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RESEARCH ARTICLE

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An evaluation of the impacts of the adoption of IFRS 15 *Revenue from Contracts with Customers*

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Abstract

This paper evaluates the impact of IFRS 15 *Revenue from Contracts with Customers* on the value relevance of financial reports for Australian listed firms. We find that for most firms the impacts of transition were immaterial, however some firms experienced a significant reduction in earnings and/or retained earnings and for these firms the value relevance of earnings was generally lower in the pre-adoption period compared to firms in which there was no material impact. Post adoption, there is little evidence that the standard improved the relevance of earnings generally.

KEYWORDS
IAS 15, Revenue, Value relevance

JEL CLASSIFICATION
M41, G32

1 | INTRODUCTION

The issuance of a revised accounting standard that addresses the recognition of revenue has been a major project for the International Accounting Standards Board (IASB). The new standard, IFRS 15 *Revenue from Contracts with Customers* (IFRS 15), was issued in 2014 becoming effective for financial years beginning on or after 1 January 2018, with the formation of a Joint Transition Resource Group with the Financial Accounting Standards Board (FASB) to support its implementation. The main reason behind the issuance of a new revenue standard was the broad revenue recognition concepts in existing standards (IAS 18 *Revenue* and IAS

11 *Construction Contracts*) which allowed different accounting treatments for economically similar transactions. For example, it is common practice to bundle goods and services in the telecommunications industry, however there was no guidance on whether and how revenue earned from the sale of goods and the provision of services should be separately accounted for. Hence, firms within the same industry made different accounting judgements that resulted in differences in the timing of revenue recognition. Limited prescribed disclosures did not identify the extent of differences, which exacerbated the problem and made it difficult to compare accounting information across firms.

In comparison to IAS 18, IFRS 15 provides new and more extensive guidance that potentially changes the allocation of sale price to different goods and services within a contract, and the timing of revenue recognition. IFRS 15 offers a single five-step model for revenue recognition for contracts. It aims to provide greater consistency and comparability across industry and business practices by establishing fundamental principles to be applied in reporting useful information about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer (IFRS 15, para 1). The extent of the impact of adopting IFRS 15 will depend on the specific customer contracts and how revenue has been reported by the entities based on existing standards. During the IASB consultation process, there was a particular focus on industries with long-term or packaged contracts, such as entities in the telecommunication and IT industries. Revenue recognition has been inconsistent in these industries and this is where the most significant changes were expected to take place during the transition to IFRS 15.

The objective of this paper is to provide insights into the impact of IFRS 15 on the financial reports of publicly listed firms. Specifically, we provide empirical evidence on a number of important considerations concerning the adoption of the new accounting standard. First, what impact did the more detailed requirements for the recognition of revenue have on earnings reported in the statement of profit or loss, and did the magnitude of impact dictate the method of adoption (i.e., retrospective or cumulative)?[1] Second, for firms where the impact of the new standard was the greatest, is there evidence of pre-IFRS 15 financial reports, and earnings in particular, being less relevant for investors? This is an important consideration as it provides insights into whether revenue recognition was problematic for these firms in the first place and if the changes included in IFRS 15 were necessary (i.e., a pre-test). Third, for firms where the impact of the new standard was greatest, is there an increase in the relevance of financial reports, and earnings in particular, with transition to the new standard (i.e., a pre- and post-test)? Fourth, after transition to the new standard, are there differences in the relevance of information in financial reports, and earnings in particular, for firms where the impact of the new standard was the greatest and those with little to no impact (i.e., a post-test)? These questions provide insights, particularly from a value relevance perspective, into the effectiveness of the changes in IFRS 15 in addressing limitations in IAS 18 *Revenue* and IAS 11 *Construction Contracts*.

This study is motivated by a number of factors. First, subsequent to the issuance of an accounting standard, the IASB is required to undertake a post-implementation review. The primary motivation for this study is to provide evidence relevant to this review which will aid in determining whether IFRS 15 is operating as intended and meeting its objectives. Second, while there has been considerable discussion of the impacts of the new standard by large accounting firms, generalisable empirical evidence is limited. For example, there has been some discussion of the implications of the new accounting standard for preparers (Davern et al., 2019) and issues associated with adoption (Napier & Stadler, 2020), but the impact on financial reports

[1]Two methods of adoption are permitted within Australia; the cumulative approach and the retrospective approach. The cumulative approach simply requires the impact of transition to the new standard to be reflected in retained earnings, with no information presented for comparative periods (and minimal disclosures if any). The retrospective approach requires the restatement of prior year's balances and detailed disclosures regarding impacts of the new standard.

generally, and in particular the relevance of earnings, has not been addressed. Third, there is little evidence on how firms transition to new accounting standards and factors relevant to the choices that may be available. In transitioning to IFRS 15 firms were required to choose between the 'retrospective' or 'cumulative' approaches. Evidence on the decisions made by firms when transitioning to IFRS 15 is relevant for accounting standard setters who may be concerned with the consequences of flexibility in transitioning to new accounting standards generally.

The sample in this study is drawn from the largest 300 firms listed on the Australian Stock Exchange (ASX), excluding firms where other standards materially dictate revenue recognition and measurement (e.g., IFRS 4 *Insurance contracts*, IFRS 9 *Financial Instruments*, IAS 40 *Investment Property* and IAS 41 *Agriculture*), foreign firms, loss-making firms, and firms with missing data. These exclusions resulted in a reduced sample of 94 firms, of which most transitioned using the cumulative approach which was simpler and merely involved restating the opening balance of retained earnings in the year of transition.[2] While this might seem problematic, it is worthwhile noting that the impact of transition to IFRS 15 on retained earnings for these firms was generally immaterial, however there were instances of firms with material impacts also adopting the cumulative approach which limited the usefulness of the information provided.[3]

Analyses of the impacts of transition to IFRS 15 revealed that for many firms (43) there was not a material impact of transition to IFRS 15, very few (five) experienced an increase in retained earnings, and the remainder (18) reported a reduction in retained earnings and/or earnings with the mean impact on retained earnings (earnings) being −10.00% (−1.91%). Analysis by industry shows that firms impacted by transition were not clustered in particular industries.[4] The incidence of firms where the impact of transition to IFRS 15 was immaterial is consistent with Napier and Stadler (2020) and suggests that tests of the impact of the standard generally may lack power. Prior to the adoption of IFRS 15 a difference is noticeable in the incremental explanatory power of earnings between firms that had no material impact of IFRS 15 and those that had a reduction in retained earnings or earnings. This difference persists in the post-transition period, albeit reduced, suggesting that IFRS 15 addressed some of the problems inherent in the prior revenue standards. However, caution is suggested based on the low incremental explanatory power of earnings for no impact firms, which might not be reliable and hence an inappropriate benchmark.

