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Is financial reporting still useful? Australian evidence

There has been recent and growing criticism of the usefulness of financial reporting for investors, particularly the annual financial statements. In response, the IASB is pursuing several projects aimed at improving the relevance of financial information. To inform the IASB's work, we investigate, using a mixed-method approach, the extent and nature of the use of annual financial statements by equity investors. We examine the relevance of financial reporting for equity valuation in Australia across time. We find that financial reporting (specifically reported net income, shareholders' equity, and operating cash flows) remains relevant for investment decisions. We further support this finding with evidence from field interviews that provide insight into how and why financial statements are used by equity investors. The field evidence also demonstrates that no one financial statement dominates in investor decision making. Given the increasing availability of more timely, forward-looking information from alternative sources, we examine the relevance of non-GAAP financial information and other non-financial information for investor decision making. We find that non-GAAP financial information (as proxied by EBIT and EBITDA) is more value relevant than statutory measures. We further find a broad range of non-financial information is utilized by investors in making investment decisions both as a 'screen' and for valuation purposes. Our findings inform regulators and other stakeholders as we provide evidence of the continuing relevance of financial statements and the complementary role of non-GAAP financial and other information. Our evidence provides a rebuttal to the recent criticism.

Key words: Equity investors; Investor decision making; Mixed methods, Value relevance.

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INTRODUCTION

The objective of this paper is to provide evidence on the relevance of financial reporting for equity valuation.¹ Applying a mixed-method approach utilizing both archival and field research methods, we examine two broad key questions.

1. Are annual financial statements decision-useful (i.e., relevant) for equity investors in making investment decisions, and has this changed over time?
2. What other types of information are considered decision-useful (i.e., relevant) for equity investors in making investment decisions, and how is this information used?

The paper is motivated by the significant criticism of financial reporting over the past decade in relation to the decision-usefulness and relevance of financial statements for equity valuation. Frequent assertions have been made that traditional financial reports have lost their relevance for investor decision making. Three main reasons have been put forward for why the relevance of financial reports may have declined (Collins *et al.*, 1997; Francis and Schipper, 1997; Lev and Gu, 2016):

1. the availability of a substantial amount of more timely forward-looking information from alternative sources (i.e., non-GAAP financial information).;
2. an increase in the occurrence and reporting of one-time or non-recurring items;
3. the shift from an industrialized economy to an intangible knowledge-based economy, and the inability of financial reporting to capture firm value from these knowledge-based intangible assets;

The majority of evidence relating to the value relevance of financial reports over time is based on US GAAP-based financial statements. In general, existing US studies show that accounting information has declined in value relevance across time (e.g., Ramesh and Thiagarajan, 1995; Francis and Schipper, 1997; Lev and Zarowin, 1999; Core *et al.*, 2003; Balachandran and Mohanram, 2011; Lev and Gu, 2016). There are, however, some exceptions to this conclusion with some studies finding no evidence that value relevance has decreased across time (Francis and Schipper, 1997; Ely and Waymire, 1999; Collins *et al.*, 1997; Barth *et al.*, 2017). While these studies have examined if accounting information prepared in accordance with US GAAP has changed in decision-usefulness over time, our focus is on a jurisdiction that applies IFRS: Australia. To date, no study has investigated the value relevance of financial reports over time in Australia. Accordingly, it is not known whether the US-based findings are generalizable to an IFRS-based setting like Australia.

¹ An accounting measure is said to be value relevant if it has a consistent association with equity market values (Barth *et al.*, 2001). The focus of the paper is on the relevance of financial reports to investors for valuation and we thus ignore the other possible uses of accounting information for stewardship and other possible users such as employees and creditors.

Relevance of Financial Statements to Investor Decision Making

Our results from archival analysis show that financial statements are decision-useful for equity investors in making investment decisions and that financial reporting by listed companies has not declined in relevance over the period studied. The results show that, on average, a company's financial performance and position, measured as reported net income and shareholders' equity respectively, explain 64% of a company's share price.

The evidence from the field interviews provides further insight into how and why financial statements remain value relevant to investor decision making. The field evidence supports the results from the archival analysis in that all interviewees note that financial statements have an important role to play as the foundation for investor decision making.² Interviewees typically viewed the financial statements as having a confirmatory role in assessing performance, and that the historical basis provided the initial input to the investment models investors developed. Overall, financial statements are considered a necessary, but not sufficient, basis for predicting future performance of an entity.

Relevance of Net Income and Shareholder's Equity to Investor Decision Making

Having established that the combined relevance of net income and shareholders' equity has not declined, we next examine whether each of net income or shareholders' equity are important for investor decision making, and whether the importance of these elements has changed over time. Our results from the archival analysis show that both shareholders' equity and net income are decision-useful for equity investors in making investment decisions. The results show that, on average, a company's financial position alone, measured as book value of equity, explains 60% of a company's share price, while financial performance alone, measured as net income, explains 52% of a company's share price.

The evidence from the field interviews is consistent with the archival results. Although financial statements are considered important for investor decision making, there was no dominant preference for whether the balance sheet or statement of profit or loss is more relevant for investment decision making.

Relevance of Other Information for Investor Decision Making—Non-GAAP Financial Information

Using EBITDA and EBIT as proxies for non-GAAP financial information, our archival analysis reveals that EBITDA explains 57% (i.e., an adjusted mean R^2 of a company's share price, and EBIT explains 54% of a company's share price. This indicates that EBITDA and

² The results are also consistent with recent comments made by current IASB board member, Nick Anderson, a former buy side investor, that: 'Financial reporting remains a fundamental element in the investment process. Over my last five years managing money, working with my co-manager, our fund delivered top-quartile returns. Could we have achieved these returns without access to financial reports that we knew we could trust? I don't think that would have been very likely.' (Retrieved from <http://www.ifrs.org/news-and-events/2018/02/financial-reporting-for-investors-nick-anderson/>).

EBIT are relevant for equity investors in making investment decisions in Australia. Moreover, compared to the mean adjusted R^2 of 52% reported earlier for net income, EBITDA/EBIT seem to be more value relevant than net income in explaining variation in company share prices. Further, the shift in value relevance of the three performance measures corresponds over the time period examined, suggesting that statutory profit and non-GAAP earnings are complements rather than substitutes. Of course, these measures are correlational rather than causal, so we turn to the field data to explore the underlying questions of how and why these measures are used.

The evidence from the field interviews shows that, in contrast to the view that the role of statutory financial information in investor decision making is primarily confirmatory in nature, non-GAAP financial information is often used by investors to help establish what part of current performance is expected to continue into the future (i.e., predicted, sustainable, persistent earnings).

Relevance of Cash Flows to Investor Decision Making

Our results from the archival analysis show that operating cash flows are associated with equity valuation. The results show that the mean adjusted R^2 is 49%, indicating that, on average, a company's operating cash flows explain 49% of a company's share price. This compares with EBITDA, EBIT, and net income explaining 57, 54, and 52% of share prices, respectively. This implies cash flows from operations as a performance metric have the lowest association with share prices.³

The evidence from the field interviews provides interesting insight into the role of cash flows in investor decision making, and how the different financial reporting stakeholders perceive the role of cash flows in investor decision making versus how investors indicate they use cash flows in investment decision making. The majority of the interviewees commented that cash flow was an important aspect of investment decision making. However, most investors did not identify the cash flow statement as more important than other aspects of the financial statements (for example, balance sheet and statement of profit or loss).

What Other Information Do Investors Find Useful for Investment Decision Making?

To complement the analysis of the role of financial information (both statutory and non-GAAP) to investor decision making, field interviews were used to provide evidence of the role that other, non-financial, information plays in investor decision making. A number of interviewees noted that there is, necessarily, a strong relationship between the financial

³ Since cash flows from operations are correlated with net income and EBITDA the documented association may not arise from investors directly using cash flows from operations for equity valuation. If investors use either net income or EBITDA for equity valuation then an implicit association with cash flows from operations will result. Our interview data is consistent with this explanation. Furthermore, the incremental value relevance of cash flows from operations for equity valuation, after controlling for net income, shows that it only explains 1.5% of share prices.

information and non-financial information, and the information sets are not used in isolation. Importantly, non-financial information was seen by a number of interviewees as a leading indicator of future financial performance. It was clear from the interviews that information is considered at two levels of the investment process. Initially, the information is used as a 'screen' or 'hurdle' for assessing which companies to consider for investment and, subsequently, the information is used as a means of assessing the value of a company.

Contribution

This research makes a number of contributions. First, we present evidence that the value relevance of financial reports has not declined across time in an IFRS-based jurisdiction: Australia. This evidence contrasts with much of the existing US GAAP-based literature on this issue. We further support this evidence with field interview evidence from investors, regulators, and auditors that provides further insights into how and why financial reports are used in investment decision making. This evidence confirms that financial reporting information is an important, or critical, contributor to investor decision making, with a focus on the role of financial information as 'confirmatory' to investor decision making, and as an input to investor models.

Second, we provide evidence that non-GAAP financial information, proxied by EBIT and EBITDA, is more relevant for investor decision making than net income across time. However, the trend in the relevance of non-GAAP financial information corresponds with the trend in relevance for net income, indicating that the measures are complements rather than substitutes. This is similarly supported by the data from our field interviews, with non-GAAP financial information facilitating predicting future performance to complement rather than replace statutory financial information. These results are expected to be of interest to the IASB in helping to inform their current project considering additional subtotals, including EBIT, for the statement of profit or loss.

Third, we provide insights as to the additional information that investors may use for investment decision making. The field interviews highlight the role of company specific factors such as governance, strategy and risk as informing investor decision making. Similarly, industry-specific factors such as environmental and social information are considered by investors.

These findings, therefore, make an important contribution to the ongoing debate of the relevance of financial reporting and highlight that different forms of reporting may not necessarily be substitutes to financial reporting, but rather act as complements to each other. Regulated financial reports provide a reliable foundation for decision making that, used in conjunction with other non-GAAP and non-financial information, enable investor decision making. Such insights provide a basis from which the IASB, national standard-setters and other regulators can respond to the criticisms levelled at financial reporting. Further, our explication of the role of other types of information used by investors, beyond the financial

statements, can guide regulators and standard-setters in focusing their limited resources and efforts to enhance financial reporting.⁴

RELATED LITERATURE AND PREDICTIONS

There is growing debate about, and concern over, the usefulness of financial reporting, in both IFRS-based jurisdictions, including Australia and Europe, as well as in the US. Interestingly, the evidence as to the decline in relevance to investors of financial reports is not consistent across jurisdictions.

