

The impact of IFRS 10 on consolidated financial reporting

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ABSTRACT

This study uses Australian data between 2012 and 2015 to examine the impact of IFRS 10 adoption from 2013 on consolidated financial reporting. We find that the adoption of IFRS 10 is associated with firms consolidating fewer subsidiaries and a decrease in the likelihood of firms consolidating subsidiaries with non-majority ownership. The results also indicate that the effects of IFRS 10 adoption are associated with the firm's financial reporting incentives. We also find that firms consolidating fewer subsidiaries after IFRS 10 are associated with higher profitability. Finally, we show that, although the value relevance of equity and net income is overall unchanged after the adoption of IFRS 10, firms reporting less subsidiaries post-IFRS 10 adoption have a significantly lower value relevance of net assets. The findings in this study are of particular interest to accounting standard setters as they review the impact of the adoption of IFRS 10 on firms' financial reporting.

Keywords: IFRS 10; Accounting standards; Consolidated financial statements; Subsidiaries; Value relevance.

JEL Classifications: M40, M41, M42

Data Availability: Data are available from the public sources indicated in the text.

I. INTRODUCTION

Consolidated financial statements are the primary source of information used by various stakeholders to make decisions regarding corporate groups. Prior research shows that consolidated financial statements are more useful to shareholders than unconsolidated financial statements (Abad et al. 2000; Goncharov, Werner and Zimmermann, 2009; Niskanen, Kinnunen and Kasanen, 1998). Underpinning the preparation of consolidated financial statements are the accounting standards that set out the definition of ‘control’, which forms the basis for identifying entities being controlled by the parent entity (*i.e.*, subsidiaries), and thus aggregated into the group whose financial information form the consolidated financial statements. The correct application of the definition of control is paramount, as the financial information presented in these statements is heavily influenced by the decision to include or exclude particular entities. Therefore, ensuring the appropriate recognition of controlled entities into consolidated financial statements is essential, particularly as these are the only statements required to be publicly disseminated and are widely used for decisions-making purposes by various external stakeholders, for example, by superannuation funds when making investment decisions.

Prior to 2013, International Accounting Standard (IAS) 27 *Separate Financial Statements* governed the presentation and preparation of consolidated financial statements for companies using International Financial Reporting Standards (IFRS).¹ While IAS 27 was viewed as an improvement from prior requirements applied internationally (Hsu, Dhu and Cheng, 2012), it has also been criticized for applying a definition of control which arguably provided firms with the discretion to opportunistically include (exclude) particular entities. In particular, the control definition under IAS 27 requires the parent entity to (1) have the “*power to govern*” over and (2) the receipt of “*benefits*” from, the subsidiary suggesting that majority shareholder ownership and positive returns are necessary conditions, respectively.² As the IASB highlights, “... (IAS 27)

¹ Australia adopted IFRS for financial years commencing on or after 1 January 2005. Due to the legal framework in Australia, accounting standards applicable to corporations are required to be issued by the Australian Accounting Standards Board (AASB). These standards are qualitatively the same and do not differ from the international standards beyond the minor technicalities in terminology specific to the Australian setting (the prefix ‘Aus’ preceding a paragraph in the standard highlights any additions in the Australian standard that are not found in the international standard). Thus, we use the term ‘IAS 27’ to refer to both the international standard (IAS 27) and the Australian version (AASB 127) consistently throughout this paper.

² IAS 27 states “... *Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. ...*” (para. 8).

focused primarily on whether an investor had a majority of the voting rights in an investee ...” (IASB, 2011, p.10) and provided insufficient application guidance to firms on the requirement to consolidate non-majority owned investees. As such, this potentially led investors to a focus on ‘bright-line’ rules when applying the control definition to subsidiaries which were not majority owned (IASB, 2011). Moreover, under IAS 27 parent entities could also include (exclude) investees based on the determination of what constitutes “*benefits.*”

In light of the concerns around IAS 27, the International Accounting Standards Board (IASB) introduced International Financial Reporting Standard (IFRS) 10 *Consolidated Financial Statements* to replace IAS 27, effective in Australia for financial years commencing on or after January 1, 2013.³ IFRS 10 applies a principles-based definition of control which requires firms to consolidate other entities for which they receive “*variable returns,*” incorporating both positive and negative returns, and they have the “*power*” to affect their returns. As such, the definition of control limits the ability of firms to omit loss-making (*i.e.* no “*benefits*”) and non-majority owned (*i.e.* inability to “*govern*”) controlled entities from the consolidated financial reports. The IASB anticipated that the new definition of control would address the “*divergence of practice*” regarding the application of the control definition in IAS 27 and increase the consistency of interpretation about which entities were required to be consolidated (IASB, 2011, p. 5).⁴ Accordingly, Ernst and Young (2011) posit the change to the definition of control addresses the issue surrounding the exclusion of loss-making entities, which was a contributing factor to the global financial crisis (GFC):

“... IFRS 10 (AASB 10) may change which entities are within a group. These changes were made by the IASB, in part, in response to the financial crisis, when there was heavy criticism of accounting rules that permitted certain entities to remain off-balance sheet.” (p.1).⁵

³ Similar to IAS 27, IFRS 10 was re-issued in Australia as AASB 10 but contains the same requirements as IFRS 10. For ease of exposition, we refer to the Australian standard as ‘IFRS 10’ throughout the text to refer to both the international (IFRS 10) and Australian (AASB 10) standards.

⁴ The European Financial Reporting Advisory Group (EFRAG) also anticipated that the new requirements would “enhance consistency of application and increase comparability for users” (European Commission, 2012 p. 4).

⁵ Ernst and Young (2011), *IFRS Developments: IASB issues three new standards: Consolidated Financial Statements, Joint Arrangements, and Disclosure of Interests in Other Entities.* May 2011.

However, some have raised concerns that the continued use of a principles-based control definition under IFRS 10 provides unnecessary complexity and allows for further subjectivity in application to non-majority owned investments (Ben-Shahar, Sulganik, and Tsang 2016), or a continued reliance on traditional ownership based thresholds used under IAS 27 (Beck, Behn, Lionzo, and Rossignoli 2017).

Accordingly, the aim of this study is to examine the impact of the IFRS 10 adoption in 2013 on consolidated financial reporting and to determine whether the IASB achieved its objective of improving the usefulness of consolidated financial statements for decision making (IASB, 2011, *p.* 43). Specifically, this study uses Australian data to examine the association between IFRS 10 adoption with: i) the number of subsidiaries consolidated into the financial statements, ii) the consolidation of non-majority owned subsidiaries, iii) the consolidation of loss-making subsidiaries, and iv) the value relevance of financial statements to shareholders. We also analyze if the effect of the adoption of IFRS 10 is impacted by factors that prior research has identified as influencing the likelihood of accurate consolidation (Beck et al. 2017; Whittred, 1987; Mian and Smith 1990a).

This study is motivated by the lack of empirical evidence on how firms responded to the adoption of IFRS 10. The IASB indicated that most consolidation decisions would be unaffected by the new control definition and expressed uncertainty as to whether the revised control definition would result in the consolidation of more or fewer investees (IASB, 2011, *p.* 17). This study provides evidence on how the updated definition of control impacted on the number of controlled entities which are consolidated and also provides indirect evidence on whether firms potentially responded to the standard by rearranging their organizational structure. To our knowledge, this study is also the first to provide empirical evidence on whether IFRS 10 improved the usefulness of accounting information for shareholders. The findings of this study are, therefore, relevant to the IASB, on the impact and effectiveness of IFRS 10 and are also relevant to the IASB as it undertakes its forthcoming post-implementation review of IFRS 10.

Using a sample of the top 500 Australian firms by market capitalization between 2012 and 2015, we find that the adoption of IFRS 10 resulted in firms reporting fewer subsidiaries. One possible

interpretation of this finding is that the updated definition of control resulted in firms applying a “*more appropriate consolidation*” (IASB, 2011, p. 17) and no longer consolidating subsidiaries which did not meet the control definition. A possible alternative explanation is that consistent with the results in Mian and Smith (1990b), firms reorganized their business activities after the adoption of IASB 10 and either merged, sold, or discontinued particular investments. In further testing, we investigate the factors associated with the adjustment in subsidiaries post-IFRS 10. Based on prior research, we focus on whether leverage (Beck et al. 2017), auditor size, CEO ownership (Whittred 1987), and firm profitability are associated with the change in the number of subsidiaries after the adoption of IFRS 10. Our results indicate that firms with higher leverage, a Big 4 auditor, and higher levels of CEO ownership are differentially impacted by IFRS 10 adoption, suggesting that our results are driven by specific reporting incentives.

Our next set of analysis examines whether IFRS 10 adoption impacted the likelihood that firms consolidate subsidiaries with non-majority ownership (*i.e.*, at or below 50 percent). Arguably, changes in the number of reported subsidiaries are more likely to occur around the margins (IASB, 2011, p. 17). Relative to IAS 27, IFRS 10 explicitly indicates that a firm may control an investee without majority ownership and provides increased guidance to investors on the capacity to control an investee without holding a majority of the voting rights (IASB, 2011). Interestingly, our findings show a significant decrease in the likelihood of the consolidation of non-majority owned subsidiaries after IFRS 10 adoption. Once again, we undertake further testing to examine the incentives for reporting accurate consolidation (Beck et al. 2017; Whittred 1987; Mian and Smith 1990a) and find that the decline in the probability of consolidating non-majority owned subsidiaries is significantly higher among loss-making firms and firms with greater leverage.

We then investigate whether IFRS increased the consolidation of loss-making subsidiaries. Due to a lack of disclosure on the profitability of individual subsidiaries, we undertake this testing by investigating whether consolidated firm profitability (*i.e.*, return on assets) is associated with the change in the subsidiaries consolidated after IFRS 10. This analysis thus provides indirect evidence on whether the adoption of the accounting standard has an effect on consolidated profit. We find that firms reporting a decrease in subsidiaries typically earn significantly lower consolidated profits. This downward effect on consolidated profit is, however, significantly ameliorated after

the adoption of IFRS 10. In contrast, our results suggest that there is no significant effect on firm profitability for firms reporting an increase in subsidiaries either before or after the adoption of IFRS 10. Overall, these findings suggest that the adoption of IFRS 10 resulted in less frequent consolidation of subsidiaries with lower profitability. Alternatively, firms may have sold subsidiaries with lower profitability in response to IFRS 10.

