Value Relevance of Control-based Consolidated Financial Statements

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Abstract

The study examines whether the switch from ownership-based guidelines for control under SSAP-8 to the principles-based guidelines (power and benefits) of FRS-37 increased the value relevance of consolidated financial statements in New Zealand. The adoption of FRS-37 led to an increase in value relevance of consolidated assets and liabilities (at the 5 percent level). Only weak evidence was found to support the view that FRS-37 was not effective (less value relevant) for entities with a large number of subsidiaries (as a proxy for investment complexity) and associates are less value relevant. The is evidence that investors view non-controlling as a liability, which does not support its presentation as equity (under IFRS 10).

Key Words

FRS-37, IAS 27, IFRS 10, control-based consolidation, value relevance, non-controlling interest, principles versus rules

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1. Introduction

FRS-37 *Consolidating Investments in Subsidiaries* became mandatory for all entities in New Zealand with years ending on or after 31 December 2002 (delayed to 31 December 2003 for Crown entities). FRS-37 was introduced to move away from consolidated financial statements based on the ownership guidelines in SSAP-8 *Accounting for Business Combinations*, towards principles-based control guidelines based on benefits and power. Using this setting we examine the value relevance of consolidated financial information pre and post the introduction of FRS-37.

This research is relevant because it provides empirical evidence from the move from a more rules-based accounting standard to a more principles-based standard. Thus, the results will be of interest to standard setters and researchers interested in this issue. Furthermore, the definition and assessment of control under SSAP-8 is similar to IAS 27 *Consolidated and Separate Financial Statements*. While the definition of control in FRS-37 is different to IFRS 10 *Consolidated Financial Statements*, they both provide guidance on the qualitative assessment of control for consolidation purposes using benefit and power criteria. In addition, the purpose was also intended to capture the consolidation of special purpose entities (SPE). Hence, the results have a much wider applicability and are also relevant to the development of international accounting standards.

We find that consolidated assets and liabilities are more value relevant under FRS-37 than SSAP-8. This provides support for the use of principles-based guidelines of power and benefits for consolidation, rather than ownership criteria. We find only very weak evidence that FRS-37 may not be effective for more complex investment structures. We find that

investors view non-controlling interest as a liability, contrary to the presentation as equity under IFRS 10.

This study contributes to the literature in a number ways. First, it provides empirical evidence on the broad issue of the choice between rules-based or principles-based accounting standards. The distinction between rules-based and principles-based standards is not well defined (SEC 2003) and one set of literature discusses the underlying issues and problems (e.g., Schipper 2003; Nobes 2005, Bennett et al, 2006; Dennis 2008; Bradbury and Schroder 2012). Another set of literature provides empirical evidence on the effectiveness of rules- or principle-based standards. Nelson (2003) reviews relevant research, with a focus on experimental and survey research. With regard to the specific issue of consolidated financial statements, Psaros and Trotman (2004) conduct a laboratory experiment to see if a rules-based or principles-based standard affected the judgement to consolidate or not. We contribute to this literature by providing archival evidence on the consolidation decision.

Second, we contribute to prior literature on the relevance of consolidated financial statements. Hsu et al. (2012) and So and Smith (2009) examine data from Taiwan and Hong Kong respectively. However, they focus on the impact of pyramid holdings in Taiwan on the adoption of IAS 27 (from ARS No 51) and do not examine the consolidation of special purpose entities. So and Smith (2009) examine the value relevance of non-controlling interest in the period surrounding the adoption of IAS 27 in Hong Kong. when Hong Kong adopted IAS 27. We also examine the value relevance of a change in the accounting for consolidate financial statements. However, our focus is on the adoption of a more principles-based guidance for the definition of control.

Third, our study is undertaken in a New Zealand setting. This has the following advantages: (1) the issuance of FRS-37 was an isolated event as far as the issuance of other

standards, and (2) there was no change in the level of enforcement. When there are multiple standards being issues (e.g., such as the adoption of IFRS) it is difficult to isolate the impact of a single standard from other confounding events. Furthermore, the comparison of principles- versus rules-based accounting standards requires control over oversight strength (Webster and Thornton 2005).

The rest of this paper is structured as follows. The next section discusses the background to the paper, including the institutional setting, the related value relevant research and the hypotheses. Section 3 describes the research design. Section 4 reports the sample selection procedures and provides descriptive statistics. Section 5 provides the main value relevance Section 7 is the conclusion. tests and section 6 additional tests.

