Massey University
COLLEGE OF BUSINESS

School of Accountancy
Private Bag 11 222
Palmerston North
New Zealand

P + 64 6 356 9099
F + 64 6 350 5617
www-accountancy.massey.ac.nz

Has IFRS Resulted in Information Overload?

by

M. Morunga and M.E. Bradbury

Discussion Paper Series 221

December 2010

ISSN 1175-2874 (Print)
ISSN 2230-3383 (Online)

SCHOOL OF ACCOUNTANCY

DISCUSSION PAPER SERIES

The discussion paper series of the School of Accountancy is intended to provide staff and postgraduate students of the School with a means of communicating new and developing ideas in order to facilitate academic debate. Discussion papers should not necessarily be taken as completed works or final expressions of opinion.

All discussion papers are quality-assured, being formally peer-reviewed prior to publication. Views expressed are those of the authors, and are not necessarily shared by the School of Accountancy.

Normally discussion papers may be freely quoted or reproduced provided proper reference to the author and source is given. When a discussion paper is issued on a restricted basis, notice of an embargo on quotation/reproduction will appear on this page.

Abstracts of discussion papers, and most full papers, are available as pdf documents at http://www-accountancy.massey.ac.nz (click on “Research” then "Discussion Papers")

A list of all discussion papers published by the School is available at the back of this publication. A hard copy of any full paper, provided it is in stock, may be obtained from

Sim Loo
School of Accountancy
Private Bag 11-222
Massey University
Palmerston North
New Zealand

Email: y.loo@massey.ac.nz

Has IFRS Resulted in Information Overload?

by

M. Morunga and M.E. Bradbury[1]

School of Accountancy
Massey University
Albany Campus
New Zealand

Corresponding author,

Email: m.e.bradbury@massey.ac.nz

ISSN 1175-2874 (Print)
ISSN 2230-3383 (Online)

Date: December 2010

Has IFRS Resulted in Information Overload?

Abstract

The move to NZ IFRS has been surrounded by complaints of too much information being provided. This is not simply a matter of the cost of providing the information, but the possibility of data overload. Data overload is an important issue as it impacts information search strategies and decision outcomes. This relevant for the current debate on differential reporting and for assessing whether NZ IFRS has achieved its goals of reducing the cost of financial analysis. The purpose of this paper is to examine the impact of the move to international financial reporting by New Zealand listed entities on the quantity of data provided in the annual report. Our analysis shows that the annual report increased for 92% of our sample firms. The average increase in size was 29% of the prior years' annual report and arose through notes to the accounts and accounting policies. Even after transitional information (e.g., accounting policies and reconciliations) the increase is 15%.

Keywords: Information overload, NZ IFRS, financial reporting

Has IFRS Resulted in Information Overload?

Introduction

"The other major gripe with IFRS was the sheer volume of disclosures required…" (Hall, 2009). This quote is typical of anecdotal claims by practitioners that the move to International Financial Reporting Standards (IFRS) has substantially increased the size of the annual report. This is a major concern for small entities that might have to report under NZ IFRS.[1] The IASB (2009) notes that "…many private entities say that full IFRSs impose a burden on small private entity preparers – a burden that has been growing as IFRSs have become more detailed and more countries have begun to use them".

The contribution of this paper is to raise the issue of information overload and its affect on the reporting and understanding of financial statements. Studies that report on the potential impact of NZ IFRS (e.g., Dunstan, 2002; Ernst & Young, 2004) have ignored the impact of financial report size and the potential information overload, as a cost of moving to NZ IFRS. Prior research has shown that information overload impacts information processing strategies and decision outcomes (Eppler and Mengis, 2004 provide a review of the literature on information overload). The possibility of information overload is an important issue when considering whether the benefits of adopting IFRS have been achieved. More importantly it is an issue for accounting policy makers that are currently considering the level of reporting disclosures for small and medium size entities under NZ IFRS. On September 12, 2007 the Accounting Standards Review Board (ASRB) announced a delay to the mandatory

[1] This is not just an issue from small entities, although this is where the impact is most acute. In 2009 the average annual report in the UK increased by 3% from 2008 and 41% from 2005 (Deloitte, 2009).

adoption of New Zealand IFRS (NZ IFRS) for smaller entities, pending a government review of financial reporting requirements (Sealy-Fisher, 2007). This paper has implications for this review.

A second contribution of the paper is that we provide empirical evidence on the anecdotal claims of increased report size under NZ IFRS. That is, we measure the change in length of annual reports in the years surrounding the implementation of IFRS. We classify the major reasons for the change in disclosure and ask if other (non-financial statement) disclosures are reduced as a result of IFRS. This is the first step in assessing whether information overload is a potential issue under NZ IFRS. We find that 92% of our sample increased annual reports increased in length. This increase is due solely to an increase in the financials section (i.e., the financial statements and notes) of the annual report. The median increase from the previous year was 24%. Most of the increase arises from the notes to the accounts. We also find that firms beyond the transition phase of NZ IFRS (i.e., early adopters) increase report size by 9%.

In the next section we review background literature on the issue of information overload and on standard setters' attempts at reducing the burden of full GAAP financial statements. We then provide an analysis of the change in length of the annual report.

Background Literature

Information Overload

The semi-strong form of the *Efficient Market Hypothesis* (EMH) holds that market prices fully reflect all publicly available information (Fama, 1970). One of the main implications of market efficiency for financial reporting is simply to provide more disclosure (Beaver, 1973).[2] However, there is increasing dissatisfaction with the EMH due to evidence of pricing anomalies. For example, the post-announcement-drift anomaly arises when prices drift after the market has had the opportunity to react to information (e.g., Bernard and Thomas 1990). Sloan (1996) provides evidence that prices over-react to the transitory accrual component of earnings. Hand (1990) finds a market reaction to a component of earnings that reflects a previously announced debt-equity swap.

Bloomfield (2002) provides a rationale for some of the observed anomalies in the EMH. He develops an *Incomplete Revelation Hypothesis* (IRH). The IRH suggests that "statistics" (i.e., useful facts extracted from financial statements such as earnings and financial ratios) that are more costly to extract result in less trading interest an are therefore less completely revealed by market prices. The market anomalies (i.e., information not being fully absorbed into prices) observed by Sloan (1996), Hand (1990), Bernard and Thomas (1990) and others can be explained by the cost of information extraction. The IRH does not imply that investors are irrational, but that the cost of extracting information not impounded in prices will not generate sufficient profits. Hence information processing capacity is an important factor in the efficient functioning of capital markets.

[2] Beaver (1973) was perceptive enough to suggest that future research ought to examine the behavioural impact of accounting data on individual investors, as opposed to the impact on aggregate prices.

Figure 1, is a conceptual view of information processing. It indicates the factors associated with information processing capacity and the influence on processing strategies and decision outcomes.

The underlying demand for information arises from the requirements of the decision task (i.e. whether the task is simple or complex). Processing capacity is also affected by the information available (load) and by the ability (capacity) of the decision maker (Eppler and Mengis, 2004). Figure 1 also indicates that several other environmental variables (such as time constraints and incentives) can impact cognitive processing limits (Tuttle and Burton, 1999). Thus, information overload arises when the supply of information exceeds the individual's capacity to process information within the available time (Snowball, 1980; Schick *et al.*, 1990).

Notwithstanding the importance of time and motivational factors on information processing, information load has an important impact on processing. Schroder *et al.* (1967) consider that task performance improves as the amount of information expands. However, as the amount of information exceeds the decision maker's capacity to process it, performance eventually declines. The Schroder *et al.* (1967) model is important because it is the accountants, who prepare reports, that determine how much information is presented and, therefore, used by decision makers (Tuttle and Burton, 1999). Several studies examine decision performance under differing levels of accounting information (Casey, 1980; Snowball, 1980; Shields 1983; Iselin, 1988; Chewning and Harrell, 1990). The information load in these studies is manipulated by varying the level of aggregated data, by not including the notes to the financial statements, and by diversifying the amount of information presented.