The last set of results examines if IFRS 10 adoption impacts the value relevance of financial statements (*i.e.*, net income and the book value of equity). We also assess whether financial statement value relevance is impacted by the direction of the change in subsidiaries consolidated post-IFRS 10 adoption. The results indicate that the value relevance of both net income and the book value of equity is unchanged by the adoption of IFRS 10. However, when we partition firms by whether they report an increase or decrease in subsidiaries, we document a significant decline in the value relevance of equity after the adoption of IFRS 10 only for firms which consolidate fewer subsidiaries. This finding indicates that investors regarded net assets as being less informative after IFRS 10 when firms consolidated less subsidiaries under the new control definition.

The findings from this study make a number of contributions. First, the results of this study are of importance to accounting standard setters (*i.e.*, the AASB and IASB) in enabling them to understand the impact of the adoption of IFRS 10 and assisting them in determining whether the standard achieved the desired objective of improving the usefulness of financial statements. The study is also timely and answers the IASB's call for a post-implementation review on IFRS 10. Our findings suggest that the revised standard led to the consolidation of fewer subsidiaries and reduced the probability of the consolidation of non-majority owned subsidiaries. Whilst these results may be due to a more "*appropriate*" application of the control definition, they are also potentially consistent with firms reorganizing their business structure post-IFRS 10. There is also some evidence that IFRS 10 decreased the usefulness of financial statements as we find a decrease in the value relevance of equity for firms reporting less subsidiaries after IFRS 10.

Second, the results of this study have wide-ranging implications for users of financial statements. From a user perspective, understanding the impact of the new control definition on management

behavior and financial statements enables more informed decision making. If the rules improved the usefulness of accounting information and reduced diversity of reporting practices, investors can place greater confidence on the financial statements and limit the need for additional sources of information. Furthermore, creditors and debtholders should have greater confidence in lending funds to listed corporations in the knowledge that all controlled entities, including those that are loss-making, have been consolidated into the financial statements.

The remainder of this study is structured as follows. Section II discusses the institutional setting, reviews relevant prior literature and develops hypotheses. The following section discusses our sample selection and provides descriptive statistics, whilst Section IV describes our research method and provides results. Section V concludes the paper.

II. INSTITUTIONAL SETTING, PRIOR LITERATURE AND HYPOTHESES

Institutional Setting

Prior to 1991, the requirements to prepare consolidated financial statements in Australia was specified in respective company legislation which required holding companies (*i.e.*, parent entities) to prepare group financial statements incorporating subsidiaries. Interestingly, subsidiaries were defined in legislation as companies in which the parent entity held a greater than 50 percent shareholding. As discussed below in the literature review, this definition of subsidiaries facilitated the exclusion of non-majority owned investees and non-corporate entities from the consolidated accounts. The first Australian accounting standard guiding the preparation of consolidated financial statements by companies was AASB 1024 *Consolidated Accounts*. This standard was applicable for the first financial year ending on or after 31 December 1991. AASB 1024 adopted a principles-based approach and required parent entities to consolidate all subsidiaries which were controlled by the parent, with control defined as:

“... 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 in Australia until the adoption of IFRS in 2005. At this date, Australia adopted all IFRS including IAS 27 which then governed the preparation of consolidated financial statements until the implementation of IFRS 10.

IAS 27 defined control as “...*the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. ...*” (para. 4). The definition of control in IAS 27 was criticized for two primary reasons (Ben-Shahar et al. 2016). First, the use of the term the “*power to govern*” as a condition for control allowed firms to argue that greater than 50 percent ownership was required by the firm to have the ability to govern another entity. The second criticism regarding the IAS 27 definition of control was the requirement for firms to “... *benefit from the activities ...*” (para. 8) of the other entity to be regarded as having control. This allowed firms to argue that loss-making entities did not provide benefits to the investor thereby enabling them to omit these entities from financial reports. This led to criticism, for instance, during the global financial crisis that the IAS 27 definition of control allowed risky loss-making investments to be excluded from consolidated financial statements (Ernst and Young 2011).

In light of these criticisms of IAS 27 and a perceived “... *diversity of practice ...*” in implementing the definition of control (IASB, 2011, p. 9), the IASB released an exposure draft ED 10 *Consolidated Financial Statements* in December 2008. The IASB indicates that it received 148 comment letters in response to the exposure draft. A summary of these comment letters suggested that although “... *there was a significant level of support for the concept of consolidation based on control ...*” many users expressed “... *a significant level of disagreement about how the IASB had articulated the control concept...*”.⁶ Following further consultation and outreach activities with various stakeholders, the IASB issued IFRS 10 *Consolidated Financial Statements* in May 2011 along with IFRS 11 *Joint Arrangements* and IFRS 12 *Disclosure of Interests in Other Entities*, which apply in Australia to annual periods beginning on or after 1st January 2013.⁷

Although, the basic consolidation accounting procedures in superseded IAS 27 were largely unchanged, IFRS 10 introduced a revised version of the definition of control and provided

⁶ IASB Meeting Notes, 19 May 2009, available at: https://www.iasplus.com/en/meeting-notes/iasb/2009/agenda_0905/agenda1167. Last accessed: 16 August, 2019.

⁷ The effective date of IFRS 10 in Europe was years commencing on or after January 1, 2014.

extensive guidance on the practical implementation of that definition. According to 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 ...*” (para. 6). To address the perceived shortcoming that IAS 27 allowed non-majority owned investees to remain “off-balance sheet”, the revised definition of control in IFRS 10 focuses on the investor’s ability to affect returns through their power over an investee, as opposed to the “*power to govern.*” Moreover the detailed application guidance provided with IFRS 10 now specifies directly that investees can have power over an investee “*even if it holds less than a majority of the voting rights*” (para. B38). The standard also indicates (para. B41) that an investee with less than 50 percent ownership has sufficient power over an investee when “... *the investor has the practical ability to direct the relevant activities unilaterally. ...*”. A list of circumstances which a firm with non-majority ownership needs to consider if it has sufficient power are provided in paragraph B42 of the standard. These circumstances include: “... *the size of the investor’s holding of voting rights relative to the size and dispersion of holdings of the other vote holders. ...*” .

To address the second criticism of IAS 27 that loss-making entities were not required to be consolidated, an objective of IFRS 10 was to improve the transparency for investors of the risks associated with “*off balance-sheet vehicles*” (European Commission 2012, p. 2). As such, the revised accounting standard now makes it clear that an investors’ variable returns from their investment can “... *be only positive, only negative or both positive and negative ...*” (para. 15) to reduce the likelihood of the non-consolidation of loss-making subsidiaries.

While the main objective of the new standard is to reduce the diversity in practice regarding the application of the control definition in IAS 27 and improve the comparability of reported financial information (IASB, 2011), there is no empirical evidence to support its effectiveness. Moreover, the ‘*Effect analysis*’ issued by the IASB (IASB 2011) indicates that the standard setter was uncertain as to whether the new standard would result in the consolidation of more or less subsidiaries. Although the IASB has foreshadowed a post-implementation review of the impact of IFRS 10, at present there is limited empirical research into the effects of the adoption of the standard on firms’ financial reporting. Whilst Ben-Shahar et al. (2016) assess the validity of the

standard from an economic perspective when assessing shareholder power, they do not undertake any empirical or descriptive analysis of the effects of the standard. The effect of the implementation of the standard is therefore an empirical question.

Literature review

A significant number of studies that examine issues relating to the preparation of consolidated financial statements have investigated the effects of the use of a principles vs. rules-based definition of control to determine which investees are consolidated. More specifically, studies have examined the impact of the use of a ‘bright-line’ rule of greater than 50 percent ownership to identify subsidiaries. Earlier Australian research for example highlights that prior to the introduction of AASB 1024 in 1991, many companies deliberately structured their ownership in investees just below 50 percent to avoid consolidation requirements (Psaros 2007; Walker 1990; Walker 1991). Prior studies have also documented a similar structuring of ownership at levels just below 20 percent to avoid the need to adopt equity accounting for investees (Comiskey and Mulford 1986).⁸

In recent times, standard-setters have generally moved to the setting of principles-based rather than rules-based accounting standards to prevent firms’ from structuring transactions to achieve a desired accounting treatment (Beck et al. 2017). Whilst this move has generally been supported (Maines et al. 2003; Schipper 2003; Nobes 2005), there is concern that principles-based standards require an increased level of professional judgement from both preparers and auditors (Nelson, Elliott and Tarpley, 2002) and that increased discretion and imprecise standards may actually result in more aggressive financial reporting (Nelson 2003; Ewert and Wagenhofer 2005; Folsom, Hribar, Mergenthaler and Peterson 2017).⁹ There is also evidence that auditors and preparers prefer rules-based standards. For instance, McEnroe and Sullivan (2013) survey CFOs and auditors and document that in 8 of 10 accounting issues, including consolidation, they prefer rules-based accounting standards. Prior research also indicates that principles-based accounting standards are

⁸ A revised *IFRS 11 Joint Arrangements* applicable to joint ventures and jointly controlled entities were implemented in Australia for financial periods beginning on or after 1 January 2013. We do not examine the effect of the adoption of IFRS 11 on Australian financial reporting and leave this analysis to subsequent research.

⁹ Agoglia, Douppnik and Tsakumis (2011) present experimental evidence showing CEOs are less likely to report aggressively using principles-based accounting rules.

associated with an increased litigation risk for firms (Donelson, McInnis and Mergenthaler, 2012) and auditors (Gimbar, Hansen, and Ozlanski 2016).