2. Background

2.1 Institutional setting

New Zealand is a common law country with a high level of investor protection and legal enforcement (La Porta *et al*., 1998). New Zealand began producing its own accounting standards in 1974. Initially the standards were based on international accounting standards but were subsequently modifies to meet local conditions (Bradbury, 1998).[1] In 1993 the Accounting Standards Review Board was established to provide statutory approval to accounting standards formulation by the accounting profession. This was a significant step because it gave approved accounting standards the force of law. In 1997, revisions to accounting standards were formally based on international or Australian accounting standards. Such standards were modified to ensure sector neutrality and consistency with other New Zealand pronouncements (Bradbury and van Zijl, 2006). In 2002, the decision

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[1] The IASC crest was used on the first New Zealand standard (Bradbury 1998).

was made to adopt International Financial Reporting Standards (IFRS) for periods beginning on or after 1 January 2007; although early adoption was permitted from 2005.

The focus of this study is the change in the guidance related to the concept of control that is applied in various consolidation accounting standards. We first discuss the changes between SSAP-8 and FRS-37 and then IAS 27 and IFRS 10. Appendix 1 provides a summary of the control and assessment of control in these standards.

SSAP-8 applied from 1 January 1988 and was based on the principle of control (i.e.; the power to govern), However, in practice, control was assessed as a function of the equity ownership held in an investment. That is, a holding more than half the nominal amount of equity share capital of an investment established the requirement for consolidated financial statements. FRS-37, superseded SSAP-8, and became mandatory for New Zealand entities with year ending on or after 31 December 2002.[2] FRS-37 expanded the definition of control to include both a *power element* and a *benefit element*. The standard notes that control includes "…in-substance ownership created under any scheme, arrangement or device and is therefore not restricted to relationships that arise through legal ownership…" (FRS-37 4.16). It also included rebuttable presumptions were included to assist preparers to exercise judgement in applying the principles in the standard. The standard was expected to capture more subsidiaries and SPE than ownership-based guidelines.

The adoption of IFRS gave rise the adoption of NZ IAS 27 to replace FRS-37. Although labelled NZ IFRS, the type of amendments made to IFRS were minimal for listed entities and were mainly related to the adoption of IFRS for public sector entities.[3]

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[2] FRS-37 was also mandatory for Crown entities from 31 December 2003.
[3] No changes were permitted for recognition and measurement requirements, disclosure requirements could be increased but not reduced, where IFRS allowed options a single treatment could be specified (Bradbury and Baskerville 2008).

In May 2011 the IASB issued IFRS 10 to replace IAS 27. The main reason for the new standard was the perceived conflict between IAS 27 and SIC-12 *Consolidation – Special Purpose Entities*, which had led to inconsistent application of the concept of control and divergence in practice. The concept of investor control in IFRS 10 arises when an investee is exposed, or has rights, to variable returns from its investment and has the power over the investee to affect those returns. SIC-12 was incorporated into IFRS 10.

The focus of this study is on the changing application of control between SSAP-8 and FRS-37. That is, the switch from ownership as an indicator of control, to direct and indirect control through the elements of power and benefit. This is similar to the move from IAS 27 to IFRS 10, which also focused on power and reward as a basis for determining control and incorporated consolidation of SPE.[4] We focus on the switch to FRS-37, primarily because the this setting is relatively 'clean' from the influence of other accounting standards.[5] Whereas IFRS 10 was adopted in a period of IFRS adoption when multiple accounting standards were being issued. Hence, from a research design point of view it would be difficult to isolate the impact of any single standard. Furthermore, because of the similarity in objectives between FRS-37 and IFRS 10 we believe our results have more general applicability and should be of interest to regulators interested in the impact of changes in control on consolidation practice. We also note that the results of our study are also a joint effect of accounting standard *per* se, and the standard being given the force of law under the ASRB regime

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[4] Although FRS-37 and IFRS 10 have similar conceptual underpinnings they were issued for different purposes. FRS-37 was issued because the ASRB had developed a policy of sector neutral accounting standards thate were applicable to both the public and private sectors (Bradbury and van Zijl 2007). Consolidation based on ownership is inapplicable for many public sector entities. IFRS 10 was motivated by the global financial crisis, which highlighted the lack of transparency over the risk of 'off balance sheet vehicles' (IFRS 10 IN5).