Information overload has consequences for processing strategies and decision outcomes. Research on how individuals cope with information overload is limited. A few studies have focussed on information search and on retrieval strategies. In dealing with the stress of information overload, prior research suggests an ordered response: (1) acceleration, (2) filtration, and (3) change decision model. Without time constraints individuals spend more total time to make decisions relative to those with lower information loads (Casey, 1980). Even without time constraints individuals often self-impose time limits on tasks. Accelerating the rate at which information is processed is the simplest form of coping with information overload, but the most difficult to sustain. Research into human processing indicates that individuals can only process about six or seven chunks of information at one time (Chewning and Harrell, 1990). Filtration consists of processing the information that is perceived to be most important and filtering out less important. High information loads also lead to the adoption of a less cognitively demanding decision model.

The ordered response to information overload suggests that difference in decision outcomes may occur depending on the chosen coping strategy. In general, research shows that in formation overload results in lower decision quality (e.g., Chewning and Harrell, 1990; Stocks and Harrell, 1955; Stocks and Tuttle, 1998; Tuttle and Burton 2002).

Differential Reporting

Concerns over the psychological limitations of information processing and data expansion on accounting communication and understanding are not new (Fertakis, 1969; Revsine, 1970). Some jurisdictions acknowledge the impact of processing costs by having a differential reporting regime. For example, NZ GAAP (pre-NZ IFRS) included a differential reporting regime which gave qualifying entities an exemption from following specific requirements in standards (typically disclosure requirements) or in some cases the whole standard. The *Framework for Differential Reporting* acknowledges that financial reporting standards create costs (usually for the reporting entity) and benefits (usually for the users of financial reports) (DIFF REP 3.3 (a)). The IASB has also developed a reporting framework for small and medium enterprises because full IFRS are designed to meet the needs of equity investors of public companies.[3]

The decision to adopt IFRS in New Zealand was made in 2002. However, the government has been slow to consider which entities will have to apply NZ IFRS. While the Ministry of Economic Development issued two discussion papers (MED 2004a, 2004b), the slow rate of progress required the ASRB to delay the mandatory adoption of NZ IFRS for specified small entities because of a further government review (Sealy-Fisher, 2007). This review was issued in September 2009. The review indicated the main weaknesses in the current reporting framework and proposed the consolidation of all financial reporting under a re-constituted Accounting Standards Review Board (ASRB); called the External Reporting Board (XRB). The report also issued proposed indicators of general purpose financial reports (the who should report

[3] *IFRS for Small and Medium-sized Entities* was issued in July 2009.

question). In a companion document, the ASRB issued proposals for the reporting obligations for each class of reporting entity (the what to report question). The ASRB proposal considers not only the level at which NZ IFRS ought to be applied but also which differential format is the most appropriate.[4]

While studies that consider the impact of adopting IFRS acknowledge the cost to preparers of financial reports (e.g., Dunstan, 2002) they do not explicitly consider the impact of information overload. In reviewing whether the benefits to financial analysis under NZ IFRS have been achieved (i.e., whether cost of capital is lower), it would also be reasonable to consider the negative effects of any potential information overload.

Furthermore, while DIFF REP notes that information users also incur costs; it does not explicitly refer to information processing costs. In reviewing the level at which entities ought to apply NZ IFRS the potential costs of information overload on users needs to be considered in addition to the costs of compliance with NZ IFRS.

This study investigates whether the size of annual reports increase under NZ IFRS. While Figure 1 indicates that several factors impact information processing capacity, standard setters only have control over information load. Other elements in Figure 1(i.e., incentives, time constraints, the individuals' capacity and decision task) are outside the standards setters control and are unlikely to be affected by the move to IFRS. Thus our results are important for reviewing whether the expected benefits and

[4] Old NZ GAAP has a single book approach to differential reporting. Under this approach the exemptions of whole standards or requirements of individual standards are identified. Under the IFRS for SMEs approach there would be two books: big GAAP and little GAAP. Accountants would have to know each book or specialise in one book.

costs of the move to NZ IFRS have been realised and the current debate on differential reporting.

Data and Method

The population for sampling was all (170) firms listed on the New Zealand Stock Exchange as at March 31, 2009. An interval sampling method was used, with a randomly chosen starting point. Firms were discarded for several reasons. First, we excluded finance companies, banks, or insurance companies as they have prudential supervision requirements and additional industry standards under NZ IFRS which are likely to impact the level of disclosures. Second, we exclude firms not reporting under NZ IFRS (e.g., those reporting under Australian equivalents to IFRS). Third, we also exclude trusts as these have a different ownership and governance structure to other listed firms, which are known to influence financial reporting. When a firm was discarded the next firm was chosen. Our sampling procedures resulted in a total of 38 firms comprising 12 early adopters (i.e., those firms that chose to adopt NZ IFRS before the mandatory date of January 1, 2007) and 26 late adopters.[5]

Annual reports were either downloaded from the entity's website or from the Companies Office website (www.companes.govt.nz). Our selection was made in the first year of mandatory adoption of NZ IFRS. However, it was expected that our sample would include early adopters of NZ IFRS. Late adopters provide evidence on the transition to NZ IFRS, whereas early adopters provide an interesting control group of firms that have passed the transition year and are continuing under NZ IFRS.

[5] Early adopters were identified against a list of 48 firms obtained from the Investment Research Group website.

Data are collected from the annual reports by counting the number of pages or part-pages to selected topics. Non-financial statement report pages were counted in whole pages or half pages only. Financial report pages were analysed into fractions of pages: halves, thirds, quarters and eighths were used. The authors independently coded one company's annual report and then compared the results. The comparison and discussion formed the basis for the procedures to be followed. One author collected data for the entire sample while the other independently test checked 10% of the sample observations. As another check all individual sections were added and checked against the total number of pages in the document.

To measure the relative change length of the annual report we estimate the following statistic: relative change = (length of section in year t less length of section in year t-1) / total annual report length in year t-1.[6]

Results

Annual Report Length

In Table 1, for an overview, we report the distribution of annual report length for each year (2007 and 2008) analysed by late adopters (Panel B) and early adopters (Panel C). In Panel A we report the percentage of increase, decreases and no change. In Panel D we report the results of statistical tests.

For late adopters 77% of the sample increased annual report size, compared to 75% of early adopters, Recall that late adopter reflect the transition to IFRS, while early adopters reflect continuing IFRS obligations. This explains the higher proportion of

[6] We considered scaling the section change in t by the length of the section in t-1. However, in several cases the length in the section in t-1 is zero.

no change firms (17%) in the early adopters. Unexpectedly, given anecdotal claims, more late adopters actually decrease the annual report (19%) than early adopters (8%).

The median (mean) annual report for late adopters increased from 53 (60) pages to 71 (76) pages. A large number of early adopters' also increase report length (from median 63 pages to 72 pages). The means and medians in Table 1 indicate that the data are right skewed. Hence, non-parametric statistics are appropriate. In Panel D of Table I we report then results of a Wilcoxon matched pair test. The results show that the difference between annual report length between 2008 and 2007 is statistically different from zero (at the 0.01 level) for both late and early adopters.

In untabulated results we also compared the difference between early and late adopters for each year. The difference in report length between early and late adopters is not significantly different from zero (at conventional levels) in either year.

Overall, these results suggest that both the move to NZ IFRS and the continuing requirements have increased annual report size. However, unexpectedly, a large number of late adopters (19%) reduced annual report length.

Annual Report Components

We analyse the relative change in the annual report for three major components: (1) financials (the major statements and notes); (2) non-financials (management commentary, audit reports, and directory information); and (3) other (non-content items such as title pages, blank pages and pictures). Untabulated results show that the relative change (increase) in the financials component was statistically significant, while changes in the other two components are not statistically different. Hence, it is only the financial statements that are driving the changes (on average increase) in annual report length observed in Table 1.