In the context of consolidation accounting, the implementation of principles-based standards has resulted in standard setters moving away from defining control using ownership levels, and instead towards a definition which relies on the economic substance of the relationship between investor and investee. Psaros and Trotman (2007) in an experimental setting, find that participants with an incentive not to consolidate are less-likely to consolidate using rules-based accounting standards. Beck et al. (2017) use data from 2004 to 2008 to examine whether the change to a principles-based control definition by the FASB and IASB impacted the propensity for firms to structure their ownership in other firms at or just below 50 percent to avoid consolidation. They conjecture that changes in the early 2000's to principles-based accounting standards based on the economic substance of the investor-investee power relationship, rather than ownership, is likely to lead to less structuring of ownership at or below the 50 percent threshold. Their results, however, show that US firms and firms in countries which use IFRS continue to structure their investments at or below 50 percent over the period 2004-2008. Their findings also indicate that firm size is positively associated with the likelihood that a firm reports an investment at an ownership level between 40-50 percent. The use of a Big 4 auditor, however, significantly reduces the likelihood of ownership being reported between the 40-50 percent thresholds. Hsu et al. (2012) examine the effects of Taiwan moving from a majority ownership definition of control to a principles-based control definition in 2005. Consistent with the provision of more useful accounting information, their results indicate that the adoption of the new control definition increased the value relevance of net income, assets, and liabilities for shareholders.

The research discussed above highlights the propensity for some firms to strategically structure ownership in investees to avoid consolidation (Duchac 2004). Prior studies have investigated the incentives of firms to avoid consolidation and one motivation which has received prominence is the non-consolidation of investees to remove the investee's debt from the consolidated balance sheet. For example, Mian and Smith (1990b) examine firms' lobbying on the US exposure draft SFAS 94, which proposed the mandatory consolidation of majority owned subsidiaries. Their results indicate that firms with unconsolidated financial subsidiaries were more likely to lobby

against the exposure draft, which was consistent with these firms being motivated to keep their investee's liabilities off the financial statements. They also document that firms with unconsolidated financial subsidiaries experience negative abnormal returns when the exposure draft was issued as a standard, and such firms react to the adoption of the standard by closing, selling or re-organizing financial subsidiaries. Beatty and Hand (1992) also examine the abnormal returns to firms effected by SFAS 94. They document a negative association between the market reaction to the adoption of the accounting standard and firm size but find no association between the market reaction and the pro-forma change in leverage arising from the consolidation of off balance sheet entities. The results in Beck et al. (2017) also highlight the importance of leverage, as their results suggest that firms with greater debt are more likely to disclose an investment at an ownership level between 40-50 percent.

Other studies have examined the impact of the pro-forma consolidation of off-balance sheet entities and document that the inclusion of these entities leads to significant increases in leverage ratios (Francis 1986; Livnat and Sondhi 1986; Copeland and Mackinnon 1987; Mohr 1988). Comiskey, McEwan, and Mulford (1987) find that the non-consolidation of finance subsidiaries does not appear to mislead financial market participants, as off-balance sheet debt is incorporated into the assessment of parent entity risk.

Prior research has also examined the incentives for firms to voluntarily report consolidated financial statements prior to the introduction of mandated consolidated reporting in Australia and the US. Whittred (1987) examines the voluntary adoption of consolidated accounting in Australia. Inconsistent with the incentive to keep debt off-balance sheet, he finds that parent entities are more likely to voluntarily provide consolidated financial statements when leverage is higher. Voluntary consolidation is also more likely in the presence of agency problems (*i.e.*, low managerial ownership) and when there are a greater number of subsidiaries. Mian and Smith (1990a) examine firms' voluntary consolidation of financial subsidiaries in the US prior to the adoption of SFAS 94 *Consolidation of all majority-owned subsidiaries*. They find that voluntary consolidation is more likely when there are greater operating and financial dependencies between the parent and the subsidiary. They also document a greater frequency of consolidation when there is an explicit debt guarantee and when the financial subsidiary is located outside the US.

Hypothesis Development

The presumption underlying the revision of the control definition adopted in IFRS 10 is that entities were not consistently providing users with a complete set of financial statements incorporating all of their controlled off-balance sheet activities (Ben-Shahar et al. 2016; Ernst and Young 2011). Assuming that the revised definition of control adopted in IFRS 10 addresses the problems involved with the previous definition of control in IAS 27, it is possible that the adoption of IFRS 10 leads to an increase in the number of entities deemed to be controlled by an investor. The IASB, however, expresses uncertainty as to whether investors will consolidate more or fewer subsidiaries after the adoption of IFRS 10 (IASB 2011) as the revised definition of control requires firms to reassess whether they ‘*truly control*’ (IASB, 2011, p. 17) an investee. Furthermore, based on the results in Mian and Smith (1990b), limiting the ability of managers to selectively include (exclude) subsidiaries post-IFRS 10 may lead to divestitures of subsidiaries with greater financial risk. Given the uncertainty regarding the effect of IFRS 10, we state our first hypothesis without a directional expectation:

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

Relative to IAS 27, IFRS 10 broadens the scope of conditions by which parent entities are deemed to control another entity. IAS 27 focused on the ‘*power to govern*’ and ‘*benefits*’ (para. 8) from ownership held by an investor, suggesting control was arguably conditional on a majority of voting rights and a positive return on investment. In contrast, IFRS 10 indicates that the ‘*ability to affect ... returns*’ and ‘*variable returns*’ (para. 7c) are sufficient conditions for control. Moreover, IFRS 10 explicitly states that an entity can have control over an investee without majority ownership and highlights that investor’s returns can be both positive and negative (IASB, 2011, para. 15). Furthermore, IFRS 10 provides increased guidance on these matters, mitigating the concerns from the IASB (2011) surrounding the previous lack of guidance resulting in inconsistent practices regarding the consolidation of non-majority owned subsidiaries. These changes to the definition of control are expected to lower the ability of management to argue that non-majority and/or loss-making entities do not qualify for consolidation.

However, it is conceivable 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), leading to even greater dispersion in application or more aggressive financial reporting. For instance, the 2009 comment letter analysis by the IASB on the exposure draft preceding IFRS 10 suggested users disagreed with how the IASB had defined control and that “*constituents were schizophrenic*” about the meaning of control. It is also noteworthy that the results in Beck et al. (2017) indicate that the move to a principles-based definition of control did not decrease the structuring of ownership below 50 percent. Moreover, from an opportunistic perspective, firms may apply the control definition to increase the consolidation of profitable non-majority owned subsidiaries, while excluding unprofitable investments by reducing their ownership interest into a ‘grey’ zone which avoids consolidation. Furthermore, it is possible that to avoid consolidation of investments that are unprofitable and/or held previously at or below the 50 percent mark, firms may divest their stake in these investments or close these subsidiaries, thereby omitting the consolidation of these entities. Because of these possible contradictory effects of the new control definition on the consolidation of loss-making and non-majority owned entities, we state our second and third hypotheses in a non-directional form:

H₂: There is an association between the adoption of IFRS 10 and the likelihood of consolidating entities with non-majority ownership.

H₃: There is an association between the adoption of IFRS 10 and frequency of consolidating loss-making entities.

Prior research highlights that a motivation for the non-consolidation of subsidiaries is concealing an investee’s debt off-balance sheet (Mian and Smith 1990b; Beck et al. 2017). Whittred (1987) however, documents that the voluntary provision of consolidated financial statements in Australia is significantly higher for firms with greater leverage. That study also finds that firms with low CEO ownership are more likely to provide consolidated reports voluntarily. Earlier studies have also documented that large audit firms are associated with increased financial reporting quality (Becker, DeFond, Jiambalvo, and Subramanyam 1998; DeFond and Zhang 2014). Moreover, Beck et al. (2017) find clients of Big 4 audit firms appear less likely to structure investee ownership

levels around the 50 percent threshold. These findings thus suggest that Big 4 audit firms limit the use of questionable consolidation accounting practises. As loss making firms have an incentive to omit unprofitable subsidiaries from their accounts, we also contend that the implementation of IFRS 10 had a disparate effect on loss making firms.¹⁰ Based on these earlier results, it is expected that leverage, firm profitability, auditor type, and CEO ownership influence the likelihood that firms were accurately reporting investees as subsidiaries prior to the adoption of IFRS 10, and thus such firms are predicted to be differentially impacted by the change to the new control definition. This leads to Hypothesis 4:

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

The primary objective of accounting is to provide information to resource providers. Shareholders require financial information to ascertain the value created by the company as a means of estimating the appropriate share price. As the process of value creation arises from assessing the quality of decisions made by management of the firm, the absence of financial information on investments in controlled entities is conjectured to be less useful to users. Consistent with this notion, prior research indicates that consolidated financial statements provide more value relevant financial information than unconsolidated financial statements (Abad et al. 2000; Goncharov et al. 2009, Niskanen et al. 1998). However, consolidated financial statements are most useful when all ‘truly’ controlled entities are included, which is contingent on the discretion provided to management by the accounting standard requirements. Accordingly, Hsu et al. (2012) document that the move from an ownership level requirement to a principles-based definition of control for consolidation in Taiwan increased the value relevance of accounting numbers. This is consistent with a broader, control definition limiting the ability of management to exploit thresholds to avoid consolidating specific subsidiaries.

Assuming that the new control definition and the provision of more detailed application guidance in IFRS 10 reduce the diversity of practice (IASB 2011), it is expected that the new standard results

¹⁰ Beck et al. (2017) initially suggest that profitability may motivate firms to structure investee ownership at or below 50 percent. They indicate however (p. 49), that the profitability variable is excluded from the analysis due to a lack of significance.

in a more consistent application of the requirements regarding the consolidation of controlled entities (IASB 2011). As indicated by the IASB (IASB 2011), the new standard should provide benefits for users in terms of more comparable and useful financial statements. However, as highlighted by prior research, a principle-based definition can be applied more subjectively than a rules-based definition, potentially leading to even greater divergence in practice (Ewert and Wagenhofer 2005) and reduced value relevance. By similar measure, practitioners may continue to rely on traditional quantitative thresholds in determining control over entities, resulting in little change in the reporting of consolidated entities and no change in value relevance (Beck et al. 2017). On balance, it is not clear whether IFRS 10 results in more consistent and ‘*appropriate*’ consolidation practices and whether the usefulness of financial statements improves, decreases or is unchanged after the adoption of the standard. This leads to our fifth hypothesis stated in the null form:

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

III. SAMPLE SELECTION AND DESCRIPTIVE STATISTICS

Sample

The sample is constructed by identifying the top 500 firms by market capitalization on the Australian Securities Exchange (ASX) for each year between 2012 and 2015. The sample is restricted to the top 500 firms as larger firms are expected to have more subsidiaries and be subject to a greater impact from adopting IFRS 10.¹¹ Information on the number of subsidiaries and the ownership interest held in each subsidiary are hand collected for each firm using the notes to the financial statements. Financial information required to estimate the regression models are obtained from the Morningstar’s *DataAnalysis* Premium database. Corporate governance and auditor information, as well as details on successful mergers and acquisitions are obtained respectively from the *Connect 4 Boardroom* and *Takeovers and Mergers* databases.