To provide additional insights into the impacts of transition to IFRS 15, attention was focused on the firm with the largest impact, InvoCare Ltd. First, like most firms, InvoCare adopted the 'cumulative approach' which resulted in limited disclosures and very little information to assist financial report users in understanding how the new standard impacted the firm, despite the fact that the impact was material. Second, the impacts of transition were pronounced as a consequence of InvoCare's business model and sales terms at the date of transition. However, these impacts were undermined by changes to the terms of sale for contracts written after transition (a real effect).

This study makes a number of important contributions. First, we provide insights into how firms transition to new accounting standards. Upon transition to IFRS 15, relatively few firms adopted the 'retrospective approach', which provides financial statement users with

[2]As opposed to the retrospective method which requires significantly more disclosures and comparative figures.

[3]This highlights variation in the determination of materiality that guides the presentation of financial reports (IAS 1 *Presentation of Financial Statements*, para 31).

[4]It is expected that industries where long-term contracts are often used are more likely subject to the impact of IFRS 15. However, our analysis of ASX top 300 firms does not reflect industry-specific patterns.

more complete disclosures and consistent comparative information. By allowing the 'cumulative approach', costs associated with implementing the new standard were likely mitigated for firms in which the impact was immaterial, thus supporting the dual approach offered by standard setters. However, there is evidence of firms with material impacts also adopting the cumulative approach. Therefore, it is suggested that standard setters consider limiting alternative transition methods with limited disclosures to firms where the impacts are immaterial.

Second, we provide evidence on the impacts of transition to IFRS 15. For most firms the impact of implementing IFRS 15 was immaterial. This is likely a consequence of the combination of firms' business models, application of previous revenue standards and the changes required by IFRS 15. The incidence of immaterial impacts raises the question of whether changes in accounting standards where the impacts are quite limited would be better addressed by amending existing standards rather than completely re-issuing them. More generally it suggests that regular reviews and updates of accounting standards may be less disruptive for preparers and users of financial reports than issuing a completely new standard (i.e., evolution as opposed to revolution).

Last, we provide evidence that the concerns of standard setters regarding former revenue recognition standards (IAS 18 and IAS 11) seem valid since the impacts of IFRS varied both within and across industries. Furthermore, the value relevance of earnings for firms impacted most by IFRS 15 was lower in the pre-adoption period than firms not impacted by the standard, suggesting that users of financial reports were able to identify firms in which revenue recognition differed from economic reality. However, evidence on whether the changes in IFRS 15 were effective is at best equivocal. Our case study shows that by simply changing its sales terms InvoCare Ltd was able to negate the impacts of IFRS 15 on revenue recognition.

The remainder of the paper is organised as follows. Section 2 examines the prior literature and develops hypotheses. Section 3 details the research design and section 4 describes the sample selection and data. The results are contained in section 5, and the conclusions are presented in section 6.

2 | BACKGROUND, LITERATURE REVIEW AND HYPOTHESES

2.1 | IFRS 15 *Revenue from Contracts with Customers*

The objective of IFRS 15 is to 'establish the principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer' (IFRS 15, para 1). The principles are aimed at bringing the revenue reporting practices of firms closer to economic reality and to achieve this, IFRS 15 introduces a five-step process for the recognition and measurement of revenues. This process involves identifying the contract with customers, identifying performance obligations, determining the transaction price, allocating the transaction price across performance obligations, and determining when performance obligations are satisfied. Compared to IAS 18, IFRS 15 is much more prescriptive providing extensive guidance with the aim of promoting greater consistency and comparability across various industries and entities, and there is specific mention of the customer obtaining legal title which in practice is likely to be highly deterministic of when revenue is recognised for the sale of goods.

In terms of which steps would have significant impacts, the identification of performance obligations and the requirement to allocate the transaction price across the different performance obligations, were expected to result in major changes for firms selling combinations (packages) of goods and services. For example, telecommunication firms often bundle a physical mobile phone with mobile service. Under IAS 18, the contract was often considered a single performance obligation and revenue was recognised monthly as payments were received. Now, under IFRS 15 the mobile phone is considered a separate performance obligation and the expected revenue from the sale of the phone is recognised immediately upon transfer to the customer. The mobile service is recognised monthly. Software companies face a similar but different impact with regards to recurring revenue contracts for cloud software. Rather than recognising revenue monthly, firms can bring forward revenue for software contracts to when the customer obtains control of the software licence. The changes introduced by IFRS 15 are highlighted in articles published by the big accounting firms which identify industries reliant on long-term contracts as those more likely to be affected. Even for industries where long-term contracts are not commonly used, more extensive disclosures of revenue contracts are required under IFRS 15.[5]

2.2 | Literature review and hypotheses

The role of regulation in financial reporting has been considered extensively in the literature with attention focused on fundamental issues such as whether market incentives can be relied upon to ensure disclosure of information or whether regulatory intervention is necessary (e.g., Benston et al., 2006; Cooper & Keim, 1983; Jeanjean & Stolowy, 2008; Tinker, 1984). Undoubtedly, this has impacted many aspects of financial reporting regulation, including the bodies responsible for setting accounting standards, the processes for setting accounting standards, and the form of accounting standards. The concern of this study is not with the general efficacy of financial reporting regulation, but rather with the more functional issue of evaluating the impact of an accounting standard change on the relevance of information in financial reports. This is important given that the objective of financial reporting identified in the *Conceptual Framework for Financial Reporting* (para 1.2) is the provision of information to users to support decision making.

The change in accounting standards that has received the greatest attention in the literature to date was the transition to IFRS which occurred in many countries in 2005 (e.g. Ashbaugh & Pincus, 2001; Carmona & Trombetta, 2008; De George et al., 2016; Horton et al., 2013; Soderstrom & Sun, 2007). Much of this attention was focused on Europe, providing evidence that adoption of IFRS improved accounting quality generally (Barth et al., 2008), and based on stock price reactions this was recognised by investors (Armstrong et al., 2010). Furthermore, there is evidence that the relevance of earnings and book values increased after adoption (Barth et al., 2014), and became more consistent with earnings and book value under United States GAAP (Barth et al., 2012). Contributing to these results were likely the magnitude of the changes, not only in terms of the number of accounting standards changing but also the breadth of their impacts on financial reports. Put simply, the impacts were material and pervasive.