Recent European research provides evidence that financial reporting is relevant to equity investors. For example, Gassen and Schwedler (2010) surveyed professional investors and found them to view the annual financial statements as the most relevant and the most reliable source of information for investment purposes. Notably, these investors saw the annual financial statements as more relevant and reliable than alternative information sources, including direct personal contact with management, note disclosures including the management discussion and analysis section, and third-party coverage. Cascino *et al.* (2016) interviewed 81 professional investors and similarly found that investors view financial reports as the most valuable information source for investment decisions. Interestingly, Cascino *et al.* (2016) reported that their interviewees saw financial statements as more relevant for valuation than evaluating managerial performance. There was also evidence of a perception of greater relevance for income statement items, and for EBITDA over statutory profit. Overall, European findings support the decision-usefulness of financial information for valuation purposes, but not are not entirely consistent with our results in the nuances of the role of different sources of information.

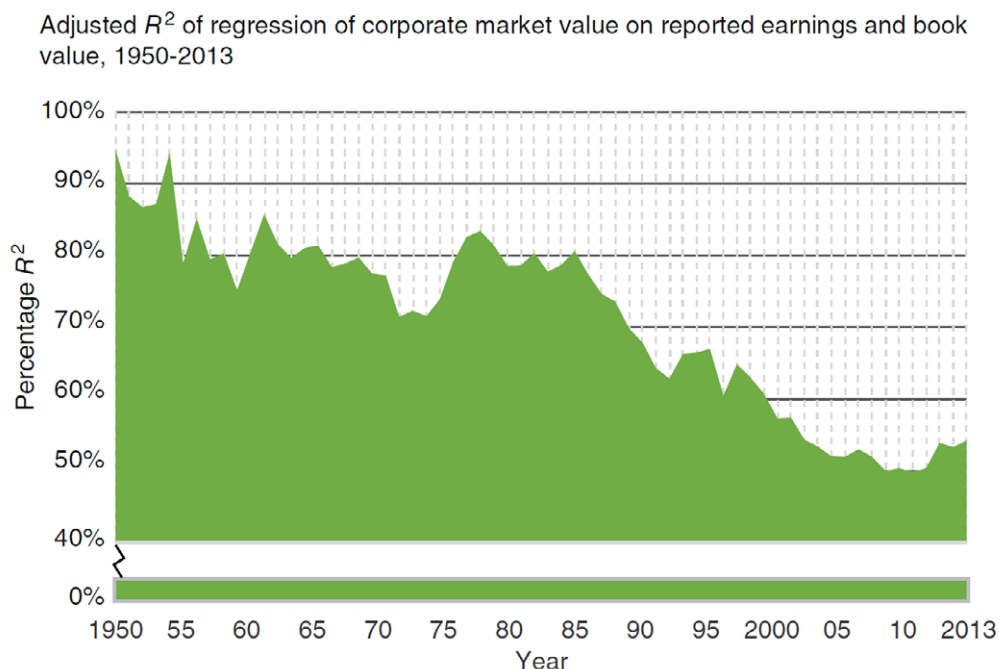
There are a number of prior studies in the US that examine the value relevance of financial reports across time, with mixed evidence. While some studies found a decline in the combined value relevance of net income and book value of equity (Lev and Zarowin, 1999; Balachandran and Mohanram, 2011; Lev and Gu, 2016), others found no evidence that value relevance has decreased across time (Francis and Schipper, 1997; Ely and Waymire, 1999; Collins *et al.*, 1997; Barth *et al.*, 2017). Due to the ambiguity about the value relevance of financial reports across time, this study aims to help resolve the uncertainty by examining this issue in an alternative setting, namely Australia.

⁴ There are two caveats in the interpretation of the archival evidence. First, we simply document an *association* between financial reports and share prices and do not provide direct evidence that the investors' use of financial reports is *causing* share price changes. For example, investors may be getting this information from other sources, such as management sales forecasts and this information is in turn incorporated in the final reports (the confirmatory role). Second, all the financial accounting variables (net income, EBITDA, shareholders' equity) that we examine are inherently highly correlated and we report results without controlling for this correlation.

In their recent book titled *The End of Accounting and the Path Forward for Investors and Managers*, Baruch Lev and Feng Gu painted a bleak future for financial reports. Lev and Gu (2016) investigate whether there has been a deterioration in the relevance of financial reports as an input to the investment decisions of equity investors. To do this, they run regression analyses and calculate, over time, the extent to which companies' share prices incorporate reported net income and shareholders' equity.

Per Figure 1, Lev and Gu's findings show a significant decline in the relevance of earnings and book value to equity investors. For example, while, on average, in the 1950s reported net profit and shareholders' equity explains over 90% of share price information, by 2013 this has dropped to explaining approximately 50% of a company's share price. As a result, Lev and Gu, and call for a significant revamp in financial reporting.

FIGURE 1
RELEVANCE OF US COMPANIES' FINANCIAL REPORTS OVER TIME



Source: Lev and Gu, 2016, Figure 3.1

Several explanations have been proposed for the apparent decline in relevance (Lev and Gu, 2016).

1. The availability of a substantial amount of more timely forward-looking information from alternative sources, and concerns about the timeliness of financial reporting (Francis and Schipper, 1997; Arif and De George, 2018).

Competing information sources (for example, non-GAAP financial information) may preempt financial statement information and act as substitutes to the statutory information provided in financial reports. As a consequence, financial statements do not capture value relevant events in the same time period as they are reflected in share prices.

2. The increase in the occurrence and reporting of one-time (or non-recurring items) and a decrease in current matching between revenue and expenses.

Collins *et al.* (1997) found in the US an increasing frequency of the reporting of one-time items. Dichev and Tang (2008) found mismatching between revenue and expenses in the US has increased across time. Non-recurring items are less persistent than earnings before non-recurring items ('underlying earnings') and can lead to less weight on earnings in relation to share price. This would, therefore, imply earnings becomes less value relevant.

3. The decline in earnings quality due to the shift from an industrialized economy and the emergence of new economy firms that derive value from intangible assets (e.g., high-tech, service oriented).

Corporate value is increasingly comprised of investments in intangibles, including internally generated intangibles. The basic argument put forward by Lev and Gu (2016) and others is that traditional financial reporting is of limited benefit to valuing these types of firms because accounting standards only allow recognition of investments in intangibles as assets in restricted circumstances, such as when intangible assets are externally acquired. Internally generated intangibles, however, are expensed despite being value creators for firms, thereby creating a disconnection between firm market value and book value. Evidence consistent with this explanation is provided by Lev and Zarowin (1999) and Srivastava (2014) who found firms with intangible assets have a greater decrease in earnings quality and a weaker association between financial reports and share prices.

RESEARCH DESIGN

Our research design combines archival and field interview methods to address our two research questions. We structure our analysis by further decomposing our research questions as shown below.

1. Are annual financial statements decision-useful (i.e., relevant) for equity investors in making investment decisions, and has this changed across time?

Are **net income and shareholders' equity** relevant for valuation, and has their relevance for valuation changed across time?

Are **operating cash flows** relevant for valuation and has its relevance for valuation changed across time?

2. What other types of information are considered decision-useful (i.e., relevant) for equity investors, and how is this information used in making investment decisions?

Is **non-GAAP** financial information relevant for valuation (proxied by EBITDA and EBIT), and has this relevance for valuation changed across time?

What **other non-financial information** is considered decision-useful for equity investors in making investment decisions?

Value Relevance

We examine the value relevance of primary accounting variables over our sample period from 1992 to 2015. Consistent with prior literature (Lev and Gu, 2016), the primary variables that we examine are net income and shareholders' equity given these are key accounting amounts traditionally synonymous with evaluating company performance and position. We follow prior research and examine time-series trends in value relevance of annual financial reports by examining the association each year between share price and these two key accounting measures. Further detail of our econometric modeling is provided in Appendix A to this paper.

Interviews

We respond to recent calls for financial reporting researchers to 'enter the field' (Kenno *et al.*, 2017). To gain an understanding of the types of information that are considered decision-useful for investor decision making we conducted interviews with investors, regulators, and auditors. We sought to both triangulate and contrast the perspectives of the different stakeholder groups (Eisenhardt and Graebner, 2007). Commonalities across the different stakeholder groups provide strong evidence from which we could draw conclusions. We expected differences to emerge that would provide insights on directions for practice interventions to develop a common understanding across stakeholders, and thus more effective financial reporting. Somewhat surprisingly there was very little substantive difference across stakeholder groups that have bearing on our research questions.

Development of the Interview Protocol

We developed a semi-structured interview protocol drawing on prior literature and consultation with experts in the practice of financial reporting and regulation. We pilot-tested the interview protocol with experienced representatives from our stakeholder groups to reach a stable and well-functioning protocol. Consistent with good research practice for interview-based research (Schultze and Avital, 2011; Galletta, 2013; Yin, 2013), we began with broad open-ended questions (e.g., 'What is the process you undertake to evaluate a company for investment purposes? What information do you use in this process?'). This ensured we would not unduly prompt or prime our interviewees to focus on financial statements. Only later in

the protocol did we narrow to address specific questions about the role of financial statements. Importantly, both in the use of broad open-ended initial questions, and in subsequent more specific questions regarding financial statements, the protocol was worded so as not to bias responses either for or against the role of financial statements in investor decision making.

The use of a standard protocol ensured we had a base set of questions that were asked of all interviewees. The protocol comprised seven main questions, with prompts to ensure elaboration by the interviewee on issues of particular concern. The conduct of the interview bore out the appropriateness of the protocol, as the natural progression of the interviewees' unprompted discourse often pre-emptively mirrored the order of our questions.

Conducting the Interviews

Interviewees were identified through a range of direct (e.g., professional contacts) and indirect sources (e.g., professional contacts of peers, or snowballed recommendations of direct contacts).⁵ Since the purpose of the interviews was to gain insight into how and why investors use financial statements, complementing the value relevance archival analysis, we did not seek a statistically representative sample. Rather, the purpose of our sampling was to ensure we solicited a diverse range of views from the relevant stakeholders. We did not explicitly determine the number of interviews to be conducted but maintained a rough balance across the different stakeholder groups as we progressed.

