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Corporate Disclosure Quality: Lessons from Australian Companies on the Impact of Adopting International Financial Reporting Standards

The purpose of this study is to examine the quality of disclosures by large Australian companies about the financial statement impact of adopting the Australian equivalents of International Financial Reporting Standards (AIFRS) The motivation behind this study encompasses a number of factors affecting financial reporting. With widespread concern in the financial media[1] and the lack of prior empirical research on the impacts of AIFRS adoption, this study sheds light on the significance of the transition in Australia to International Financial Reporting Standards (IFRS). It can also be used to inform standard setters, both in Australia and internationally, about the manner in which mandatory disclosures should be implemented.

The setting presents an opportunity to observe an accounting standard with a limited life and, being principle-based, permitted considerable discretion in the nature of disclosures about the impact of AIFRS adoption. To what extent managers took advantage of the discretion has not been widely researched. However, from a stakeholder perspective it is important to understand how these concessions in compliance with accounting standards were exploited by companies. In accordance with this motivation, we examine two related research questions; first, how did the quality of pre-adoption AIFRS disclosures vary across companies; and second, what factors influenced disclosure quality? Given the background to the introduction of AIFRS and the findings of prior research, we expect to observe AIFRS disclosure quality varying according to the adoption impact, industry membership, and general company-specific factors. Also, due to differences in the published guidance provided by audit firms, we expect to observe an audit firm influence on disclosure quality.

The research method involves a sample of 408 of the largest Australian companies for which annual report disclosures were assessed for quality of AIFRS disclosures in accordance with AASB 1047 *Disclosing the Impacts of Adopting Australian Equivalents to International Financial Reporting Standards.* Data were also collected from various sources to capture company-specific characteristics likely to explain the cross-sectional variation in disclosure quality. Based on the

For annual reporting periods beginning on or after 1 January 2005, Australian companies were required to comply with the Australian equivalents of International Financial Reporting Standards (AIFRS). To ensure a smooth transition, a broadly defined standard (AASB 1047) mandated pre-adoption company disclosures of the AIFRS' impact. The standard provided managers with the opportunity to exercise considerable discretion in complying with the underlying disclosure requirements. We examine how this discretion impacted on the quality of pre-adoption AIFRS disclosures provided by a sample of large Australian companies. Using a disclosure quality index, we find considerable evidence of a cross-sectional variation in disclosure quality that varies according to differences in the AIFRS financial impact, size, industry and profitability factors. Importantly, we also observe individual Big 4 audit firm influences on disclosure quality. These findings highlight consequences of mandating corporate disclosures based on broadly defined principles.

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regression results where the dependent variable is an index measure of disclosure quality, we show that the AIFRS impact on profit, firm size, industry membership and profitability explain differences in disclosure quality. Importantly, our results also show that AIFRS disclosure quality varied depending on the external audit firm (within the 'Big 4' category).

Background and Prior Research on AIFRS Adoption

The increasingly global nature of the business world and the role that financial information plays in international markets has increased the demand for uniform financial reporting regulation. With this objective in mind, the International Accounting Standards Board (IASB), in collaboration with major accounting standard setters from various countries, has accelerated efforts to produce a set of globally accepted international accounting standards. On 3 July 2002 the Australian government, through the Financial Reporting Council (FRC), announced that Australia would adopt these standards. Accordingly, the Australian Accounting Standards Board (AASB) announced in 2004 that Australian companies issuing general purpose financial reports under the *Corporations Act 2001* would adopt AIFRS for annual reporting periods beginning on or after 1 January 2005.

Concerns that AIFRS adoption had the potential to have a significant impact on the reported financial position and financial performance of companies led the AASB to issue AASB 1047 in April 2004. This standard required a two-staged approach to the disclosure of the expected effects of AIFRS adoption. In their 2004 financial reports, reporting entities were required to provide a *narrative* explanation of the expected differences in accounting policies. Whereas in annual or interim financial reports ending on or after 30 June 2005, entities were required to provide:

> (a) Any known or reliably estimable information about the impacts on the financial report had it been prepared using the Australian equivalents to IFRSs; or (b) if the impacts in (a) above are not known or reliably estimable, a statement to that effect. (AASB 2004 paragraph 4.2).

Following adoption of AIFRS, disclosure of the realised effects were required under AASB 1 *First-time Adoption of Australian Equivalents to International Financial Reporting Standards*, issued in July 2004.[2]

Clearly, the two-stage objective of AASB 1047 was to ensure that users of financial reports received timely and reliable information about the likely effects of AIFRS and company preparedness for the transition to the new standards. However, a lack of clear and precise guidelines in AASB 1047, and to a lesser extent in

AASB 1, suggests that preparers of financial reports had considerable discretion in how they complied with the disclosure standards.[3] For example, the AASB 1047 narrative disclosure option for 2004 disclosures and 'opt-out' provision for 2005 disclosures if the impacts were uncertain (paragraph 4.2(b)), allowed companies considerable latitude in how they reported the financial statement impacts. In addition, AASB 1 (paragraphs 13-25G) provided exemptions for certain complex standards enabling companies to elect not to adopt the changes prescribed upon implementation. This discretion, while reducing the compliance burden on managers, had the potential to reduce the quality of information provided to investors. To what extent information quality was impaired is an empirical question that we pursue in this study.[4]

Research to date on the impact of AIFRS has been mainly confined to a few small-scale studies focusing on the first stage impact of AASB 1047; that is, the narrative disclosures in the 2004 financial reports. Both Jubb (2005) and Ernst & Young (2005a) examine AIFRS disclosures with the sole purpose of identifying the major impacts of adopting AIFRS on Australian companies. As expected, the most frequently cited changes in accounting policies were identified as those having the largest impact. Palmer (2006) extends Jubb's (2005) study by analysing AIFRS disclosures in the December 2004 to June 2005 financial reports using a self-constructed disclosure index that is claimed to capture variation in the extent and quality of disclosure. He finds company size, profitability and auditor quality are significant determinants for both the extent and quality of disclosure. However, industry membership is not a significant determinant and leverage is significant in explaining the extent but not the quality of disclosure.

While these prior studies have produced useful findings, the results relate to the narrative disclosure behaviour in accordance with the first stage adoption of AASB 1047. Compliance and disclosure quality in accordance with the second stage disclosure requirements of AASB 1047 and with AASB 1 adoption have not been extensively examined.[5] Other factors limit the generalisability of the early findings to subsequent disclosure behaviour. For example, Jubb (2005) finds evidence of industry effects that were not evident in Palmer (2006). Additionally, the Ernst & Young (2005a) and Palmer (2006) studies use relatively small sample sizes and ignore other potential determinants of disclosure quality such the possible influences of individual auditor firms on disclosure quality.

Determinants of AIFRS Disclosure Quality

Corporate financial theory posits that managers optimise disclosure policy in order to maximise company

value (Diamond and Verrecchia 1991; Core 2001). In a discretionary disclosure environment this choice involves trading off the benefits of a reduction in the information asymmetry (for example, a decrease in the cost of capital) that results from increased disclosure quality against the increase in potential costs arising from the disclosure of uncertain information (for example, litigation and reputation costs) (Skinner 1994), and proprietary costs (Verrecchia 1983).