[5] FRS-37 was the only new standard implemented for years ending on or after 31 December 2002.

2.2 Related value relevance literature

Several studies show that consolidated financial statements bare more useful than unconsolidated or parent-only financial statements (Harris et al. 1994, Niskanen et al. 1998; Abad et al. 2000; Goncharov et al. 2009).

Harris et al. (1994) compare the value relevance of accounting measures for US and German firms matched on industry and firm size. When they differentiate German firms based on the degree of consolidation (parent-only, domestic-only consolidation and full consolidation) they find the value relevance increases in the level of consolidation and that associations are stronger for consolidated data relative to unconsolidated data.

Niskanen et al. (1998) examine the information content of consolidated versus parent-only earnings, using accounting and market data of Finnish firms. Consolidated earnings are expected to be more informative as they reflected the economic performance of the whole economic entity in which investors hold claims. The results show that consolidated earnings provide incremental explanatory power for stock returns, relative to parent-only earnings.

Abad et al. (2000) investigate the value relevance of consolidated versus parent company accounting information on a sample of Spanish firms listed on the Madrid Stock Exchange. Their findings suggested that from a value relevance perspective, consolidated information dominate non-consolidated information.

Goncharov et al. (2009) examine the different roles played by consolidated and parent only financial statements using both accounting and market-based metrics from a sample of non-financial German companies between 1994 -2004. They find that parent-only financial statements are useful for alignment of financial and tax accounts. In all other respects (e.g.,

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earnings quality, timeliness, financial distress predication) consolidated financial statements perform equally as well or better.

The above studies indicate the usefulness of consolidated financial statements over parent-only financial statements. So and Smith (2009) and Hsu et al. (2012) extend this line of research by examining whether the definition of the group's boundaries affects the value relevance of consolidated financial statements. So and Smith (2009) examine the value relevance of non-controlling interest (NCI) during changes to IAS 27 in Hong Kong. They conclude that investors have not been confused by the revised presentation of NCI (from mezzanine to within equity) and associate firm value only with interest owned by the parent company's shareholders.

Hsu et al. (2012) examine the value relevance of listed firms in Taiwan from 2000 to 2008, where listed firms were changed from the US ARB No 51 *Consolidated Financial Statements*) and to IAS 27. They find that the value relevance of the control-based approach in Taiwan are less pronounced in firms with pyramid structures or crossholdings. They argue the results support the common control model raised in the IASB Discussion Paper (IASB 2008). Hsu et al. (2012) acknowledge they ignored the impact of consolidating special purpose entities.

2.3 Hypotheses

The above discussion indicates that standard setters (i.e., the ASRB and the IASB) believe that a control based consolidated standard would improve accounting. However, McEnroe and Sullivan (2012) survey the perceptions of IFRS from the view of auditors and CFOs. The general preference was for maintaining the ownership approach to consolidation. The majority did not agree that the replacement of the ownership approach by a control approach would lead to financial statements that were more relevant for the decisions made by

financial statement users. Therefore, the value relevance of FRS-37 relative to SSAP-8 is a empirical issue. We therefore test the following null hypothesis:

H1: The introduction of principles-based guidelines to the definition of control (under FRS-37) did not increase the value relevance of consolidated financial statements.

Hsu et al. (2012) argue that the improvement of value relevance under the control model is limited to firms with simple ownership structures. That is the control-based approach would not apply to the more complex pyramid or crossholdings investment structures that exist in Taiwan. While New Zealand does not have such structures, we apply a similar hypothesis using firms with a large number of subsidiaries as a proxy for complexity.

H2: The introduction of principles-based guidelines to the definition of control (under FRS-37), did not increase the value relevance of consolidated financial statements for entities with a large number of subsidiaries.

3. Research design

Value relevance research examine the association between accounting numbers and firm value. Following Hsu et al. (2012) and the substantial level of prior research, we model market value as a function of book value of equity:

$$MV_{it} = \beta_0 + \beta_1\ EQUITY_{it} + \beta_2\ NI_{it} + \beta_3\ LOSS_{it} + \Sigma YEAR + \Sigma IND + \varepsilon_{it} \qquad (1)$$

where:

MV_{it} is the market value of shares for the firm i four months after the end of fiscal year t.