Table 2 reports the change in financials section of the annual report analysed by components: (1) the four major statements (balance sheet, income statement, movement in equity, cash flow statement), (2) accounting policies and (3) notes. In Panel A we report the increases, decreases and no changes and in Panel B we report descriptive statistics of the relative change measure. The results of statistical tests of whether the change in relative report length is significant and whether there is a difference between late and early adopters is reported in Panel C.

The financials section of the annual report increases for 92% of firms and decreases for 8%. The median (mean) relative increase on last year's annual report is 24% (22%). The change in length of the financials section across the sample ranges from -16% to +67%. That is for at least one firm the financial section of the annual report increased by two-thirds. Panel C shows that the relative increase is statistically significant at the 0.01 level. All components of the financials have increased. The largest increase is in the notes to the accounts (10.9% median), followed by accounting policies (10.3%) and the statements (0.5%). These increases are statistically significant at the 0.01 level. The statistical difference between early and late adopters is also significant at conventional levels.

Financials Components

We provide further analysis of the change in length of the financials section. Table 3 analyses the impact of NZ IFRS on the each accounting statement and the accounting policies. Table 4 examines the impact on the notes to financial statements. Table 3 provides an analysis for the total sample. Panels A and B report the percentage increases, decreases and no changes for the late and early adopters respectively. Panel C reports descriptive statistics and Panel D reports the results of statistical tests.

For the late adopters (i.e., the IFRS transition effect) the change in the length of the balance sheet and cash flow statement is not statistically significant at conventional levels. There are small (but significant) increases to the income statement and comprehensive income statement (statement of changes in equity or statement of recognised income and expense). NZ IFRS requires more items to be shown on the face of the balance sheet (IAS 1.68) and the income statement (IAS 1.81) than OLD GAAP (pre-IFRS). The norm under OLD GAAP was to have a simple income statement with more details in the notes.

For the change in accounting policy components, we analysed separately ‘IFRS transition’ and ‘critical estimates’, as these are new reporting requirements under IFRS. It became obvious during the analysis that ‘financial instruments’ was a major item of change. The ‘general’ column represents the residual impact on accounting policies after the changes in transition, critical estimates and financial instruments have been measured.

All components of accounting policy (general, IFRS transition, financial instruments and critical estimates) have significantly increased in length. The financial instrument accounting policy increased for 96% of the sample firms. Even general accounting policies increased for 81% of the sample firms. The IFRS transition policy note is relatively small. The critical estimates policy is a new feature under NZ IFRS (IAS 1.116). Perhaps surprisingly for 46% of firms there is no change for this accounting policy component.

As to be expected, the early adopters have a larger percentage of no changes across all items in Table 3. For early adopters, the only items to register statistically significant changes are increases in accounting policy notes are the general and financial instrument components. These items suggest the continuing effect of IFRS is both specific (to IFRS) and general.

In Table 4 we report the impact of NZ IFRS on the notes to the financial statements. For late adopters (Panel A), tax and deferred tax (row 4) is the most common cause of increase (92% of firms). The requirement to report earnings per share (row 12) increased annual report length for 81% of firms. Earnings per share which was not required to be reported under old GAAP. However "other" balance sheet items (row 5) also increased for 81% of firms, indicating a general increasing trend. For late adopters, the total impact on notes to the accounts (row 1) is a median (mean) increase of 14% (16%). The range is from -10% to 47%. The median (mean) increase due to the IFRS reconciliation (row 17) is 4.5% (4.6%). Hence, if the IFRS reconciliation is a temporary reporting requirement, the transition to NZ IFRS has resulted in a 10% increase in the notes to the financial statements.

For early adopters (Panel B, row 1) there is a median increase in report length of 1.1% (mean 21%). Overall this increase is weakly significant at the 0.10 level. Only borrowings (row 8) registered a significant increase (at the 0.05 level). This is likely to be due to the requirements of NZ IFRS 7 *Financial Instrument Disclosures* which became operative on or after 1 January 2007 or could be earlier adopted if full NZ IFRS was early adopted.[7]

Summary and Conclusion

This paper has summarised the literature on information overload, which has implication for both the assessment of whether the adoption of IFRS has achieved the goals of reducing the cost of capital and for the current debate over the level of differential reporting.

The results show that the increase in annual report size was due to the financials section of the report. The financials section increased for 92% of our sample firms and decreased for 8%. The median increase in financials section was 24%, which came mostly from increases in the notes to the accounts and accounting policies. IFRS reconciliations and accounting policies on transition accounted for 4 to 5% of this increase. These items are not required on a continuing basis. If these transitory items are eliminated, the results indicate nearly a 20% continuing increase in the annual report arising mostly from accounting policy and note disclosures under IFRS.

Furthermore, the annual report of firms continuing under NZ IFRS (i.e., the early adopters) have a median relative increase of 9%, related mostly to accounting policies.

[7] Events after balance date significantly decreased for early adopters. Arguably this item could be removed from the analysis as it relates to (possibly random) events that might confound the analysis. Our preference is to report these in our analysis rather than eliminate from the readers view. In any event the impact is unlikely to alter the interpretation.

When the decision to adopt IFRS was made in 2002, the FRSB and ASRB discontinued its previous harmonisation policy. Had this policy continued, then it is likely that FRS 39, *Financial Instruments: Recognition and Measurement* and IFRS 2 *Share-based Payments* would have adopted. Hence, it could be argued that these two standards are not strictly part of the adoption to IFRS or at least should be considered separately. These two accounting standards accounted for a median 4.8% increase in annual report for late adopters. However, even if IAS 39, IFRS 2 and the transition and reconciliation adjustments are discounted, NZ IFRS reports have increased by 15% for adopting firms and 3% for firms continuing under NZ IFRS.

In conclusion, NZ IFRS has significantly increased information loads for preparation, communication and understanding of financial statements. At this stage we cannot claim this has resulted in information overload. Before such a claim can be made more research is required on whether the information provided by NZ IFRS (and financial instruments in particular) has increased the cost of analysis or resulted in poorer decisions.

References

Deloitte (2009). *A Telling Performance*: *Surveying Narrative Reporting in Annual Reports*, Deloitte, London.

Beaver, W.H. (1973). What should be the FASB's objectives, *The Journal of Accountancy*,52(7), 49-56.

Bernard, V.L. and Thomas. J. (1990). Evidence that stock prices do not fully reflect the implications of current earnings for future earnings, *Journal of Accounting and Economics*, 15(2-3), 319-345.

Bloomfield, R.J. (2002). The "incomplete revelation hypothesis" and financial reporting, *Accounting Horizons*, 16(3), 233-243.

Casey, C.J. (1980). Variation in accounting information load: The effect on loan officers'' predictions of bankruptcy, *The Accounting Review*, 60(1), 36-49.

Chewning, N.L., and Harrell, A.M. (1990). The effect of information load on decision makers' cue utilization levels and decision quality in a financial distress decision task, *Accounting, Organizations and Society,* 15(6), 527-542.

Dunstan, K. L. (2002). *The case for the use of international financial reporting standards in New Zealand : a briefing paper prepared on behalf of the New Zealand Securities Commission,* Centre for Accounting Governance and Taxation Research School of Accounting and Commercial Law, Victoria University of Wellington.

Eppler, M.J. and Mengis, J. (2004). The concept of information overload: A review of literature from organization science, accounting and marketing, MIS and related disciplines, *The Information Society*, 20, 325-344.

Ernst, and Young (2004). *IFRS Impact Report*: Ernst &Young. New Zealand.

Fama, E.F. (1970). Efficient capital markets: A review of theory and empirical work, *Journal of Finance*, 42(3), 383-417.

Fertakis, J.P. (1969). On communication, understanding, and relevance in accounting reporting, *The Accounting Review*, 44(4), 680-691.

Hall. M. (2009). IFRS accounting changes bedevil the bottom line, *National Business Review,* March 6.