The significance of the extent of differences between a former and new accounting standard is identifiable in studies examining the impact of IFRS adoption in Australia (Chalmers et al., 2011; Clarkson et al., 2011; Cotter et al., 2012; Jeanjean & Stolowy, 2008). While there is evidence that with transition to IFRS the relevance of earnings increased, this was not the case for the book value of equity (Chalmers et al., 2011). A number of factors likely impacted this result which are salient to the current study. First, in Australia there was a policy of harmonisation which limited the impacts of transition (Cotter et al., 2012). Second, the changes did not necessarily impact financial reports in a consistent manner. For example, there were significant changes in accounting practices for identifiable intangible assets and there is evidence that relevant information about these assets was excluded from financial reports after transition (Chalmers et al., 2008). Hence, the results of any evaluation of the effect of the accounting standard change will be conditioned by the materiality of the impact on financial reports, the breadth of firms impacted, and consistency in the impacts.

[5]See a Deloitte article: https://www2.deloitte.com/nl/nl/pages/audit/solutions/ifrs-15-how-a-new-accounting-standard-impacts-your-business.html.

Consequently, any evaluation of the impact of IFRS 15 on the relevance of financial reports should be focused on firms where the impacts were greatest rather than firms generally. Consideration should also be given separately to firms where the impacts of the new accounting standard differ (i.e., impact up/no impact/impact down). Fortunately, evaluation on this basis is consistent with the issues likely addressed in a post-implementation review. In this paper, we evaluate the impact of IFRS 15 adoption through a value relevance analysis. We focus our attention to the specific issues of revenue recognition and measurement, which is consistent with the general approach of prior studies that examine accounting standard changes (e.g. Chalmers et al., 2011; Clarkson et al., 2011; Hung, 2000). However, it is worth noting that standard setters and other stakeholders may have other interests in the post-implementation review, such as evaluating the standard's impact on presentations and disclosures, and other implementation issues (e.g. Cotter et al., 2012; Davern et al., 2019; Loyeung et al., 2016). While we focus on the relevance of earnings for valuation purposes, others may be interested in alternative characteristics of accounting information such as faithfulness, timeliness, and understandability. Future research may wish to investigate these issues which will further enrich our understanding of the impact of IFRS 15.

There is anecdotal evidence of deficiencies in the accounting standards which previously prescribed the accounting practices for revenue recognition, that is, IAS 18 *Revenue* and IAS 11 *Construction Contracts*. For example, the accounting practices for the recognition of revenues adopted by Slater and Gordon Ltd[6] were the focus of considerable attention, and to allay concerns with these practices it was negotiated with the regulator, the Australian Securities and Investments Commission (ASIC), that the firm would be an early adopter of IFRS 15.[7] Clearly, there existed the belief that revenue recognition differed significantly from the economic reality in some firms, which adversely impacted the relevance of financial reports, and earnings in particular, necessitating a change in accounting standards. Whether the market could identify firms in which revenue recognition differed significantly from economic reality, and whether the revised standard was appropriately targeted at these firms is an open empirical question. For example, it could be expected that for firms in which IFRS 15 resulted in material adjustments to earnings or retained earnings, an efficient market would have discounted the value relevance of pre-IFRS 15 earnings due to greater discrepancy between the underlying economic reality and the accounting representation. Therefore, we first compare the value relevance of earnings between firms in which the impacts of transitioning to IFRS 15 were material with those in which the impacts were immaterial. This is evaluated with the following hypothesis:

H1 *Prior to adopting IFRS 15, earnings were less relevant for firms in which the impacts of transitioning to IFRS 15 were material (i.e., pre-test).*

The expectation of the accounting standards setters is that IFRS 15 addresses concerns with revenue recognition and measurement for firms in which there is potential for the accounting to differ from economic reality. Therefore, it is expected that for firms in which the impacts of IFRS 15 are most pronounced, the relevance of financial reports, and earnings in particular, increases. ASIC had similar expectations and this is evident in its negotiation of the early adoption of IFRS 15 by Slater and Gordon Ltd. Following this rationale, the following hypothesis is tested:

[6]Slater and Gordon Ltd was an ASX listed firm that provided legal services, many of which were on a contingent fee basis. There was considerable uncertainty regarding the recognition and measurement of these revenues and widespread concern that revenues were overstated.

[7]ASIC Media Release 15-235MR

TABLE 1 Summary of hypotheses

	Pre-IFRS 15	Transition	Post-IFRS 15
Material impact	A	H_2	C
	H_1		H_3
Immaterial impact	B		D

An overview of hypotheses, identifying relevant sample firm years across which differences in the relevance of financial statement information, and in particular earnings, is evaluated.

H2 *After adoption of IFRS 15, there is an increase in the relevance of earnings for firms in which the impacts of transitioning to IFRS 15 were material (i.e., pre- to post-test).*

The above hypothesis evaluates if there was an increase in the relevance of information in financial reports, and earnings in particular, for firms in which there was a material impact upon adoption of IFRS 15. However, a further issue is whether the changes prescribed by IFRS 15 resolved differences in the relevance of information in financial reports across firms. That is, were problems with the recognition of revenues largely addressed by the new standard, or do they persist? To provide evidence on this issue, we test the following hypothesis:

H3 *After adoption of IFRS 15, earnings is as relevant for firms in which the impacts of transitioning to IFRS 15 were material as those in which the impacts were immaterial (i.e., post-test).*

These hypotheses are summarised in Table 1, which outlines the comparisons being made.

3 | RESEARCH DESIGN

Evaluating the impacts of IFRS 15 on the relevance of financial report information presents a number of challenges. A focus on revenue in any analysis would necessitate the inclusion of expenses, requiring significant data collection which might not be directly observable and significantly reducing the power of the tests. Such an approach would also undoubtedly create issues with collinearity and likely identify differences across industries and business models and reflect differences in profit margins across firms. However, in the absence of changes in the determination of expenses, any change in revenue would map directly into earnings. In these situations, revenue, or changes in revenue, would be fully captured by earnings. Therefore, we focus on earnings to evaluate the impact of IFRS 15 on the relevance of information in financial reports. This also avoids complications arising from changes in revenue being offset by changes in expenses (e.g., revenue for airlines attributable to loyalty programs being recognised as unearned revenue rather than establishing a provision for future service obligations). A consequence of focusing on earnings to evaluate the relevance of IFRS 15 is that the impacts on financial reports could be understated and this will bias against finding significant results. This limitation is acknowledged. Accordingly, the impacts of IFRS 15 on the relevance of information in financial reports are evaluated on the basis of earnings and a value relevance research design is adopted.