$EQUITY_{it}$ is the consolidated book value per share for firm i at the end of year t.

NI_{it} is the total consolidated income for firm i for year t.

LOSSit is included as an indicator that equalled 1 for firms having a negative income in year t and 0 otherwise.[6]

ΣYEAR is a series of year indicator variables.

ΣIND is a series of industry indicator variables.[7]

Except for dummy variables, all other variables are deflated by the number of shares on issue at the end of time t. For Equation (1), results showing significant positive values for β_1 and β_2 would indicate the value relevance of consolidated equity and net income.

Model is then extended to test (H1), whether the consolidated financial statements under the control based method of consolidation (FRS-37) have greater value relevance than the ownership based method (SSAP-8). This is achieved using a indicator variable (*POST*) that captures the timing of when these methods were in use:

$$MVit = \beta0 + \beta1\ EQUITYit + \beta2\ NIit + \beta3\ POST + \beta4\ POST\ x\ EQUITYit + \beta5\ POST\ x\ NIit + \beta6\ LOSSit + \Sigma YEAR + \Sigma IND + \delta it \tag{2}$$

where:

POST is an indicator variable equal to 1 when observations are reported under FRS-37 and 0 otherwise. Significant positive values for *β4* and *β5* in model (2), indicate the incremental value relevance of *EQUITYit* and *CNIit* under the principles-based guidelines for consolidation, offer support for H1.

In addition to regressions based on Equations 1 and 2, we regress market value on the components of consolidated equity (*ASSETS, LIABILITY, NCI*). To test for complexity (H2), we separate firms into sub-samples based whether they have more or less than than five subsidiaries. This is somewhat arbitrary but is intended to capture the complexity of group structures.

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[6] A loss for the year may affect the value relevance of accounting information.
[7] Industry and year dummies control for industry and period specific economic effects that are not captured by the other variables.

4. Sample selection and descriptive statistics

We decided to collect data from 2001 to 2004 (i.e., two years pre and post the introduction of FRS-37). The initial population was 181 companies listed on the NZX at 31 December 2000. Table 1 reports the outcome of the sample selection procedures. The initial population of 181 firms was reduced by overseas issuers not reporting in New Zealand dollars (14), firms delisting during 2001-2004 (76), share prices unavailable (14), firms changing year end (8), financial statements not available (5), and due to the substantially different reporting and disclosure requirements, we excluded financial and insurance firms (10). The sample of 54 firms resulted in 216 firm year observations. Financial statement and share price data was hand-collected from the NZX website for each firm.

Descriptive statistics (on a per share basis) are reported in Table 2 Panel A shows the mean (median) per share values of the market value of shareholders equity (MV_{it}) is 2.792 (1.630), consolidated equity ($EQUITY_{it}$) as 1.481 (0.895), consolidated assets ($ASSET_{it}$) as 2.815 (1.938), consolidated liabilities ($LIABILITY_{it}$) as 1.338 (0.888) and non-controlling interests (NCI_{it}) as 0.019 (0.000).

Panel B offers a breakdown between the pre FRS-37 and post FRS-37 sub-periods. The mean values for observations during 2001-2002 and the mean values for observations during 2003-2004 are compared. The mean values of number of subsidiaries ($SUBS_{it}$) and number of fully held subsidiaries ($100\%SUBS_{it}$) for the two periods are also compared. The mean number of subsidiaries held increased from 11.92 to 12.13 and the mean number of fully held subsidiaries showed a small movement from 10.69 to 10.92. This suggests that FRS-37 did not substantially change in number of entities defined as subsidiaries. This either because there was (1) FRS-37 was unnecessary as firms were already complying with the spirit of the standard, (2) FRS-37 was ineffective in capturing

in-substance subsidiaries, or (3) the change in the standard wer anticipated (through the due process of the standard) and that firms unwound positions.[8] Panel C reports the Pearson and Spearman correlation coefficients for all variables under analysis.

