The impact of IFRS 10 on consolidated financial reporting

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Research questions and main objectives

- Objective is to examine the impact of the adoption of IFRS 10 in 2013 on consolidated financial reporting.
- Specifically, we study the effect of IFRS 10 adoption on:
  - The number of subsidiaries consolidated;
  - The consolidation of non-majority owned subsidiaries;
  - The consolidation of loss making subsidiaries;
  - The value relevance of equity and net income
  - We also analyse whether the change in subsidiaries after IFRS 10 is associated with financial reporting incentives

Consolidated financial statements and IFRS 10

- Consolidated financial statements are the main source of financial information provided to users on corporate groups
- The basis for determining which investees are consolidated is the application of the control definition included in accounting standards
- The definition of control in IAS 27 arguably provided firms with the discretion to include/(exclude) particular entities
- To address these criticisms IFRS 10 introduced a new control definition which was effective in Australia for financial years commencing on or after January 1, 2013
- The IASB anticipated that the new control definition would reduce the divergence of practice and increase consistency in the application of control (IASB, 2011).

Motivation and contributions for study

- This study is motivated by the lack of empirical evidence on the effect of the adoption of IFRS 10.
- Our results indicate whether the updated control definition impacted on the number of subsidiaries consolidated and provides indirect evidence on whether firms responded by rearranging their organizational structure
- The findings also provide evidence relevant to whether IFRS 10 impacted the usefulness of consolidated financial statements for decision making (IASB, 2011)
- Our findings are also directly relevant to the IASB/AASB as it undertakes its forthcoming post-implementation review of IFRS 10.

Key results

- The adoption of IFRS 10 resulted in firms reporting fewer subsidiaries
- Further analysis indicates that the effect of IFRS 10 is sensitive to controlling for financial reporting incentives
- We find a decrease in the likelihood of the consolidation of non-majority owned subsidiaries after IFRS 10. This decline is higher among loss-making firms and firms with greater leverage
- Firms with a decrease in subsidiaries experience a significant decrease in consolidated profit. This downward effect is significantly ameliorated after the adoption of IFRS 10
- The value relevance of NI and the BVE is unchanged by IFRS 10 adoption. However, there is a significant decline in the value relevance of BVE after the adoption of IFRS 10 for firms which consolidate fewer subsidiaries

History of consolidated financial reporting in Australia

- No accounting standard prior to 1991
- From 1991 AASB 1024 adopted a principles-based control definition:

"… *the capacity of an entity to dominate decision-making, directly or indirectly, in relation to the financial and operating policies of another entity so as to enable that other entity to operate with it in pursuing the objectives of the controlling entity …*" (*para.* 9).

- AASB 1024 remained operative until the adoption of IFRS in 2005. At this date, Australia adopted all IFRS including IAS 27.

Reasons for change in control definition

- IAS 27: *Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities*
- Definition was criticised for two reasons (Ben-Shahar et al. 2016):
  - 1) the term the '*power to govern*' allowed firms to argue that greater than 50% ownership was required to have control;
  - 2) the requirement for firms to '*obtain benefits from activities*' (para. 8) of the investees allowed firms to argue that loss-making entities did not provide benefits to the investor
- Ernst and Young (2011) posits that the exclusion of loss-making entities was a contributing factor to the global financial crisis

New control definition

- IFRS 10: *an investor controls an investee when the investor 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*
- Application guidance specifies investees can have power over an investee '*even if it holds less than a majority of voting rights*' (para. B38) and (para. B41) an investee with less than 50% ownership has sufficient power when '*the investor has the practical ability to direct relevant activities unilaterally*.'
- IFRS 10 makes it clear that investors' variable returns from their investment can '… *be only positive, only negative or both positive and negative …*' (para. 15)
- Objective of IFRS 10 is to reduce diversity in practice and improve comparability of reported financial information (IASB, 2011). IASB was uncertain as to whether the new standard would result in the consolidation of more or less subsidiaries