By mandating minimum disclosure levels in AASB 1047, the AASB assumed that without regulatory intervention, inadequate or incomplete disclosures would have resulted. However, the two-staged disclosure approach and the exclusion provisions in AASB 1047 provided implicit recognition of the costs of disclosure; notably, the avoidance of mandating disclosures that could prove to be subsequently inaccurate.[6] Thus we expect that companies would have taken advantage of these disclosure concessions and as a result, disclosure quality will vary across companies based on the degree to which companies faced greater costs or benefits associated with expected overall effects of AIFRS adoption.

Following an analysis of the background to the introduction of AIFRS, the strategies companies adopted to implement AIFRS, and the findings of prior research, we expect the cost and benefits of disclosure to vary according to the influence of a number of key factors. These factors are: the external auditor advice, industry characteristics, the expected company-specific financial impact and general company-specific factors (profitability, size, leverage and corporate governance quality). The theoretical arguments in support of these various disclosure quality determinants are explained below.

External auditor influence

Wallace, Naser and Mora (1994) suggest 'that the contents of annual reports and accounts are not only audited but also influenced by auditor'. Following the pioneering work of DeAngelo (1981), it has been common practice to distinguish between brand name audit firms (that is, big versus small audit firms) when testing the impact of auditor type on corporate disclosure practices and performance. Brand name audit firms are generally found to be positively associated with better disclosure.[7] However, in the aftermath of the Enron failure and the demise of Arthur Andersen, more recent studies have observed noticeable differences among the individual audit firms when examining auditor effectiveness.[8]

Similarly, we expect to observe differences in auditor influence on disclosure quality within and across the Big 4/Non-Big 4 dichotomy. As AASB 1047 was a new standard requiring comprehensive disclosure, with limited guidance and with a limited life of two years (for fiscal years ending in 2004 and 2005 for most companies), it is expected that companies relied heavily on guidance from their auditors to ensure compliance with AASB 1047.[9] While it is expected that larger audit firms would have had a greater influence on the nature of disclosure provided by their clients relative to their smaller counterparts, differences in the guidance across the larger audit firms are also expected.

AIFRS publications and model financial reports prepared by Big 4 firms and issued to clients prior to the adoption of AIFRS are likely to reflect guidance differences. To confirm the expected differences, example financial statements produced by the Big 4 firms were obtained for the financial year ending 30 June 2005.[10] The disclosure notes for the impact of adopting AIFRS (as required by AASB 1047 paragraph 4.2) were then scrutinised and categorised. A summary of the categorised disclosures for each of the Big 4 firms is provided in Table 1 on page 260.

On the basis of the information in Table 1, it is clear that among the Big 4 firms, Ernst & Young provided (and thus was likely to require) the least comprehensive pro-forma disclosures regarding the impact of AIFRS adoption. Ernst & Young's disclosure coverage is confined to the minimum reconciliation requirements and extends to only three pages. The differences between the other firms are not as great, although Deloitte's coverage is noticeably less that KPMG's and PricewaterhouseCoopers's (PwC) total page coverage. Accordingly, we expect that companies subject to audit by Ernst & Young will provide AIFRS disclosures of the lowest disclosure quality, and those audited by KPMG and PwC will provide disclosures of the highest quality.

Industry impact of AIFRS adoption

Disclosure quality is likely to be influenced by differences in the AIFRS portfolios adopted by companies. These differences are likely to arise due to a number of factors, including variation in the number and type of applicable standards, adoption complexity and financial impact. Wide differences in these factors are evident across industries and are concentrated in a small group of industries based on the Global Industry Classification System (GICS).[11] These are the extractive industry (mining and energy), the biotechnology and technology industry, the retail industry (consumer staples and consumer discretionary), and the financial services industry (financials and property trusts).

The extractive industry was heavily affected by increased expenses and write-downs arising from the adoption of the industry-specific standard, AASB 6

Table 1 AASB 1047 disclosures provided in the Big 4 accounting firms' example financial statements as at 30 June 2005

Disclosure Description	EY	DTT	PwC	KPMG
Reconciliations				
Reconciliation of equity as presented under AGAAP to that under AIFRS, both consolidated and company, as at 30 June 2005 and 1 July 2004	Yes	No	No	No
Number of notes explaining details of individual items in the above equity reconciliation	9	–	–	–
Reconciliation of net profit as presented under AGAAP to that under AIFRS, both consolidated and company, for year ended 30 June 2005	Yes	No	No	No
Number of notes explaining details of individual items in the above profit reconciliation	7	–	–	–
Pro-forma statements				
Pro-forma statement of financial performance (disclosing AGAAP actual/AIFRS impact/AIFRS pro forma), both consolidated and company, for year ended 30 June 2005	No	Yes	Yes	Yes
Pro-forma statement of financial position (disclosing AGAAP actual/AIFRS impact/AIFRS pro-forma), both consolidated and company, as at 30 June 2005	No	Yes	Yes	No
As above for the statement of financial position plus an additional statement of financial position, both consolidated and company, as at 1 July 2004	No	No	No	Yes
Summary of impact of the transition to AIFRS on retained earnings as at 1 July 2004	No	No	No	Yes
Number of explanatory notes to the pro-forma statement of financial performance and statement of financial position	–	11	15	14
Total extent of coverage				
Number of pages devoted to the impact of adopting AIFRS	3	6.5	9	14.5

DTT = Deloitte Touche Tohmatsu; EY = Ernst & Young; KPMG = KPMG; PwC = PricewaterhouseCoopers; N = No; Y = Yes; AGAAP = Australian generally accepted accounting standards; and AIFRS = Australian equivalents to International Financial Reporting Standards

Exploration for and Evaluation of Mineral Resources, as well as AASB 137 *Provisions, Contingent Liabilities and Contingent Assets*, and AAS 2 *Share-based Payments*. The likely negative effects provided incentives for managers to provide greater quality disclosure to mitigate investor concern about adoption consequences.

The biotechnology and telecommunications industry was similarly affected by AAS 2, and it was also the major sector affected by AAS 138 *Intangible Assets*. Similar to the extractive industry, both standards had mainly negative consequences for firms, providing incentives for disclosure.

The retail sector was affected by more standards on average than most other industries, but these standards often had offsetting effects on the net income and equity. For example, most companies in the sector were affected by AASB 136 *Impairment of Assets* and AASB 3 *Business Combinations*. As a consequence, many companies experienced an increase in net income arising from the cessation of goodwill amortisation. However, this increase was often offset by the need to recognise other expenses, such as those arising from inventory valuation adjustments, adjustments to provisions and share-based payments. Because of the offsetting effects, AIFRS adoption had, on average, only a minimal industry-wide impact. The overall immaterial

consequences of AIFRS adoption may have led managers in this sector to adopt a low-quality disclosure strategy.