By completion of 17 interviews, it was evident that we had reached saturation, with negligible incremental insight from additional interviews and a surprising degree of consistency in the perspectives across the three different stakeholder groups. Consistent with established guidance, a larger sample of interviews was not required as given the nature of the topic interviewees were readily able to articulate their views, and the use of auditors and regulators provided 'shadowed data' (Morse, 2000), that is, informative as to 'the range of experiences and the domain of the phenomena beyond the single participant's personal experience, and provides some explanation of the rationale for these differences' (Morse, 2000, p. 4). That the data revealed very few differences between investors, regulators, and auditors further reduced the need for a larger sample.

Interviews were held in person, at a location of the interviewee's choosing (typically interviewee offices in Melbourne and Sydney). Interviews were held in September and October 2017. Substantive interview discussions averaged 28 minutes and ranged from 14 to 55 minutes. All interviews were attended by at least two of the researchers, and one researcher attended all interviews. All interviews were recorded and professionally

⁵ Interviewees held typically held senior roles in their organizations (Investors: chief investment officer, research director, principal; Auditors: partners (several different firms, all but one Big 4); Regulators: Manager, Director). Notably, only two of 17 participants had previously been taught by any member of the research team.

transcribed for subsequent analysis. Transcripts amounted to over 69,000 words and 107 pages. To guard against bias in interpreting the interview data we analyzed the transcripts using LIWC 2015 (Pennebaker *et al.*, 2015) text analysis software. The result revealed that our interviewees, while somewhat guarded in their responses (Authenticity = 47.87), were overall positive in their tone (tone = 64.52) and spoke with authority and expertise (Clout = 67.30), and were informal, personal, and narrative in communication style (Analytic = 38.29).⁶

SAMPLE AND DATA

Companies

Our archival sample consists of 29,838 firm-year observations from 1992 to 2015.⁷ Table 1(a) provides descriptive statistics (Panel A) and correlations (Panel B) for our primary accounting variables. As Panel A of Table 1 indicates, our sample firms are, on average, profitable firms that generate positive operating cash flows (OCF) that exceed reported net income but not EBITDA. Panel B shows that, whether in the context of Pearson (above the diagonal) or Spearman (below the diagonal) correlations, there is preliminary evidence of the association between key accounting numbers contained within a company's annual financial statements and their share price. In particular, there is a significant positive correlation between a company's share price (P) and shareholders' equity (BVE), net income, EBITDA, and operating cash flows. Not surprisingly, there are significant positive correlations between the accounting items themselves, particularly the correlations between net income and EBITDA and between EBITDA and operating cash flows.

TABLE 1(A)
PRIMARY ACCOUNTING VARIABLES

Panel A: Descriptive statistics					
	Price	BVE	Net Income	EBITDA	OCF
Mean	1.03	0.60	0.03	0.11	0.07
Median	0.23	0.15	0.00	0.00	0.00
Std	2.28	1.08	0.15	0.28	0.21
Max	75.25	10.56	1.46	2.41	2.13
Min	0.00	-0.09	-0.55	-0.27	-0.35

All variables are computed on a per share basis

⁶ See Appendix C for further details.

⁷ We begin in 1992 because this is the year that Aspect-Huntley began comprehensive coverage of Australian firms.

Panel B: Correlations

	Price	BVE	Net Income	EBITDA	OCF
Price	1.00	0.73	0.71	0.76	0.68
BVE	0.73	1.00	0.68	0.80	0.70
Net Income	0.71	0.68	1.00	0.85	0.72
EBITDA	0.76	0.80	0.85	1.00	0.85
OCF	0.68	0.70	0.72	0.85	1.00

All correlations are statistically significant at $p < 0.01$.

Interviews

Our sample consists of 17 interviewees, with backgrounds as investors, regulators and auditors. Table 1(b) outlines the demographic information for the interviewees.

TABLE 1(B)
DEMOGRAPHIC INFORMATION FOR INTERVIEWEES

		Number	Percentage of sample
Classification	Investor	7	41
	Regulator	5	29
	Auditors	5	29
Gender	Male	15	88
	Female	2	12
Years of experience	>10	3	18
	11– 20	3	18
	21– 30	7	41
	>30	4	24
	Mean	21.8	
Highest qualification	Bachelor degree (including Honours)	11	65
	Masters / MBA	5	29
	PhD	1	6
Professional certifications ⁸	CPA/CAANZ/Other equivalent international designation	11	65
	AICD	2	12
	Other	3	18
	None	4	24

FINDINGS

⁸ Total is > 17 as some interviewees hold more than one qualification.

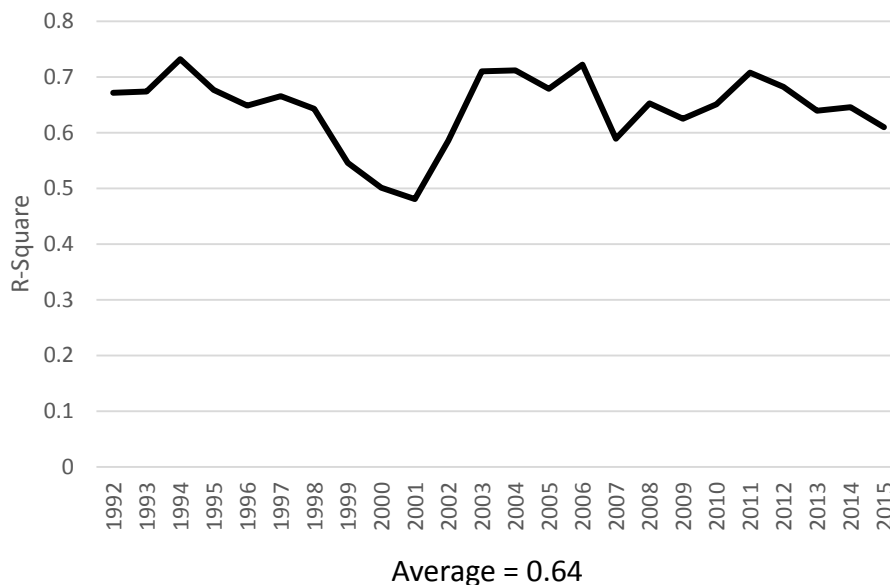
Relevance of Financial Statements to Investor Decision Making

Value relevance of financial statements over time (combined net income and shareholders' equity) Our results from the archival analysis show that financial statements are decision-useful for equity investors in making investment decisions. The results show that the mean adjusted R^2 is 64%. In other words, on average, a company's financial performance and position, measured as reported net income and shareholders' equity respectively, explain 64% of a company's share price.

As shown in Figure 2,⁹ this result for the combined value relevance of net income and book value of equity has remained relatively constant over time, ranging from a high of 73.2% in 1994 to a low of 48% in 2001. For 2015, the most recent year examined, on average, a company's financial performance and position explains 61% of a company's share price, which is consistent with the long-term average.

FIGURE 2

POWER OF NET INCOME AND BOOK VALUE COMBINED IN EXPLAINING SHARE PRICES



⁹ The number of observations has increased significantly across time implying the underlying population may not be comparable. As a preliminary robustness measure for the baseline result, we estimate equation (1) across a sub-sample of firms that were in the sample for more than 80% of the total time period. The results (untabulated) are consistent with the full sample.

Overall, the archival results show that financial reporting has not declined in relevance over the period studied. In contrast to much of the prior literature that finds a decreasing trend in the combined value relevance of earnings and book value of equity (e.g., Lev and Zarowin, 1999; Balachandran and Mohanram, 2011; Lev and Gu, 2016) we find no evidence that value relevance has decreased across time for net income and book value of equity combined. This result is particularly interesting given the significant increase in available information for investors over the time period studied. This result suggests that the limitation of the timeliness of the release of financial information is not as important for investor decision making as has been previously argued. It should be noted that the regulated reporting frequency in Australia is less frequent than in the US (semi-annual versus quarterly) (Arif and De George, 2018), which would make the annual financial statement a more important source of reliable information in the Australian context.

Relevance of Financial Statements—Evidence from Field Interviews

The interview data provides explanations of how and why financial statements are used in investor decision making, and how they remain value relevant to investor decision making. Interviewees were uniformly unwilling to make investments without audited financial statements. A rare exception was noted when the investor had first-hand connections with the entity, such as when engaging as a seed investor of a start-up company, which therefore could directly secure information to meet their needs.

Interviewees typically viewed the financial statements as having a confirmatory role in assessing performance, and that the historical basis of these statements provided the initial input to the investment models investors develop and use for investment purposes.¹⁰

As comments from investors revealed:

Clearly financial information is, by and large, the thing that you're going to at least be primarily concerned about. (Investor 1)

The financials ... are the thing that give us confidence. The audited financials are the thing that give us confidence that debts will be repaid, that there are sustainable earnings that will fund future dividends and capital growth ... It's the thing that gives us confidence to invest. So, I think the entire system is crucial to us forming a view on the fair value of an investment that we might make. (Investor 2)

¹⁰ While our interview extracts are largely positive towards financial statements, this is not simply a function of selection bias, machine text analysis confirmed an overall positive tone in the transcripts.

Regulators and auditors had views consistent with those of the investors:

If I had to put a percentage on [the role of the financial statements], it's three-quarters confirmatory. But ... to me that doesn't diminish its role because I think if there were audited financial statements the users might say they don't look at them and they just go to investor briefings, but that's where all the numbers come from. (Regulator 1).