Prior research

- Despite the IASB foreshadowing a post-implementation review of of IFRS 10, there is limited empirical research into the standard's adoption to support its effectiveness
- One stream of prior research studies the impact of rules-based vs principles-based definitions of control:
  - Early Australian research finds prior to AASB 1024, many companies structured their ownership in investees just below 50 percent (Psaros 2007; Walker 1990; Walker 1991);
- Beck et al. (2017) find the move to a principles based control definition did not reduce the structuring of ownership at or below 50%. Larger and more levered firms are more likely to have ownership between 40-50%.
- Hsu et al (2012) show the value relevance of financial statements increased when Taiwan moved to a principles based control definition

Prior research

- Early research also examines the incentives for voluntary consolidation or firm lobbying
- Removal of investee's debt from the balance sheet has received prominence as a reason for avoiding consolidation (Francis 1986; Livnat and Sondhi 1986; Copeland and Mackinnon 1987; Mian and Smith, 1990b)
- Whittred (1987) studies voluntary consolidation in Australia. Results indicate voluntary consolidation is more likely:
  - when firms have higher leverage;
  - in the presence of agency problems (*i.e.*, low managerial ownership) and when there are a greater number of subsidiaries.

Hypothesis development (H1)

- The revision of the control definition assumes entities were not consistently incorporating all of their controlled off-balance sheet activities (Ben-Shahar et al. 2016; Ernst and Young 2011).
- Firms may however restructure their firm to avoid consolidation (Mian and Smith, 1990b)
- IASB also expressed uncertainty as to whether new standard would lead to more or less subsidiaries

H1: There is an association between the adoption of IFRS 10 and the number of entities consolidated.

Hypothesis development (H2 and H3)

- The new control definition is expected to reduce the ability of management to argue that non-majority and/or loss-making entities do not qualify for consolidation
- Firms may react to the standard by restructuring ownership of non-majority owned or loss-making subsidiaries to avoid consolidation
- It is also possible that the application of a revised principles-based definition of control may induce greater subjectivity (Henry 1999; Nelson 2003; Psaros and Trotman 2004; Agoglia et al. 2011)

H_2: There is an association between the adoption of IFRS 10 and the likelihood of consolidating entities with non-majority ownership.

H_3: There is an association between the adoption of IFRS 10 and the frequency of consolidating loss making entities.

Hypothesis development (H4)

- Prior studies suggests leverage (Mian and Smith 1990b; Beck et al. 2017), firm profitability, auditor type (Beck et al. 2017), and CEO ownership (Whittred, 1987) influence the likelihood that firms accurately report investees as subsidiaries
- We therefore predict that these factors are likely to influence how firms are impacted by the change to the new control definition.

H4: The impact of the adoption of IFRS 10 on the consolidation of subsidiaries is associated with financial reporting incentives.

Hypothesis development (H5)

- Prior research indicates that consolidated financial statements provide more value relevant financial information (Abad et al. 2000; Goncharov et al. 2009, Niskanen et al. 1998) and a principles based definition of control increases the value relevance of financial statements (Hsu et. al. 2012)
- IASB (IASB, 2011) believes the new standard should provide more comparable and useful financial statements
- Due to firm restructuring or continued use of discretion in applying the control definition (Ewert and Wagenhofer 2005) it is not certain that IFRS 10 results in more appropriate consolidation

H5: There is no association between the adoption of IFRS 10 and the value relevance of financial statements.

SAMPLE – TABLE 1

	N
ASX Top 500 publicly listed firms from 2012 to 2015	2,000
Less: Firms with missing financial information	(784)
Sample with sufficient financial information	1,216
Less: Firms with missing information on subsidiaries	(104)
Less: Firms with missing CEO and director information	(20)
Full Sample to test $\mathbf{H_1}$-$\mathbf{H_4}$	1,092

COLLECTION OF SUBSIDIARY INFORMATION

19. Subsidiaries

The consolidated financial statements include the financial statements of Wesfarmers Limited and the subsidiaries listed in the following table. Refer to page 135 for the respective legend.