The financial services industry was also affected by fewer but often more complex standards than most other industries.[12] Because of the complexities associated with adopting these standards, many companies elected to delay adoption in accordance with AASB 1 (paragraphs 13, 26 and 36A). Investment trusts were also positively affected by the requirement to recognise fair value of investment properties under AASB 140 *Investment Property*. For these reasons it is expected that managers of companies in the financial services industry perceived a lesser need to provide detailed disclosures in their 2005 financial statements.

Given these concessions and the considerable within-industry variation with respect to each company's portfolio of accounting standards, it is difficult to predict how AIFRS disclosure quality varied across all sectors. However, our analysis suggests that relative to other industries, the extractive, and biotechnology and telecommunications industries are likely to have provided greater quality AIFRS disclosures, and the financial services group lower quality disclosures. We make no prediction about the retail group due to the offsetting impact of the large and broad range of standards applicable to this sector.

Financial factors influencing AIFRS adoption

Both the magnitude of the AIFRS impact on the financial statements and the nature of the underlying news are likely to influence the extent and quality of disclosures. Although the adoption of AIFRS had no direct cash flow consequences other than conversion expenses (for example, changes in accounting systems to report AIFRS information and AIFRS staff training), it was expected to significantly change reported net income and shareholders' equity for many companies. The more negative the adoption consequences, the greater the incentive managers would have had to provide informative disclosures to remove investor uncertainty about the financial impact. Consequently, a negative relation is expected between the incremental change in net income and shareholders' equity from AIFRS adoption and disclosure quality.[13]

General company disclosure determinants

Other factors frequently found to be associated with the level and quality of corporate disclosure in prior studies (other than those previous discussed) include profitability, company size, leverage and governance quality.[14] Similarly, many of the same factors are likely to explain the variation in AIFRS disclosure quality.

Profitability

Prior disclosure studies frequently find a positive relation between current profitability and the level of disclosure (Wallace and Naser 1995; Inchausti 1997; Owusu-Ansah 1998; Owusu-Ansah and Yeoh 2005). Based on agency and signalling theories it is argued that more profitable companies use external disclosure to support their current positions and compensation arrangements, and to avoid undervaluation of their company's shares (Inchausti 1997). Profitability is frequently measured using return on capital measures, typically, return on shareholders' equity (ROE). A company's profitability is also evaluated using the change in profitability as measured by the first difference in return measures (Burgstahler and Dichev 1997). Hence, both ROE and changes in ROE are expected to be positively associated with AIFRS disclosure quality.

Corporate size

A positive relation has consistently been found between size (typically measured as total assets or market capitalisation) and disclosure levels in prior studies.[15] Larger companies are more visible and given the concerns raised by regulators and the media about the potential impact of AIFRS adoption, those companies are more likely to be concerned about the potential political and litigation costs that may arise from poor quality disclosure. Larger companies are also expected to have better developed and more comprehensive internal reporting systems that can be effective in lowering compliance, information dissemination and other costs associated with the AIFRS transition.[16] Thus we expect a positive association between size (as measured by total assets or market capitalisation) and AIFRS disclosure quality.

Leverage

From an agency theory perspective, Jensen and Meckling (1976) argue that highly leveraged companies minimise monitoring costs by providing increased disclosure. However, Jensen (1986) argues that the agency costs of debt can be effectively controlled through restrictive covenants in debt agreements rather than through increased public disclosure. Nonetheless, the empirical evidence is inconclusive and appears to be context specific.[17] AIFRS adoption typically increased reported leverage for the majority of companies because assets and equity declined (Ernst & Young 2005a). In some cases, companies may have technically breached leverage ratios restrictions in their debt covenants. How companies responded is difficult to determine *ex ante*. While some with high leverage may have chosen to provide enhanced public disclosure, others may have chosen to avoid public scrutiny and communicate directly with lenders. Given these uncertain and inconclusive prior findings, we include leverage as a possible explanatory variable, but make no directional prediction about its relationship with disclosure quality.

Governance quality

Corporate governance quality (CGQ) has also been found to impact on the nature of corporate disclosures.[18] However, the impact of individual governance provisions is not consistent across studies. For example, Cheng and Courtenay (2006), and Chen and Jaggi (2000) find a positive association between board independence and disclosure, but Eng and Mak (2003), and Gul and Leung (2004) find a negative association. Because of the difficulty in identifying how individual governance provisions interact and impact on disclosure, recent studies have used a corporate governance index to capture CGQ.[19] Beekes and Brown (2006) use the rankings provided in 2002 Horwath Report for their corporate governance index and find a positive association between the quantity and timeliness of price-sensitive disclosure and CGQ.

The Horwath Report is claimed to be 'an objective and independent assessment of the corporate governance

structures of Australia's largest public companies' (Psaros and Seamer 2005: 2). The report contains corporate governance rankings (on a five-star rating scale). The ratings are derived from a summary measure of a broad range of company governance mechanisms, including: the existence and structure of a company's board of directors and its committees, the level of perceived independence of the company from the external auditors, and disclosures relating to the existence of a code of conduct, risk management and share trading policy. Given that a number of internal governance mechanisms may have influenced AIFRS disclosure quality, we also use the index to test the impact of CGQ.

In summary, we expect differences in AIFRS disclosure quality can be explained by external auditor type, industry membership, the company-specific AIFRS financial impact and general company-specific factors (profitability, size, leverage and corporate governance quality) evident in prior disclosure research.

Research Design

Sample selection and data sources

The initial sample comprises all Australian Securities Exchange (ASX)-listed companies that are in the top 500 companies by market capitalisation as at 30 June 2005 with annual reporting dates ending between 31 December 2004 and 30 September 2005. Companies were removed if they reported to a foreign GAAP (39 companies), lacked an AIFRS note disclosure in their annual reports (16 companies), were suspended or delisted (23 companies), or had no 2005 annual report available at the time of the study (14 companies). The final sample comprises 408 companies. For this sample, data were obtained from the AIFRS note disclosures made in compliance with AASB 1047. Annual reports between 2004 and 2005 for these companies were obtained via the Connect 4 *Annual Report Collection* and the Aspect-Huntley *Fin Analysis* databases. Governance quality ratings for 229 companies in the sample were extracted from the 2005 Horwath Corporate Governance Report.[20]

Table 2 shows the breakdown of the sample by industry classification and category. Companies are widely dispersed across GICS sectors and the five industry categories used to group like companies for analysis: Mining & Energy (IND_ME); Bio-Technology & Technology (IND_BT); Financial Services (IND_FS); Retailing (IND_RET); and Other (IND_OTH). This categorisation is successful in capturing sufficient numbers of companies in each category for analysis without any industry category being overly dominant. (The percentage of sample companies in categories

ranges from a minimum of 10% for IND_BT to a maximum of 35% for IND_OTH).