Hand, J. (1990). A test of the extended functional fixation hypothesis, *The Accounting Review*, 65(4), 740-763.

Iselin, E.R. (1988). The effects of information load and information diversity on decision quality in a structured decision task, *Accounting, Organizations and Society*, 13(2), 147-164.

Ministry of Economic Development. (2004a), *Review of the Financial Reporting Act 1993, Part I: The financial Reporting Structure*, March, MED, Wellington.

Ministry of Economic Development. (2004b), *Review of the Financial Reporting Act 1993, Part II*, November, MED, Wellington.

Revsine, L. (1970). Data expansion and conceptual structure, *The Accounting Review*, 45(4), 704-711.

Sealy-Fisher, V. (2007). FRSB developments, *Chartered Accountants Journal of New Zealand*, 86(9), 45-46.

Schick, A.G., Gordon, L.A., and Haka, S. (1990). Information overload: A temporal Approach, *Accounting, Organizations and Society*, 15(3), 199-220.

Schroder, H.M., Driver, M.J., and Struefert, S. (1967). *Human information processing*, Holt, Reinhart & Winston, New York.

Shields, M.D. (1983). Effects of information supply and demand on judgment accuracy: Evidence from corporate managers, *The Accounting Review*, 63(2), 284-303.

Sloan, R. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review*, 71(3), 289-315.

Snowball, D. (1980). Some effects of accounting expertise and information load: An empirical study, *Accounting, Organizations and Society*, 5(3), 1323-1338.

Stocks, M. and Harrell, A. (1995). The impact of an increase in accounting information levels on the judgement quality of individuals and groups, *Accounting, Organizations and Society*, 20, 685-700.

Stocks, M. and Tuttle, B. (1998). An examination of the information presentation effects on financial distress predictions, *Advances in Accounting Information Systems*, 6, 107-128.

Tuttle, B. and Burton, F.G. (1999). The effects of a modest incentive on information overload in an investment analysis task, *Accounting, Organizations and Society* , 24, 673-687.

Table 1
A comparison of annual report length for late adopters (N=26) and early adopters (N=12)

	2007	2008
Panel A: Changes (percentage of firms)		
	Late adopters	*Early adopters*
Increase	77%	75%
Decrease	19%	8%
No change	4%	17%
Panel A: Late adopters (annual report pages)		
Mean	60	76
Std Dev	25	30
Minimum	28	40
Median	53	71
Maximum	122	138
Panel B: Early adopters (annual report pages)		
Mean	69	79
Std Dev	23	31
Minimum	40	44
Median	63	72
Maximum	111	153
Panel D: Statistical test (Wilcoxon matched pair rank test)		
Z statistic	3.775	2.727
p-value (2-tailed)	0.000	0.006

Table 2

An analysis of the change in the length of the financials section of the annual report for total sample (N=38) by major component

	Financials	Components		
		Statements	Accounting Policies	Notes
Panel A: Changes (percentage of firms)				
Increase	92%	74%	92%	84%
Decrease	8%	16%	8%	16%
No change	0%	11%	0%	0%
Panel B: Relative change				
Mean	0.224	0.008	0.098	0.117
Std Dev	0.196	0.014	0.066	0.133
Minimum	-0.160	-0.023	-0.034	-0.104
Median	0.240	0.005	0.103	0.109
Maximum	0.670	0.047	0.250	0.470
Panel C: Statistical tests				
Is the change significant? (Wilcoxon matched pair test)				
Z statistic	5.040	3.781	5.228	4.576
p-value	0.000	0.000	0.000	0.000
Are late adopters different from early adopters? (Mann Whitney test)				
Z statistic	3.046	2.859	2.292	3.423
p-value	0.002	0.004	0.022	0.001

Table 3.

An analysis of the change in the length of statements and accounting policies

	Statements				Accounting Policies			
	Income statement	Balance sheet	Comprehensive income	Cash flow statement	General	IFRS transition	Financial instruments	Critical estimates
Panel A: Late adopter: change (% of firms)								
Increase	65%	19%	58%	19%	81%	54%	96%	46%
Decrease	4%	8%	8%	15%	19%	19%	0%	8%
No change	31%	73%	35%	65%	0%	27%	4%	46%
Panel B: Early adopter: change (% of firms)								
Increase	25%	0%	33%	8%	75%	17%	100%	25%
Decrease	25%	0%	17%	17%	17%	8%	0%	25%
No change	50%	100%	50%	75%	8%	75%	0%	50%
Panel C: Relative change								
Mean	0.003	0.000	0.005	0.000	0.035	0.007	0.054	0.003
Std Dev	0.005	0.005	0.010	0.005	0.039	0.021	0.035	0.005
Minimum	-0.004	-0.024	-0.004	-0.017	-0.034	-0.018	0.000	-0.005
Median	0.002	0.000	0.000	0.000	0.025	0.000	0.048	0.000
Maximum	0.017	0.012	0.042	0.017	0.156	0.116	0.119	0.017
Panel D: Statistical tests								
Is the change significant? Late adopters (Wilcoxon matched pair test)								
	3.835	1.030	3.341	0.241	3.797	2.248	4.445	2.819
	0.000	0.302	0.001	0.810	0.000	0.025	0.000	0.005
Is the change significant? Early adopters (Wilcoxon matched pair test)								
	0.127	.	0.888	-0.576	2.551	0.680	.	0.211
	0.899	.	0.374	0.565	0.011	0.496	.	0.833
Are late adopters different from early adopters? (Mann Whitney test)								
	2.674	0.836	0.052	0.594	2.261	0.914	0.47	1.86
	0.008	0.403	0.692	0.545	0.024	0.361	0.574	0.063

Table 4
An analysis of the change in the length of notes to the financial statement