Entity		2018 %	2017 %
A.C.N. 003 921 873 Pty Limited		**100**	100
A.C.N. 004 191 646 Pty Ltd		**100**	100
A.C.N. 007 870 484 Pty Ltd		**100**	100
A.C.N. 008 648 799 Pty Ltd		**100**	100
A.C.N. 008 734 567 Pty Ltd		**100**	100
A.C.N. 082 931 486 Pty Ltd		**100**	100
A.C.N. 092 194 904 Pty Ltd		**100**	100
A.C.N. 112 719 918 Pty Ltd		**100**	100
AEC Environmental Pty Ltd		**100**	100
Andearp Pty Ltd		**100**	100
ANKO Retail Incorporated	@ ◤	**100**	-
Australian Gold Reagents Pty Ltd		**75**	75
Australian Graphics Pty Ltd		**100**	100
Australian International Insurance Limited	+	**100**	100
Australian Liquor Group Ltd	*	**100**	100

Entity		2018 %	2017 %
Bunnings Manufacturing Pty Ltd		**100**	100
Bunnings Properties Pty Ltd		**100**	100
Bunnings Pulp Mill Pty Ltd		**100**	100
Bunnings Services Limited	~ ▲	**-**	100
BWP Management Limited	<	**100**	100
C S Holdings Pty Limited	+	**100**	100
Campbells Hardware & Timber Pty Limited		**100**	100
CGNZ Finance Limited	■	**100**	100
Charlie Carter (Norwest) Pty Ltd	*	**100**	100
Chef Fresh Pty Ltd		**100**	100
Chemical Holdings Kwinana Pty Ltd	+	**100**	100
CMFL Services Ltd	*	**100**	100
CMNZ Investments Pty Ltd		**100**	100
CMPQ (CML) Pty Ltd		**100**	100
Coles Ansett Travel Pty Ltd		**97.5**	97.5

DISCLOSURES UNDER AASB 1024

Notes to and Forming Part of the Accounts

WESFARMERS LIMITED AND ITS CONTROLLED ENTITIES

	Beneficial Interest		Book Value of Investment		Contribution to Consolidated Profit	
	1996	1995	1996	1995	1996	1995
	%	%	$000	$000	$000	$000
30 PARTICULARS RELATING TO CONTROLLED ENTITIES						
Parent Entity:						
Wesfarmers Limited					17,800	23,033
Controlled Entities:						
Charlie Carter Pty Ltd+	100	100	6,519	6,519	510	952
Charlie Carter (Norwest) Pty Ltd	75	75	–	–	(73)	511
Charlie Carter (Retail) Pty Ltd+	100	100	200	200	367	380
Co-operative Wholesale Services Ltd	100	100	443	443	–	–
Federation Insurance Services Pty Ltd+	100	100	–	–	–	–
Stores Realty Pty Ltd+	100	100	1,386	1,386	221	(5)
Ucone Pty Ltd+	100	100	–	–	3,785	10,877
Wesfarmers Bunnings Limited+	100	100	306,307	306,307	491	3,108
Barnett Bros Pty Limited+	100	100	–	–	26	(9)
Bunnings Building Supplies Pty Ltd+	100	100	–	–	12,383	12,824