It should be the first thing anybody reads. Well, obviously, I think it provides a pretty comprehensive track record ... of results, financial position being reported to the market. So ... I've always seen it as confirming a report card. So, it's confirming maybe what professional investors and others are estimating as [what is] actually happening in the business. (Auditor 2)

While recognizing the foundational role of audited financial statements, investors are not naïve as to their limitations:

Audited financial statements are the go-to It's the best we have. It's an imperfect world ... but they're a critical part of what we use. (Investor 7)

Likewise, issues around the backward-looking focus and timeliness were echoed by auditors and regulators, but did not seem to detract from the critical role played by financial statements:

So, it is a little bit backward looking because, by definition, it's the historical financial statements. It's not next year's financial statements so investors obviously are looking more at future cash flows and value. So, I see it mainly as a confirmation ... But it provides a pretty good way to explain the business. I think a lot of decisions and professional investors ... are going to be based on understanding the track record that companies or management have demonstrated in the past. So, I think it's quite important. (Auditor 2)

The financial report is a point in time. Yes, it's historical and by the time it comes out you know it is a bit of a lag ... but, in the end, it's a true point in time – it's got the independent assurance ... It's all about confident, informed markets and investors. And the way I look at it is a key component of that is the financial report. (Regulator 4)

Indeed, financial statements were recognized as going beyond a confirmatory role, to facilitating forward extrapolation:

... more than just confirming their view, but also, it's the additional information which they are not going to get from other sources ... they are really looking for the next level of detail to be able to both confirm their existing decision, but also to update their models or investment frameworks for the next forward-looking cycle. (Regulator 3)

Although all interviewees expressed the importance of financial statements for investor decision making, some contrasting views were expressed in relation to whether financial statements were the *most* important information used by an investor in their decision making. For example, one auditor, although noting that financial statements are ‘base level’ confirmatory for a company, suggested that it is not the ‘primary information that they [investors] use’ (Auditor 3). The reason provided for this view is that:

... it would maybe not be the company’s accounts or annual report, but more the other information they provide to analysts, whether that be forecast information, things from their analyst briefings and presentations, information they’ve provided for modelling purposes around their assumptions and the future forecasts ... I don’t think they’re probably as timely as a lot of information that’s unaudited can get out there to the market and it’s obviously very backward and historical looking. But I think they play an important role in adding credibility to the other information that the companies will put out there. (Auditor 3)

Interestingly, this view was not expressed by any of the investors interviewed as part of this study. In broad terms, the interview evidence supports a consistent view across the stakeholder groups that the financial statements are the foundation for investor decision making, a necessary, but not sufficient, basis for predicting future performance of an entity.

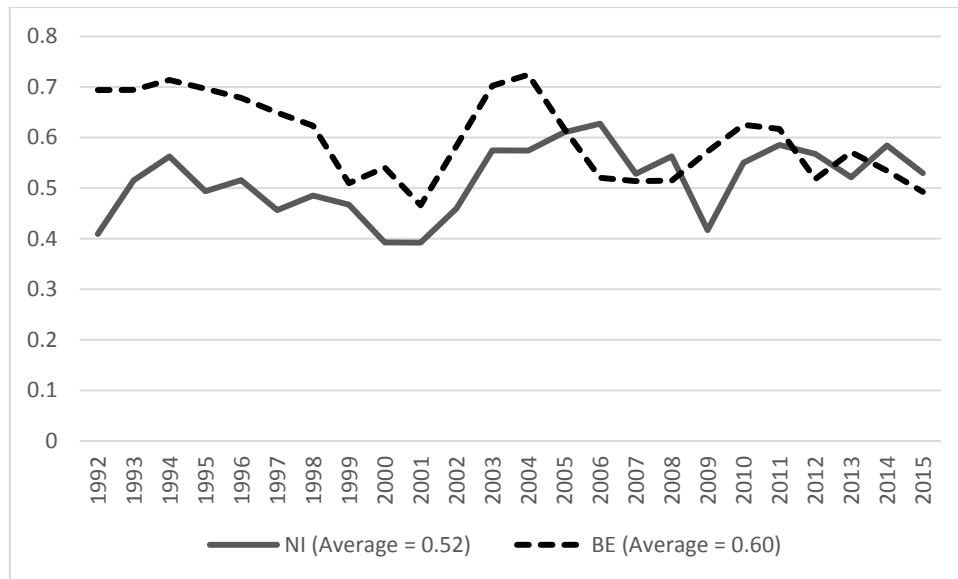
Relevance of Net Income and Shareholder’s Equity to Investor Decision Making

Value relevance net income and shareholders’ equity over time (analyzed separately) Having established that the combined relevance of net income and shareholders’ equity has not declined, we next examine whether this finding is driven by net income or shareholders’ equity (or both) maintaining value relevance over the sample period. That is, to examine whether the importance of these elements has changed over time.

Figure 3 shows the results where we analyze the effect on share price of reported net income and shareholders’ equity separately, on an annual basis.

FIGURE 3

POWER OF NET INCOME AND BOOK VALUE INDIVIDUALLY IN EXPLAINING SHARE PRICES



R-squared of separate annual regressions of corporate market value on reported net income and book value, 1992–2015.

Our results from the archival analysis show that both shareholders' equity and net income are decision-useful for equity investors in making investment decisions. The results show that the mean adjusted R^2 for book value of equity is 60%, and for net income the mean adjusted R^2 is 52%. In other words, on average, a company's financial position alone, measured as book value of equity, explains 60% of a company's share price, while financial performance alone, measured as net income, explains 52% of a company's share price.¹¹

As shown in Figure 3, the association between a company's share price and reported shareholders' equity has declined over the sample period, as reflected in its reduced ability to explain company share prices. However, the association between a company's share price and reported net income has remained relatively stable over time.

Figure 3 also shows that the greater predictive ability of shareholders' equity to explain company share prices is declining over time to a level comparable with that of net income. In fact, there is no significant difference between these two items in 2015. In 2015, shareholders' equity explains 49% of the share price and net income explains 46% of share price. This indicates that both elements are similarly important for investor decision making.

¹¹ The decision-usefulness of the financial position for equity valuation as measured by the explanatory power of 60% could be overstated. Current share prices are a positive function of past earning growth. This past earning growth is included in current retained earnings and therefore a mechanical relation will arise between current book value of equity and current share price due to the use of earnings in the past to value a share.

Overall, our archival findings indicate that reported net income and book value of equity are important inputs in explaining a company's share price. Moreover, in more recent times these accounting numbers are becoming similarly important, perhaps suggesting that investors rely equally on these accounting numbers for decision making purposes.

Relevance of Net Income and Shareholders' Equity—Evidence from Field Interviews

The evidence from the interviews provides further insight into the role of net income (profit and loss) and shareholders' equity (balance sheet). Consistent with the archival research the interviews evidenced that, at least for investors, the profit and loss statement and the balance sheet were seen as similarly important for investment decision making. Most interviewees commented that investors would use all aspects of financial statements in combination:

... a large proportion of investors these days use the income statement but ... a lot of value investors ... use the balance sheet more heavily. But it's definitely a combination of the two. (Investor 5)

Indeed, as one investor noted the interdependencies require consideration of all the financial statements:

I don't see how people could use any one statement in isolation of the others. (Investor 4)

Notably, investors used the different financial statements to inform themselves about different aspects of a business. For example:

The profit and loss gives us a good sense of a company's ability to pay its future debts ... but the balance sheet gives us a good sense of whether there are assets that we are a little nervous about like stranded assets or things like that. (Investor 2)

Furthermore, investors noted that the relative importance of the balance sheet or profit or loss would be industry dependent and driven by the characteristics of individual companies. For example:

... in the end game, you're forecasting cash flows and valuing those, but generally you'll do that via the income statement. This changes when you have a balance sheet driven business so for banking, insurance, to a large degree, firms that generate value from fair value to equity investments ... you'll tend to focus primarily on book value rather than income statement. (Investor 1)

In contrast, regulators and auditors were of the view that investors would focus more on the profit and loss rather than balance sheet of a company when making investment decisions:

I suspect the focus is on ... performance rather than a particular point in time. And that partly reflects the fact that the balance sheet is old by the time you

look at it, it was at a point in time, whereas at least the profit and loss gives [the] flow over a year and you can compare it with what was in the previous year. (Regulator 2)

It probably varies, depending by industry but as a general rule I would say [investors focus on] profit and loss. (Auditor 3)

[Investors] focus on probably the whole profit and loss ... profit and loss gets an unhealthy level of focus because ... the profit and loss is seen as the score card. (Auditor 1)

Investors, however, are not as narrow in their focus as auditors and regulators appear to think, with one clearly explaining how the marketplace had learnt from experience of a narrow focus:

The whole industry learnt some pretty hard lessons through the GFC about ... not being focused on capital structure. That's always been an important one for us so we look at a range of metrics which we derive from historical financial data around leverage ratios and interest coverage ratios ... (Investor 6)

All three stakeholder groups recognized that the focus in the financial statements was moderated by the nature of the investment decision (e.g., long-term versus short-term):

It depends on the investors. So, some investors are investing for the long-term, obviously, so I think they'll look at the quality of the profitability of the company ... whereas others are looking at the shorter-term results ... If it is a yield investment they'll focus on the profitability and things like that but if it's for the longer term I think they look at the quality of the assets and the quality of the profit and loss ... How predictable that is going forward. (Auditor 4)

Overall, evidence from the field interviews indicates that both the income statement (net income) and the balance sheet (shareholders' equity) are seen to have a key role in investor decision making. This is consistent with the archival results, which indicate that both statements are becoming similarly important for investment decision making purposes.

Relevance of Cash Flows to Investor Decision Making

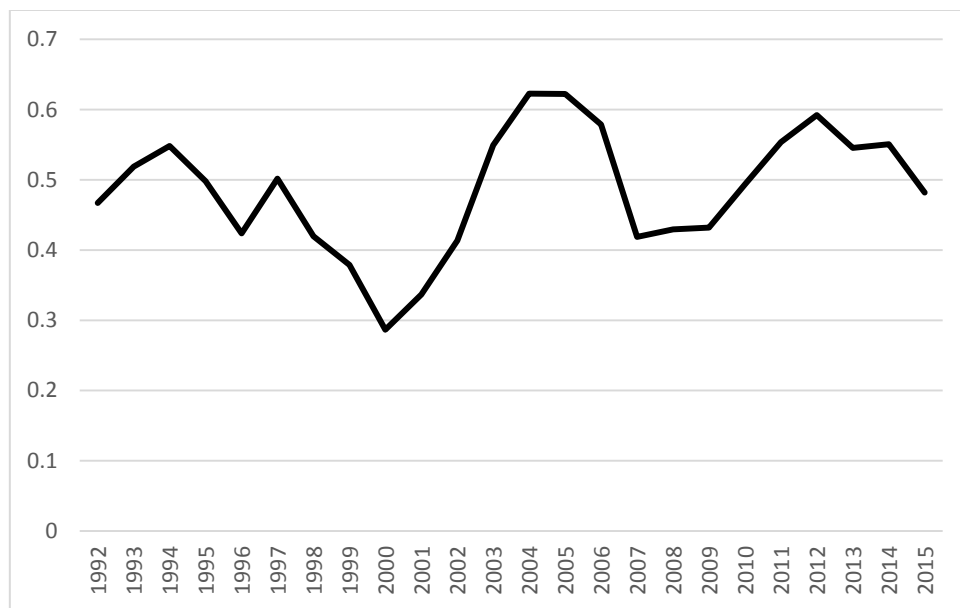
Value relevance of cash flows over time Our results from the archival analysis show the relevance of operating cash flows for equity investors in making investment decisions. The results show that the mean adjusted R^2 is 49%. This means that, on average, a company's operating cash flows explains 49% of a company's share price.