Panel A: Late adopters

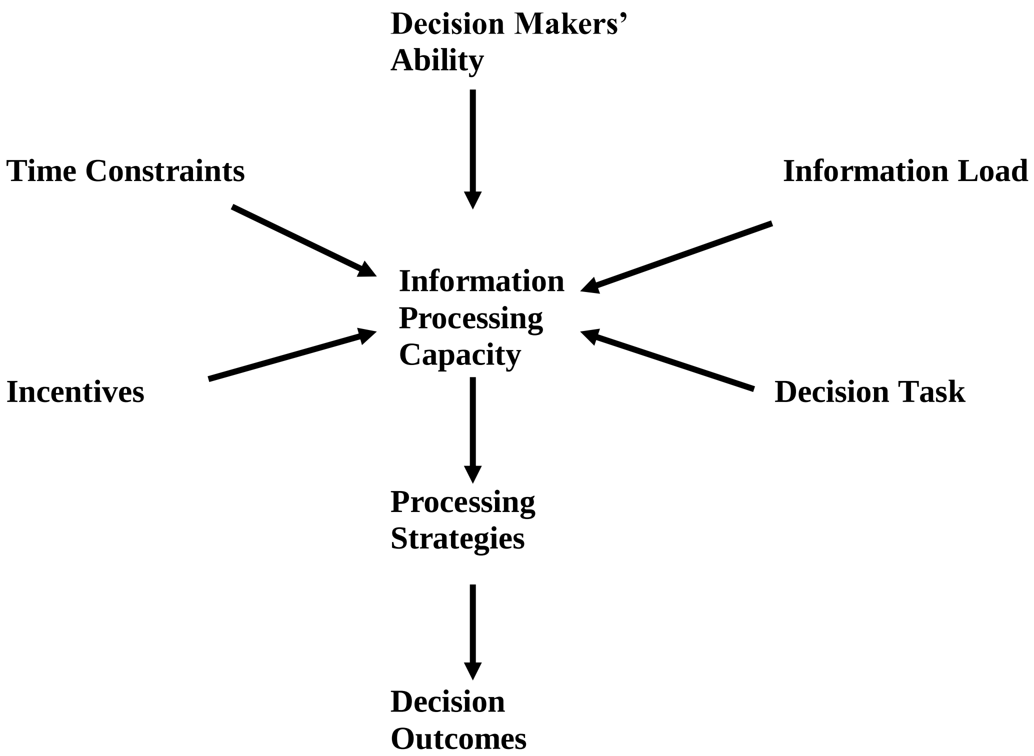
	Relative change					Change (% firms)			*Statistical tests*	
	Mean	Standard Deviation	Minimum	Median	Maximum	Increase	Decrease	No change	Z statistic	p-value (2-tailed)
1. Total	0.161	0.137	-0.104	0.140	0.470	88%	12%	0%	4.178	0.000
2. Segments	0.005	0.018	-0.071	0.005	0.028	62%	15%	23%	2.712	0.007
3, Revenue and expense	0.006	0.017	-0.030	0.008	0.055	69%	27%	4%	1.867	0.062
4. Tax and deferred tax	0.015	0.012	-0.004	0.015	0.043	92%	8%	0%	4.280	0.000
5. Balance sheet (other)	0.027	0.031	-0.026	0.026	0.096	81%	19%	0%	3.543	0.000
6. Intangibles	0.012	0.012	-0.006	0.012	0.033	73%	8%	19%	3.853	0.000
7. Investments	-0.002	0.021	-0.066	0.000	0.040	38%	42%	19%	0.204	0.838
8. Borrowings	0.009	0.013	-0.003	0.003	0.047	58%	8%	35%	3.380	0.001
9. Equity and dividends	0.013	0.023	-0.019	0.009	0.085	69%	19%	12%	2.950	0.003
10. Cash flow reconciliation	0.000	0.004	-0.008	0.000	0.010	23%	31%	46%	0.604	0.546
11. Share based payments	0.010	0.015	0.000	0.000	0.044	35%	0%	65%	2.980	0.003
12. Earnings per share	0.007	0.006	-0.002	0.006	0.026	81%	8%	12%	4.120	0.000
13. Contingencies, commitments and leases	0.003	0.005	-0.007	0.003	0.015	69%	15%	15%	3.081	0.002
14. Related party	0.009	0.011	-0.012	0.006	0.042	73%	15%	12%	3.445	0.001
15. Events dafter balance date	0.000	0.007	-0.027	0.000	0.015	46%	35%	19%	0.549	0.583
16. Retirement plans	0.002	0.008	0.000	0.000	0.039	4%	0%	96%	1.000	0.317
17. IFRS reconciliation	0.046	0.041	-0.027	0.045	0.151	77%	12%	12%	3.928	0.000

Table 4 (continued)
Panel B: Early adopters

	Relative change					Change (% of firms)			*Statistical tests*	
	Mean	Standard Deviation	Minimum	Median	Maximum	Increase	Decrease	No change	Z statistic	p-value (2-tailed)
1. Total	0.021	0.040	-0.044	0.014	0.110	75%	25%	0%	1.648	0.099
2. Segments	0.001	0.004	-0.008	0.000	0.008	42%	8%	50%	1.480	0.139
3. Revenue and expense	0.001	0.007	-0.010	0.000	0.016	25%	33%	42%	-0.123	0.902
4. Tax and deferred tax	-0.001	0.006	-0.012	0.000	0.008	33%	50%	17%	-0.669	0.503
5. Balance sheet (other)	0.002	0.014	-0.019	0.001	0.025	58%	42%	0%	0.549	0.583
6. Intangibles	0.002	0.004	-0.003	0.000	0.009	42%	17%	42%	1.435	0.151
7. Investments	0.008	0.020	-0.011	**0.003**	0.065	58%	33%	8%	1.295	0.195
8. Borrowings	0.003	0.006	-0.005	0.002	0.018	58%	8%	33%	2.088	0.037
9. Equity and dividends	0.004	0.016	-0.038	0.006	0.020	58%	17%	25%	1.586	0.113
10. Cash flow reconciliation	0.001	0.002	-0.002	0.000	0.006	17%	8%	75%	0.680	0.496
11. Share based payments	0.004	0.009	-0.001	0.000	0.030	33%	8%	58%	1.506	0.132
12. Earnings per share	0.001	0.003	-0.005	0.000	0.008	33%	17%	50%	0.804	0.422
13. Contingencies, commitments and leases	0.001	0.004	-0.007	0.001	0.008	50%	25%	25%	1.230	0.219
14. Related party	-0.001	0.009	-0.029	0.001	0.010	50%	25%	25%	0.952	0.341
15. Events after balance date	-0.001	0.002	-0.006	0.000	0.001	17%	50%	33%	-1.767	0.077
16. Retirement plans	0.000	0.000	0.000	0.000	0.000	0%	0%	100%	.	.
17. IFRS reconciliation	-0.004	0.013	-0.046	0.000	0.000	0%	8%	92%	.	.

Figure 1

Conceptual view of factors associated with information processing capacity



School of Accountancy

Massey University

Discussion Paper Series

2010 No. 221 Has IFRS Resulted in Information Overload? by M. Morunga and M. Bradbury.

No. 220 Kiwi Talent Flow: A Study of Chartered Accountants and Business Professionals Overseas by J.J. Hooks, S.C. Carr, M. Edwards, K. Inkson, D. Jackson, K. Thorn and N. Alfree.

No. 219 The Determinants of the Accounting Classification of Convertible Debt When Managers Have Freedom of Choice by H.E. Bishop.

No. 218 The Definition of "Insider" in Section 3 of the *Securities Markets Act 1988*: A Review and Comparison With Other Jurisdictions by S. Zu and M.A. Berkahn.

No. 217 The Corporatisation of Local Body Entities: A Study of Financial Performance by J.J. Hooks and C.J. van Staden.

No. 216 Devolved School-Based Financial Management in New Zealand: Observations on the Conformity Patterns of School Organisations to Change by S. Tooley and J. Guthrie.

No. 215 Management Accounting Education: Is There a Gap Between Academia and Practitioner Perceptions? by L.C. Hawkes, M. Fowler and L.M. Tan.

No. 214 The Impact of Events on Annual Reporting Disclosures by J.J. Hooks.

No. 213 Claims of Wrongful Pregnancy and Child Rearing expenses by C. M. Thomas.

No. 212 Web Assisted Teaching: An Undergraduate Experience by C.J. van Staden, N.E. Kirk and L.C. Hawkes.

No. 211 An Exploratory Investigation into the Corporate Social Disclosure of Selected New Zealand Companies by J.A. Hall.

No. 210 Should the Law Allow Sentiment to Triumph Over Science? The Retention of Body Parts by C.M. Thomas.

No. 209 The Development of a Strategic Control Framework and its Relationship with Management Accounting by C.H. Durden.

No. 208 'True and Fair View' versus 'Present Fairly in Conformity With Generally Accepted Accounting Principles' by N.E. Kirk.

No. 207 Commercialisation of the Supply of Organs for Transplantation by C.M. Thomas.

No. 206 Aspects of the Motivation for Voluntary Disclosures: Evidence from the Publication of Value Added Statements in an Emerging Economy by C.J. van Staden.

No. 205 The Development of Social and Environmental Accounting Research 1995-2000 by M.R. Mathews.

No. 204 Strategic Accounting: Revisiting the Agenda by R.O. Nyamori.

No. 203 One Way Forward: Non-Traditional Accounting Disclosures in the 21st Century by M.R. Mathews and M.A. Reynolds.

No. 202 Externalities Revisited: The Use of an Environmental Equity Account by M.R. Mathews and J.A. Lockhart.

No. 201 Resource Consents – Intangible Fixed Assets? Yes … But Too Difficult By Far!! by L.C. Hawkes and L.E. Tozer.

No. 200 The Value Added Statement: Bastion of Social Reporting or Dinosaur of Financial Reporting? by C.J. van Staden

2000 No. 199 Potentially Dysfunctional Impacts of Harmonising Accounting Standards: The Case of Intangible Assets by M.R. Mathews and A.W. Higson.