TABLE 2 PANEL A – DESCRIPTIVE STATISTICS

	Full Sample (1)			Pre-IFRS 10 adoption sample (2)			Post-IFRS 10 adoption sample (3)			Statistical difference Cols (2)-(3) (4)
Variables	*N*	*mean*	*median*	*N*	*mean*	*median*	*N*	*mean*	*median*	
SUBCOUNT	1,092	32.397	16.000	507	33.181	16.000	585	31.718	16.000	0.600
SUBSNONMAJORITY	1,092	0.185	0.000	507	0.195	0.000	585	0.176	0.000	0.814
UPWARD CHANGE	1,092	0.417	0.000	507	0.450	0.000	585	0.388	0.00	2.064**
DOWNWARD CHANGE	1,092	0.212	0.000	507	0.199	0.000	585	0.222	0.000	-0.928
NO CHANGE	1,092	0.372	0.000	507	0.351	0.000	585	0.390	0.000	-1.318
ROA	1,092	0.036	0.076	507	0.065	0.087	585	0.010	0.068	4.276***
LEVERAGE	1,092	1.959	1.698	507	1.913	1.690	585	2.000	1.709	-1.359
BIG4	1,092	0.821	1.000	507	0.809	1.000	585	0.832	1.000	-1.024
CEO OWNERSHIP	1,092	0.035	0.002	507	0.039	0.003	585	0.031	0.001	1.187
LOSS	1,092	0.227	0.000	507	0.181	0.000	585	0.267	0.000	-3.366***
TOTAL ASSETS	1,092	20.366	20.297	507	20.357	20.237	585	20.375	20.322	-0.180
BOARD SIZE	1,092	1.965	1.946	507	1.959	1.946	585	1.970	1.946	-0.520
CEO BONUS	1,092	0.629	1.000	507	0.649	1.000	585	0.612	1.000	1.260
CURRENT RATIO	1,092	2.818	1.593	507	2.968	1.592	585	2.689	1.593	1.239
MARKET TO BOOK	1,092	2.174	1.450	507	2.270	1.540	585	2.091	1.360	1.291
MERGER	1,092	0.012	0.000	507	0.018	0.000	585	0.007	0.000	1.660*
DEC YEAR END	1,092	0.146	0.000	507	0.077	0.000	585	0.205	0.000	-6.086***
MVE	1,092	5.749	1.985	507	5.261	2.060	585	6.171	1.845	-0.989
BVE	1,092	2.708	1.327	507	2.566	1.354	585	2.831	1.304	-1.049
EBIT	1,092	0.449	0.215	507	0.468	0.236	585	0.432	0.180	0.725

TABLE 2 PANEL C – DESCRIPTIVE STATISTICS

	UPWARD CHANGE Sample						DOWNWARD CHANGE Sample						NO CHANGE Sample					
	Pre-IFRS10			Post-IFRS10			Pre-IFRS10			Post-IFRS10			Pre-IFRS10			Post-IFRS10		
Variables	*N*	*mean*	*median*	*N*	*mean*	*median*	*N*	*mean*	*median*	*N*	*mean*	*median*	*N*	*mean*	*median*	*N*	*mean*	*median*
SUBCOUNT	228	43.386	25.000	227	43.656	29.000	101	49.129	34.000	130	42.046	22.500	178	11.062	5.000	228	13.943	7.000
SUBSNONMAJORITY	228	0.263	0.000	227	0.242	0.000	101	0.297	0.000	130	0.192	0.000	178	0.051	0.000	228	0.101	0.000

TEST OF H1

- Poisson regression:

$$SUBCOUNT = \alpha_i + \beta_1 POST + \beta_2 LEVERAGE + \beta_3 BIG4 + \beta_4 CEO\ OWNERSHIP + \beta_5 LOSS + \beta_6 TOTAL\ ASSETS + \beta_7 BOARD\ SIZE + \beta_8 CEO\ BONUS + \beta_9 CURRENT\ RATIO + \beta_{10} MARKET\ TO\ BOOK + \beta_{11} MERGER + \beta_{12} DEC\ YEAR\ END + INDUSTRY + \varepsilon_I \quad (1)$$