As shown in Figure 4, this result for operating cash flows is less stable than reported net income, ranging from a high of 62.2% in 2004 to a low of 28.6% in 2000. For 2015, the most recent year examined, on average, a company's operating cash flows explain 48% of a company's share price, which is consistent with the long-term average.

As Figure 4 depicts, it seems that since 2004 operating cash flows have increased in value relevance. Prior to this date, however, operating cash flows were, on average, more volatile in explanatory power, and less able to explain, company share prices.

FIGURE 4

POWER OF OPERATING CASH FLOWS IN EXPLAINING SHARE PRICES



Average = 0.49

R-squared of separate annual regressions of corporate market value on operating cash flows, 1992

–2015

Relevance of Cash Flows—Evidence from Field Interviews

While the interview evidence, unsurprisingly, concurs that cash flows are important in investment decision making, it reveals a more nuanced view. Specifically, while cash flows are important it does not necessarily mean that the cash flow statement itself is as important. For example:

I think cash is always king. You always have to look at ... what the cashflows are, where they're coming from. If it's a cash producing business, but you always have to come back to the balance sheet with respect to valuations because if something is producing ... cash then the question is—well, what are we paying for that? (Investor 7)

As one auditor succinctly described it:

I don't think enough investors really look at the cash flow statement ... But ... it's historical, isn't it? It's not a predictor of what's going to be generated in the future. (Auditor 4)

While investors did not identify the cash flow statement as more important than other financial statements, this was often not how auditors and regulators thought investors would view the cash flow statement. For example:

Cash flows would have to be the thing [investors] look at over and above everything else because they're real. (Regulator 1)

The apparent lack of focus on the cash flow statement was perplexing to one auditor:

I always think it's funny when in the financial services, [investors] come up with a measure called cash earnings, where there actually is a cash flow statement which is supposed to show cash earnings. And, so, the fact that people are trying to come up with another form of cash earnings is to me is a bit of a nonsense ... Personally, I think that the profit and loss needs the context of a cash flow and I think that the cash flow is under focused on. And the reason for that is because people are trying to adjust their profit and loss to come up with EBITDA. And, when they're coming up with measures like EBITDA, they're trying to come up with a proxy for cash flow and I think the cash flow statement already gives you good information on the cash flows of a firm. Whereas an EBITDA, at the end of the day: taxes—they have to pay them, interest—well the finding is something that has to be paid for ... (Auditor 1)

However, the cash flow statement is not without value, for example:

The format of cashflow statements in Australia is a lot better, say, than the US, particularly with ... cashflows from operations ... We will look at different metrics around cashflows from operations and particularly in terms of how we forecast it. (Investor 6)

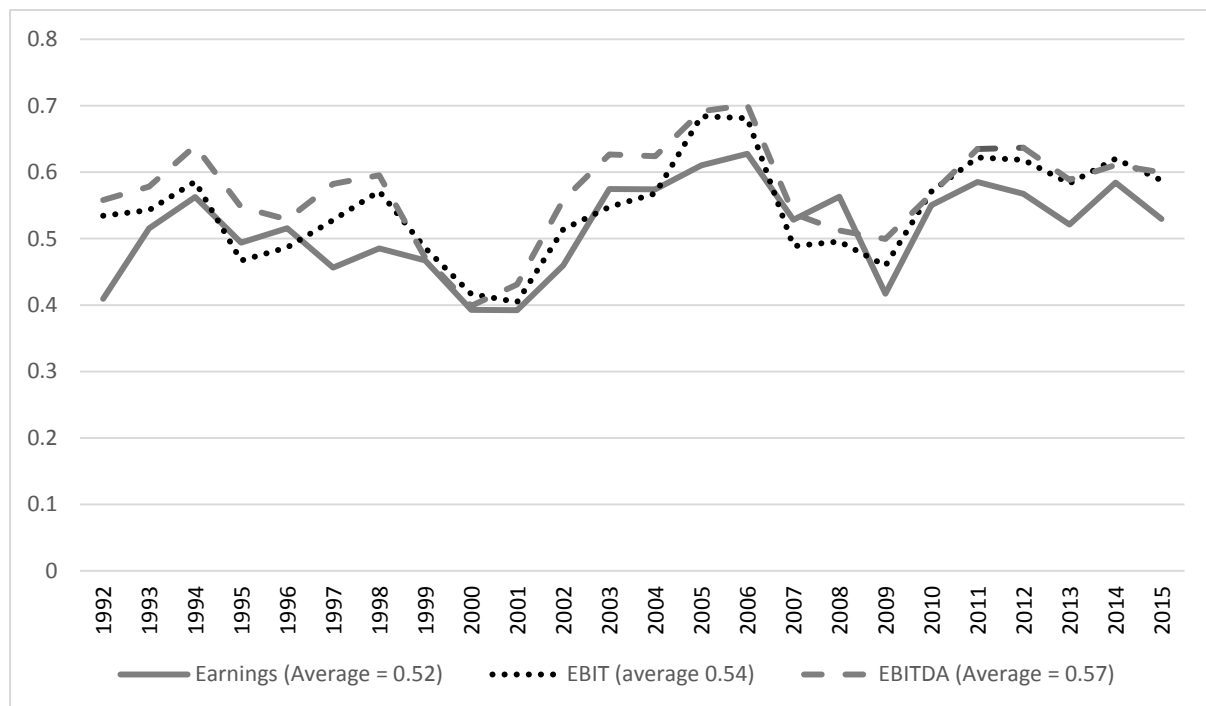
The use of 'different metrics around cashflows' suggests that the cash flow statement is not seen as the only source of information for predicting future cash flows, and so there is a potential disconnect between the importance of cash flows and the importance of the cash flow statement.

In summary, the interviews support the importance of cash flows in investment decision making, but not exclusively cash flow as reported in the cash flow statement. As a result, there appears to be a misconceived perception amongst regulators and auditors as to the importance that investors place on the role of the cash flow statement in investor decision making, and the role of cash flows versus the role of the income statement and balance sheet.

Relevance of Other Information for Investor Decision Making—Non-GAAP Financial Information

Value relevance of EBIT and EBITDA over time versus net income Having earlier established that net income is value relevant to equity investors, and consistently so over time, we next compare the value relevance of net income, which is a statutory profit measure, with our proxy of non-GAAP earnings, namely EBITDA and EBIT. Figure 5 shows the results where we analyze the comparative effect on share price of reported net income and EBITDA and EBIT on an annual basis.

FIGURE 5
POWER OF NET INCOME, EBIT AND EBITDA IN EXPLAINING SHARE PRICES



R-Squared of annual regressions of corporate market value on net income, EBIT and EBITDA, 1992 –2015

Our results from our archival analysis in relation to EBITDA, EBIT, and net income show that the mean adjusted R^2 is 57, 54, and 52% respectively. This means that, on average, a company's EBITDA, EBIT, and net income explains 57, 54, and 52% of a company's share price. The adjusted R^2 reported for EBITDA is greater than net income in all but one of the 24 years and the mean value across time is statistically different from net income (t -value = 2.72 prob <0.01). This seems to indicate that EBITDA is more value relevant than net income in explaining variation in company share prices. While the adjusted R^2 of EBIT is greater than

net income in 75% of the years there is no statistical difference in the mean value of the adjusted R^2 across time between the two performance metrics. One potential explanation for the greater value relevance of EBITDA compared to net income is investors view those items that comprise net income but not EBITDA such as depreciation and amortization are less relevant for valuation purposes.

Interestingly, the trend in value relevance of EBIT, EBITDA, and net income is comparable over the sample period. That is, the change in value relevance over time for both accounting measures correspond, suggesting that statutory profit and non-GAAP earnings are complements and not substitutes. This is consistent with Clinch *et al.* (2016), who find that firms' underlying earnings (e.g., EBITDA and EBIT) and statutory profit (ie., IFRS-based net income) are associated with share prices, indicating the complementary nature of the information contained in both underlying earnings and net income.¹²

Relevance of Non-GAAP Financial Information—Evidence from Field Interviews

The evidence from the field interviews provides insight into the role that non-GAAP financial information plays in investor decision making, and how non-GAAP information relates to statutory financial information (for example, net income).

In contrast to the evidence presented earlier, that the role of statutory financial information in investor decision making is primarily confirmatory in nature, when asked about the role of non-GAAP financial information, interviewees highlighted that the measures are often used by investors to help establish what part of current performance is expected to continue into the future (i.e., predictive, sustainable, persistent earnings). As Investor 3 specifically commented 'all the [research] studies show that non-GAAP numbers do a better job of predicting future cash flow and earnings than GAAP measures do'.