Research model and testing procedures

Measurement of disclosure quality

Disclosure quality is measured using an index (QDS) representing increasing categories of disclosure quality based on the AIFRS disclosures presented in the 2005 company annual reports. As there is a large variation in the presentation of these disclosures in financial statements notes, a self-constructed disclosure index is used to capture the full extent and variation in disclosure quality across companies. To minimise subjectivity in constructing the index, a single robust rating system was developed based on the guidance provided to companies in AASB 1047.[21]

AASB 1047 (paragraph 4.2.3) did not provide specific guidance on how information should be presented in the AIFRS note in the 2005 annual report, but instead suggested that entities could quantify the financial effects by means of a 'reconciliation' to financial statement line items or key aggregate measures, and supply 'appropriate descriptions of the differences'. Accordingly, our index is based on these two aspects: the presentation of the quantified financial impact of AIFRS on equity and profit,[22] and the accompanying narrative descriptions. An eight-point scoring system was developed to rate the quality of the reconciliation statements. The score ranged from zero, where no quantified reconciliation was provided, to eight for a complete restated set of financial statements with a fully quantified reconciliation.

A nine-point scoring system was developed to rate the accompanying narrative disclosures. The narrative was rated according to three overall levels of disclosure detail (general, specific and detailed), and further split into three components according to how specific the narrative was about each standard's financial impact on the company. The categories ranged from no specific description of the impacts to a detailed description identifying individual standards with supporting figures explaining the calculation of the impact. Determining the final QDS score involved assigning a single unweighted aggregate score (reconciliation plus the narrative score) ranging from 1 to 17 to each company's disclosures. The full coding schema is provided in Appendix A.[23]

By using our aggregation method and avoiding a word or page count we are able to capture the trade-off between the quantitative reconciliation and the narrative disclosure formats across companies. For example, both Coates Hire Ltd and Rebel Sports Ltd were allocated a total quality disclosure score of 6. However, the individual components of the scores significantly varied due to differences in the emphasis placed

Table 2 Industry classifications

Industry category		No. of companies	%
Mining & Energy (IND_ME)			
Energy		26	6.37%
Metals & Mining		50	12.25%
	Subtotal	76	18.62%
Biotechnology & Technology (IND_BT)			
Pharmaceuticals & Biotechnology		13	3.19%
Semiconductors & Semiconductor Equipment		1	0.25%
Software & Services		15	3.68%
Technology Hardware & Equipment		5	1.23%
Telecommunication Services		7	1.72%
	Subtotal	41	10.05%
Financial Services (IND_FS)			
Banks		10	2.45%
Diversified Financials		50	12.25%
Insurance		6	1.47%
Real Estate		15	3.68%
Real Estate Investment Trusts		25	6.13%
	Subtotal	106	25.98%
Retailing (IND_RET)			
Consumer Durables & Apparel		5	1.23%
Consumer Services		12	2.94%
Food & Staples Retailing		7	1.72%
Retailing		19	4.66%
	Subtotal	43	10.54%
Other (IND_OTH)			
Automobiles & Components		4	0.98%
Capital Goods		23	5.64%
Chemicals		5	1.23%
Commercial Services & Supplies		27	6.62%
Construction Materials		4	0.98%
Containers & Packaging		2	0.49%
Food Beverage & Tobacco		15	3.68%
Health Care Equipment & Services		16	3.92%
Media		20	4.90%
Paper & Forest Products		7	1.72%
Transportation		11	2.70%
Utilities		8	1.96%
	Subtotal	142	34.80%
	TOTAL	**408**	**100%**

on the alternative (narrative versus the quantitative reconciliation) formats, as indicated below:

	Quantified financial impacts	Narrative explanations	Total
Coates Hire Ltd	0	6	6
Rebel Sports Ltd	5	1	6

Other examples of coding and scoring for both quantified financial impacts and narrative explanations are presented in Appendix B.

Research model

The following linear regression model (equation 1) is used to test the expected explanatory factors of disclosure quality (QDS):

$$QDS_i = \beta_0 + \beta_1 DELOI_i + \beta_2 EY_i + \beta_3 KPMG_i$$
$$+ \beta_4 PWC_i + \beta_5 IND\_ME_i + \beta_6 IND\_BT$$
$$+ \beta_{7i} IND\_FS_i + \beta_8 IND\_RET_i + \beta_9 PROFIMP_{ii}$$
$$+ \beta_{10} ROE_i + \beta_{11} CROE_i + {}_i$$
$$+ \beta_{12} SIZE_i + \beta_{13} LEV + \beta_{14} CGQ_i + \varepsilon_i \qquad (1)$$

where:

QDS = an index (1–17) measure of disclosure quality in which an equal number of ratings were assigned for the AIFRS quantified reconciliations (0–8) and the AIFRS narrative disclosures (1–9)

$DELOI$ = 1 if the company is audited by Deloitte and 0 otherwise

EY = 1 if the company is audited by Ernst & Young and 0 otherwise

$KPMG$ = 1 if the company is audited by KPMG and 0 otherwise

PwC = 1 if the company is audited by Pricewater-houseCoopers and 0 otherwise

IND_ME = 1 if the company is in the mining and energy industries and 0 otherwise

IND_BT = 1 if the company is in the biotechnology and technology industries and 0 otherwise

IND_FS = 1 if the company is in the financial service industry and 0 otherwise

IND_RET = 1 if the company is in the retailing industry and 0 otherwise

$PROFIMP$ = Change in net income from adopting AIFRS, measured as AIFRS less AGAAP net income divided by AGAAP assets for the period

ROE = Current period return on equity, measured as AGAAP net income divided by AGAAP shareholders' equity

$CROE$ = Change in ROE, measured as the change in AGAAP ROE relative to the previous period[24]

$SIZE$ = Size of the company, measured as the log of AGAAP assets for the current period

LEV = Leverage of the company, measured as total AGAAP liabilities divided by total AGAAP assets

CGQ = Corporate governance score (0–5) as shown in the *Horwath 2005 Corporate Governance Report*

A negative association is expected between QDS and EY, IND_FS and PROFIMP. A positive association is expected between QDS and KPMG, PwC, IND_ME, IND_BT, ROE, CROE, CGQ, and SIZE. No directional predictions are made with respect to QDS and DELOI, IND_RET or LEV. To compare differences between brand name and non-brand name auditors, the individual audit firm variables are replaced by a Big 4 variable (BIG4) in equation 1 and tested in alternative estimations of the model. Given the possible offsetting effects among the Big 4 firms, no predictions are made with respect to the relation between QDS and BIG4.

Results

Descriptive statistics and univariate tests

Table 3 presents the descriptive statistics for continuous variables used in the regression model and additional statistics on the AIFRS impact.[25] The QDS mean is only 8, which suggests that disclosure quality is not high for the majority of companies in the sample. Companies are not highly leveraged (LEV median of 42%) and performed well in 2005 (ROE median of 11.4%), although performance has not improved over the previous year (CROE median of 0%). Consistent with Goodwin and Ahmed (2006), the median incremental AIFRS impact on income and equity is small in monetary terms and as a proportion of AGAAP assets (PROFIMP median is 1.5% and the EIMP median is –1.2%). In contrast with the statistics shown for QDS, corporate governance scores are above the mid-point and are well distributed around a median of 3.5 (out of a maximum of 5).

