise or not; MEM= number of audit committee members; MEET= number of annual audit committee meetings; B_SIZE= size of the board; B_IND= board independence; AUD= audited by the Big 4 or not; CEO= CEO is chairman of the board; logTA= log of total assets; GROWTH= growth of the firm; ROA= return on assets; LEV= leverage of the firm; dummyPP= pre- or post-IFRS adoption.

Highlights

- Examine whether accounting quality has improved following the adoption of IFRS in Australia
- Investigate whether audit committees are more effective in promoting accounting quality under IFRS
- Accounting quality is not significantly enhanced subsequent to the adoption of IFRS.
- Audit committees are more effective in maintaining accounting quality under IFRS.