Another investor noted that:

When our task is to forecast earnings or cash flows, the most recent period or the growth of the most recent period is a heavily important benchmark ... My task ... is trying to discern what part of that recent period I can expect to continue or not – and that's where I think non-GAAP measures become really important. (Investor 1)

Another investor noted that non-GAAP financial information is almost exclusively focused on the profit and loss—'you don't tend to see very many investment firms ... or brokers and

¹² For each accounting item presented in Figures 2, 3, 4, and 5, Appendix D contains a list of the adjusted R^2 for each year of the sample period and average adjusted R^2 over the sample period.

investment banks adjusting balance sheets or cashflows. It's practically always the profit and loss' (Investor 6). The investor went on to comment that:

Obviously, the concept there is trying to get to an operating or ... recurring. However, you want to [have] ... a starting point to make predictions about future years. In the end we're discounting future earnings and cashflows back to come up with present values to try and figure out what these businesses are worth ... Most of our competitors are doing the same thing so everyone's ... focused on trying to get as clean and representative starting point as they can. Which I'd define as ... maybe the last three or four years as a starting point from which to make projections out over the next three, five and ... 10 years and beyond. So that's the sort of concept behind adjusting for one-offs, non-recurring items etc. (Investor 6)

It was also noted:

EBITDA should be the number that most accurately reflects the future prospects of a company. It doesn't always because it seems open to a level of fluctuation of volatility. But, basically, to me, you should be able to look at a set of financials and say—here's our earnings because all the things that we need to take into account have been taken into account. That is, the best picture of your future expectations of what a company is going to generate in earnings. And then we can overlay our own expectations about the future prospects of that company. (Investor 2)

In contrast to the role of financial statements in investment decision making, no interviewees mentioned that non-GAAP information is confirmatory, even though much of the non-GAAP information provided is historical in nature (e.g., EBITDA).

Further, a number of interviewees noted that non-GAAP information is used to 'better communicate' the financial results of a company to investors. For example, one investor commented that:

There's only so far that statutory reporting can go because ... it's very difficult to capture the nuances of every industry, every company... So the non-GAAP reporting I think is essential to help users of the accounts better understand the dynamics of those companies and their cashflows. (Investor 4)

Another interviewee noted that:

My impression is investors want to know what just went on, what did you do in the last 12 months or six months, but they moreover, especially these days, want to get an understanding of what the future holds. And, sometimes, if you can see what's been underlying your statutory profits for the last two or three years that might help management to have a better communication to investors of—"don't focus on that, it's not really what's going to drive our business"

future and our profit, it's this within our results what we're focused on and we think you probably should be focused on too to make your own decisions. (Regulator – M1)

Interviewees also identified several key issues with the preparation and use of non-GAAP financial information, including issues relating to:

- transparency in the development of the information;
- reliability of the measures; and
- consistency both within and between companies in how the measures are calculated.

For example, in relation to non-GAAP financial information, one investor noted that 'I think they're very important, but I think even investors themselves don't realize how ad hoc they can be' (Investor 3). Another investor commented that 'the problem ... with the non-GAAP measures is that how they're constructed is sometimes a bit of a black box.' (Investor 1). Similarly, one regulator commented that:

If done properly by the company it can be useful information, but you're not going to have comparability across other companies ... Alternative measures of profit, for example, has [sic] the potential to be useful for a specific company. If you can't ... get useful comparative information ... I think too many companies ... use it as a way of conveying a profit that they want to convey rather than giving the true ... underlying performance of the business. (Regulator 2)

To help alleviate some of the concerns noted above, a number of regulators and auditors mentioned the need for the non-GAAP measures to be properly defined, but not necessarily regulated. A number of interviewees commented that some form of additional disclosure of the calculation methodology would be useful for consistency, comparability and transparency. For example, one regulator noted that:

I think transparency about how [non-GAAP measures are] calculated would be important, such that hopefully, you can get that consistency in calculation from company to company ... But, maybe that becomes something that's not necessarily mandated, but rather the disclosure of its calculation is. And then [investors] ... can put pressure on the companies to get that consistency... As a minimum, there should be a reconciliation from anything that's disclosed, non-GAAP, back to what it would be in the financial statements. (Regulator 3)

In addition, investors made comments along the following lines:

... the only way to deal with it is [by] disclosure ... So when you utilize a non-GAAP, particularly underlying type number, you should—or perhaps, could have an obligation to then reconcile your construction of that. Otherwise you're again reliant on management for communicating the number in an appropriate

way. (Investor 1)

If [companies] had to provide written disclosure of how [non-GAAP measures] reconcile, that would definitely be helpful. (Investor 7)

It would be useful if you could reconcile ... back to all the statutory accounts. (Investor 4)

Although, any form of regulatory requirement was noted by some interviewees as being potentially problematic, with one investor noting that:

[Non-GAAP] will vary from year to year and it's almost as if the definition of non-GAAP earnings is not clear until earnings have occurred in practice. And, so potentially there's value in having firms produce measures or definitions and non-GAAP in advance before they actually measure it. I don't know how easy it would be to enforce that kind of thing. (Investor 3)

Another investor also noted that the role of improving the quality of non-GAAP financial information is not limited to the regulators, commenting that:

... it really is companies themselves who are contributing to that information who should play a greater role in ensuring the quality of the information that goes out is consistent, reliable, meaningful information. (Investor 4)

Overall, the evidence from the field interviews highlights that non-GAAP financial information has an important role to play in investor decision making. However, the role is in the context of the financial statements. This is particularly highlighted in the number of interviewees who would like to see a stronger relationship between the statutory financial information and the non-GAAP financial information. From this, we can conclude that there is no evidence to suggest that non-GAAP measures are a substitute for statutory financial measures of performance of an entity (e.g., net income), and although annual financial statements have been criticized as being, somehow, replaced by timelier non-GAAP information, the evidence suggests that the two sets of information are more complementary in nature, rather than acting as substitutes.

Relevance of Other Information for Investor Decision Making—Non-financial Information

What other information do investors find useful for investment decision making? To complement the analysis of the role of financial information (both statutory and non-GAAP) to investor decision making, field interviews were used to provide evidence of the role that other, non-financial, information plays in investor decision making.

The archival analysis above, and the related field interviews, highlight that financial statements and other financial information are relevant for investor decision making. To help

understand what other information investors use in investment decision making, as part of our field interviews we asked the interviewees about what other (non-financial) information is used in evaluating a company for investment purposes.

Overall, a number of interviewees noted that there is, necessarily, a strong relationship between the financial information and non-financial information, and the information sets are not used in isolation. Importantly, non-financial information was seen by a number of interviewees as a leading indicator for future financial information. For example, one investor noted that:

An environmentally disruptive company is eventually going to run into business prospect issues because they will face issues ... So sustainability does probably play out in future earnings. (Investor 7)

A number of key themes were evident from the interview responses. Firstly, it was clear from the interviews that information is considered at two levels in the investment process. Initially the information is used as a 'screen' or 'hurdle' for assessing which companies to consider for investment, and subsequently, the information is used as a means of assessing the value of a company.

For both stages of the investment process (i.e., screening and valuation), key elements relating to the company that were highlighted by interviewees included:

- governance of an entity—including understanding the management personnel;
- risk information—for evaluation / loss aversion;
- business model and strategy, including information provided in the operating and financial review, directors' report, etc.
- industry factors and competition;
- environmental and social information;
- other non-financial information including sales data, brand perception, customer satisfaction.

Environmental, social, and governance (ESG) information was often considered as an important screen for investment purposes, with a number of interviewees commenting that investors are considering environmental and social aspects when thinking about investments, and that this information is becoming more important.

Although, one regulator commented that they thought social and environmental information was 'a public relations exercise' (Regulator 1). Another regulator also commented that:

Where they've found particularly with some of the environmental and social type reporting, that some have expressed concerns about the basis upon which it's prepared and whether they understand what that basis is. So, it comes back again to how much of this is really reporting under a framework or is it just almost a marketing spin. (Regulator 3)

However, another regulator suggested that:

[Investors] should have an environmental conscience, they should have a social conscience, and I'd expect a lot of them do. And they want to make their investment decisions within that context. (Regulator 2)

In terms of governance, one auditor noted that 'the capital of a company is not just the physical assets ... but it's the quality of the people that it's got' (Auditor 4).

One investor noted that:

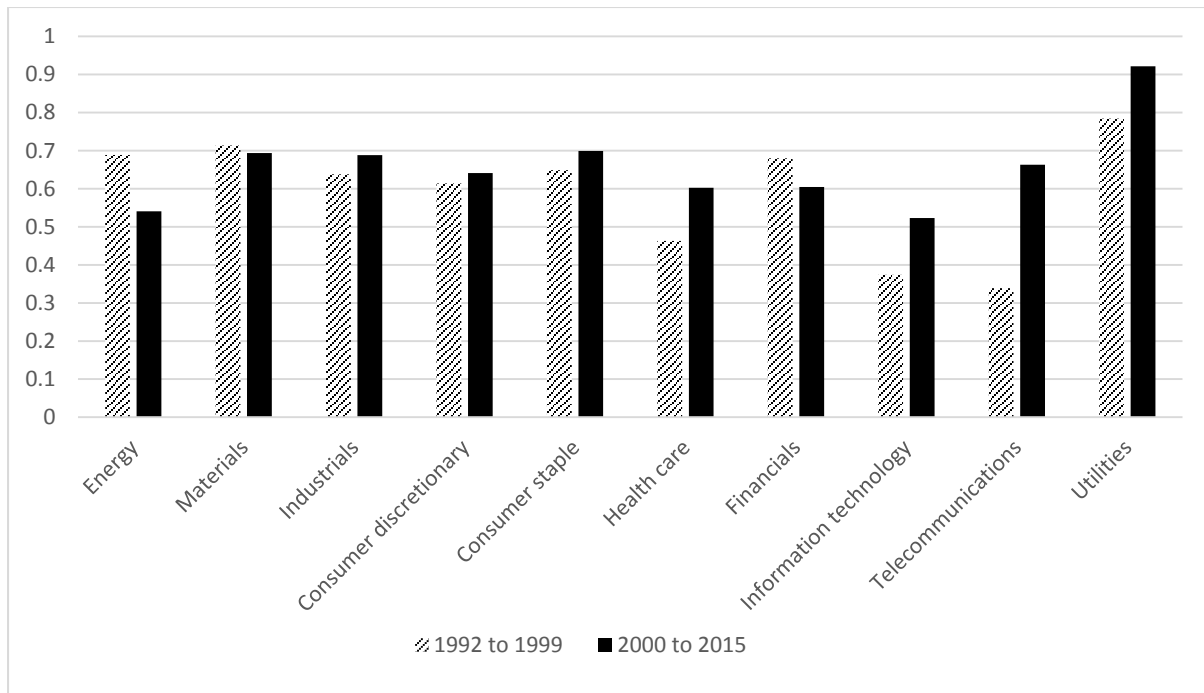
If a company has a low overall ESG score ... then below a cut-off those companies are excluded so they don't even get into the investible universe to be look at or modelled or considered. They just get knocked out in round one ... Round two—once we are down to 150 or so investible companies ... we take the ESG score in again as a positive differentiating factor. This time, so the companies with the highest scores will rank higher, companies with the lowest scores will rank lower. (Investor 6)

A number of interviewees specifically commented on the importance of understanding and linking the financial and non-financial information relating to a company. For example, one auditor commented that:

It's important for the investors to do non-financial research but then use the financial statements as the cross-check for all of that and see that it is giving them the right—is it supporting what they're seeing and what they're thinking ... I think that the two work hand-in-hand and I think that investors should take a view on the business prospects more broadly and they should be looking heavily on the non-financial because that's what's going to differentiate one firm from the next that they could invest in, but the financial information's also important for them to give a cross-check, if you like, on what they think the revenue of the business of the entity is, I think the financial information helps them do that. (Auditor 1)

This view was shared by another auditor who noted that:

I think more generally it's becoming increasingly important, and I think a recognition that it has a more direct impact at the end of the day on performance and profitability ... increasingly [there is] a more direct link to



Average R -squared of regressions of corporate market value on reported net income and book value by industry, across 1992 –1999 and 2000– 2015.