¹¹ We find 19 firm-year observations (nine firms) where no subsidiaries were reported. Divestitures account for two of these observations. Dropping all observations without subsidiaries do not qualitatively or statistically change the results.

From the initial sample of 2,000 firm-year observations, we remove: 760 firm-years due to missing financial information, 104 firm-years due to missing subsidiary data and 12 firm-years due to insufficient corporate governance data.¹² A further 24 firm-years with firms using US GAAP and eight firm-years where the firm early-adopted IFRS 10 were also excluded. After these eliminations we are left with 1,092 firm-years to test H_1 to H_5 . The sample selection process is summarized in Table 1.

INSERT TABLE 1 HERE

Descriptive Statistics

The descriptive statistics for the sample partitioned into the period pre- and post- the adoption of IFRS 10 are reported in Panel A of Table 2. Definitions for all variables are provided in Appendix 1. The average number of subsidiaries (*SUBCOUNT*) across the sample is approximately 32. Although the average number of reported subsidiaries after the adoption of IFRS 10 decreases from 33 to 32, the difference is not statistically significant. Figure A depicts the average number of subsidiaries for each firm yearly and shows that the reduction in subsidiaries is most significant in financial year 2014, when a majority of the Australian firms were first required to comply with IFRS 10. As IFRS 10 provided additional guidance on the consolidation of non-majority owned subsidiaries, it is also interesting to examine the likelihood of the consolidation of subsidiaries without majority ownership after the adoption of IFRS 10. We use an indicator variable (*SUBSNONMAJORITY*) to identify firms which consolidate subsidiaries with non-majority ownership. Interestingly, the results indicate that the percentage of firms consolidating non-majority owned subsidiaries decreases from 19.5 percent to 17.6 percent following IFRS 10 adoption. The difference, however, is not statistically significant.

To examine the direction of the yearly change in the number of subsidiaries, we employ three indicator variables denoting: an increase (*UPWARD CHANGE*), decrease (*DOWNWARD CHANGE*), or no change (*NO CHANGE*) in subsidiaries. The findings indicate that after the implementation of IFRS 10 there is a significantly lower frequency of reported increases in the

¹² The removal of firm-years with insufficient financial, subsidiary and governance information includes the current and prior year required to construct the changes models used in the analysis.

number of subsidiaries (45 percent pre- vs. 39 percent post- IFRS10). In contrast, there are no statistically significant differences in the likelihood of no change or a decrease in the number of subsidiaries pre- and post-IFRS 10 adoption.

INSERT TABLE 2 HERE

The descriptive statistics for the control variables indicate that there is a decrease in firm profitability after the adoption of IFRS 10, evidenced by a significant decline in return on assets (*ROA*) and a significant increase in the likelihood that firms' report a loss (*LOSS*). We also identify a decreased likelihood that firms complete a takeover (*MERGER*) after IFRS 10 implementation. Amongst the other controls we document that approximately 82 percent of firms are audited by a Big 4 audit firm (*BIG4*) and about 63 percent of firms remunerate their CEO through a cash bonus (*BONUS*). Furthermore, CEO ownership is relatively low with a mean of 3.5 percent (*CEO OWNERSHIP*) and a median close to zero. These figures do not significantly differ before and after IFRS 10 adoption.

In Panel B of Table 2, we provide descriptive statistics for each variable after partitioning the sample into firm years in which there is an increase, decrease, or no change in subsidiaries. It is notable that the firms reporting no change in subsidiaries are: smaller (*TOTAL ASSETS*), less profitable (*ROA* and *LOSS*), less likely to use a Big 4 auditor (*BIG4*), have fewer subsidiaries (*SUBCOUNT*), and are less likely to have consolidated subsidiaries which are not majority owned (*SUBSNONMAJORITY*). Firms that report fewer subsidiaries are: larger (*TOTAL ASSETS*), have greater leverage (*LEVERAGE*), a lower market-to-book ratio (*MARKET TO BOOK*), and are less profitable (*ROA* and *LOSS*) than their counterparts, which record an increase in subsidiaries.

The descriptive findings in Panel B of Table 2 are further partitioned into the periods before and after the adoption of IFRS 10 with the results reported in Panel C of Table 2. Whilst there is only a minimal change in the mean total number of subsidiaries for firms reporting an increase (43.386 to 43.656) in subsidiaries after IFRS 10 is adopted, firms reporting fewer subsidiaries post-IFRS 10 show a decrease from an average of 49 to 42 subsidiaries. Moreover, firms reporting fewer subsidiaries are much less likely to consolidate non-majority owned subsidiaries after IFRS 10 adoption. The results also indicate that there is a large decrease in return on assets (*ROA*) and a

higher frequency of losses (*LOSS*) after the adoption of IFRS 10 for firms which report both a decrease and no change in subsidiaries. There is also some evidence of an increased use of Big 4 audit firms (*BIG4*), greater leverage (*LEVERAGE*) and lower CEO ownership (*CEO OWNERSHIP*) after IFRS 10 adoption for all categories. Overall, the descriptive statistics support the view that firms report fewer subsidiaries following the implementation of IFRS 10.

IV. RESEARCH METHOD AND RESULTS

Test of H₁

To test H₁, we estimate a Poisson regression where the dependent variable is a count (*SUBCOUNT*) of the number of subsidiaries disclosed by a firm in their annual report. The main test variable is an indicator variable (*POST*) denoting financial years after the implementation of IFRS 10 (*i.e.*, years commencing on or after 1 January 2013). We also control for some of the incentives associated with the disclosure/non-disclosure of subsidiaries identified in prior research. These controls include firm leverage (Mian and Smith 1990a, Beck et al. 2017) using the ratio of assets to equity (*LEVERAGE*) and shareholder agency problems using the percentage ownership of the CEO (*CEO OWNERSHIP*) (Whittred 1987). We also include an indicator variable highlighting whether a firm reports a loss (*LOSS*), as loss-making firms have stronger incentives to exclude unprofitable subsidiaries. As prior research typically documents that large auditors are associated with higher financial reporting quality (Becker et al. 1998; DeFond and Zhang 2014), we include an indicator variable to capture the firms audited by a Big 4 audit firm (*BIG4*).

Model (1) also includes a number of financial controls impacting the number of subsidiaries including firm size measured using the natural logarithm of total assets (*TOTAL ASSETS*), liquidity measured using a firm's current ratio (*CURRENT*), and growth options using the market-to-book ratio (*MARKET TO BOOK*). We also include governance controls for board size (*BOARD SIZE*) (Yermack 1996) and an indicator variable if the CEO received a bonus based on accounting profit (*CEO BONUS*). Since it is expected that a completed takeover mechanically increases the number of subsidiaries reported, we control for successful M&As taking place during a financial year through the use of an indicator variable (*MERGER*). Finally, we include an indicator variable to denote firms with a December financial year end (*DEC YEAR END*) to control for any possible

learning effect from adopting the new standard. As IFRS 10 was adopted for financial years commencing on or after 1 January 2013, December year-end firms were the first group of firms which adopted the new standard. We also include industry fixed effects (*INDUSTRY*) in the model with industry defined using two digit GICS codes. The full model is summarized as follows (time and firm subscripts omitted for convenience):

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

The results from estimating Model (1) are presented in Column (1) of Table 3. The findings on *POST* are negative and significant at the 10 percent level. This result indicates that firms consolidated fewer subsidiaries after the adoption of IFRS 10. Amongst the control variables, we find that firms disclose a significantly higher number of subsidiaries when they are larger (*TOTAL ASSETS*), have greater leverage (*LEVERAGE*), and are audited by a Big 4 firm (*BIG4*). The result on leverage is consistent with the findings in Whittred (1987). Interestingly, firms consolidate fewer subsidiaries when they make a loss (*LOSS*) and have a higher growth opportunities (*MARKET TO BOOK*). Firms which remunerate their CEO through bonus (*CEO BONUS*) compensation also disclose significantly more subsidiaries.

INSERT TABLE 3 HERE

To test the robustness of our results we redefine the dependent variable in Model (1) as the year-on-year change in the number of subsidiaries (change in *SUBCOUNT*) and re-estimate Model (1) using an OLS regression where the dependent and continuous control variables are defined as the change in the current year value from the prior year. The results from estimating the changes model approach is presented in Columns (2) of Table 3. Consistent with the results from the original model, we find a significant negative coefficient on *POST* in Column (2) of Table 3, consistent with a decline in the number of reported subsidiaries after IFRS 10 adoption.

As a final set of tests of H₁, we estimate a series of Probit regression models. The dependent variable in these tests is defined alternatively as an indicator variable denoting: an upward change

in subsidiaries (*UPWARD CHANGE*); a downward change in subsidiaries (*DOWNWARD CHANGE*) or no change in subsidiaries (*NO CHANGE*). These results are presented respectively in Columns (3) through (5) of Table 3. The findings in Column (3) and Column (5) report an insignificant coefficient on *POST*. In contrast, in Column (4), we find a significant positive coefficient on *POST*, which is consistent with a decline in the number of subsidiaries after IFRS 10 adoption. Interestingly, the use of Big 4 (*BIG4*) auditors is significantly associated with both an increase and decrease in subsidiaries, and less likely to be associated with no change in subsidiaries.