There is a significant literature considering the changes in the value relevance of information in financial reports (e.g., Barth et al., 2001; Clarkson et al., 2011; Collins et al., 1997; Easton, 1985; Hung, 2000; Theil, 1971). While these studies consider changes in the relevance of financial report information generally, we are only concerned with the incremental explanatory power of earnings. Therefore, our evaluation of the impacts of IFRS 15 begins with examining the relevance of earnings and book value, which takes the following form:

$$Price_{it} = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 Earn_{it} + \varepsilon_{it}, \tag{1}$$

where, $Price_{it}$: Stock price for firm i, 3 months after the end of the financial year t; BV_{it}: Book value of equity per share for firm i at the end of year t; $Earn_{it}$: Earnings per share for firm i at the end of year t.

To evaluate the incremental explanatory power of earnings, the explanatory power of book value alone is considered using model (2) below:

$$Price_{it} = \beta_0 + \beta_1 BV_{it} + \varepsilon_{it}. \tag{2}$$

The incremental explanatory power of earnings can be assessed as the difference in the explanatory power of the two models.

Examining whether IFRS 15 increased the relevance of financial reports is best conducted on a sample of firms where the new standard had a significant impact, as recognised in the hypotheses. Accordingly, sample firms are partitioned on the basis of whether the standard had a material impact or not. Material impact firms are determined from disclosures in the financial reports during the year of transition, as required by IAS 8 *Accounting policies, changes in accounting estimates and errors*, and/or IFRS 15. These disclosures also provide the foundation for a descriptive analysis of the transition approaches adopted. Recognising that the impacts may not be consistent across firms, we further partition the sample on the basis of whether the changes required by IFRS 15 increase (*Impact Up*) or decrease (*Impact Down*) retained earnings.[8] Attention is again focused on retained earnings due to the potential for changes in revenues to be offset by changes in expenses, as well as the changes across periods offsetting.

To evaluate whether the changes required by IFRS 15 were appropriately targeted (i.e., a pre-test), we first consider in the pre-IFRS 15 period whether the earnings of those firms materially impacted by the standard are less relevant than the earnings of firms which were not materially impacted (H1). In doing so, a distinction is made between firms in which the impacts of transition were earnings increasing or decreasing.

To evaluate the impacts of the changes in accounting for revenues required by IFRS 15 (i.e., a pre- and post-test), consideration is given to the relevance of earnings in the pre- and post-transition periods (H2). We examine this separately for firms in which earnings were materially impacted and those in which it was not, and split the sample between firms that experienced increasing or decreasing impacts to retained earnings.

Finally, to evaluate whether the changes required by IFRS 15 substantially addressed issues with revenue recognition (i.e., a post-test), we examine in the post-IFRS 15 period whether the earnings of firms materially impacted by the changes are less relevant than those firms in which retained earnings was not materially impacted (H3). Again, the sample is divided between firms that experienced impacts which were earnings increasing or decreasing.

4 | SAMPLE AND DATA DESCRIPTION

4.1 | Sample

The sample is drawn from the 300 largest firms listed on the Australian Securities Exchange (ASX 300) over the transition period to IFRS 15. Transition was mandated for financial years commencing on or after 1 January 2018 and although early adoption was permitted it was not

[8]Consideration of the impacts of retained earnings is necessary due to the limited disclosures sometimes made.

TABLE 2 Sample selection and descriptive statistics

	Firm-year observations	Pooled observations
Top ASX 300 firms in year 2018; over years 2016–2018	300	900
Exclusions		
Industry Exclusions (Real Estate, Oil, Gas & Consumable Fuels, Metals & Mining, REITs, Energy Equipment and Services, Financials, Utilities)	(131)	(393)
Foreign jurisdiction (US GAAP, IFRS)	(32)	(96)
ETFs	(12)	(36)
Delisted firms	(1)	(3)
Early adopters	(2)	(6)
Missing data (Share Price, Variables)	(15)	(45)
Firms with Negative Earnings & Book Value	(13)	(39)
Firms for evaluation of how transition reported	94	282
Exclusions		
PE ratio of more than 30	(26)	(78)
MB ratio of more than 10	(3)	(9)
Firms for evaluation of impacts of transition	66	198

common.[9] The actual date of adoption was confirmed by reference to financial reports and disclosures relating to accounting policies and the impact of changes in accounting policies (all of which were hand collected). Financial data is collected for 2 years prior to transition (i.e., 2017 and 2018 for firms with 30 June financial year end) and 1 year subsequent to transition (generally financial year 2019). The disruption to markets and firms arising from COVID-19 precludes extension to 2020.

Firms are excluded from the initial sample for a range of reasons. First, firms are deleted where other standards are likely to materially dictate revenue recognition and measurement (e.g., IFRS 4 *Insurance contracts*, IFRS 9 *Financial Instruments*, IAS 40 *Investment Property* and IAS 41 *Agriculture*). Second, foreign companies are excluded due to potentially different regulatory requirements. Third, firms disclosing material changes in accounting policies other than IFRS 15 are excluded due to confounding effects. Finally, firms are deleted due to missing data and the reporting of losses. A final sample of 94 unique firms is used to evaluate how firms transitioned to IFRS 15. The sample selection process is described in Table 2.

Evaluating the relevance of earnings is more problematic. Due to concerns with the relevance of earnings and book value generally (and likely increased reliance on alternative non-financial information) firms with a price-to-earnings (P/E) ratio greater than 30 are excluded, as are observations with a market to book ratio of greater than 10.[10]

[9]In the interests of simplicity early adopters are recognised with substituted accounting periods which aligned transition, and they are discussed and evaluated in a manner consistent with this.

[10]Sensitivity tests were done on the basis of whether the results would differ significantly if the sample included all observations with no P/E or MB restrictions. The results were not significant and had little to no statistical power as these firms are likely valued using other information (e.g., non-financial) that is not captured by our model. With that in mind, the results are not tabulated.