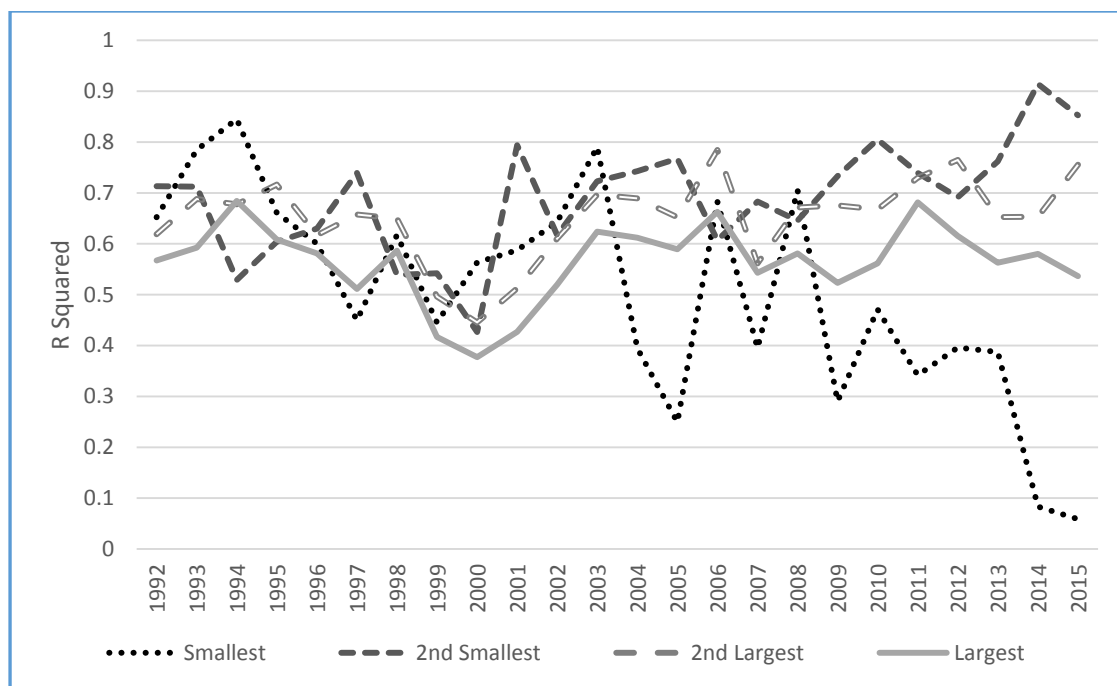
As evident from Figure 6, the relevance of net income and shareholders' equity has, in general, increased across the two time periods. Specifically, while the relevance of financial reporting declined across time for sample firms in the energy and financials industries, and remained relatively constant in the materials industry, the decision-usefulness of financial reporting for firms in all other industries improved over time. Interestingly, the industries that experienced the most dramatic increase in decision-usefulness of financial reporting are the intangibles-intensive information technology and telecommunications industries. For example, from 1992–1999 reported net income and shareholders' equity combined explained, on average, 37% (34%) of a company's share price in the information technology (telecommunications). From 2000–2015, this increased to 52% (66%), indicating that, despite concerns that financial reporting does not adequately capture corporate value derived from investments in intangibles, financial reporting remains decision-useful in intangibles-intensive industries. Appendix B contains detailed information on the relevance of reported net income and shareholders' equity across all industry classifications.

A potential explanation for finding no systematic decrease in value-relevance is that it may be that 'new economy' service-orientated type firms may be younger and smaller. We provide a preliminary analysis of this by partitioning firms into four size quartiles from very small to very large. For large and medium size firms, as evident from Figure 7, there is no observable trend in adjusted R^2 across time, implying that the combined value relevance of net income and shareholders' equity has stayed reasonably constant across time. In contrast, for the very

smallest portfolio of firms there is a clear trend downwards in the combined value relevance of net income and shareholders' equity across time. The most significant sector in this very small portfolio is the mining exploration companies, which represent 43% of companies in the portfolio and analysis shows this sector had a decline in value relevance. However, further analysis shows that the industry sectors most affected by a decline in value relevance in the very small portfolio are consumer discretionary and telecommunications. This finding is very preliminary and further research is required to understand why very small stocks in the consumer discretionary and telecommunication sectors have had a decline in value relevance.

FIGURE 7

POWER OF NET INCOME AND SHAREHOLDERS' EQUITY COMBINED IN EXPLAINING SHARE PRICES ACROSS COMPANY SIZE PORTFOLIOS



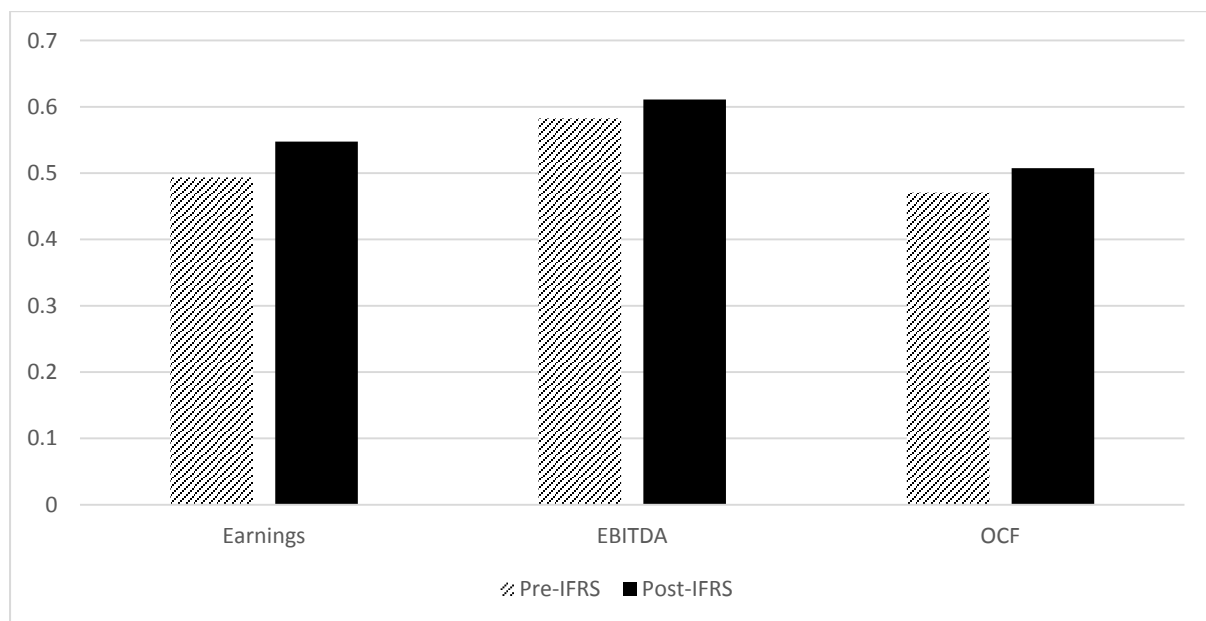
R-squared of annual regressions of corporate market value on reported net income and book value across company size quartiles, 1992–2015.

Analysis of IFRS Adoption

Finally, we examine the impact of IFRS adoption on the relevance of financial reporting in Australia. There are several Australian studies that examine the impact of IFRS adoption on the relevance of accounting information, with inconclusive findings. For example, Goodwin *et al.* (2008) find that Australian GAAP (AGAAP)-reported net income and book value of

equity are more relevant for equity valuation than IFRS-based net income and book value of equity, On the other hand, Chalmers *et al.* (2011) find that the relevance of net income increases post-IFRS and the relevance of book value of equity remains constant over the pre- and post-IFRS periods, while Clarkson *et al.* (2011) find no change in the relevance of either net income or book value of equity post-IFRS. In the context of intangible assets, Chalmers *et al.* (2008) find IFRS (AGAAP) provides incrementally relevant information for equity valuation purposes in relation to goodwill (identifiable intangibles). Our analysis differs from the above studies by examining the impact of IFRS adoption on the relevance of alternative performance metrics, which is pertinent given the documented increase in pro forma earnings disclosures following the adoption of IFRS (Coulton *et al.*, 2016; Crowley *et al.*, 2016). As part of our analysis, we divide our sample period into pre (1992–2005) and post (2006–2015) IFRS periods and compare the mean adjusted R^2 across both sub-periods for three alternative performance metrics: statutory profit (i.e., earnings), EBITDA, and cash earnings (i.e., operating cash flows). The results are reported in Figure 8.

FIGURE 8
POWER OF NET INCOME, EBITDA AND OPERATING CASH FLOWS IN EXPLAINING SHARE PRICES PRIOR TO AND FOLLOWING THE INTRODUCTION OF IFRS



Average R -squared of regressions of corporate market value on net income (Earnings), EBITDA, and operating cash flows (OCF) pre (1992–2005) and post (2006–2015) IFRS

Our results show an increase in the relevance of all performance metrics post-IFRS. In the context of net income, the mean adjusted R^2 is 49% prior to the introduction of IFRS and 55% following IFRS adoption. This means that, on average, a company's net income explains 49% of a company's share price when net income is calculated using AGAAP and 55% of a company's share price when net income is measured using IFRS. Similarly, the ability of EBITDA to explain a company's share price increases from 58% to 61% following the introduction of IFRS, while the relevance of operating cash flows for equity valuation increases from 47% to 51% post-IFRS. Consistent with our earlier analysis, the mean adjusted R^2 reported for EBITDA indicates that EBITDA is more value relevant than net income and operating cash flows in explaining the variation in company share prices, whether pre- or post-IFRS. Overall, our findings indicate an increase in the decision-usefulness of firm performance metrics following the introduction of IFRS.