In summary, the results provided in Table 3 show a decrease in the number of reported subsidiaries after the implementation of IFRS 10. There are a number of possible explanations for these results. Firstly, as suggested by the IASB (IASB, 2011) the new definition of control along with the detailed implementation guidance provided in IFRS 10 were expected to result in firms reassessing whether they actually controlled their investees. Our findings suggest that the modification of firms' interpretations of the control definition resulted on average in some subsidiaries no longer meeting the definition of being a controlled entity. Alternatively, it is possible that firms responded to IFRS 10 by either discontinuing the operations of a number of subsidiaries or combining the business activities of multiple subsidiaries into fewer entities.

Test of H₂

The next model tests H₂ by examining whether IFRS 10 impacted the likelihood that firms disclose subsidiaries which are consolidated with a non-majority ownership level. The dependent variable is an indicator variable coded as one if the firm reports subsidiaries with an ownership interest at or below 50 percent (*SUBSNONMAJORITY*). The independent variables are consistent with those in Model (1). H₂ predicts a significant coefficient on *POST* but does not make a directional prediction due to conflicting explanations on the likely impact of IFRS 10 adoption. The full Probit regression model is (time and firm subscripts omitted for convenience):

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

The results from estimating Model (2) are reported in Table 4. The finding on the key test variable indicates that the likelihood of consolidation of non-majority owned subsidiaries decreases after IFRS 10 is adopted. This result is inconsistent with the expectations of the IASB (2011) and suggests that the application of the new control definition and interpretation guidance led to firms being less likely to consolidate non-majority owned subsidiaries. Combined with the findings reported in Table 3, it is possible that firms discontinued their investment in subsidiaries which were not majority owned after the adoption of IFRS 10.

INSERT TABLE 4 HERE

The findings on the control variables indicate that larger firms and those audited by non-Big 4 auditors (*BIG4*) are significantly more likely to disclose subsidiaries which are not majority owned. Additionally, firms with a lower current ratio (*CURRENT RATIO*) and lower CEO ownership (*CEO OWNERSHIP*) and the absence of a CEO bonus (*CEO BONUS*) plan are more likely to consolidate non-majority owned subsidiaries.

Test of H₃

H₃ states that the likelihood of the consolidation of loss-making subsidiaries changes after the adoption of IFRS 10, but does not state a directional prediction. Due to a lack of disclosure of the profit or loss contributed by each subsidiary within a group, we are unable to directly test the hypothesis. To provide indirect evidence on H₃, we estimate OLS regression Model (3). The dependant variable in this analysis is the return on assets (*ROA*) reported by a firm. The independent variables are consistent with those in Models (2) and (3), other than the inclusion of two indicator variables denoting whether a firm reported more (*UPWARD CHANGE*) or less subsidiaries (*DOWNWARD CHANGE*) in a particular financial year. These two indicator variables are also interacted with *POST* to indicate whether the profitability of a firm arising from the change in subsidiaries differs after the adoption of IFRS 10. The model is summarized as follows (time and firm subscripts omitted for convenience):

$$ROA = \alpha_i + \beta_1 POST + \beta_2 DOWNWARD CHANGE + \beta_3 DOWNWARD CHANGE * POST + \beta_4 UPWARD CHANGE + \beta_5 UPWARD CHANGE * POST + \beta_6 LEVERAGE + \beta_7 BIG4 + \beta_8 CEO$$

$$OWNERSHIP + \beta_9 LOSS + \beta_{10} TOTAL ASSETS + \beta_{11} BOARD SIZE + \beta_{12} CEO BONUS + \beta_{13} CURRENT RATIO + \beta_{14} MARKET TO BOOK + \beta_{15} MERGER + \beta_{16} DEC YEAR END + INDUSTRY + \varepsilon_i \quad (3)$$

The results from estimating regression Model (3) are presented in Table 5. The findings indicate that a downward change in subsidiaries is associated with a significant decrease in firm profitability, whilst an increase in subsidiaries is not significantly associated with ROA. Intriguingly, whilst the interaction variable between *UPWARD CHANGE*POST* is insignificantly different from zero, we find a positive and statistically significant coefficient on *DOWNWARD CHANGE*POST*. This result indicates that firms which reported fewer subsidiaries after the adoption of IFRS 10 achieved a smaller decrease in profitability. This result suggests that the subsidiaries which are no longer consolidated were either less profitable or possibly making a loss. Our results, however, need to be interpreted cautiously as we are unable, due to a lack of disclosure, to directly examine profitability at the individual subsidiary level.

INSERT TABLE 5 HERE

The findings on the control variables in Table 5 indicate that larger firms and those with a higher market-to-book ratio (*MARKET TO BOOK*) have significantly greater profitability. Similar to Yermack (1996), we also find that firms with a smaller board size (*BOARD SIZE*) are more profitable.

Test of H4

Based on the findings in prior research, H4 predicts that the effect of the adoption of IFRS 10 is associated with firm leverage (*LEVERAGE*) and performance (*LOSS*), CEO ownership (*CEO OWNERSHIP*), and auditor size (*BIG4*). To test H4 we modify Model (1) by creating interaction variables between *POST* and each of the abovementioned variables. The complete model is as follows (time and firm subscripts omitted for convenience):

$$SUBCOUNT = \alpha_1 + \beta_L POST + \beta_2 LEVERAGE + \beta_3 LEVERAGE*POST + \beta_4 BIG4 + \beta_5 BIG4*POST + \beta_6 CEO OWNERSHIP + \beta_7 CEO OWNERSHIP*POST + \beta_8 LOSS +$$

$$\beta_9 \text{LOSS*POST} + \beta_{10} \text{TOTAL ASSETS} + \beta_{11} \text{BOARD SIZE} + \beta_{12} \text{CEO BONUS} + \beta_{13} \text{CURRENT RATIO} + \beta_{14} \text{MARKET TO BOOK} + \beta_{15} \text{MERGER} + \beta_{16} \text{DEC YEAR END} + \text{INDUSTRY} + \varepsilon_t \quad (4)$$

The findings from estimating regression Model (4) are presented in Column (1) of Table 6.

INSERT TABLE 6 HERE

The results in Table 6 indicate that after controlling for the interactive effect of incentives to consolidate subsidiaries, the *POST* variable becomes positive and significant in Column (1). This finding lends credence to the view that firms responded in differing manners to the new standard based on their countervailing incentives. Consistent with Whittred (1987), we document that firms with higher leverage (*LEVERAGE*) report more subsidiaries. Moreover, the significant negative coefficient on *LEVERAGE*POST* indicates that more highly levered firms were less likely to report an increase in subsidiaries after IFRS 10 adoption. This finding is consistent with greater leverage being associated with more ‘appropriate’ consolidation (Whittred 1987). In contrast to Whittred (1987), we find greater CEO ownership (*CEO OWNERSHIP*) results in more subsidiaries and a negative and significant coefficient on the interaction variable between *CEO OWNERSHIP* and *POST*. This result is consistent with firms with greater agency problems (*i.e.*, lower CEO ownership) being more impacted by the adoption of IFRS 10, resulting in the consolidation of additional subsidiaries.

Similar to the results in Table 3, we find that clients of Big 4 audit firms (*BIG4*) consolidate a significantly greater number of subsidiaries. The negative coefficient on the interaction term *BIG4*POST* indicates that clients of Big 4 audit firms were less likely to disclose more subsidiaries post-IFRS 10. Mirroring our finding on leverage, this result is suggestive that clients of Big 4 auditors were already accurately reporting subsidiaries prior to the introduction of the new standard. The result on the interaction term *LOSS*POST* is insignificant, thereby suggesting that IFRS 10 adoption has no differential impact on the number of subsidiaries disclosed by loss making companies.

As an additional test of H4, we conduct a similar analysis using Model (2) testing the likelihood that firms consolidate non-majority owned subsidiaries (*SUBSNONMAJORITY*) after the adoption

of IFRS 10. Specifically, we modify Model (2) to include the same interaction variables between *POST* and respectively *LEVERAGE*, *CEO OWNERSHIP*, *BIG4* and *LOSS*. The results from estimating this revised model are shown in Column (2) of Table 6. It is noteworthy that after controlling for factors influencing the likelihood of accurate consolidation, we find an insignificant coefficient on *POST*. The findings on the interaction terms indicate that the adoption of IFRS10 did not significantly impact the likelihood that clients of Big 4 auditors consolidate subsidiaries with non-majority ownership. In contrast, we document that after the adoption of IFRS 10, both loss making firms and firms with higher leverage are less likely to consolidate subsidiaries with non-majority ownership. These findings are notable as they are consistent with prior research and potentially suggestive of firms avoiding the consolidation of subsidiaries which would further increase indebtedness (Francis 1986; Mohr 1988; Mian and Smith 1990b) or a reported loss. Alternatively, the results are potentially consistent with loss making and highly levered firms restructuring the ownership in these investees post-IFRS 10 to avoid the new consolidation requirements. Finally, consistent with the results in Table 4, we document that firms with lower CEO ownership are more likely to consolidate non-majority owned subsidiaries, but this association significantly weakened after the adoption of IFRS 10.

Test of H₅

Finally, H₅ examines if the adoption of IFRS 10 is associated with improved usefulness of financial statements. We test H₅ by investigating whether there is an increase in the value relevance of final statements after the adoption of IFRS 10. The model adopted is based on the early work of Edwards and Bell (1961) and Ohlson (1995) and is consistent with prior research examining the value relevance of consolidated financial statements (Abad et al. 2000; Ahmed, Kilic, and Lobo 2006; Harris, Lang, and Moller 1994; Hsu et al. 2012). The regression model tests the association between market value per share (*MVE*) and the book value of equity (*BVE*) and earnings before interest and tax (*EBIT*) both scaled by the number of shares. Consistent with prior research (Hayn 1995, Burgstahler and Dichev 1997), an indicator variable is included in the model denoting firms which make a loss (*LOSS*). To test whether the adoption of IFRS 10 improved the value relevance of net income and the book value of equity, both *BVE* and *EBIT* are interacted with the indicator

variable denoting financial statements after the adoption of IFRS 10 (*POST*). The full model is summarized as follows (time and firm subscripts omitted for convenience):

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

The results from estimating Model (5) are presented in Table 7. In Column (1) of Table 7, we estimate the base case value relevance regression excluding the *POST* variable and interaction terms. Consistent with prior research, we find that both net income per share and book value per share are positive and significant. In Column (2) of Table 7, we show the findings from estimating the complete Model (5). These results provide insignificant coefficients on both interaction terms inconsistent with greater financial statement value relevance after the adoption of IFRS 10.