5. Main test of value relevance

Table 3 reports regression estimates of value relevance of consolidated financial statements. Regression (1) reports results of regressing firm market value (*MVit*) on the book value of consolidated equity (*EQUITYit*) and consolidated net income (*NIit*). The coefficients *β1* on *EQUITYit* and *β2* on *NIit* are 1.155 (14.847) and 2.653 (7.149) respectively with t-statistics in parenthesis. Both *β1* and *β2* are positive and significant at the 1% level. These results support prior literature that the book value of consolidated equity and consolidated net income are value relevant (Harris et al. 1884, Niskanen et al. 1998; Abad et al. 2000, Goncharov et al. 2009).

Regression (2) is similar to (1) except that equity is decomposed into its elements (*ASSET*), liabilities (*LIABILITY*), non-controlling interest (*NCI*). The signs and significance on the coefficients for *ASSET* and *LIABILITY* are consistent with the nature of assets and liabilities. The negative and significant result for the coefficient on *NCI* suggests it is regarded by users of the financial statements as a liability. This contrary to position taken in IFRS 10.22, which requires non-controlling interest to be presented within equity, albeit separately disclosed from the equity to the parent shareholders.

Regressions (3) and (4) extends regressions (1) and (2) to include the effects pre and post FRS-37. In Regression (3) the coefficients (variables) of interest are *β 4* (*POST x EQUITY*) and *β5* (*POST x NI*). Only *β5* is significant at the 10% level. The coefficient for *POST x EQUITYit* is not significant. In Regression (4) the focus is on the coefficients *β6*

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[8] Of course, the standard may have been effective for the public sector, but not the private sector.

(*POST x ASSET), β7 (POST x LIABILITY), β8 (POST x CNI),* and *β9 (POST x NCI). β6* and

β7 are significant at the 5% level., offering some support for H1, There coefficient on *β9,*

indicating a change in perception by users with regard to *NCI*, is not significant.

Table 4 presents the regression results for value relevance based on whether firms

have more or less than five subsidiaries. Following the results in Hsu et al. (2012), we

attempt to capture complexity of the firm's investment structure in subsidiaries. Except for

the *POST x NI* interaction term for less complex (small groups) all other interaction terms are

not significant. This is consistent with, but offers only very weak support, for the view that

controlled based consolidation is not suitable for more complex firms.

6. Additional tests

6.1 Difference-in-difference tests

The mandatory introduction of FRS-37 in New Zealand was undertaken in relative isolation

from other standard changes. However with the ability for firms to early adopt, the reality

that some organisations were slow in their implementation and the issuance of new standards

occurring in years either side of this, there was the possibility that the results were influenced

by some factors other than the switch from SSAP-8 to FRS-37.

To determine whether other factors were potentially influential, we examine the value

relevance firms with only wholly owned subsidiaries and no associates prior to introduction

of FRS-37 and whose holdings remained unchanged after introduction of FRS-37. We

compare the unchanged sample to the remaining firms ('changed sample'). We expect the

value relevance of the consolidated statements of the 'unchanged sample' remain relatively

stable, if no other factors outside the switch form SSAP-8 to FRS-37 were significantly

influential. That is the *POST* interaction terms would only be significant for the 'changed'

firms. Table 6 shows the results for the difference in difference analysis. The results show that, in general, the *POST* interactions are not significant for both sub-samples.

6.2 Returns model

Kothari and Zimmerman (1995)recommend that value relevance studies be supplemented with a returns model because of omitted variables and scale problems

$$RET_{it} = β0 + β1 \ x \ NI_{it} + β2 \ x \ ΔNI_{it} + β3POST + β4POST \ x \ NI_{it} + β5POST \ x \ ΔNI_{it} + β6LOSS_{it} + ΣYEARY + ΣIND + λ_{it} \quad\quad (3)$$

Where:

RET_{it} denotes the firm's annual stock returns, cumulated from 8 months before the end of fiscal year t through four months after the end of fiscal year t and the other variables are as defined earlier.

The return regression results are reported in Table 6. The coefficients for *POST x NI_{it}* and *POST x ΔNI_{it}* are significant at the 1% level. The results are in line with the previous value relevance regressions. The coefficient for *POST x ΔCNI_{it}* provides additional evidence of an increase in the value relevance of consolidated financial statements under the control-based method of consolidation and therefore supports H1.