4.2 | Method of transitioning to IFRS 15

Table 3 presents results of how firms transitioned to IFRS 15. Of the sample firms only 28 (29.8%) transitioned using the 'retrospective approach' which involved restating prior year amounts. For most of these firms the impact on earnings was less than the impact on revenues. This result is consistent with the impact on revenues being at least in part offset

TABLE 3 Evaluation of methods of transition to IFRS 15

Panel A: Industry distribution by method of transition to IFRS 15

		Transition method		
GICS	***n***	**Cumulative**	**Retrospective**	**Not disclosed**
Communication services	8	5	3	0
Consumer discretionary	25	13	9	3
Consumer staples	10	3	3	4
Energy	0	0	0	0
Financials	0	0	0	0
Health care	9	6	2	1
Industrials	22	11	8	3
Information technology	11	7	2	2
Materials	9	6	1	2
Real Estate	0	0	0	0
Utilities	0	0	0	0
Total	94	51	28	15

Panel B: summary statistics of revenue and earnings scaled by book value in transition year 2018, and transition impact on revenue, earnings and retained earnings by method of transition

Method	***n***	**Mean**	**Std dev**	**25th**	**Median**	**75th**
Not disclosed (15)						
Revenue/Book value of equity	15	291.43%	447.52%	84.89%	128.83%	320.09%
Earnings/Book value of equity	15	17.94%	11.14%	11.25%	16.98%	21.78%
Cumulative (51)						
Revenue/Book value of equity	51	268.81%	355.89%	79.72%	155.96%	367.24%
Earnings/Book value of equity	51	22.54%	33.81%	9.53%	13.62%	23.92%
Impact on revenue	Not disclosed					
Impact on earnings	Not disclosed					
Impact on retained earnings	26	−3.25%	27.41%	−1.41%	−0.58%	0.70%
Retrospective (28)						
Revenue/Book value of equity	28	184.68%	192.62%	89.40%	117.97%	208.14%
Earnings/Book value of equity	28	17.13%	12.95%	8.72%	13.01%	20.91%
Impact on revenue	12	−4.61%	6.43%	−9.89%	−0.63%	0.05%
Impact on earnings	12	−7.83%	16.83%	−5.56%	−0.99%	−0.04%
Impact on retained earnings	12	−11.73%	25.51%	−7.95%	−1.11%	−0.68%

Under IFRS 15 firms had the option to transition to the new standard under two approaches: the cumulative and retrospective approaches. The cumulative approach requires firms to show the cumulative impact of IFRS 15 towards retained earnings without the need to restate prior years. The retrospective approach requires the firm to restate all prior information as if they were reported under IFRS 15.

by changes in expenses, and in the absence of being able to control for these expenses this confirms the focus on changes in earnings to evaluate the impacts of IFRS 15. For only three firms was the change in earnings material and greater than the change in revenues (these firms were not in a single sector). Clearly this impact is not persistent across sample firms and further evaluation of the causes for this are beyond the scope of this paper which is concerned with the impacts of IFRS 15 generally. For 'retrospective approach' firms that report non-zero impact on retained earnings, the mean (median) impact on earnings was −7.83% (−0.99%) and −11.73% (−1.11%) on retained earnings. These results identify considerable skewness in the impacts of IFRS 15, and while there are material impacts for some firms, the impacts are generally immaterial.

Most firms (51% or 54.3%) transitioned using the 'cumulative approach'. While this might seem problematic, it should be noted that the impact of transition on retained earnings was generally small for these firms and in most instances immaterial. For example, for 'cumulative approach' firms that report non-zero impact on retained earnings, the mean (median) impact on retained earnings for these firms was −3.25% (−0.58%). The impact on revenue or earnings was not disclosed. The balance of 15 (15.9%) firms did not disclose either the transition approach adopted or the impact of transition.

Limitations in the information disclosed is likely due to (im)materiality and would be in accordance with IAS 1 *Presentation of Financial Statements*, para 31. However, this did not preclude many firms making disclosures that were immaterial. Evaluation of this decision is beyond the scope of this paper.

4.3 | Impact of transition

Evaluation of the impacts of IFRS 15 on the relevance of earnings is undertaken on the basis of a reduced sample of 66 firms where earnings and book value likely have greater relevance for financial report users. The impacts of transitioning to IFRS 15 are presented in Table 4.

Sample firms were identified as either *Impact Up* or *Impact Down* on the basis of disclosures in the annual report concerning the effect of IFRS 15 on retained earnings. Of the sample firms, 5 (7.5%) are identified as *Impact Up* with a mean (median) impact on retained earnings of 2.10% (0.27%). This result shows that all these impacts are immaterial, hence these firms are excluded from our subsequent analyses. Eighteen (27.3%) firms were identified as *Impact Down* with a mean (median) impact on retained earnings of −10.00% (−1.09%) and on earnings of −1.91% (−0.89%). Skewness in the magnitude of impact suggests that transition did have material impacts for some firms, but not generally. We label those firms that did not disclose any impact of IFRS 15 as not impacted (*No Impact*), relying on the appropriate application of materiality. Over one third of the sample, 43 (65.2%) firms, are identified as *No Impact* firms. Table 5 provides the summary statistics of key variables used in the regression analyses.

5 | RESULTS

5.1 | Relevance of earnings prior to transition (H1)

It is an empirical question as to whether IFRS 15 was appropriately targeted at firms in which there was a greater discrepancy between the underlying economic reality and its accounting representation. Accordingly, we examine the value relevance of earnings prior to transition to

TABLE 4 Evaluation of impacts of transition to IFRS 15

Panel A: industry distribution by the impacts of transition to IFRS 15

GICS	No impact	Impact up	Impact down
Communication services	0	2	2
Consumer discretionary	16	0	4
Consumer staples	8	0	1
Energy	0	0	0
Financials	0	0	0
Health care	3	0	2
Industrials	11	1	5
Information technology	2	1	0
Materials	3	1	4
Real estate	0	0	0
Utilities	0	0	0
	43	5	18

Panel B: summary statistics of revenue and earnings scaled by book value in transition year 2018, and transition impact on revenue, earnings and retained earnings by direction of impact

Impact	*n*	Mean	Std dev	25th	Median	75th
No Impact (43)						
Revenue/book value of equity	43	262.23%	360.64	78.99%	147.85%	282.15%
Earnings/book value of equity	43	15.91%	12.94%	9.46%	13.62%	18.46%
Impact down (18)						
Revenue/book value of equity	18	295.53%	234.43%	124.79%	234.38%	375.90%
Earnings/book value of equity	18	17.44%	10.17%	9.92%	13.56%	26.22%
Impact on revenue	7	−2.13%	5.24%	−0.69%	−0.11%	0.05%
Impact on earnings	7	−1.91%	2.92%	−3.83%	−0.89%	0.38%
Impact on retained earnings	18	−10.00%	19.25%	−6.97%	−1.09%	−0.57%
Impact up (5)						
Revenue/book value of equity	5	106.00%	46.62%	85.80%	89.16%	150.91%
Earnings/book value of equity	5	14.61%	5.13%	10.61%	14.48%	17.01%
Impact on revenue	1	0.03%	–	0.03%	0.03%	0.03%
Impact on earnings	1	−0.13%	–	−0.13%	−0.13%	−0.13%
Impact on retained earnings	5	2.10%	4.03%	0.20%	0.27%	0.70%

Sampled firms are partitioned on the basis of whether the changes required by IFRS 15 have no material impact (*No Impact*), upward impact (*Impact Up*) or downward impact (*Impact Down*) on retained earnings and/or earnings.