No. 198 Delegated Financial Management Within New Zealand Schools: Disclosures of Performance and Condition by S. Tooley.

No. 197 The Annual Report: An Exercise in Ignorance? by L.L. Simpson.

No. 196 Conceptualising the Nature of Accounting Practice: A Pre-requisite for Understanding the Gaps between Accounting Research, Education and Practice by S. Velayutham and F.C. Chua.

No. 195 Internal Environmental Auditing in Australia: A Survey by C.M.H. Mathews and M.R. Mathews.

No. 194 The Environment and the Accountant as Ethical Actor by M.A. Reynolds and M.R. Mathews.

No. 193 Bias in the Financial Statements – Implications for the External Auditor: Some U.K. Empirical Evidence by A.W. Higson.

No. 192 Corporate Communication: An Alternative Basis for the Construction of a Conceptual Framework Incorporating Financial Reporting by A.W. Higson

No. 191 The Role of History: Challenges for Accounting Educators by F.C. Chua.

No. 190 New Public Management and Change Within New Zealand's Education System: An Informed Critical Theory Perspective by S. Tooley.

No. 189 Good Faith and Fair Dealing by C.J. Walshaw.

No. 188 The Impact of Tax Knowledge on the Perceptions of Tax Fairness and Tax Compliance Attitudes Towards Taxation: An Exploratory Study by L.M. Tan and C.P. Chin-Fatt.

No. 187 Cultural Relativity of Accounting for Sustainability: A research note by M.A. Reynolds and R. Mathews.

No. 186 Liquidity and Interest Rate Risk in New Zealand Banks by D.W. Tripe and L. Tozer

No. 185 Structural and Administrative Reform of New Zealand's Education System: Its Underlying Theory and Implications for Accounting by S. Tooley.

No. 184 An Investigation into the Ethical Decision Making of Accountants in Different Areas of Employment by D. Keene.

No. 183 Ethics and Accounting Education by K.F. Alam.

No. 182 Are Oligopolies Anticompetitive? Competition Law and Concentrated Markets by M.A. Berkahn.

No. 181 The Investment Opportunity Set and Voluntary Use of Outside Directors: Some New Zealand Evidence by M. Hossain and S.F. Cahan.

No. 180 Accounting to the Wider Society: Towards a Mega-Accounting Model by M.R. Mathews.

No. 179 Environmental Accounting Education: Some Thoughts by J.A. Lockhart and M.R. Mathews.

No. 178 Types of Advice from Tax Practitioners: A Preliminary Examination of Taxpayer's Preferences by L.M. Tan.

No. 177 Material Accounting Harmonisation, Accounting Regulation and Firm Characteristics. A Comparative Study of Australia and New Zealand, by A.R. Rahman, M.H.B. Perera and S. Ganesh.

No. 176 Tax Paying Behaviour and Dividend Imputation: The Effect of Foreign and Domestic Ownership on Average Effective Tax Rates, by B R Wilkinson and S.F. Cahan.

No. 175 The Environmental Consciousness of Accountants: Environmental Worldviews, Beliefs and Pro-environmental Behaviours, by D. Keene.

No. 174 Social Accounting Revisited: An Extension of Previous Proposals, by M.R. Mathews.

No. 173 Mapping the Intellectual Structure of International Accounting, by J. Locke and M.H.B. Perera.

No. 172 "Fair Value" of Shares: A Review of Recent Case Law, by M.A. Berkahn.

No. 171 Curriculum Evaluation and Design: An Application of an Education Theory to an Accounting Programme in Tonga, by S.K. Naulivou, M.R. Mathews and J. Locke.

No. 170 Copyright Law and Distance Education in New Zealand: An Uneasy Partnership, by S. French.

No. 169 Public Sector Auditing in New Zealand: A Decade of Change, by L.E. Tozer and F.S.B. Hamilton.

No. 168 Dividend Imputation in the Context of Globalisation: Extension of the New Zealand Foreign Investor Tax Credit Regime to Non-resident Direct Investors, by B. Wilkinson.

No. 167 Instructional Approaches and Obsolescence in Continuing Professional Education (CPE) in Accounting - Some New Zealand Evidence, by A.R. Rahman and S. Velayutham.

No. 166 An Exploratory Investigation into the Delivery of Services by a Provincial Office of the New Zealand Inland Revenue Department, by S. Tooley and C. Chin-Fatt.

No. 165 The Practical Roles of Accounting in the New Zealand Hospital System Reforms 1984-1994: An Interpretive Theory, by K. Dixon.

No. 164 Economic Determinants of Board Characteristics: An Empirical Study of Initial Public Offering Firms, by Y.T. Mak and M.L. Roush.

No. 163 Qualitative Research in Accounting: Lessons from the Field, by K. Dixon.

No. 162 An Interpretation of Accounting in Hospitals, by K. Dixon.

No. 161 Perceptions of Ethical Conduct Among Australasian Accounting Academics, by G.E. Holley and M.R. Mathews.

No. 160 The Annual Reports of New Zealand's Tertiary Education Institutions 1985-1994: A Review, by G. Tower, D. Coy and K. Dixon.

No. 159 Securing Quality Audit(or)s: Attempts at Finding a Solution in the United States, United Kingdom, Canada and New Zealand, by B.A. Porter.

No. 158 Determinants of Voluntary Disclosure by New Zealand Life Insurance Companies: Field Evidence, by M. Adams.

No. 157 Regional Accounting Harmonisation: A Comparative Study of the Disclosure and Measurement Regulations of Australia and New Zealand, by A. Rahman, H. Perera and S. Ganeshanandam.

1995 No. 156 The Context in Which Accounting Functions Within the New Zealand Hospital System, by K. Dixon.

No. 155 An Analysis of Accounting-Related Choice Decisions in the Life Insurance Firm, by M.A. Adams and S. Cahan.

No. 154 The Institute of Chartered Accountants of New Zealand: Emergence of an Occupational Franchisor, by S. Velayutham.

No. 153 Corporatisation of Professional Practice: The End of Professional Self-Regulation in Accounting? by S. Velayutham.

No. 152 Psychic Distance and Budget Control of Foreign Subsidiaries, by L.G. Hassel.

No. 151 Societal Accounting: A Forest View, by L. Bauer.

No. 150 The Accounting Education Change Commission Grants Programme and Curriculum Theory, by M.R. Mathews.

No. 149 An Empirical Study of Voluntary Financial Disclosure by Australian Listed Companies, by M. Hossain and M. Adams.

No. 148 Environmental Auditing in New Zealand: Profile of an Industry, by L.E. Tozer and M.R. Mathews.

No. 147 Introducing Accounting Education Change: A Case of First-Year Accounting, by L. Bauer, J. Locke and W. O'Grady.

No. 146 The Effectiveness of New Zealand Tax Simplification Initiatives: Preliminary Evidence from a Survey of Tax Practitioners, by L.M. Tan and S. Tooley.

No. 145 Annual Reporting by Tertiary Education Institutions in New Zealand: Events and Experiences According to Report Preparers, by D. Coy, K. Dixon and G. Tower.

No. 144 Organizational Form and Discretionary Disclosure by New Zealand Life Insurance Companies: A Classification Study, by M. Adams and M. Hossain.

No. 143 Voluntary Disclosure in an Emerging Capital Market: Some Empirical Evidence from Companies Listed on the Kuala Lumpur Stock Exchange, by M. Hossain, L.M. Tan and M. Adams.

No. 142 Auditors' Responsibility to Detect and Report Corporate Fraud: A Comparative Historical and International Study, by B.A. Porter.

No. 141 Accounting Information Systems Course Curriculum: An Empirical Study of the Views of New Zealand Academics and Practitioners, by G. Van Meer.

No. 140 Balance Sheet Structure and the Managerial Discretion Hypothesis: An Exploratory Empirical Study of New Zealand Life Insurance Companies, by M. Adams.