7. Conclusion

This study was undertaken to determine if the introduction of FRS-37, which replaced ownership guidelines for determining the requirements for consolidation with control-based guidelines, improved the value relevance of consolidated financial statements. This study is therefore relevant for standard setters and researchers interested in the relative merits of principle-based accounting standards relative to rules-based standards. As FRS-37 is has similar objectives to IFRS 10 (i.e., the use of benefits and power as elements of control to capture subsidiaries and SPE) the results will also be of interest to standard setters. As FRS-

37 was introduced in isolation from other standards the results are relatively free from the confounding effects of the introduction of other standards,

While the results are not strong, they indicate that consolidation under the control-based guidelines resulted in greater value relevance compared to consolidated financial statements under the ownership-based guidelines of SSAP-8.

We examined the impact of FRS-37 on more complex investment ownership structures but did not find significant results. This may be due to the relatively poor proxy we used to measure complexity (i.e. the number of subsidiaries) and there is scope for more research in this area.

It was also found that the market viewed non-controlling interest as a liability rather than equity (as required to be presented in IFRS 10). Abad et al. (2000) find no support for value relevance for the non-controlling interest component of earnings, Swanson and Mielke (1997) find non-controlling interests provide meaningful information to parent shareholders.

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Table 1 Effect of sample selection criteria:

Total number of firms listed on NZX as at 31/12/2000	181
Listed as overseas issuer not using NZ dollar	-14
Delisted prior to or part way through analysis (2001-2004)	-76
Historical share prices unavailable	-14
Change of year-end part way through years being analysed	-8
Consolidated accounts not available for full analysis	-5
Financial and insurance companies	<u>-10</u>
Sample (firms)	54

Table 2 Descriptive statistics
Panel A Accounting variables 2001-2004 (N=216)

	Mean	STD	Q1	Median	Q3
MVit	2.792	3.490	0.603	1.630	4.162
RETit	0.255	1.264	-0.116	0.134	0.325
EQUITYit	1.481	2.061	0.407	0.895	1.830
ASSETit	2.815	3.138	0.765	1.938	4.226
LIABILITYit	1.338	1.539	0.239	0.888	1.831
NCIit	0.019	0.066	0.000	0.000	0.011
NIit	0.152	0.421	0.006	0.116	0.259

Panel B: Summary statistics across two sub periods (N=108)

	2001-2002			2003-2004		
	Mean	Median	STD	Mean	Median	STD
MVit	2.508	1.495	2.954	3.075	2.110	3.948
RETit	0.295	0.103	1.726	0.295	0.103	1.726
EQUITYit	1.442	0.879	1.945	1.520	0.914	2.179
ASSETit	2.773	2.076	2.955	2.857	1.869	3.324
LIABILITYit	1.330	0.862	1.533	1.345	0.892	1.552
NCIit	0.022	0.000	0.073	0.018	0.000	0.058
NIit	0.110	0.089	0.357	0.194	0.158	0.474
SUBSit	11.92	5.50	23.246	12.13	5.00	23.22
100%SUBSit	10.69	5.00	22.169	10.92	5.00	22.50
ASSOCSit	1.45	1.00	1.964	1.83	1.00	2.65

Panel C: Pearson and Spearman Correlations

	MV_{it}	RET_{it}	$ASSET_{it}$	$LIABILITY_{it}$	NI_{it}	NCI_t
MV_{it}		0.810***	0.842***	0.550***	0.788***	0.015
RET_{it}	0.862***		0.729***	0.385***	0.673***	0.020
$ASSET_{it}$	0.838***	0.692***		0.826***	0.584***	0.104
$LIABILITY_{it}$	0.743***	0.625***	0.946***		0.223***	0.099
NI_{it}	0.832***	0.792***	0.673***	0.576***		0.075
NCI_t	0.274***	0.247***	0.356***	0.380***	0.250***	

All data was collected from the New Zealand Stock Exchange. *MVit* denotes the market value of firms *i's* shareholders' equity four months after the fiscal year *t* end; *RETit* denotes the firms' annual stock return cumulated for eight months before the end of fiscal year *t* and four months following the end of fiscal year *t*; *EQUITYit* denotes the consolidated book value of firm *i's* shareholder equity at the end of year *t*; *ASSETit* denotes consolidated assets for firm *i* at the end of year *t*; *LIABILITYit* denotes the consolidated liabilities for firm *i* at the end of year *t*; *NCIit* denotes non-controlling interest for firm *i* at the end of year *t*; *NIit* denotes consolidated net income in year *t*. All regression variables have been deflated by the number of shares on issue at year-end. *SUBSit* is the number of subsidiaries included in the reporting entity; *100%SUBSit* is the number of wholly owned subsidiaries included in the reporting entity; *ASSOCSit* is the number of associates included in the reporting entity.