IFRS 15, for firms that experienced a negative impact and for firms that experienced no material impact. The results are presented in Table 6.

It is worth noting that the results of estimating model (1) across the sample partitions differ significantly. For example, the coefficient on *Earn* varies materially across the *No Impact* and *Impact Down* partitions ($\alpha_1 = 30.996$, t-stat $= 4.37$, and $\alpha_1 = 17.347$, t-stat $= 9.22$, respectively). This is not only with respect to *Earn*, but also *BV* and identifies significant challenges in undertaking studies of this nature. This result suggests that the implications of

TABLE 5 Summary statistics of key regression variables

	n	Mean	Std deviation	25th	Median	75th
$Price_{it}$	198	12.451	17.715	3.610	6.718	15.02
BV_{it}	198	4.173	3.679	1.678	2.933	4.888
$Earn_{it}$	198	0.621	0.680	0.218	0.391	0.714
$RevQ_{it}$	66	11.95%	16.76%	2.82%	11.19%	16.58%

This table describes the key variables used in the regression analysis. All variables except $RevQ_{it}$ are tabulated based on a combined pre- and post-IFRS sample of 198 firm-year observations. Variable $RevQ_{it}$ is tabulated based on the post-IFRS sample of 66 firm observations. All variables are as defined in Appendix A: Table A1.

TABLE 6 Evaluation of the relevance of earnings in the period prior to transition to IFRS 15

	(1)	(2)		
	No impact	Impact down		
	Coef.	t-stat.	Coef.	t-stat.
Constant	−1.615	−1.32	−1.719	−3.15***
BV_{it}	−1.004	−1.15	0.722	2.66***
$Earn_{it}$	30.996	4.37***	17.347	9.22***
N	86		36	
Adjusted R^2	0.810		0.964	
F Stat	55.73		441.39	
Constant	−2.823	−1.07	−0.982	−0.84
BV_{it}	4.130	3.81***	2.99	7.52***
N	86		36	
Adjusted R^2	0.410		0.824	
F Stat	14.54		56.57	
Incremental R^2 of earnings	0.400		0.140	

Evaluation of the relevance of earnings for firms partitioned on the basis of the impact of IFRS 15 (no impact/impact down). This is undertaken for earnings and book value and book value only. From this the incremental explanatory power of earnings is determined. All variables are as defined in Appendix A: Table A1.

current period earnings for future period earnings varies significantly across firms, which manifests in divergent coefficients. Hence, we focus on the incremental explanatory power of earnings.[11]

When the results of estimating model (1) are evaluated in conjunction with the results of estimating model (2), the incremental explanatory power (or relevance) of earnings is identified. The results for the *No Impact* partition might be considered as identifying the benchmark for the determination of whether earnings are less relevant for firms in which there was a material impact. For these firms the incremental explanatory power of earnings over book value is 40.0%. In comparison, the incremental explanatory power of earnings for the *Impact Down* partition is only 14.0%. This result shows that firms which were subject to greater impacts upon transition to IFRS 15 had lower incremental explanatory power of earnings in the pre-adoption period.

[11]This might be addressed by inclusion of controls for 'other information'; however, this is beyond the scope of this study.

5.2 | Relevance of earnings upon transition (H2)

The results of evaluating whether the relevance of earnings increased with transition to IFRS 15 are presented in Table 7.

Focusing first on the *No Impact* partition (Panel A), it is notable from the results of estimating model (1) that the explanatory power of earnings and book value increased from 81.0% in the prior period to transition to 92.4% in the period subsequent to transition to IFRS 15. However, when this result is considered alongside the results of estimating model (2) which uses book value alone, there is evidence that the incremental explanatory power of earnings decreased from 40.0% to 19.3% (i.e., the difference in the adjusted R-squared between the two models). While this could be interpreted negatively, such as IFRS 15 decreasing the value relevance of earnings, caution is recommended as these are firms in which the new accounting standard was not identified as having a material impact on the financial statements. In combination with the lower co-efficient on *Earn* subsequent to transition, this result suggests that other information, such as economic conditions or uncertainty, may have impacted the expected persistence of earnings and hence the relevance of earnings (and book value) generally.

Panel B reports results of the analyses on the *Impact Down* partition of firms. The results from estimating model (1) show that the explanatory power of earnings and book value declined from the pre- to post-period, but only marginally from 96.4% to 94.4%. When these results are considered in combination with the results from estimating model (2) (on book value alone), the incremental explanatory power of earnings on transition to IFRS 15 is also seen to decline from 14.0% to 7.5%. On the face of it, these results seem to provide little support for H2 (i.e., that IFRS 15 positively impacted the relevance of earnings). However, it is worth noting that the material decrease in the relevance of earnings observed for firms in which there was no material impact of IFRS 15, did not occur for firms that experienced a material impact from IFRS 15.

5.3 | Relevance of earnings subsequent to transition (H3)

To determine whether transition to IFRS 15 resolved issues with the relevance of earnings across the various partitions of firms, we estimate models (1) and (2) on firms in the period subsequent to the transition. The results are presented in Table 8.

Looking at model (1), a relatively high explanatory power is observed for both the *No Impact* and *Impact Down* partitions of firms (92.4% and 94.4%, respectively). In combination with the results from estimating model (2), the incremental explanatory power of earnings appears to be 19.3% for the *No Impact* subsample and 7.5% for the *Impact Down* subsample. These results show a significant convergence of the incremental relevance of earnings for *No Impact* and *Impact Down* firms relative to the period before transition. Hence, there appears to be some support for H3, that is, that IFRS 15 resolved some of the issues with revenue recognition and measurement. However, caution is warranted in interpreting this result as the benchmark incremental explanatory power of earnings for the *No Impact* sample may be problematic.