Table 4 provides a summary of the frequencies for the auditor type and industry grouping dichotomous variables, and provides tests of group differences for QDS scores. Panel A results show that approximately 83% of sample companies are audited by a Big 4 auditor, with EY and PwC comprising the dominant audit firms. As predicted, tests of audit firms mean QDS differences show that companies audited by EY have a significantly lower QDS score, and those audited by KPMG and PwC have a significantly high QDS score relative to those audited by other Big 4 firms. No significant association exists between QDS and both Deloitte or Big 4. The results of the *t*-tests provide support for not treating the Big 4 audit firms as a homogeneous group in our study of disclosure quality.

Table 4, panel B, shows that approximately 65% of sample companies fall into one of the four major industry groupings, of which the financial services sector is the major sector with 26% of all sample companies. As predicted, companies in the mining and energy, and biotechnology and technology sectors have significantly higher QDS scores, and those in financial services sector have significantly lower scores relative to those in other industries. Panel C shows that there is no excessive clustering of audit firms across specific industries that could suggest that industry classification is driving audit firms QDS differences. There appears to be evidence of some specialisation among the Big 4 firms. However, untabulated Chi-square and correlation tests reveal only two instances of significant difference: KPMG when compared with other Big 4 firms is less likely to be an auditor of retail companies and more likely to be an auditor of companies in the Other industry category.

Regression analysis

Table 5 on page 266 presents the results of estimating three versions of equation 1 to contrast the audit firm effects. The results for Model 1 are derived from estimating the basic model where the Big 4 firms are

Table 3 Descriptive statistics

	N	Mean	Median	SD	Min.	Max.
QDS	408	8.034	8	3.571	1	17
SIZE (Total Assets) ($m)	408	4963.1	355.8	30816.9	6.5	419588.0
LEV (Liabilities-to-Assets)	408	0.413	0.423	0.232	0.003	1.453
ROE (Return-on-Equity)	408	0.117	0.114	0.246	−1.935	1.303
CROE (Change in ROE)	408	−0.015	0.006	0.326	−3.706	1.508
Net Income Change due to AIFRS ($m)	408	6.9	0.3	113.8	−587.0	1,797.5
PROFIMP (Net Income Impact of AIFRS)	408	0.285	0.015	1.704	−3.394	26.477
Equity Change due to AIFRS ($m)	408	−94.0	−1.7	434.5	−6,081.0	1,384.4
EIMP (Equity Impact of AIFRS)	408	−0.055	−0.012	0.183	−1.000	1.172
CGQ (Governance Score)	229	3.483	3.5	1.098	1	5

QDS is an index (1–17) measure of disclosure quality in which an equal number of ratings were assigned for the AIFRS quantified reconciliations (0–8) and the AIFRS narrative disclosures (1–9); SIZE is the log of AGAAP assets for the current period; LEV equals total AGAAP liabilities divided by total AGAAP assets; ROE is current period return on equity, measured as AGAAP net income divided by AGAAP shareholders' equity; CROE is the change in AGAAP ROE relative to the previous period; Net Income Change due to AIFRS is the change in net income from adopting AIFRS, measured as AIFRS net income less AGAAP net income; PROFIMP is the change in net income from adopting AIFRS, measured as AIFRS net income less AGAAP net income divided by AGAAP assets for the period; Equity Change due to AIFRS is the change in shareholders' equity from adopting AIFRS, measured as AIFRS shareholders' equity less AGAAP shareholders' equity; EIMP is the change in shareholders' equity from adopting AIFRS, measured as AIFRS shareholders' equity less AGAAP shareholders' equity divided by AGAAP assets for the period; CGQ is the corporate governance score (0–5) as shown in the Horwath 2005 Corporate Governance Report.

Table 4 Comparisons of disclosure quality (QDS) scores by auditor and industry type

Variable	Member of this group			Non-member			Mean difference	t-stat	
	N	%	Mean (Median)	N	%	Mean (Median)			
Panel A: Audit firm									
Deloitte	45	11.0	8.000 (9)	363	89.0	8.039 (8)	−0.039	−0.068	
Ernst & Young	113	27.7	6.690 (6)	295	72.3	8.549 (9)	−1.859	−5.318	***
KPMG	76	18.6	9.487 (10)	332	81.4	7.702 (7)	1.785	3.458	***
PwC	104	25.5	8.827 (9)	304	74.5	7.763 (7)	1.064	2.642	***
BIG4	338	82.8	8.151 (8)	70	17.2	7.471 (7.5)	0.679	1.608	
Panel B: Industry type									
Mining & Energy	76	18.6	8.676 (9)	332	81.4	7.892 (8)	0.783	1.712	**
Biotech & Technology	41	10.0	9.098 (9)	367	90.0	7.916 (8)	1.182	2.018	**
Financial Services	106	26.0	7.587 (7)	302	74.0	8.188 (8)	−0.601	−1.648	*
Retailing	43	10.5	7.756 (7)	365	89.5	8.065 (8)	−0.309	−0.526	
Other	142	34.8	7.777 (8)	266	65.2	8.167 (8)	−0.390	−1.047	

Panel C: Companies audited by audit firm and industry type

Industry Type / Audit firm	Deloitte		Ernst & Young		KPMG		PwC		BIG4		NON-BIG4	
	N	%	N	%	N	%	N	%	N	%	N	%
Mining & Energy	8	17.8	24	21.2	15	19.7	15	14.4	62	18.3	14	20.0
Biotech & Technology	4	8.9	16	14.2	5	6.6	9	8.7	34	10.1	7	10.0
Financial Services	8	17.8	27	23.9	19	25.0	32	30.8	86	25.4	20	28.6
Retailing	4	8.9	15	13.3	3	3.9	12	11.5	34	10.1	9	12.9
Other	21	46.7	31	27.4	34	44.7	36	34.6	122	36.1	20	28.6
Total	45		113		76		104		338		70	

*, **, *** significant at the 0.1, 0.05, and 0.01 levels respectively (2-tailed) based on independent samples t-test. Both panels A and B show the mean difference in dependent variable scores for each auditor and industry group respectively. Panel C shows the frequencies by industry and auditor type. QDS is an index (1–17) measure of disclosure quality in which an equal number of ratings were assigned for the AIFRS quantified reconciliations (0–8) and the AIFRS narrative disclosures (1–9).

grouped together and included as the one dummy variable (Big-4/Non-Big 4). In Model 2, the full model is presented with each Big 4 audit firm entering the model and the Non-Big 4 firms are included in the omitted base category captured by the intercept. In Model 3 only companies audited by a Big 4 firm (N = 338) are included

in the model. Each of the Big 4 firms is included as a dummy variable in the model except for EY, which is now the omitted base category. All models exclude the governance quality measure because CGQ data are only available for 229 companies. (Results using CGQ are presented in Table 6 on page 267).[26]

Table 5 Regression results of AIFRS disclosure quality on auditor type and other factors