INSERT TABLE 7 HERE

In Table 7, to provide some additional evidence on whether IFRS 10 improved the value relevance of financial statements, we re-estimate the regression model separately for firms which report an annual increase (Column 3), decrease (Column 4) or no change (Column 5) in subsidiaries. The results (Column 3) indicate that there is no change in the value relevance of net income or equity for firms which report more subsidiaries after IFRS 10 adoption. In contrast, (Column 4) indicates that for firms which reported less subsidiaries the value relevance of net equity decreases in the time period after the adoption of IFRS 10. This finding suggests that the non-consolidation of certain subsidiaries following the implementation of the new control definition reduced the usefulness of net equity information to shareholders. Interestingly, the results in the last column of Table 7 show an improvement in the value relevance of equity for firms with no change in reported subsidiaries after the adoption of IFRS 10. Thus, we find weak evidence supporting the rejection of H₄, as the results document that IFRS 10 adoption is associated with changes in value relevance.

Additional Testing

We conduct a number of untabulated analyses to assess the robustness of our findings. First, we control for CEO turnover with a binary variable for the year in which a new CEO commences and find that the results do not qualitatively or statistically change. Second, we jointly consider the impact of upward and downward changes in subsidiaries in the post- IFRS 10 period within the same model for our value relevance analysis and find only statistical significance in the downward change interaction variables, thereby consistent with the primary analyses reported. Third, we manually inspect company disclosures regarding IFRS 10, and find two companies within our sample voluntarily disclose a material impact of IFRS 10 on their subsidiaries. Given the small sample, we were unable to conduct any meaningful analysis. Fourth, we consider the immediate impact of IFRS 10 by restricting the sample used in our tests to the first year of implementation and the year immediately preceding the implementation year and re-run our primary analysis. We find similar, albeit weaker results, with firms consolidating fewer subsidiaries and being less profitable in the year of implementation. The CEO ownership variable continues to moderate results in both the subsidiaries level and non-majority analysis. Other analyses are statistically insignificant but remain largely directionally consistent. Fifth, as per our prior discussion, we exclude those firm-years where no subsidiaries were reported, and we find the results are qualitatively similar but statistically stronger. Sixth, we consider alternative measures of non-majority ownership, specifying the variable as either binary or the proportion of subsidiaries with less than 50 percent/40 percent or between 40 percent-50 percent ownership, and we find robust results using the binary but not continuous variable. Finally, given the moderating impact of leverage on the impact of IFRS 10, we augment our value relevance analysis to separately include assets and liabilities in lieu of the book value of equity and find the conclusions drawn from the analysis remain qualitatively similar.

V. CONCLUSION

The IASB introduced IFRS 10 in 2013 to reduce diversity in practice surrounding the application of the control definition applied in determining whether to consolidate an entity into the group financial statements. Prior to the effective date of the standard, the IASB expressed uncertainty as to whether the new standard would increase or decrease the number of subsidiaries consolidated by firms (IASB 2011). To date, however, there is a paucity of evidence highlighting the impact of

the adoption of IFRS 10 on firms' financial reporting. This lack of evidence is potentially limiting for the IASB in assessing the effectiveness of the standard, particularly now that the standard setter has announced a post implementation review of the effects of IFRS 10. This study addresses the lack of evidence and contributes to the literature by examining the impact of IFRS 10 using data on Australian listed companies between 2012-2015.

Our results indicate that following the adoption of IFRS 10, firms consolidated fewer subsidiaries into their financial reports. There are two possible explanations for this finding. Firstly, it is possible that the updated definition of control in IFRS 10 resulted in a "*more appropriate*" consolidation of investees. The results in this study document a decreased likelihood that firms consolidate subsidiaries which are not majority owned after the adoption of IFRS 10. This is intriguing given the increased focus and guidance provided in IFRS 10 to the consolidation of subsidiaries which are controlled despite not being majority owned. Alternatively, it is possible that our findings are driven by firms either disposing subsidiaries or restructuring ownership levels after the implementation of IFRS 10. The analysis in our study supports this view, as we find that that the results are strongest for firms with financial reporting incentives.

We also assess whether IFRS 10 improved the usefulness of financial information for shareholders by testing whether the value relevance of financial statements increases post-IFRS 10 adoption. Whilst our results show no overall change in the value relevance of net income and equity, we document a decline in the value relevance of equity for firms' which report fewer subsidiaries after IFRS 10 adoption. These results are potentially concerning, as it is suggestive of less useful financial statements for firms which reduced the extent of consolidation after the implementation of IFRS 10.

This study is subject to a number of limitations. Firstly, due to the need for extensive hand collected data on subsidiaries, we restricted our sample to the top 500 listed firms in Australia by market capitalization. Although the majority of reported subsidiaries of ASX listed firms are likely to be focused in this sample, we may not be capturing an effect generalizable to smaller firms. Secondly, due to current disclosure requirements we are unable to collect information on the profitability of individual subsidiaries, thereby limiting our analysis of the propensity to consolidate loss-making

subsidiaries. Thirdly, we are unable to determine whether our results are indicative of firms implementing more appropriate consolidation accounting practices, or firms selling or restructuring their subsidiaries post-IFRS 10. Determining whether firms are selling or restructuring their subsidiaries require manually checking the disclosure notes in the annual reports, media announcements, and non-public disclosures made to the Australian Securities Exchange and Australian Securities and Investments Commission. We leave it to future research to disentangle between these two competing interpretations of the findings provided in this study. Finally, the introduction of IFRS 10 was accompanied by the simultaneous application of IFRS 12 *Disclosure of Interests in other Entities*. The financial statement disclosures we rely on to identify the effect of IFRS 10 were also impacted by the adoption of IFRS 12 and it is not possible to disentangle the effects of the simultaneous adoption of both standards.¹³ Possible future research can examine the effect of the adoption of IFRS 12 on the detailed financial statement disclosures provided by firms and whether the results we document are upheld in the smaller firm segment.

¹³ As IFRS 12 focuses on disclosure and does not have a direct impact on the number of consolidated subsidiaries relative to IFRS 10, its effects may be more prevalent on the value relevance tests.

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Figure A

The average number of subsidiaries reported by firms from 2012 to 2015.

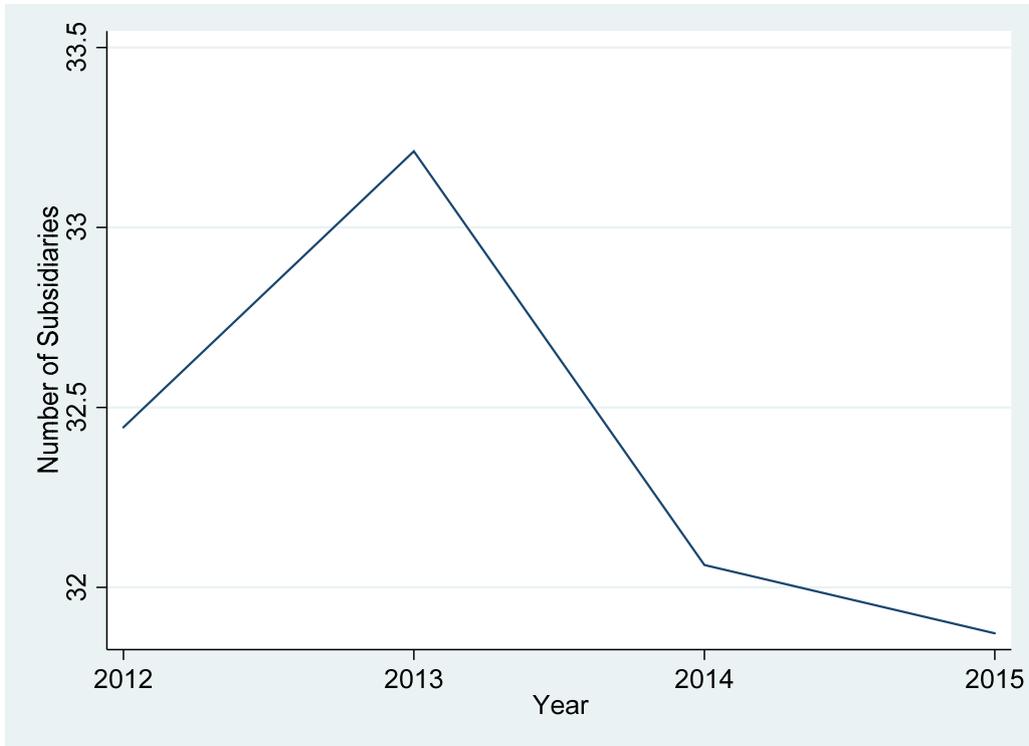


Table 1
Sample derivation

<i>Sample</i>	<i>N</i>
ASX Top 500 publicly listed firms from 2012 to 2015	2,000
Less: Firms with missing financial information	(760)
Sample with sufficient financial information	1,240
Less: Firms with missing information on subsidiaries	(104)
Less: Firms with missing CEO and director information	(12)
Sample with sufficient subsidiary and governance data	1,124
Less: Firms using US GAAP	(24)
Less: Firms early adopting IFRS 10	(8)
Full Sample to test H₁-H₅	1,092

Table 2
Descriptive statistics

Panel A: Pre- and post-IFRS 10

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

This table reports univariate statistics on a sample of 1,092 observations. The sample is split into pre-IFRS 10 ($N=507$), and post-IFRS 10 ($N= 585$). A statistical test of difference in means pre- and post IFRS 10 are presented in column (4). A t -test is used for continuous variables and a χ^2 -test for binary variables. All continuous variables are winsorized at the 1% and 99% levels. All variables are defined in Appendix 1.