Table 3: Value relevance of shareholders' equity, assets, liabilities and earnings from consolidated financial statements (N=216)

	Regression (1) MV	Regression (2) MV	Regression (2) MV	Regression (4) MV
Intercept	1.053	0.441	1.195	0.715
	(4.212)***	(1.964)**	(4.634)***	(2.880)**
EQUITYit	1.155		1.113	
	(14.847)***		11.695)***	
ASSETit		0.864		0.728
		(10.471)***		(6.754)***
LIABILITYit		-0.356		-0.096
		(-2.624)**		(-0.501)
NCIit		-3.302		-3.575
		(-2.112)**		(-1.902)*
NIit	2.653	3.265	1.850	3.361
	(7.149)***	(9.500)***	(3.520)***	(6.679)***
POSTi			0.601	0.704
			(0.928)	(1.190)
POSTi x EQUITYit			0.074	
			(0.516)	
POSTi x ASSETit				0.292
				(1.963)**
POSTi x LIABILITYit				-0.566
				(-2.227)**
POSTi x NCIit				0.630
				(0.225)
POSTi x NIit			1.109	-0.275
			(1.552)*	(-0.403)
LOSS	-0.156	-0.111	-0.278	-0.138
	(-0.574)	(-0.452)	(-1.027)	(-0.553)
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Adj R2	0.823	0.861	0.829	0.863

Table 4: Value relevance of shareholders' equity, assets, liabilities and earnings from consolidated financial statements analyzed by number of subsidiaries > or < 5

	Subs <5	Subs >5	Subs <5	Subs >5
	Regression (2)	Regression (2)	Regression (4)	Regression (4)
	MV	*MV*	*MV*	*MV*
Intercept	0.345	1.147	0.358	0.972
	(1.314)	(3.388)**	(1.278)	(2.500)**
ASSETit	0.910	0.673	1.099	0.529
	(8.921)***	(4.715)***	(8.095)***	(2.574)**
LIABILITYit	-0.399	-0.148	-0.792	0.199
	(-1.214)*	(-0.737)	(-2.142)*	(0.664)
NCIit	-2.093	-4.689	-0.786	-5.645
	(-0.454)	(-2.224)*	(-0.181)	(-2.319)**
NIit	3.592	3.077	1.282	3.919
	(8.090)***	(5.789)***	(1.268)	(5.759)***
POST			-0.043	1.116
			(-0.168)	(1.345)
POST x ASSETit			0.020	0.236
			(0.109)	(0.926)
POST x LIABILITYit			-0.115	-0.580
			(-0.208)	(-1.553)
POST x NCIit			-2.098	2.317
			(-0.140)	(0.714)
POST x NIit			2.055	-1.455
			(1.747)*	(-1.576)
LOSS	0.022	-0.250	-0.500	-0.465
	(0.081)	(-0.351)	(-1.251)	(-1.164)
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Adj R2	0.972	0.979	0.625	0.628
N	72	144	72	144

Table 5: Value relevance of consolidated assets, liabilities, net income and non-controlling interests in consolidated statements for firms that are affected by FRS-37 (changed sample) relative to firms which wre not affected (Unchanged sample).

	Unchanged sample Regression (2)	Changed sample Regression (2)	Unchanged sample Regression (4)	Changed sample Regression (4)
	MV	*MV*	*MV*	*MV*
Intercept	-0.346	0.865	-0.278	-0.348
	(-0.963)	(2.543)**	(-0.810)	(-0.446)
ASSETit	1.927	0.809	1.766	0.677
	(4.712)***	(6.416)***	(3.633)**	(3.658)***
LIABILITYit	-1.140	-0.321	-1.518	-0.033
	(-1.730)*	(-1.753)	(-1.541)	(-0.121)
NCIit		-3.283		-4.034
		(-1.829)*		(-1.859)*
NIit	3.063	2.589	6.177	3.161
	(5.239)***	(5.469)***	(3.228)**	(5.329)***
POST			-1.077	1.263
			(-1.222)	(1.726)*
POST x ASSETit			0.414	0.235
			(1.430)	(0.995)
POST x LIABILITYit			0.414	0.235
			(1.430)	(0.995)
POST x NCIit				1.769
				(0.572)
POST x NIit			-3.945	-1.038
			(-1.971)*	(-1.215)*
LOSS	0.128	-0.355	0.539	-0.378
	(0.416)	(-1.114)	(1.414)	(-1.064)
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Adj R2	0.979	0.661	0.980	0.663
N	60	156	60	156