Dependent variable: QDS		Model 1 Grouped BIG4/Non-BIG4		Model 2 Individual BIG4/Non-BIG4		Model 3 Individual BIG4	
Variable	Predicted sign	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Intercept		2.735	1.261	3.834	1.824^	2.013	0.861
BIG4	+	0.329	0.671				
DELOI	?			0.307	0.467	1.443	2.372*
EY	−			−1.103	−2.067*		
KPMG	+			1.717	2.872**	2.798	5.358**
PwC	+			1.179	2.172*	2.246	4.739**
IND_ME	+	0.857	1.644*	1.053	2.100*	0.967	1.712*
IND_BT	+	1.472	2.235*	1.891	2.975**	1.955	2.755**
IND_FS	−	−0.383	−0.806	−0.194	−0.425	0.047	0.093
IND_RET	?	−0.046	−0.074	0.315	0.530	0.113	0.166
PROFIMP	−	−1.199	−1.611^	−1.450	−2.028*	−1.857	−2.345**
ROE	+	−0.397	−0.506	−0.587	−0.777	−0.329	−0.386
CROE	+	1.535	1.812*	1.704	2.095*	1.426	1.543^
SIZE	+	0.262	2.171*	0.182	1.557^	0.226	1.816*
LEV	?	−0.488	−0.471	−0.010	−0.010	−0.335	−0.292
Adj. R^2			0.029		0.109		0.114
F-stat			2.200*		4.774**		4.552**
N			408		408		338

^, *, ** significant at the 0.1, 0.05 and 0.01 levels respectively (1-tailed for signed predictions, 2-tailed otherwise). QDS is an index (1–17) measure of disclosure quality in which an equal number of ratings were assigned for the AIFRS quantified reconciliations (0–8) and the AIFRS narrative disclosures (1–9); BIG4 equals 1 if the company is audited by Deloitte, Ernst & Young, KPMG or PricewaterhouseCoopers, and 0 otherwise; DELOI equals 1 if the company is audited by Deloitte, and 0 otherwise; EY equals 1 if the company is audited by Ernst & Young, and 0 otherwise; KPMG equals 1 if the company is audited by KPMG, and 0 otherwise; PwC equals 1 if the company is audited by PricewaterhouseCoopers, and 0 otherwise; IND_ME equals 1 if the company is in the mining and energy industries, and 0 otherwise; IND_BT equals 1 if the company is in the biotechnology and technology industries, and 0 otherwise; IND_FS equals 1 if the company is in the financial services industry, and 0 otherwise; IND_RET equals 1 if the company is in the retailing industry, and 0 otherwise; PROFIMP is the incremental change in net income from adopting AIFRS, measured as AIFRS less AGAAP net income divided by AGAAP assets for the period; ROE is current period return on equity, measured as AGAAP net income divided by AGAAP shareholders' equity; CROE is the change in AGAAP ROE relative to the previous period; SIZE is the log of AGAAP assets for the current period; LEV equals total AGAAP liabilities divided by total AGAAP assets.

In Table 5 on page 266, Model 1 results clearly show that BIG4 is not significant, thus justifying the separation of each Big 4 firm in Model 2. The Model 2 results shows KPMG and PwC are positively related to disclosure quality, whereas, a significantly negative relationship is evident for EY. Thus as predicted, auditor quality (as proxied by Big 4 firms) translates into increased disclosure quality for KPMG and PwC, but reduced disclosure quality for EY. With respect to the industry grouping variables, the predicted significant associations are evident for IND_ME and IND_BT, but, contrary to the univariate findings, the predicted negative association between IND_FS disclosure quality is now not evident. As expected, there is a significant negative association between the net income impact of AIFRS (PROFIMP) and disclosure quality. Also, consistent with prior disclosure research, company size (SIZE) and the change in profitability (CROE) are associated with higher disclosure quality. Neither the current level of profitability (ROE) nor leverage (LEV) is significant in explaining disclosure quality.

The separation of the Big 4 firms in Model 2 also substantially improves the model's explanatory power, with the adjusted R^2 increasing from 2.9% in Model 1 to 10.9 % in Model 2. The increase in explanatory power is most likely due to the fact that there are offsetting effects when, in Model 1, the Big 4 firms are grouped together (for example, companies audited by PwC and KPMG have better disclosure quality scores than companies audited by EY). By including separate dummy variables for the Big 4 audit firms in Model 2, the separate effects and their interactions with other variables in the model are captured in the regression results. The results for other explanatory variable are similar to those reported for Model 1.

In Model 3, the results for only companies audited by the Big 4 firms show that the coefficients on all the non-EY audit companies are significantly positive, indicating that EY has the lowest disclosure quality among the Big 4 category. Further (untabulated) tests reveal that KPMG and PwC have significantly higher disclosure quality scores than Deloitte, and those audited by KPMG and PwC have similar scores. Thus these results highlight the significant influence individual audit firms can have on disclosure quality.

Table 6 Regression results of AIFRS disclosure quality on auditor type, governance score and other factors

Dependent variable: QDS		**Model 1** Grouped BIG4/Non-BIG4		**Model 2** Individual BIG4/Non-BIG4		**Model 3** Individual BIG4	
Variable	Predicted sign	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Intercept		0.578	0.183	0.588	0.197	−1.268	−0.385
BIG4	+	1.240	1.499^				
DELOI	?			0.726	0.744	1.276	1.628
EY	−			−0.547	−0.641		
KPMG	+			2.481	2.759**	3.035	4.566**
PwC	+			2.418	2.858**	2.979	4.767**
IND_ME	+	1.574	2.288*	1.915	2.950**	1.846	2.613**
IND_BT	+	1.682	1.952*	2.450	2.964**	2.642	3.016**
IND_FS	−	0.302	0.438	0.281	0.434	0.231	0.330
IND_RET	?	−0.369	−0.457	−0.014	−0.018	−0.332	−0.382
PROFIMP	−	−1.153	−1.056	−1.770	−1.706*	−2.099	−1.838*
ROE	+	−0.643	−0.483	−1.115	−0.888	−0.824	−0.595
CROE	+	2.107	1.520^	2.404	1.843*	2.400	1.708*
SIZE	+	0.312	1.662*	0.298	1.685*	0.408	2.161*
LEV	?	−2.496	−1.525	−1.753	−1.134	−2.287	−1.349
CGQ	+	0.462	1.699*	0.372	1.451^	0.196	0.710
Adj. R^2		0.074		0.184		0.184	
F–stat		2.640**		4.629**		4.500**	
N		229		229		203	

^, *, ** significant at the 0.1, 0.05 and 0.01 levels respectively (1-tailed for signed predictions, 2-tailed otherwise). QDS is an index (1–17) measure of disclosure quality in which an equal number of ratings were assigned for the AIFRS quantified reconciliations (0–8) and the AIFRS narrative disclosures (1–9); BIG4 equals 1 if the company is audited by Deloitte, Ernst & Young, KPMG or PricewaterhouseCoopers, and 0 otherwise; DELOI equals 1 if the company is audited by Deloitte, and 0 otherwise; EY equals 1 if the company is audited by Ernst & Young, and 0 otherwise; KPMG equals 1 if the company is audited by KPMG, and 0 otherwise; PwC equals 1 if the company is audited by PricewaterhouseCoopers, and 0 otherwise; IND_ME equals 1 if the company is in the mining and energy industries, and 0 otherwise; IND_BT equals 1 if the company is in the biotechnology and technology industries, and 0 otherwise; IND_FS equals 1 if the company is in the financial services industry, and 0 otherwise; IND_RET equals 1 if the company is in the retailing industry, and 0 otherwise; PROFIMP is the incremental change in net income from adopting AIFRS, measured as AIFRS less AGAAP net income divided by AGAAP assets for the period; ROE is current period return on equity, measured as AGAAP net income divided by AGAAP shareholders' equity; CROE is the change in AGAAP ROE relative to the previous period; SIZE is the log of AGAAP assets for the current period; LEV equals total AGAAP liabilities divided by total AGAAP assets; CGQ is the corporate governance score (0–5) as shown in the Horwath 2005 Corporate Governance Report.