No. 139 An Analysis of the Contemporaneous Movement Between Cash Flow and Accruals-based Performance Numbers: The New Zealand Evidence - 1971-1991, by J. Dowds.

No. 138 Voluntary Disclosure in the Annual Reports of New Zealand Companies by M. Hossain, M.H.B Perera and A.R. Rahman.

No. 137 Financial Reporting Standards and the New Zealand Life Insurance Industry: Issues and Prospects, by M. Adams.

No. 136 Measuring the Understandability of Corporate Communication: A New Zealand Perspective, by B. Jackson.

No. 135 The Reactions of Academic Administrators to the United States Accounting Education Change Commission 1989-1992, by M.R. Mathews, B.P. Budge and R.D. Evans.

No. 134 An International Comparison of the Development and Role of Audit Committees in the Private Corporate Sector, by B.A. Porter and P.J. Gendall.

No. 133 Taxation as an Instrument to Control/Prevent Environmental Abuse, by G. Van Meer.

No. 132 Brand Valuation: The Main Issues Reviewed, by A.R. Unruh and M.R. Mathews.

No. 131 Employee Reporting: A Survey of New Zealand Companies, by F.C. Chua.

No. 130 Socio-Economic Accounting: In Search of Effectiveness, by S.T. Tooley.

No. 129 Identifying the Subject Matter of International Accounting: A Co-Citational Analysis, by J. Locke.

No. 128 The Propensity of Managers to Create Budgetary Slack: Some New Zealand Evidence, by M. Lal and G.D. Smith.

No. 127 Participative Budgeting and Motivation: A Comparative Analysis of Two Alternative Structural Frameworks, by M. Lal and G.D. Smith.

No. 126 The Finance Function in Healthcare Organisations: A Preliminary Survey of New Zealand Area Health Boards, by K. Dixon.

No. 125 An Appraisal of the United States Accounting Education Change Commission Programme 1989-1991, by M.R. Mathews.

No. 124 Spreadsheet Use by Accountants in the Manawatu in 1991: Preliminary Comparisons with a 1986 Study, by W. O'Grady and D. Coy.

No. 123 An Investigation of External Auditors' Role as Society's Corporate Watchdogs?, by B.A. Porter.

No. 122 Trends in Annual Reporting by Tertiary Education Institutions: An Analysis of Annual Reports for 1985 to 1990, by K. Dixon, D.V. Coy and G.D. Tower.

No. 121 The Accounting Implications of the New Zealand Resource Management Act 1991, by L.E. Tozer.

No. 120 Behind the Scenes of Setting Accounting Standards in New Zealand, by B.A. Porter.

No. 119 The Audit Expectation-Performance Gap in New Zealand - An Empirical Investigation, by B.A. Porter.

No. 118 Towards an Accounting Regulatory Union Between New Zealand and Australia, by A.R. Rahman, M.H.B. Perera and G.D. Tower.

No. 117 The Politics of Standard Setting: The Case of the Investment Property Standard in New Zealand, by A.R. Rahman, L.W. Ng and G.D. Tower.

No. 116 Ethics Education in Accounting: An Australasian Perspective, by F.C. Chua, M.H.B. Perera and M.R. Mathews.

No. 115 Accounting Regulatory Design: A New Zealand Perspective, by G.D. Tower, M.H.B. Perera and A.R. Rahman.

No. 114 The Finance Function in English District Health Authorities: An Exploratory Study, by K. Dixon.

No. 113 Trends in External Reporting by New Zealand Universities (1985-1989): Some Preliminary Evidence, by G. Tower, D. Coy and K. Dixon.

No. 112 The Distribution of Academic Staff Salary Expenditure Within a New Zealand University: A Variance Analysis, by D.V. Coy.

No. 111 Public Sector Professional Accounting Standards: A Comparative Study, by K.A. Van Peursem.

No. 110 The Influence of Constituency Input on the Standard Setting Process in Australia, by S. Velayutham.

No. 109 Internal Audit of Foreign Exchange Operations, by C.M.H. Mathews.

No. 108 The Disclosure of Liabilities: The Case of Frequent Flyer Programmes, by S.T. Tooley and M.R. Mathews.

No. 107 Professional Ethics, Public Confidence and Accounting Education, by F.C. Chua and M.R. Mathews.

No. 106 The Finance Function in Local Councils in New Zealand: An Exploratory Study, by K. Dixon.

No. 105 A Definition for Public Sector Accountability, by K.A. Van Peursem.

No. 104 Externalities: One of the Most Difficult Aspects of Social Accounting, by F.C. Chua.

No. 103 Some Thoughts on Accounting and Accountability: A Management Accounting Perspective, by M. Kelly.

No. 102 A Unique Experience in Combining Academic and Professional Accounting Education: The New Zealand Case, by M.R. Mathews and M.H.B. Perera.

1990 No. 101 Going Concern - A Comparative Study of the Guidelines in Australia, Canada, United States, United Kingdom and New Zealand with an Emphasis on AG 13, by L.W. Ng.

No. 100 Theory Closure in Accounting Revisited, by A. Rahman.

No. 99 Exploring the Reasons for Drop-out from First Level Accounting Distance Education at Massey University, by K. Hooper.

No. 98 A Case for Taxing Wealth in New Zealand, by K. Hooper.

No. 97 Recent Trends in Public Sector Accounting Education in New Zealand, by K. Dixon.

No. 96 Closer Economic Relation (CER) Agreement Between New Zealand and Australia: A Catalyst for a new International Accounting Force, by G. Tower and M.H.B. Perera.

No. 95 Creative Accounting, by L.W. Ng.

No. 94 The Financial Accounting Standard Setting Process: An Agency Theory Perspective, by G. Tower and M. Kelly.

No. 93 Taxation as a Social Phenomenon: An Historical Analysis, by K. Hooper.

No. 92 The Development of Corporate Accountability, and The Role of the External Auditor, by B.A. Porter.

No. 91 An Analysis of the Work and Educational Requirements of Accountants in Public Practice in New Zealand, by M. Kelly.

No. 90 Chartered Accountants in the New Zealand Public Sector: Population, Education and Training, and Related Matters, by K. Dixon.

No. 89 Cost Determination and Cost Recovery Pricing in Nonbusiness Situations: The Case of University Research Projects, by K. Dixon.

No. 88 An Argument for Case Research, by R. Ratliff.

No. 87 Issues in Accountancy Education for the Adult Learner, by K. Van Peursem.

No. 86 Management Accounting: Purposes and Approaches, by M. Kelly.

No. 85 The Collapse of the Manawatu Consumers' Co-op - A Case Study, by D.V. Coy and L.W. Ng.

No. 84 Governmental Accounting and Auditing in East European Nations, by A.A. Jaruga, University of Lodz, Poland.

No. 83 The Functions of Accounting in the East European Nations, by A.A. Jaruga, University of Lodz, Poland.

No. 82 Investment and Financing Decisions within Business: The Search for Descriptive Reality, by D. Harvey.

No. 81 Applying Expert Systems to Accountancy - An Introduction, by C. Young.

No. 80 The Legal Liability of Auditors in New Zealand, by M.J. Pratt.

No. 79 "Marketing Accountant" the Emerging Resource Person within the Accounting Profession, by C. Durden.

No. 78 The Evolution and Future Development of Management Accounting, by M. Kelly.

No. 77 Minding the Basics - Or - We Were Hired to Teach Weren't We?, by R.A. Emery and R.M. Garner.

No. 76 Lakatos' Methodology of Research Programmes and its Applicability to Accounting, by F. Chua.

No. 75 Tomkins and Groves Revisited, by M. Kelly.

No. 74 An Analysis of Extramural Student Failure in First Year Accounting at Massey University, by K. Hooper.

No. 73 Insider Trading, by L.W. Ng.

No. 72 The Audit Expectation Gap, by B.A. Porter.

No. 71 A Model Programme for the Transition to New Financial Reporting Standards for New Zealand Public Sector Organisations, by K.A. Van Peursem.