RESULTS FOR H1 – Table 3

	Full Sample (1)	***Change model Subsample (2)***	***Change model Subsample (3)***	***Change model Subsample (4)***	***Change model Subsample (5)***
Dependent Variable:	*SUBCOUNT*	*Change in SUBCOUNT*	*UPWARD CHANGE*	*DOWNWARD CHANGE*	*NO CHANGE*
POST	-0.032*	-1.190*	-0.094	0.243***	-0.075
	(-1.652)	(-2.647)	(-1.191)	(4.391)	(-1.263)
LEVERAGE	0.080***	-0.337	-0.118	0.072	0.088
	(4.615)	(-0.710)	(-1.111)	(0.830)	(1.411)
BIG4	0.426***	-0.663	0.263***	0.288**	-0.414***
	(8.744)	(-1.050)	(6.350)	(2.124)	(-4.051)
CEO OWNERSHIP	0.181	8.999	-0.715	8.041***	-4.116**
	(0.832)	(0.613)	(-0.295)	(4.354)	(-2.314)
LOSS	-0.221***	0.126	-0.031	-0.261	0.104
	(-2.946)	(0.195)	(-0.163)	(-1.079)	(0.571)
TOTAL ASSETS	0.362***	0.139	0.102***	0.000	-0.127***
	(47.676)	(0.727)	(3.814)	(0.025)	(-5.929)
BOARD SIZE	0.030	-1.028	0.144	0.456***	-0.466***
	(0.314)	(-0.844)	(0.888)	(2.982)	(-2.719)
CEO BONUS	0.130***	-0.736	0.033	0.120*	-0.115
	(6.411)	(-1.229)	(0.292)	(1.853)	(-1.425)

TEST OF H2

- Probit regression

$$SUBSNONMAJORITY = = \alpha_i + \beta_1 POST + \beta_2 LEVERAGE + \beta_3 BIG4 + \beta_4 CEO\ OWNERSHIP + \beta_5 LOSS + \beta_6 TOTAL\ ASSETS + \beta_7 BOARD\ SIZE + \beta_8 CEOBONUS + \beta_9 CURRENT\ RATIO + \beta_{10} MARKET\ TO\ BOOK + \beta_{11} MERGER + \beta_{12} DEC\ YEAR\ END + INDUSTRY + \varepsilon_i \qquad (2)$$

RESULTS FOR H2 – Table 4

	Full Sample
	(1)
Dependent Variable:	*SUBSNONMAJORITY*
POST	-0.120***
	(-3.120)
LEVERAGE	0.003
	(0.137)
BIG4	-0.138***
	(-4.108)
CEO OWNERSHIP	-1.342***
	(-5.058)
LOSS	0.105
	(0.808)
TOTAL ASSETS	0.279***
	(7.889)
BOARD SIZE	-0.070
	(-0.845)
CEO BONUS	-0.178***
	(-3.457)
CURRENT RATIO	-0.030**
	(-2.149)
MARKET TO BOOK	-0.051***
	(-3.659)

TEST OF H3

- OLS regression

$$ROA = \alpha_i + \beta_1 POST + \beta_2 DOWNWARD\ CHANGE + \beta_3 DOWNWARD\ CHANGE{*}POST + \beta_4 UPWARD\ CHANGE + \beta_5 UPWARD\ CHANGE{*}POST + \beta_6 LEVERAGE + \beta_7 BIG4 + \beta_8 CEO\ OWNERSHIP + \beta_9 LOSS + \beta_{10} TOTAL\ ASSETS + \beta_{11} BOARD\ SIZE + \beta_{12} CEOBONUS + \beta_{13} CURRENT\ RATIO + \beta_{14} MARKET\ TO\ BOOK + \beta_{15} MERGER + \beta_{16} DEC\ YEAR\ END + INDUSTRY + \varepsilon_i \quad (3)$$

RESULTS FOR H3 – Table 5

	Full Sample
	(1)
Dependent Variable:	*ROA*
POST	-0.041**
	(-2.479)
DOWNWARD CHANGE	-0.043***
	(-2.794)
*DOWNWARD CHANGE*POST*	0.040*
	(1.718)
UPWARD CHANGE	-0.010
	(-0.761)
*UPWARD CHANGE *POST*	0.021
	(1.038)
LEVERAGE	-0.011
	(-1.248)
BIG4	0.001
	(0.032)
CEO OWNERSHIP	0.042
	(0.488)
LOSS	-0.292***
	(-12.777)
TOTAL ASSETS	0.023***
	(3.211)
BOARD SIZE	-0.038*
	(-1.779)
CEO BONUS	0.008
	(0.742)