Panel B: Change in subsidiaries (Upward, Downward and No Change)

<i>Variables</i>	(1)			(2)			(3)		
	<i>UPWARD CHANGE Sample</i>			<i>DOWNWARD CHANGE Sample</i>			<i>NO CHANGE Sample</i>		
	<i>N</i>	<i>mean</i>	<i>median</i>	<i>N</i>	<i>mean</i>	<i>median</i>	<i>N</i>	<i>mean</i>	<i>median</i>
<i>SUBCOUNT</i>	455	43.521	27.000	231	45.143	27.000	406	12.680	6.000
<i>SUBSNONMAJORITY</i>	455	0.253	0.000	231	0.238	0.000	406	0.079	0.000
<i>ROA</i>	455	0.065	0.085	231	0.037	0.074	406	0.002	0.068
<i>LEVERAGE</i>	455	2.036	1.796	231	2.127	1.814	406	1.778	1.551
<i>BIG4</i>	455	0.851	1.000	231	0.887	1.000	406	0.751	1.000
<i>CEO OWNERSHIP</i>	455	0.030	0.002	231	0.028	0.001	406	0.044	0.002
<i>LOSS</i>	455	0.165	0.000	231	0.182	0.000	406	0.323	0.000
<i>TOTAL ASSETS</i>	455	20.754	20.610	231	20.873	20.768	406	19.644	19.605
<i>BOARD SIZE</i>	455	2.006	1.946	231	2.049	2.079	406	1.870	1.792
<i>CEO BONUS</i>	455	0.659	1.000	231	0.671	1.000	406	0.571	1.000
<i>CURRENT RATIO</i>	455	2.374	1.512	231	2.569	1.419	406	3.458	2.009
<i>MARKET TO BOOK</i>	455	2.121	1.410	231	1.946	1.240	406	2.363	1.500
<i>MERGER</i>	455	0.013	0.000	231	0.017	0.000	406	0.007	0.000
<i>DEC YEAR END</i>	455	0.116	0.000	231	0.147	0.000	406	0.177	0.000
<i>MVE</i>	455	6.841	3.000	231	6.277	2.100	406	4.224	1.348
<i>BVE</i>	455	3.219	1.695	231	3.242	1.462	406	1.831	0.952
<i>EBIT</i>	455	0.550	0.306	231	0.557	0.261	406	0.273	0.103

This panel reports univariate statistics on a sample of 1,092 observations split into firms that report: an increase in the number of subsidiaries ($N=455$), a decrease in the number of reported subsidiaries ($N=231$) and no change in the number of subsidiaries ($N=406$). All variables are defined in Appendix 1.

Panel C: Change in subsidiaries (Upward, Downward and No Change) by pre- and post-IFRS 10

Variables	UPWARD CHANGE Sample						DOWNWARD CHANGE Sample						NO CHANGE Sample					
	(1)			(2)			(3)			(4)			(5)			(6)		
	Pre-IFRS10			Post-IFRS10			Pre-IFRS10			Post-IFRS10			Pre-IFRS10			Post-IFRS10		
	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
ROA	228	0.072	0.087	227	0.058	0.081	101	0.068	0.080	130	0.014	0.065	178	0.053	0.091	228	-0.039	0.056
MVE	228	6.141	2.630	227	7.543	3.230	101	6.351	2.010	130	6.219	2.279	178	3.515	1.693	228	4.778	1.082
LEVERAGE	228	2.021	1.745	227	2.052	1.820	101	2.041	1.812	130	2.194	1.846	178	1.702	1.527	228	1.836	1.559
BIG4	228	0.842	1.000	227	0.859	1.000	101	0.881	1.000	130	0.892	1.000	178	0.725	1.000	228	0.772	1.000
CEO OWNERSHIP	228	0.034	0.002	227	0.026	0.001	101	0.035	0.001	130	0.023	0.001	178	0.047	0.005	228	0.042	0.001
LOSS	228	0.167	0.000	227	0.163	0.000	101	0.089	0.000	130	0.254	0.000	178	0.253	0.000	228	0.377	0.000
TOTAL ASSETS	228	20.726	20.633	227	20.781	20.594	101	20.881	20.683	130	20.867	20.815	178	19.586	19.446	228	19.690	19.741
BOARD SIZE	228	1.994	1.946	227	2.019	2.079	101	2.053	2.079	130	2.046	2.013	178	1.862	1.792	228	1.876	1.792
CEO BONUS	228	0.640	1.000	227	0.678	1.000	101	0.723	1.000	130	0.631	1.000	178	0.618	1.000	228	0.535	1.000
CURRENT RATIO	228	2.698	1.559	227	2.049	1.486	101	2.533	1.419	130	2.596	1.416	178	3.560	2.124	228	3.379	1.952
MARKET TO BOOK	228	2.030	1.360	227	2.211	1.470	101	1.868	1.440	130	2.007	1.205	178	2.804	1.795	228	2.019	1.290
MERGER	228	0.018	0.000	227	0.009	0.000	101	0.020	0.000	130	0.015	0.000	178	0.017	0.000	228	0.000	0.000
DEC YEAR END	228	0.057	0.000	227	0.176	0.000	101	0.099	0.000	130	0.185	0.000	178	0.090	0.000	228	0.246	0.000
BVE	228	2.916	1.668	227	3.523	1.795	101	3.551	1.612	130	3.002	1.440	178	1.558	1.013	228	2.043	0.908
EBIT	228	0.533	0.281	227	0.567	0.345	101	0.657	0.286	130	0.479	0.253	178	0.278	0.162	228	0.270	0.049

This table reports univariate statistics on a sample of 1,092 observations split into firms that report: an increase in the number of subsidiaries ($N=455$), a decrease in the number of reported subsidiaries ($N=231$) and no change in the number of subsidiaries ($N=406$), partition pre- and post- the adoption of IFRS 10. All variables are defined in Appendix 1.

Table 3
The adoption of IFRS 10 and the number of subsidiaries (H₁)

	(1)	(2)	(3)	(4)	(5)
	<i>Full Sample</i>	<i>Change model Subsample</i>	<i>Change model Subsample</i>	<i>Change model Subsample</i>	<i>Change model Subsample</i>
<i>Dependent Variable:</i>	<i>SUBCOUNT</i>	<i>Change in SUBCOUNT</i>	<i>UPWARD CHANGE</i>	<i>DOWNWARD CHANGE</i>	<i>NO CHANGE</i>
<i>POST</i>	-0.032* (-1.652)	-1.190* (-2.647)	-0.094 (-1.191)	0.243*** (4.391)	-0.075 (-1.263)
<i>LEVERAGE</i>	0.080*** (4.615)	-0.337 (-0.710)	-0.118 (-1.111)	0.072 (0.830)	0.088 (1.411)
<i>BIG4</i>	0.426*** (8.744)	-0.663 (-1.050)	0.263*** (6.350)	0.288** (2.124)	-0.414*** (-4.051)
<i>CEO OWNERSHIP</i>	0.181 (0.832)	8.999 (0.613)	-0.715 (-0.295)	8.041*** (4.354)	-4.116** (-2.314)
<i>LOSS</i>	-0.221*** (-2.946)	0.126 (0.195)	-0.031 (-0.163)	-0.261 (-1.079)	0.104 (0.571)
<i>TOTAL ASSETS</i>	0.362*** (47.676)	0.139 (0.727)	0.102*** (3.814)	0.000 (0.025)	-0.127*** (-5.929)
<i>BOARD SIZE</i>	0.030 (0.314)	-1.028 (-0.844)	0.144 (0.888)	0.456*** (2.982)	-0.466*** (-2.719)
<i>CEO BONUS</i>	0.130*** (6.411)	-0.736 (-1.229)	0.033 (0.292)	0.120* (1.853)	-0.115 (-1.425)
<i>CURRENT RATIO</i>	-0.032*** (-2.801)	-0.087** (-5.465)	-0.026*** (-3.830)	0.056*** (2.624)	-0.000 (-0.018)
<i>MARKET TO BOOK</i>	-0.117*** (-8.855)	-0.338* (-2.592)	-0.048 (-1.333)	0.027 (0.531)	0.044 (0.838)
<i>MERGER</i>	-0.248 (-1.628)	-4.134 (-0.659)	-0.217 (-0.760)	0.263 (0.479)	0.082 (0.365)
<i>DEC YEAR END</i>	-0.045 (-0.966)	0.200 (0.243)	-0.103 (-1.610)	0.083*** (3.930)	0.034 (0.482)
<i>Constant</i>	-4.786*** (-11.640)	2.711 (0.633)	-2.195*** (-2.993)	-2.386*** (-7.675)	3.105*** (4.640)
<i>N</i>	1,092	1,092	1,092	1,092	1,092
<i>Industry controls</i>	Yes	Yes	Yes	Yes	Yes
<i>Pseudo/Adjusted R2</i>	0.417	0.033	0.046	0.082	0.096

This table reports the impact of IFRS 10 on the number of subsidiaries. Column (1) reports the results of a Poisson regression testing whether the number of subsidiaries increased after the adoption of IFRS 10. Column (2) reports OLS regression results of a change in the number of subsidiaries and the adoption of IFRS 10. Column (3) reports Probit regression results of an upward change in the number of subsidiaries and the adoption of IFRS 10. Column (4) reports Probit regression results of a downward change in the number of subsidiaries and the adoption of IFRS 10. Column (5) reports Probit regression results of a no change in the number of subsidiaries and the adoption of IFRS 10. All continuous variables are winsorized at the 1% and 99% levels. Standard errors are clustered by year. The *, ** and *** represent statistical significance at the ten, five, and one percent levels respectively. All continuous control variables in Columns (2) to (5) are specified as a change (*i.e.*, current year value minus prior year value). Industry controls are based on two-digit GICS codes and controls for industry fixed effects. All variables are defined in Appendix 1.