5.4 | Additional analysis

5.4.1 | Revenue quality

A potential limitation in the above analysis is that the impacts of IFRS 15 are immaterial for many firms, hence we perform a more targeted analysis and focus on firms where the issue of revenue recognition and measurement was likely most problematic (hence impacts of

TABLE 7 Evaluation of the relevance of earnings following transition to IFRS 15

Panel A: no impact subsample

	(1)		**(2)**		**(3)**
	Pre-period		**Post-period**		**Incremental R^2 of Post-IFRS 15**
	Coef.	***t*-stat.**	**Coef.**	***t*-stat.**	
Constant	−1.615	−1.32	−0.848	−0.97	
BV_{it}	−1.004	−1.15	0.137	0.26	
$Earn_{it}$	30.996	4.37***	19.485	6.98***	
N	86		43		0.114
Adjusted R^2	0.810		0.924		
F Stat	55.73		112.56		
Constant	−2.822	−1.07	−3.641	−1.55	
BV_{it}	4.131	3.81**	3.752	4.95**	
N	86		43		
Adjusted R^2	0.410		0.731		0.321
F Stat	14.54		24.54		
Incremental R^2 of earnings	0.400		0.193		−0.207

Panel B: impact down subsample

	(1)		**(2)**	**(3)**	
	Pre-period		**Post-period**	**Incremental R^2 of Post-IFRS 15**	
	Coef.	***t*-stat.**	**Coef.**	***t*-stat.**	
Constant	−1.719	−3.15***	−0.825	−1.18	
BV_{it}	0.722	2.66***	1.481	4.37***	
$Earn_{it}$	17.347	9.22***	9.627	4.85***	
N	36		18		−0.020
Adjusted R^2	0.964		0.944		
F Stat	441.39		438.02		
Constant	−0.982	−0.84	−0.690	−0.58	
BV_{it}	2.99	7.52***	2.844	8.71***	
N	36		18		
Adjusted R^2	0.824		0.869		0.045
F Stat	56.57		75.95		
Incremental R^2 of earnings	0.140		0.075		−0.065

Evaluation of the relevance of earnings for firms partitioned on the basis of the impact of IFRS 15 (no impact / impact down). This is undertaken first for earnings and book value, then for book value only. The pre-period consists of 2 years prior to transition and the post-period consists of the year of transition. From the pre- and post-period, the incremental explanatory power of earnings is determined. All variables are as defined in Appendix A: Table A1.

transition more pronounced). This would occur more often in circumstances where there is greater divergence between accrual and cash accounting. To capture this, a revenue quality measure (*RevQ*) is constructed which is calculated as the rank of the signed revenue accrual (e.g., Account Receivable and Revenue in Advance) scaled by revenue from customers. We

TABLE 8 Evaluation of the relevance of earnings in the period subsequent to transition to IFRS 15

	(1)		(2)	
	No impact		Impact down	
	Coef.	*t*-stat.	Coef.	*t*-stat.
Constant	−0.848	−0.97	−0.825	−1.18
BV_{it}	0.137	0.26	1.481	4.37***
$Earn_{it}$	19.485	6.98***	9.627	4.85***
N	43		18	
Adjusted R^2	0.924		0.944	
F Stat	112.56		438.02	
Constant	−3.641	−1.55	−0.690	−0.58
BV_{it}	3.752	4.95***	2.844	8.71***
N	43		18	
Adjusted R^2	0.731		0.869	
F Stat	24.54		75.95	
Incremental R^2 of earnings	0.193		0.075	

Evaluation of the relevance of earnings for firms partitioned on the basis of the impact of IFRS 15 (no impact/impact down). This is undertaken for earnings and book value, and then for book value only. The incremental explanatory power of earnings is compared between the two subsamples. All variables are as defined in Appendix A: Table A1.

calculate this measure in both the pre- and post-transition periods. When we compare this measure for the *No Impact* and *Impact Down* partitions, we observe no significant differences either before or after transition (untabulated). Hence, there is no evidence of IFRS 15 effectively targeting or impacting firms where there were greater revenue accruals.

To address the issue of whether differences in revenue quality remained subsequent to transition to IFRS 15, Equation (1) was estimated with the inclusion the revenue quality measure (*RevQ*) and interactions between this measure with earnings and book value. The results are presented in Table 9.

The co-efficient on revenue quality measure is not significant for either the *No Impact* subsample (−5.239, t stat = −0.40) or the *Impact Down* subsample (6.357, t stat = 0.47). The results were also not different for the interaction terms between revenue quality and book value/earnings across the *No Impact* and *Impact Down* subsamples. These results may potentially identify the lack of differences in revenue quality generally across the subsamples, or more so the insignificance of revenue quality generally.

5.4.2 | Case studies of InvoCare and JB HiFi

To provide additional insights into the impact of IFRS 15 on financial reports, we focus on the case of InvoCare Ltd, where transition resulted in a reduction of retained earnings (shareholders' funds) of 64% (32%), down by \$90 m from \$139.8 m to \$49.8 m (down by \$90 m from \$282.4 m to \$192.4 m). InvoCare operates funeral homes, cemeteries and crematoriums in Australia, New Zealand and Singapore, and their activities include the sale of a range of funeral related goods and services. However, since InvoCare Ltd applied the cumulative approach of adoption, their disclosures relating to the impact of the new standard were limited.

The most significant impact of transition to IFRS 15 for InvoCare was revenue recognition for cemetery and crematorium products, resulting in a decrease in trade receivables of \$55.3 m,

TABLE 9 Evaluation of the relevance of earnings in the period subsequent to transition to IFRS 15

	(1)			(2)		(3)	
	No impact			**Impact down**		**Full sample**	
	Coef.	***t*-stat.**	**Coef.**	**Coef.**	***t*-stat.**		
Constant	−0.284	−0.19		−1.836	−1.11	−0.438	−0.41
BV_{it}	−0.298	0.50		1.719	7.83***	0.665	1.65*
$BV_{it}*RevQ_{it}$	−0.888	−0.22		−1.954	−0.48	−1.236	−0.52
$Earn_{it}$	16.595***	6.27	***	10.776	3.39***	14.543	6.77***
$RevQ_{i}$	−5.239	−0.40		6.357	0.47	−4.297	−0.47
$Earn_{it}*RevQ_{i}$	20.676	1.36		−7.321	−0.28	20.309	1.57
N	43			18		61	
Adjusted R^2	0.928			0.933		0.922	
F Stat	128.97			201.68		53.18	

Evaluation of the relevance of earnings for firms partitioned on the basis of the impact of IFRS 15 (no impact/impact up/impact down). This is undertaken for earnings and book value and book value only. Revenue Quality Measure is added in the regression. From this the incremental explanatory power of earnings is determined. All variables are as defined in Appendix A: Table A1.

an increase in inventory of \$11.2 m and an increase in deferred revenue of \$64.6 m. While a breakdown of particular goods and services is not provided, it is likely that the impact was greatest for the sale of interment rights. Prior to transition to IFRS 15 revenue was recognised when sale contracts were entered into, notwithstanding payment potentially being made over 5 years, interest free. To minimise credit losses on the resultant receivables, title to the interment right was only transferred with the final payment. Transition to IFRS 15 precluded revenue recognition until the final payment was made. Hence, this contributed significantly to the above impacts (i.e., a decrease in trade receivables, increase in deferred revenues and decrease in retained earnings).