CONCLUSIONS AND FUTURE RESEARCH

Motivated by claims that financial reports have lost relevance for equity valuation, this study provides Australian evidence on the relevance of financial reporting for equity valuation and, consequently, whether financial reporting can still be considered an effective information tool for equity investors.

Our results show that financial reports remain relevant for equity valuation in Australia, as demonstrated by archival findings, and supported by evidence from field interviews with investors, regulators, and auditors. Our results also show that, as a whole, financial reporting is consistently relevant over time. Our findings also document the relevance of specific accounting measures to equity investors, with a focus on traditional metrics, such as reported net income, shareholders' equity, and operating cash flows, as well as contemporary non-GAAP measures proxied by EBITDA and EBIT. In particular, our findings highlight that Australian investors view such accounting numbers as complements, rather than substitutes, and take the measures into consideration as a bundle for decision making purposes.

Our results, in an Australian context, paint a more positive picture for financial reporting than has been suggested internationally (Lev and Gu, 2016). We have explored several possible reasons for the differences with studies in other regions. Our analysis suggests that the difference cannot be explained by economic differences such as the smaller role of intangibles in the Australian economy. Nor is it attributable to a weaker information environment as our results are robust for the largest companies, which arguably have the strongest information environment. One possible explanation is that there has been some decline historically, but it pre-dates the period for which data is available in Australia. Unfortunately, this is untestable, and in any event does not explain the evidence we present that financial reporting is still relevant. We find some evidence of differences of IFRS adoption on the relevance of financial reporting, which may partially explain differences with results in non-IFRS contexts. We look to future research to further explore these differences.

The results of this study are important for standard-setters, regulators, and auditors by providing empirical evidence to explain the role that financial information plays in investor decision making. Our research provides a basis from which the IASB, national standard-setters, and other regulators can respond to some of the criticisms levelled at financial reporting. In particular, the results will help inform the IASB's current focus on the 'Better Communication in Financial Reporting' suite of projects. Our research will help inform the Primary Financial Statements project on improvements to the structure and content of the primary financial statements, including whether to introduce additional subtotals, including EBIT, into the statement of financial performance. In addition, our research is relevant to the Principles of Disclosure project addressing principles governing financial statement disclosure, and improving the information provided to users of financial statements.

These findings, therefore, make an important contribution to the ongoing debate about the relevance of financial reporting and highlight that different forms of reporting may not necessarily be substitutes to financial reporting, but rather act as complements to each other with synergies that provide investors with the authentication of information they need to be able to make useful decisions. These insights can further help regulators understand the other types of information investors are likely to use, outside the financial statements, to help focus future regulatory resources.

APPENDIX A

DETAILED RESEARCH DESIGN

The association each year between share price and accounting amounts is estimated using the following ordinary least squares (OLS) regression:

$$P_i = \alpha + \beta_1 NI_i + \beta_2 BVE_i + \mu \quad (1)$$

Where P is share price for firm i three months after fiscal year, NI is net profit after tax for firm i for the financial year, and BVE is book value of equity for firm i measured at financial year end. NI and BVE are both scaled by shares outstanding at year-end to allow comparison with prior research (Collins *et al.*, 1997; Lev and Zarowin, 1999). The adjusted R^2 from this yearly regression provides a measure of the combined value relevance of earnings and net income for equity valuation.

To compare the individual explanatory power that net income and book value of equity have for prices, we follow Lev and Gu (2016) and disaggregate model (1) into two parts: (1) the explanatory power of net income (NI) alone in explaining share prices; and (2) the explanatory power of book value of equity (BVE) alone in explaining share prices. The respective models for each of these is as follows, where the adjusted R^2 of each yearly regression using the respective models indicates the ability of NI and BVE to separately explain share prices:

$$P_i = \alpha + \beta_1 NI_i + \mu \quad (2)$$

$$P_i = \alpha + \beta_2 BVE_i + \mu \quad (3)$$

To examine the explanatory power of alternative accounting numbers, namely operating cash flows (OCF), $EBIT$, and $EBITDA$ we replicate models (2) and (3) with these alternative accounting numbers. The respective models for each of these is as follows, where the adjusted R^2 of each yearly regression indicates the ability of OCF , $EBIT$ and $EBITDA$ to explain share prices, respectively:

$$P_i = \alpha + \beta_1 OCF_i + \mu \quad (4)$$

$$P_i = \alpha + \beta_2 EBIT_i + \mu \quad (5)$$

$$P_i = \alpha + \beta_3 EBITDA_i + \mu \quad (6)$$

APPENDIX B
INDUSTRY ADJUSTED R^2

Changes in relevance across time based on yearly regressions of price on net income
and shareholders' equity across industry classifications

	Observations		Adjusted R^2		Change in adjusted R^2
	1992	2000	1992	2000	
	to	to	to	to	
	1999	2015	1999	2015	
Energy	389	2340	0.6887	0.5409	-0.1478
Materials	2703	7985	0.7133	0.6937	-0.0196
Industrials	963	2481	0.6377	0.6882	0.0505
Consumer Discretionary	757	2176	0.6139	0.6413	0.0274
Consumer Staple	428	702	0.6488	0.6991	0.0503
Health Care	203	1801	0.4628	0.6024	0.1396
Financials	1099	2393	0.6798	0.6044	-0.0754
Information technology	324	1830	0.3739	0.5231	0.1492
Telecommunications	70	447	0.339	0.663	0.3240
Utilities	37	229	0.7841	0.9214	0.1373
		Mean	0.5942	0.6578	0.0636

The table reports the adjusted R^2 from estimation of $P_i = \alpha + \beta_1 NI_i + \beta_2 BVE_i + \mu$ across industry classifications. Where P is share price for firm i three months after fiscal year, NI is net income, and BVE is book value of equity. NI and BVE are both scaled by shares outstanding. Observations are

trimmed at the 1st and 99th percentile.

APPENDIX C

TRANSCRIPT TEXTUAL ANALYSIS RESULTS

	Number	Word Count	Analytic	Clout	Authentic	Tone
Overall	17	4078.5	38.29	67.30	47.87	64.52
Auditor	5	3355.2	38.68	63.25	53.55	68.64
Investor	7	4195.5	44.72	69.96	43.70	64.14
Regulator	5	4515.4	27.78	64.53	48.48	63.45

Analytic	A high number reflects formal; lower numbers reflect more informal, personal, here-and-now, and narrative thinking
Clout	A high number suggests confidence and an interviewee speaking from expertise
Authentic	Lower numbers suggest a more guarded, distanced form of discourse
Tone	A higher number is associated with a more positive, upbeat style. A mid- range number suggests ambivalence

All four measures are on 0– 100 scale. Analysis was performed using the LIWC2015 default dictionary.

APPENDIX D

ANNUALIZED AND AVERAGE ADJUSTED R^2 OVER THE SAMPLE PERIOD FOR EACH ACCOUNTING ITEM PRESENTED

Year	Figure 2	Figure 3		Figure 4	Figure 5		
	NI + BVE	NI	BVE	OCF	NI (Earn)	EBIT	EBITDA
1992	0.6719	0.4095	0.6939	0.4670	0.4095	0.5344	0.5580
1993	0.6742	0.5155	0.6944	0.5188	0.5155	0.5429	0.5782
1994	0.7320	0.5627	0.7138	0.5482	0.5627	0.5857	0.6398
1995	0.6769	0.4939	0.6966	0.4981	0.4939	0.4669	0.5475
1996	0.6487	0.5157	0.6785	0.4237	0.5157	0.4867	0.5288
1997	0.6658	0.4565	0.6494	0.5018	0.4565	0.5279	0.5823
1998	0.6431	0.4853	0.6235	0.4196	0.4853	0.5713	0.5953
1999	0.5459	0.4673	0.5098	0.3789	0.4673	0.4861	0.4713
2000	0.5015	0.3928	0.5406	0.2865	0.3928	0.4166	0.3987
2001	0.4811	0.3922	0.4660	0.3366	0.3922	0.4045	0.4312
2002	0.5858	0.4598	0.5834	0.4135	0.4598	0.5139	0.5584
2003	0.7102	0.5747	0.7024	0.5493	0.5747	0.5478	0.6268
2004	0.7120	0.5742	0.7243	0.6226	0.5742	0.5680	0.6241
2005	0.6790	0.6103	0.6176	0.6223	0.6103	0.6842	0.6918
2006	0.7225	0.6276	0.5204	0.5787	0.6276	0.6812	0.7012
2007	0.5892	0.5284	0.5138	0.4188	0.5284	0.4886	0.5376
2008	0.6528	0.5630	0.5148	0.4295	0.5630	0.4957	0.5123
2009	0.6253	0.4171	0.5724	0.4319	0.4171	0.4593	0.4995
2010	0.6512	0.5504	0.6252	0.4936	0.5504	0.5709	0.5669
2011	0.7079	0.5854	0.6171	0.5536	0.5854	0.6222	0.6349
2012	0.6824	0.5675	0.5181	0.5921	0.5675	0.6185	0.6369
2013	0.6396	0.5213	0.5711	0.5454	0.5213	0.5830	0.5887
2014	0.6460	0.5844	0.5343	0.5506	0.5844	0.6203	0.6109
2015	0.6101	0.5296	0.4926	0.4819	0.5296	0.5877	0.5997
Average	0.6440	0.5160	0.5989	0.4860	0.5160	0.5443	0.5717

The table reports the adjusted R^2 for each accounting item presented in Figures 2, 3, 4, and 5, both annually and averaged over the 1992–2015 sample period. Where *NI* is net income; *BVE* is book value of equity; *OCF* is operating cash flows; *EBIT* is earnings before interest and tax; and *EBITDA* is earnings before interest, tax, depreciation, and amortization. All items are scaled by shares outstanding.

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