Table 4
The adoption of IFRS 10 and the consolidation of subsidiaries
with ownership at or below 50% (H₂)

<i>Dependent Variable:</i>	<i>(1)</i> <i>Full Sample</i> <i>SUBSNONMAJORITY</i>
<i>POST</i>	-0.120*** (-3.120)
<i>LEVERAGE</i>	0.003 (0.137)
<i>BIG4</i>	-0.138*** (-4.108)
<i>CEO OWNERSHIP</i>	-1.342*** (-5.058)
<i>LOSS</i>	0.105 (0.808)
<i>TOTAL ASSETS</i>	0.279*** (7.889)
<i>BOARD SIZE</i>	-0.070 (-0.845)
<i>CEO BONUS</i>	-0.178*** (-3.457)
<i>CURRENT RATIO</i>	-0.030** (-2.149)
<i>MARKET TO BOOK</i>	-0.051*** (-3.659)
<i>MERGER</i>	-0.412 (-0.707)
<i>DEC YEAR END</i>	0.229 (1.498)
<i>Constant</i>	-6.622*** (-10.299)
<i>N</i>	1,092
<i>Industry controls</i>	Yes
<i>Pseudo R2</i>	0.119

This table presents the results of estimating a Probit regression testing the impact of IFRS 10 on the likelihood of consolidation of subsidiaries with ownership levels at or below 50%. All continuous variables are winsorized at the 1% and 99% levels. Standard errors are clustered by year. The *, ** and *** represent statistical significance at the ten, five, and one percent levels respectively. Industry controls are based on two-digit GICS codes and controls for industry fixed effects. All variables are defined in Appendix 1.

Table 5
The impact of the adoption of IFRS 10 on consolidated profits (H₃)

<i>Dependent Variable:</i>	<i>(1)</i> <i>Full Sample</i> <i>ROA</i>
<i>POST</i>	-0.041** (-2.479)
<i>DOWNWARD CHANGE</i>	-0.043*** (-2.794)
<i>DOWNWARD CHANGE*POST</i>	0.040* (1.718)
<i>UPWARD CHANGE</i>	-0.010 (-0.761)
<i>UPWARD CHANGE *POST</i>	0.021 (1.038)
<i>LEVERAGE</i>	-0.011 (-1.248)
<i>BIG4</i>	0.001 (0.032)
<i>CEO OWNERSHIP</i>	0.042 (0.488)
<i>LOSS</i>	-0.292*** (-12.777)
<i>TOTAL ASSETS</i>	0.023*** (3.211)
<i>BOARD SIZE</i>	-0.038* (-1.779)
<i>CEO BONUS</i>	0.008 (0.742)
<i>CURRENT RATIO</i>	0.002 (0.933)
<i>MARKET TO BOOK</i>	0.016*** (4.031)
<i>MERGER</i>	0.007 (0.330)
<i>Constant</i>	-0.302** (-2.204)
<i>N</i>	1,092
<i>Industry controls</i>	Yes
<i>Adjusted R2</i>	0.505

This table presents the results of estimating an OLS regression testing the impact of IFRS 10 on the consolidation of loss making subsidiaries. All continuous variables are winsorized at the 1% and 99% levels. Standard errors are clustered by year. The *, ** and *** represent statistical significance at the ten, five, and one percent levels respectively. Industry controls are based on two-digit GICS codes and controls for industry fixed effects. All variables are defined in Appendix 1.

Table 6
Incentives for non-consolidation and the impacts from the adoption of IFRS 10 (H₄)

<i>Dependent:</i>	(1) <i>Full Sample</i> <i>SUBCOUNT</i>	(2) <i>Full Sample</i> <i>SUBSNONMAJORITY</i>
<i>POST</i>	0.214*** (3.740)	0.149 (0.859)
<i>LEVERAGE</i>	0.105*** (9.790)	0.117 (1.609)
<i>LEVERAGE*POST</i>	-0.049* (-1.947)	-0.182* (-1.957)
<i>BIG4</i>	0.504*** (14.426)	-0.213*** (-8.878)
<i>BIG4*POST</i>	-0.140** (-2.250)	0.136 (1.491)
<i>CEO OWNERSHIP</i>	0.421*** (7.060)	-2.519*** (-3.676)
<i>CEO OWNERSHIP*POST</i>	-0.505*** (-7.037)	1.945** (2.526)
<i>LOSS</i>	-0.247** (-2.340)	0.267*** (5.238)
<i>LOSS*POST</i>	0.048 (0.650)	-0.276*** (-5.077)
<i>TOTAL ASSETS</i>	0.361*** (43.320)	0.273*** (7.138)
<i>BOARD SIZE</i>	0.033 (0.357)	-0.054 (-0.546)
<i>CEO BONUS</i>	0.125*** (6.140)	-0.200*** (-4.071)
<i>CURRENT RATIO</i>	-0.033*** (-2.803)	-0.032** (-2.032)
<i>MARKET TO BOOK</i>	-0.115*** (-8.602)	-0.054*** (-4.583)
<i>MERGER</i>	-0.196 (-1.316)	-0.377 (-0.664)
<i>DEC YEAR END</i>	-0.044 (-0.991)	0.232 (1.405)
<i>Constant</i>	-4.901*** (-14.616)	-6.677*** (-11.946)
<i>N</i>	1,092	1,092
<i>Industry controls</i>	Yes	Yes
<i>Pseudo R2</i>	0.478	0.125

This table reports whether the impact of IFRS 10 on the number of subsidiaries and the likelihood of consolidation of non-majority owned subsidiaries is impacted by variables which are predicted to change the likelihood of accurate consolidation. Column (1) reports the results of a Poisson regression testing whether the number of subsidiaries increased after the adoption of IFRS 10. Column (2) presents the results of estimating a Probit regression testing the impact of IFRS 10 on the likelihood of consolidation of subsidiaries with ownership levels at or below 50%. All continuous variables are winsorized at the 1% and 99% levels. Standard errors are clustered by year. The *, ** and *** represent statistical significance at the ten, five, and one percent levels respectively. Industry controls are based on two-digit GICS codes and controls for industry fixed effects. All variables are defined in Appendix 1.

Table 7
The adoption of IFRS 10 and value relevance (H₅)

	(1)	(2)	(3)	(4)	(5)
	<i>Full sample</i>	<i>Full sample</i>	<i>UPWARD CHANGE Sample</i>	<i>DOWNWARD CHANGE Sample</i>	<i>NO CHANGE Sample</i>
<i>Dependent:</i>	<i>MVE</i>	<i>MVE</i>	<i>MVE</i>	<i>MVE</i>	<i>MVE</i>
<i>BVE</i>	0.916*** (7.915)	0.384 (2.017)	0.267 (0.912)	0.610** (3.645)	0.643*** (6.851)
<i>EBIT</i>	7.827*** (14.907)	9.544*** (7.633)	10.523*** (9.503)	7.107** (3.513)	8.017*** (6.743)
<i>POST</i>	-	-0.197 (-1.825)	0.066 (0.126)	0.860*** (6.964)	-1.141** (-4.525)
<i>BVE*POST</i>	-	0.776 (1.799)	0.822 (0.959)	-0.610* (-2.711)	1.273*** (9.560)
<i>EBIT*POST</i>	-	-2.320 (-0.940)	-3.578 (-0.920)	4.591 (1.947)	-2.163 (-0.976)
<i>LOSS</i>	2.294** (4.728)	2.308** (5.185)	2.181* (2.556)	2.090* (2.809)	2.154*** (10.051)
<i>Constant</i>	-1.529* (-2.814)	-1.421* (-2.826)	-1.953*** (-7.996)	-0.792 (-0.474)	-0.348 (-0.475)
<i>N</i>	1,092	1,092	455	231	406
<i>Industry controls</i>	Yes	Yes	Yes	Yes	Yes
<i>Adjusted R2</i>	0.783	0.794	0.824	0.882	0.792

This table reports the results of an OLS regression examining if the adoption of IFRS 10 increases the value relevance of financial statements. All continuous variables are winsorized at the 1% and 99% levels. Standard errors are clustered by year. The *, ** and *** represent statistical significance at the ten, five, and one percent levels respectively. Industry controls are based on two-digit GICS codes and controls for industry fixed effects. All variables are defined in Appendix 1.

Appendix 1: List of variables and definitions used in this study

Variable	Definition
<i>SUBCOUNT</i>	A count of the number of subsidiaries disclosed by a firm in their notes to the financial statements.
<i>SUBSNONMAJORITY</i>	An indicator variable equal to one if a firm consolidates any subsidiaries with an ownership level at or below 50%, zero otherwise.
<i>ROA</i>	A firm's return on assets calculated as profit after tax divided by total assets.
<i>MVE</i>	Market capitalisation at the balance date divided by the number of ordinary shares issued.
<i>DOWNWARD CHANGE</i>	An indicator variable equal to one if the number of subsidiaries reported by a firm decreased from the prior year, zero otherwise.
<i>UPWARD CHANGE</i>	An indicator variable equal to one if the number of subsidiaries reported by a firm increases from the prior year, zero otherwise.
<i>NO CHANGE</i>	An indicator variable equal to one if the number of subsidiaries reported by a firm does not change from the prior year, zero otherwise.
<i>POST</i>	An indicator variable denoting financial years after the implementation of IFRS 10, zero otherwise.
<i>LEVERAGE</i>	A firm's leverage using the ratio of total assets to total equity
<i>BIG4</i>	An indicator variable equal to one if a firm is audited by a Big 4 auditor, zero otherwise.
<i>CEO OWNERSHIP</i>	The percentage of share ownership of the CEO.
<i>LOSS</i>	An indicator variable equal to one if a firm reports a loss as their profit after tax, zero otherwise.
<i>TOTAL ASSETS</i>	The natural logarithm of total assets.
<i>CURRENT RATIO</i>	A firm's ratio of current assets to current liabilities.
<i>MARKET TO BOOK</i>	A firm's market value of equity of a firm at the balance date divided by the book value of equity.
<i>BOARD SIZE</i>	The natural logarithm of the total number of directors appointed to a firm's board.
<i>CEO BONUS</i>	An indicator variable equal to one if a firm's CEO is paid a cash bonus based on accounting profit.
<i>MERGER</i>	An indicator variable equal to one if a firm made a successful acquisition during the financial year, zero otherwise.
<i>DEC YEAR END</i>	An indicator variable equal to one if a firm's financial year ends on 31 December, zero otherwise.
<i>BVE</i>	The book value of equity divided by the number of ordinary shares issued.
<i>EBIT</i>	The net income before interest and tax divided by the number of ordinary shares issued.