Other cemetery and crematorium products provided by InvoCare are also potentially impacted by transition to IFRS 15. This includes headstones, monuments, gardens and plaques. Revenue on these products are recognised when the goods are delivered, thus less likely be impacted by transition to IFRS 15. Revenue recognition for the provision of actual funeral services is unlikely to be impacted by transition to IFRS 15 as this would continue to be linked to service provision. This is equally the case for prepaid funerals. Before and after transition, revenues are not recognised until the funeral services are provided. Rather amounts received are deferred and recognised on the balance sheet as liabilities (i.e., prepaid contract funds under management \$553.6 m and prepaid contract liabilities \$510.0 m). There appears to be some impact in relation to the treatment of selling costs (i.e., an increase in direct selling costs \$32.4 m and an increase in prepaid contract liabilities \$28.6 m).

This case study provides a number of insights into the transition to IFRS 15. First and perhaps most problematic, is that the above example firm in which IFRS 15 had the greatest impact transitioned with minimal disclosures of the impacts (i.e., the cumulative rather than the retrospective approach was used). As transition provisions were addressed in IFRS 15, this limited the application of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* (IAS 8, para 19). Second, contract terms for the sale of interment rights were changed after transition to IFRS 15. Sale terms now specify title to interment rights passing upon entering into the contract. Therefore, if there was to be any impact from IFRS 15 (intentional or not) it was immediately circumvented, which might be characterised as a real effect (Napier & Stadler, 2020). Third, because transition to IFRS 15 deferred previously recognised revenues and the impacts on future revenues are shielded, profits will be overstated over the period over which these deferred revenues are subsequently recognised (i.e., double counting).

A limitation of focusing on Invocare in the above example is that the firm may have been intentionally opaque in their disclosures relating to revenue recognition and measurement on the basis of proprietary costs. To address this concern, the disclosures relating to revenues were also collected for JB HiFi Ltd (JB HiFi). This firm was selected as their business model is relatively straight forward and readily observable. Hence, disclosures would be relatively predictable and proprietary costs are likely minimal. JB HiFi provides a clear explanation in the financial report of the nature of its contracts with customers (i.e., sale of goods, commissions and rendering of services) and the respective accounting practices applied. There is also disclosure of aggregate revenue from contracts with customers and aggregate unearned revenue. The only disaggregation of revenue from contracts with customers occurs in relation to operating segments and this does not reflect the nature of those revenues, rather it is focused on business units. Undoubtedly, JB HiFi would argue that all revenues from contracts with customers have similar characteristics and/or are all impacted by common economic factors. If there is a message from JB HiFi's financial report it is that while there may have been the expectation of enhanced disclosures of information relevant to users under IFRS 15, without a detailed disaggregation of revenue and specific information on how revenue was measured (i.e., quantitative information) this may not have been realised.

6 | CONCLUSION

This study provides insights into the impact of IFRS 15 on financial reports. Specifically, evidence is provided on how firms transitioned to the new standard and the impact it had on the value relevance of earnings. For most firms there was no material impact of IFRS 15 on earnings or retained earnings. For firms experiencing a material impact, the general effect was a reduction in earnings/retained earnings which was varied and showed no industry trend. These firms also had a lower explanatory power of earnings prior to adopting IFRS 15, which did not improve following transition to the new standard. Last, even though a number of firms experienced a material impact from adopting IFRS 15, not all of these firms transitioned using the retrospective approach which mandates comprehensive disclosures and restatement of comparative year's figures.

The evidence presented in this paper generates some important policy implications. First, standard setters should consider restricting transition approaches with limited disclosures to those firms in which the impacts of a new standard are immaterial. They should also be aware that it was relatively easy for some firms to change their business model and transactions to avoid the impacts of the new standard, as highlighted by the case study of InvoCare Ltd. Furthermore, if the impacts of transition to the new standard are generally immaterial, this raises the question of whether a major change in the standard was necessary and whether problems with existing standards might be better addressed through regular reviews and updating. For example, given the time and cost it took to finalise and implement IFRS 15, could the IASB have addressed issues like bundled goods and services in amendments to the existing standard? That is, could an evolutionary approach have provided an opportunity to address problems on a timelier basis and with less disruption and cost to financial reporting? An incremental approach may also provide less uncertainty for users; however one must also consider the resources required for continuous improvement of standards.

Evidence on whether IFRS 15 was effective is limited by the number of firms in which the impact was immaterial in our sample. This might be addressed by identifying a more targeted sample where the impacts were likely material. However, challenges with this approach are generalisability and whether this is appropriate when accounting standards are broadly applicable. Future research may wish to examine the impacts of IFRS 15 in other institutional settings to compare the method of transition and changes in the relevance of earnings, or to examine changes in disclosure quality following IFRS 15 adoption.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study were collected from the annual reports of publicly listed firms which are freely available to the public.

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APPENDIX A

TABLE A1 Variable definitions

$Price_{it}$	Share price taken at the end of the third month following firm *i*'s fiscal year *t* end
$Earn_{it}$	Net income excluding abnormal items scaled by the number of outstanding shares for firm *i* and year *t*
BV_{it}	Book value of equity scaled by the number of outstanding shares for firm i and year *t*
$RevQ_{it}$	Revenue quality for firm i and year *t*, measured as accounts receivables plus unearned earnings, divided by revenue
No impact	An indicator variable equal to 1 if retained earnings was not restated in the transition period of AASB 15, and 0 otherwise
Impact down	An indicator variable equal to 1 if retained earnings was restated downwards in the transition period of AASB 15, and 0 otherwise
Impact up	An indicator variable equal to 1 if retained earnings was restated upwards in the transition period of AASB 15, and 0 otherwise