TEST OF H4

- Impact of incentives to accurately report consolidated financial statements

$$SUBCOUNT = \alpha_i + \beta_1 POST + \beta_2 LEVERAGE + \beta_3 LEVERAGE*POST + \beta_4 BIG4 + \beta_5 BIG4*POST + \beta_6 CEO\ OWNERSHIP + \beta_7 CEO\ OWNERSHIP*POST + \beta_8 LOSS + \beta_9 LOSS*POST + \beta_{10} TOTAL\ ASSETS + \beta_{11} BOARD\ SIZE + \beta_{12} CEO\ BONUS + \beta_{13} CURRENT\ RATIO + \beta_{14} MARKET\ TO\ BOOK + \beta_{15} MERGER + \beta_{16} DEC\ YEAR\ END + INDUSTRY + \varepsilon_I \quad (4)$$

RESULTS FOR H4 – TABLE 6

	Full Sample	***Full Sample***
	(1)	***(2)***
Dependent:	*SUBCOUNT*	*SUBSNONMAJORITY*
POST	0.214***	0.149
	(3.740)	(0.859)
LEVERAGE	0.105***	0.117
	(9.790)	(1.609)
*LEVERAGE*POST*	-0.049*	-0.182*
	(-1.947)	(-1.957)
BIG4	0.504***	-0.213***
	(14.426)	(-8.878)
*BIG4*POST*	-0.140**	0.136
	(-2.250)	(1.491)
CEO OWNERSHIP	0.421***	-2.519***
	(7.060)	(-3.676)
*CEO OWNERSHIP*POST*	-0.505***	1.945**
	(-7.037)	(2.526)
LOSS	-0.247**	0.267***
	(-2.340)	(5.238)
*LOSS*POST*	0.048	-0.276***
	(0.650)	(-5.077)
TOTAL ASSETS	0.361***	0.273***
	(43.320)	(7.138)
BOARD SIZE	0.033	-0.054
	(0.357)	(-0.546)
CEO BONUS	0.125***	-0.200***
	(6.140)	(-4.071)

TEST OF H5

- OLS regression

$$MVE = \alpha_i + \beta_1 BVE + \beta_2 EBIT + \beta_3 POST + \beta_4 POST*BVE + \beta_5 POST*EBIT + \beta_6 LOSS + INDUSTRY + \varepsilon_i \quad (5)$$

RESULTS FOR H5 – Table 7

	Full sample	***Full sample***	***UPWARD CHANGE Sample***	***DOWNWARD CHANGE Sample***	***NO CHANGE Sample***
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Dependent:	*MVE*	*MVE*	*MVE*	*MVE*	*MVE*
BVE	0.916***	0.384**	0.267	0.610**	0.643***
	(7.915)	(2.017)	(0.912)	(3.645)	(6.851)
EBIT	7.827***	9.544***	10.523***	7.107**	8.017***
	(14.907)	(7.633)	(9.503)	(3.513)	(6.743)
POST	-	-0.197	0.066	0.860***	-1.141**
		(-1.825)	(0.126)	(6.964)	(-4.525)
*BVE*POST*	-	0.776	0.822	-0.610*	1.273***
		(1.799)	(0.959)	(-2.711)	(9.560)
*EBIT*POST*	-	-2.320	-3.578	4.591	-2.163
		(-0.940)	(-0.920)	(1.947)	(-0.976)
LOSS	2.294**	2.308**	2.181*	2.090*	2.154***
	(4.728)	(5.185)	(2.556)	(2.809)	(10.051)

Additional testing

- Removal of December year-end firms
- Control for CEO turnover
- Examine narrative company disclosures
- Remove firms with no subsidiaries
- Alternative measures of majority ownership
- Conduct value relevance tests using separately assets and liabilities rather than BVE

Conclusions

- The IASB introduced IFRS 10 to address criticisms regarding the control definition in IAS 127 and to reduce diversity in practice
- We find that after IFRS 10 firms consolidate fewer subsidiaries and are less likely to consolidate non-majority owned subsidiaries.
- Additional analysis suggests that results are associated with incentives for accurate financial reporting
- No overall change in the value relevance of net income and equity, but a decline in the value relevance of equity for firms’ which report fewer subsidiaries
- Limitations of the study

Thank you