No. 70 Is the Discipline of Accounting Socially Constructive? by M. Kelly.

No. 69 A Computerised Model for Academic Staff Workload Planning and Allocation in University Teaching Departments, by M.J. Pratt.

No. 68 Social Accounting and the Development of Accounting Education, by M.R. Mathews.

No. 67 A Financial Planning Model for School Districts in the United States - A Literature Survey, by L.M. Graff.

No. 66 A Reconsideration of the Accounting Treatments of Executory Contracts and Contingent Liabilities, by C. Durden.

No. 65 Accounting in Developing Countries: A Case for Localised Uniformity, by M.H.B. Perera.

No. 64 Social Accounting Models - Potential Applications of Reformist Proposals, by M.R. Mathews.

No. 63 Computers in Accounting Education: A Literature Review, by D.V. Coy.

No. 62 Social Disclosures and Information Content in Accounting Reports, by M.R. Mathews.

No. 61 School Qualifications and Student Performance in First Year University Accounting, by K.C. Hooper.

No. 60 Doctoring Value Added Reports: A Shot in the Arm - Or Head?, by P.R. Cummins.

No. 59 The Interrelationship of Culture and Accounting with Particular Reference to Social Accounting, by M.B.H. Perera and M.R. Mathews.

No. 58 An Investigation into Students' Motivations for Selecting Accounting as a Career, by Y.P. Van der Linden.

No. 57 Objectives of External Reporting: A Review of the Past; A Suggested Focus for the Future, by Y.P. Van der Linden.

No. 56 Shareholders of New Zealand Public Companies: Who Are They?, by C.B. Young.

No. 55 The Impacts of Budgetary Systems on Managerial Behaviour and Attitudes: A review of the literature, by K.G. Smith.

No. 54 Can Feedback Improve Judgement Accuracy in Financial Decision-Making?, by K.G. Smith.

No. 53 Heuristics and Accounting: An Initial Investigation, by M.E. Sutton.

No. 52 British Small Business Aid Schemes - any Lessons for New Zealand?, by A.F. Cameron.

No. 51 What are Decision Support Systems?, by M.J. Pratt.

No. 50 The Implementation of Decision Support Systems - A Literature Survey and Analysis, by M.J. Pratt.

No. 49 Spreadsheet Use by Accountants in the Manawatu, by D.V. Coy.

No. 48 The Search for Socially Relevant Accounting: Evaluating Educational Programmes, by M.R. Mathews

No. 47 The Distributable Profit Concept - Let's Reconsider!, by F.S.B. Hamilton.

No. 46 A Consideration of the Applicability of the Kuhnian Philosophy of Science to the Development of Accounting Thought, by Y.P. Van der Linden.

No. 45 Matrix Ledger Systems - MLS A New Way of Book-keeping, by P.R. Cummins.

No. 44 A Tentative Teaching Programme for Social Accounting, by M.R. Mathews.

No. 43 Exploring the Philosophical Bases Underlying Social Accounting, by M.R. Mathews.

No. 42 Objectives of External Reporting - Fact or Fiction?, by C.B. Young.

No. 41 Financial Accounting Standards. Development of the Standard Setting Process in the U.S.A. with Some Comments Concerning New Zealand, by G.L. Cleveland.

No. 40 Attitudes of British Columbia Accountants Towards The Disclosure of Executory Contracts in Published Accounts, by M.R. Mathews and I.M. Gordon.

No. 39 A Critical Evaluation of Feyerabend's Anarchistic Theory of Knowledge and its Applicability to Accounting Theory and Research, by A.M. Selvaratnam.

No. 38 Rationalism and Relativism in Accounting Research, by C.B. Young.

No. 37 Taxation and Company Financial Policy, by K.F. Alam and C.T. Heazlewood.

No. 36 Accountancy Qualifications for 2000 AD" A Black Belt in Origami?, by P.R. Cummins and B.R. Wilson.

No. 35 Towards Multiple Justifications for Social Accounting and Strategies for Acceptance, by M.R. Mathews.

No. 34 Company Taxation and the Raising of Corporate Finance, by K.F. Alam.

No. 33 Current Cost Accounting in New Zealand, (An Analysis of the Response to CCA-1), by A.F. Cameron and C.T. Heazlewood.

No. 32 Watts and Zimmerman's "Market for Accounting Theories": A Critique Based on Ronen's Concept of the Dual Role of Accounting, by L.W. Ng.

1985 No. 31 Investment Decisions in British Manufacturing, by K.F. Alam.

No. 30 Educating the Professional Accountant - Getting the Right Balance, by M.R. Mathews.

No. 29 Corporate Taxation and Company Dividend Policy, by K.F. Alam.

No. 28 The "Interpretive Humanistic" Approach to Social Science and Accounting Research, by L.W. Ng.

No. 27 Changes in Cost Accounting Since 1883, by L.W. Ng.

No. 26 A Comparison of B.C. and Washington State Accountants on Attitudes Towards Continuing Education, by M.R. Mathews and I.M. Gordon.

No. 25 A Suggested Organisation for Social Accounting Research - Some Further Thoughts, by M.R. Mathews (Out of Print).

No. 24 Canadian Accountants and Social Responsibility Disclosures - A Comparative Study, by M.R. Mathews and I.M. Gordon (Out of Print).

No. 23 Foreign Exchange Risk Management: A Survey of Attitudes and Policies of New Zealand Companies, by W.S. Alison and B. Kaur (Out of Print).

No. 22 Factors Affecting Investment Decisions in U.K. Manufacturing Industry: An Empirical Investigation, by K.F. Alam (Out of Print).

No. 21 Corporate Decision Making, Tax Incentives and Investment Behaviour: A Theoretical Framework, by K.F. Alam.

No. 20 A Comparison of Accountants Responses to New Ideas: Washington State CPA's and New Zealand CPA's, by M.R. Mathews and E.L. Schafer.

No. 19 Corporate Taxation and the Dividend Behaviour of Companies in the UK

No. 18 Tax Incentives and Investment Decisions in UK Manufacturing, Industry by K.F. Alam (Out of Print).

No. 17 The Accountants' Journal: An Adequate Forum for the Profession?, by D. Kerkin.

No. 16 Structured Techniques for the Specification of Accounting Decisions and Processes and Their Application to Accounting Standards, by J. Parkin.

No. 15 Objectives of Accounting: Current Trends and Influences, by D.J. Kerkin.

No. 14 Professional Ethics and Continuing Education, by M.R. Mathews.

No. 13 Valuation in Farm Accounts, by H.B. Davey and E. Delahunty (Out of Print).

No. 12 Views of Social Responsibility Disclosures: An International Comparison, by M.R. Mathews.

No. 11 The Role of Management Accounting in Small Businesses, by M.Chye and M.R. Mathews (Out of Print).

No. 10 What Accountants Think of (Certain) New Ideas (The Results of a Limited Survey), by M.R. Mathews.

No. 9 The Matching Convention in Farm Accounting, by E. Delahunty and H.B. Davey.

No. 8 Some comments on the Conceptual Basis of ED-25, by B.R. Wilson (Out of Print).

No. 7 The FASB's Conceptual Framework for Financial Accounting and Reporting: An Evaluation, by M. Chye.

No. 6 Marketing - A Challenge for Accountants, by F.C.T. Owen.

No. 5 Value Added Statements: A Reappraisal, by M. Chye.

No. 4 A Survey to Obtain Responses of Accountants to Selected new Ideas in Accounting, by M.R. Mathews (Out of Print).

No. 3 Continuing Education: The New Defence of Professionalism, by M.R. Mathews.

No. 2 Socio-Economic Accounting - A Consideration of Evaluation Models, by M.R. Mathews.

1981 No. 1 The Role of Accounting Standards Vis-a-Vis the "Small" Company, by C.T. Heazlewood.

Has IFRS resulted in information overload?

Morunga, M.

2010

http://hdl.handle.net/10179/2582