Table 6 shows results for estimating the reduced sample inclusive of the CGQ variable based on the Horwath governance index. Consistent with expectation, there is a significant positive association between disclosure quality and CGQ, but the evidence is not strong and CGQ is insignificant in Model 3. The EY coefficient is also not significant in the full model (Model 2). However, in Model 3, EY (the omitted base category captured by the intercept) continues to have the lowest disclosure quality among the Big 4 group because the other included audit-firm dummy variables are significantly positive. The explanatory power of the models increases noticeably in Table 6 relative to Table 5 due to the inclusion of the CGQ variable and the generally increased significance of the other explanatory variables.[27]

Sensitivity analysis

A series of robustness checks was conducted to ensure that the regression results were not sensitive to alternative measures. The first set of tests involved re-estimating the regressions models using QDS calculated according to the following alternative aggregation methods.

1 The narrative component was collapsed from the nine-point score to a three-point primary category score (where 1 = general, 2 = specific and 3 = detailed), and re-scored to produce a maximum QDS score of 11.
2 The reconciliation component was collapsed from an eight-point score to a three-point primary category score (where 1 = no quantified reconciliation, 2 = a part or full pro-forma financial statement for one year, and 3 = a part or full pro-forma financial statement for two years) and re-scored to produce a maximum QDS score of 12.
3 A combination of both methods (2) and (3) was used to produce a maximum QDS score of six.
4 The 'identification of standards' sub-division within the narrative component was removed and no extra points were awarded for this addition information.

This procedure resulted in a six-point narrative score and a maximum QDS score of 14.

5 The narrative component was expanded to include three extra categories for companies that may only have identified the affected accounting standards and not provided supporting figures in their corresponding description. (The following coding system was adopted: 1 = a general description; 2 = a general description including identification of individual accounting standards; 3 = a general description with numerical quantification; and 4 = a general description with accounting standards and numerical quantification). This coding procedure resulted in the 12-point narrative score and a maximum QDS score of 20.

All of the above alternating methods for constructing the disclosure indices did not result in any noticeable differences to the results previously presented.

Our next set of tests involved testing for possible correlated omitted variable bias. A dummy variable for loss companies and a variable similar to PROFIMP measuring the AIFRS impact on closing equity were used in regression analysis. However, no significant results were evident. Similarly, variables found to be significant in prior disclosure research and not used in our primary tests—including company age, liquidity and shareholder concentration (Inchausti 1997; Owusu-Ansah 1998; Palmer 2006 and Wallace et al. 1994)—were tested in separate and joint regression model applications. However, none of these variables were found to be significant in explaining disclosure quality.

Further analysis was conducted to account for the nature of the accounting standards in explaining the variation in disclosure quality. In separate tests, the regression models were re-estimated inclusive of variables representing the total number of new standards affecting a company, the number of difficult standards allowed as exemptions under AASB 1, and the proportion of difficult standards out of the total affecting the company. Also, separate dummies variables were included in the models for each AIFRS standard having a major financial statement impact to check whether particular standards may explain our audit firm and industry findings. Despite all these procedures, the results remain consistent with those previously reported and we were unable to identify any direct association between the nature of accounting standards and AIRFS disclosure quality.

Finally, to further assess the relation between industry and disclosure quality, the industry variables (IND_ME, IND_BT, IND_FS, and IND_RET) were replaced in the regression models by dummy variables for each of the 11 GICS industry sector codes and the models re-estimated. Consistent with the findings of Palmer (2006), the individual GICS variables were not significant in any re-estimations of the models. This result demonstrates the importance of identifying underlying factors likely to influence disclosure behaviour in selecting industry variables in disclosure research.

Conclusion

This study examines the effects of recent changes in the international accounting environment with the introduction of AIFRS in Australia. Our focus is on the quality of disclosures made by Australian companies of the likely effects of AIFRS prior to the adoption of these standards. A review of the disclosures provided by our sample from the top 500 Australian companies shows a broad variation in the type of AIFRS information presented to users of financial statements.

Consistent with our expectation the variation in AIFRS disclosure quality can be explained by both company-specific and industry-specific factors. The AIFRS financial impact, profitability and industry factors are associated with disclosure quality, but we observe only weak evidence of a Big 4 audit firm effect. However, when we separately examine the impact of each Big 4 audit firm, we find differences between firms; disclosure quality is significantly greater for companies audited by KPMG and PricewaterhouseCoopers, and significantly lower for companies audited by Ernst & Young. These differences are consistent with those observed in the example financial statements provided by these firms and are not explained by differences in industry membership. The results are also robust to alternative methods, measures of quality and factors explaining quality.

Our findings identify the important role audit firms played in company AIFRS disclosures. Managers appear to have deferred to their external auditors for guidance on how to satisfy the mandated disclosure requirements rather than exercise the level of discretion often observed in other disclosure studies. As a consequence, the guidance that varied considerably across the major audit firms is reflected in differences in quality of company AIFRS disclosures and in a reduction in disclosure comparability across companies. These findings highlight the difficulty preparers and the accounting profession experienced in complying with a disclosure standard based on broadly defined principles and vague guidance.

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Notes

1. For example, see Fiona Buffini, 'New standards a kick in the intangibles assets', *The Australian Financial Review*, 10 April 2003: 4; and Florence Chong, 'Firms fume over IFRS into "overkill"', *The Australian*, 27 November 2006: 32.

2. AASB 1 (as amended up to and including 6 April 2006) is equivalent to IFRS 1 *First-time Adoption of International Financial Reporting Standards*, as issued and amended by the IASB.

3. Consistent with the exercise of discretion, an ASIC survey (ASIC 2006) found only 700 of the 1250 listed entities surveyed fully quantified key AGAAP–AIFRS differences in their 2005 annual reports.

4. We regard 'quality' of information to be enhanced where more specific quantitative information (as opposed to less specific qualitative information) is provided to users by firms.

5. One exception is Goodwin and Ahmed (2006). Using a sample of early reporting (31 December balance date) firms, they find that AIFRS adoption had no material financial impact for the majority of firms. They do not examine the cross-sectional variation in disclosure quality.

6. Verrecchia (2001) notes that uncertainty offers an alternative rationale for the withholding of information by firms in the absence of an exogenous proprietary cost. Uncertain information acts like a disclosure cost in that it creates doubt in the minds of the uninformed. Moreover, in choosing to disclose uncertain information, managers are likely to weigh the credibility gain or loss that could occur at a subsequent date when more information is forthcoming.