Table 6 Returns model

	RET
Intercept	-0.0.32
	(-0.856)
NI_{it}	1.186
	(16.320)***
ΔNI_{it}	-0.644
	(-11.273)***
POST_i	0.237
	(2.394)**
POST_i x NI_{it}	-0.480
	(-5.223)***
POST_i x ΔNI_{it}	0.361
	(3.767)***
LOSS	0.078
	(1.841)*
Industry	Yes
Year	Yes
N	216
Adj R_2	0.701

Regression in Table 6 is estimated using data from non-financial firms from 2001-2004. *RET* is the firm's annual stock returns, cumulated from eight months before the end of fiscal year *t* through four months after the end of fiscal year *t*.

Appendix 1 Major differences in control between SSAP-8, FRS-37, IAS 27 and IFRS 10

	SSAP-8 *Accounting for business combinations*	FRS-37 *Consolidating investments in subsidiaries*	IAS 27	IFRS 10

Control	Control means the **power to govern** the financial and operating policies of another entity for the purpose of obtaining the **benefits** and or assuming the risks normally associated with ownership.	Control by one entity over another entity exists in circumstances where the following parts (a) **power element** and (b) **benefit element** are both satisfied:
		(a) The first entity has the capacity to determine the financing and operating policies that guide the activities of the second entity, except in the following circumstances where such capacity is not required:
		   (i) Where such policies have been irreversibly predetermined by the first entity or its agent; or
		   (ii) Where the determination of such policies is unable to materially impact the level of potential ownership benefits that arise from the activities of the second entity.
		(b) The first entity has an entitlement to a significant level of current or future ownership benefits, including the reduction of ownership losses, which arise from the activities of the second entity.
			Control is **the power** to govern the financial and operating policies of an entity so as to **obtain benefits** from its activities.	An investor controls an investee when it is exposed, or has **rights, to variable returns** from its involvement with the investee and has the ability to affect those returns through its **power** over the investee.
				Thus, an investor controls an investee if and only if the investor has all the following:
				(a) power over the investee (see paragraphs 10–14);
				(b) exposure, or rights, to variable returns from its involvement with the investee (see paragraphs 15 and 16); and
				(c) the ability to use its power over the investee to affect the amount of the investor's returns (see paragraphs 17 and 18).

Assessing existence of control	Ownership focus	The existence of control as defined in this Standard is a question of fact. The determination of the fact that control exists will, however, often **require the application of judgement**. This is because control of an entity can be attained in a variety of ways, and the underlying circumstances will vary between differing situations. Paragraph 5.10 sets out a number of rebuttable presumptions, which, in	**Control is presumed to exist when the parent owns, directly or indirectly through subsidiaries, more than half of the voting power of an entity** unless, in exceptional circumstances, it can be clearly demonstrated that such ownership does not constitute control. **Control also exists when**	

		the absence of any evidence to the contrary, will indicate the existence of control. Where a given situation does not apparently match one or more of the rebuttable presumptions, the lists of indicators of both ownership powers and ownership benefits in paragraph 5.11 may still be sufficient to establish the existence of control.	**the parent owns half or less of the voting power of an entity when there is:** (a) power over more than half of the voting rights by virtue of an agreement with other investors; (b) power to govern the financial and operating policies of the entity under a statute or an agreement; (c) power to appoint or remove the majority of the members of the board of directors or equivalent governing body and control of the entity is by that board or body; or (d) power to cast the majority of votes at meetings of the board of directors or equivalent governing body and control of the entity is by that board or body.	
Special purpose entities (SPEs)		Control will arise in favour of a party that is entitled to a significant or greater level of the SPE's ownership benefits, irrespective of whether that party has the ultimate decision-making capacity regarding the SPE. Entities having financial assets securitised through an SPE vehicle in this manner will commonly have control		Incorporates SIC 12 *Consolidation – Special Purpose Entities*.