7. See Street and Gray (2002), Glaum and Street (2003), Leung and Horwitz (2004), Owusu-Ansah (1998), Owusu-Ansah and Yeoh (2005), and Clarkson et al. (2006).

8. For example, see Chaney and Philipich (2002), Fuerman (2003), Eisenberg and Macey (2004), and Tilis (2005).

9. For example, Woodside Ltd disclosed in their 2004 annual report (Note 4) that 'external auditors have provided input into the process of interpreting the requirements and impacts of IFRS'.

10. Deloitte Touche Tohmatsu (2005), Ernst & Young (2005b), KPMG (2005) and PricewaterhouseCoopers (2005).

11. Palmer's (2006) finding of an insignificant association between industry membership and AIFRS disclosure is possibly due to his use of dummy variables for all GICS sectors in his regression models despite low numbers of observations for a number of sectors. His findings are also contrary to the industry influences observed in other disclosure studies (for example, Street and Gray 2002, Taplin et al. 2002, Akhtaruddin 2005).

12. For example, AASB 132 *Financial Instruments: Presentation* and AASB 139 *Financial Instruments: Recognition and Measurement*.

13. As many changes resulting from AIFRS adoption avoided the income statement through write-downs directly to retained earnings, we focus on the net income in our primary analysis and consider the equity effects in sensitivity analysis.

14. See Ahmed and Courtis (1999) for a meta-analysis of 29 disclosure studies, and a summary of disclosure research findings in Chavent et al. (2006).

15. See Singhvi and Desai (1971), Firth (1979), Cooke (1992), Ho and Wong (2001), Hossain et al. (1995), Wallace and Naser (1995), Ho and Wong (2001), and Eng and Mak (2003).

16. The relative higher cost for smaller firms was frequently cited in the media in the lead-up to AIFRS adoption. (For example, see BDO, 'Impact on the smaller listed companies', *Accounting News*, October 2006: 2–4.)

17. For example, Eng and Mak (2003) find a negative association; Ferguson et al. (2002) find a positive association; and Lim, Matolcsy and Chow (2007) find no association between leverage and voluntary disclosure.

18. For example, see Forker (1992); Chen and Jaggi (2000); Ho and Wong (2001); Gul and Leung (2004); Cheng and Courtenay (2006); and Lim, Matolcsy and Chow (2007).

19. For example, see Gompers, Ishii and Metrick (2003), Brown and Caylor (2006), and Beekes and Brown (2006).

20. The Horwath 2005 Corporate Governance Report includes only the top 250 companies by market capitalisation. There were 229 firms common to the sample used in this study.

21. Two independent reviews were used in developing the coding scheme.

22. We exclude the Statement of Cash Flows because AIFRS adoption had no material impact on this Statement.

23. Results using alternative disclosure scoring procedures and alternative measures for the explanatory variables are discussed in the sensitivity analysis section.

24. Similar results were obtained when percentage changes in ROE were used. All firms in the final sample had positive shareholders' equity.

25. Results using the other measures are discussed later in the sensitivity analysis section of the paper.

26. Prior to estimating the regression models, departures from normality were appropriately corrected using common transformation techniques. Also results from bivariate correlations tests and VIF statistics were examined for signs of multi-collinearity among the independent variables. However, none were detected.

27. To test whether sample bias may be driving results we re-run the models using the full sample of companies and use mean substitution for missing CGQ values. The untabulated results are generally stronger that those shown in Tables 5 and 6, thus dispelling concerns about any sample bias.

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Appendix A: Explanation of Disclosure Index

A: Quantified reconciliation of AIFRS impacts

Column heading	Description	Score out of 8
No quantified reconciliation	No reconciliation of quantitative changes.	0
Equity or profit – 1 year	Reconciliation of either equity or profit for the current period.	1
Reconciliation – 1 year	Reconciliations for both equity and profit for the current year.	2
Reconciliation/Statement – 1 year	Reconciliation of either equity or profit and a financial statement for the other.	3
Financial statements – 1 year	Financial statements showing changes for the current year only.	4
Reconciliation – 2 years	Reconciliation of either equity or profit for both the current year and transition date.	5
Reconciliation/Statement – 2 years	Figures shown for both the current year and transition date. One year presented as a reconciliation of either equity or profit and the other year presented as financial statements.	6
Financial statements – 2 years	Reconciliation of either equity or profit and financial statements showing changes for both the current year and transition date.	7
Reconciliation and statements – 2 years	Reconciliation of both equity and profit and financial statements prepared under AIFRS for both the current year and transition date.	8

B: Narrative explanations of AIFRS impacts

Column heading	Description	Score out of 9
Description General	Basic description of only the standard itself without reference to the company's financial impact.	1
Description General with figures	Basic description of the standard's financial impact on the company including the figure in the reconciliation/ statements.	2
Description General with figures and standards	Basic description of the standard's financial effect on the company including reference to figures in the reconciliation/statements and identifies applicable standards.	3
Description Specific	Description of the standard's effect on the company's specific situation.	4
Description Specific with figures	Description of the standard's effect on the company's specific financial situation with accompanying figures.	5
Description Specific with figures and standards	Description of the standard's effect on the company's specific financial situation with accompanying figures and identifies applicable standards.	6
Description Specific detailed	Detailed description of the standard's financial effect on the company.	7
Description detailed with figures	Detailed description of the standard's financial effect on the company with detailed figures showing how final amounts were determined.	8
Description detailed with figures and standards	Detailed description of the standard's financial effect on the company with detailed figures showing how final amounts were determined and identifies applicable standards.	9

Appendix B: Examples of Coding and Scoring For Both Quantified Financial Impacts and Narrative Explanations

Company	Presentation of quantified financial impacts	Score	Narrative explanations of AIFRS impacts	Score	Total score
Coates Hire Ltd	No reconciliation of quantified changes was provided.	0	The impact of adopting AIFRS was described including: details of the standard's effect on the company's financial situation; accompanying figures; and the title of the applicable standard.	6	6
Rebel Sports Ltd	Reconciliations provided for equity (both current year and transition year), and for the current year's profit.	5	Only basic descriptions of each standard were provided without reference to the standard's financial impact.	1	6
Wilson Investment Fund Ltd	Only a reconciliation of profit for the current year was provided.	1	A detailed description of the relevant standards' financial effect, how amounts were determined and identification of the applicable standard was provided.	9	10
Incitec Pivot Ltd	Reconciliation of profit for the current year and financial statements showing changes for the current year and transition date.	7	A basic description of each standard's financial effect on the company, including reference to figures in the statements and details of the applicable standards were provided.	3	10
Colorado Ltd	Reconciliation of profit for the current year and financial statements showing changes for the current year and transition date.	7	A detailed description of each standard's financial effect on the company showing how final amounts were determined.	8	15
BHP Billiton Ltd	Reconciliation of both equity and profit and financial statements prepared under AIFRS for both years.	8	A detailed description of each standard's financial effect on the company was provided.	7	15