

# DECISION- USEFULNESS IN FINANCIAL REPORTS

**RESEARCH REPORT NO.1**

**ARE FINANCIAL REPORTS  
STILL USEFUL TO INVESTORS?**

BE HEARD.  
BE RECOGNISED.



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# 1.0 EXECUTIVE SUMMARY

For decades, financial reports have been accepted by investors and other external stakeholders as the primary window into a company's financial performance and position. In addition to being a critical information source of a company's financial health, financial reports are also considered an important mechanism to maintain the integrity of capital markets around the world.

Recently, however, questions have been raised around the continuing usefulness of financial reports to investors. Some academic studies point to evidence indicating a decline in usefulness of financial reports to investors over time. Other reports seek to explain a loss of relevance of financial information due to the increasing number of information sources available to investors, and others interested in corporate financial information.

The views emerging about financial reports around the world also resonate within the Australian financial reporting environment. With this in mind, a team of academics from the University of Melbourne and Monash University have undertaken academic research, with the support of CPA Australia, to establish whether financial reports remain useful to Australian investors. Contrary to findings elsewhere, the Australian study establishes that financial reports remain useful to investors, and remain so over time.

This report is the first in a series of reports commissioned by CPA Australia and provides a summary of key findings of whether and, if so, how, financial statements are useful for equity investors in Australia.

## 2.0 INTRODUCTION

Annual financial reports are still a mainstay of corporate reporting, with companies investing considerable time and effort in their preparation. However, there has been recent criticism that annual financial reports are becoming increasingly less decision-useful and less relevant to users.

Various reasons have been given for this perceived decline in usefulness, including:

- inability to capture corporate value increasingly comprised of knowledge-based intangible assets;
- lack of timeliness, as users now have access to more timely alternative sources of information;
- rise in alternative measures (i.e., non-GAAP measures) that act as potential substitutes to statutory information provided in financial reports; and
- increasing complexity and length, particularly in relation to note disclosures.

As part of the growing debate about, and concern over, the usefulness of financial reporting, academics both in Australia and overseas are undertaking research to provide evidence of whether the relevance of financial reports to investors has declined over time, with interesting findings.

To examine the research question of whether, and, if so, how financial statements are useful for equity investors in Australia, a team of Australian academics adopted a mixed method research approach comprising two methods.

First, the authors examined the value relevance of primary accounting variables to determine whether there has been a change in the relevance of Australian companies' financial reports for capital market decisions. Consistent with prior studies, the primary variables that are examined are net income, shareholders' equity and operating cash flows. These are key accounting amounts traditionally synonymous with evaluating company performance and position.

The Australian academics follow prior research and examined time-series trends in value relevance of annual financial reports. This was achieved by examining the association each year between share price and the two key accounting amounts of reported net profit and shareholders' equity. This archival method is based on the annual financial statements of ASX-listed companies over a 24-year period, spanning 1992-2015 and resulted in 29,838 observations, which is, on average, 1,243 listed firms per year. This method enables the authors to determine whether, and the extent to which, annual financial statements are decision-useful for equity investors in Australia.

Second, to gain an understanding of how and why annual financial statements are decision-useful for investor decision making, including the types of information relied upon, the authors conducted a series of interviews with investors, regulators and practitioners. A total of 17 interviews were conducted across investors (7), regulators (5) and practitioners (5) yielding nearly 70,000 words of transcripts. Commonalities across the different stakeholder groups provide strong evidence from which conclusions can be drawn.

The authors developed a semi-structured interview protocol drawing on prior literature and consultation with experts in the practice of financial reporting and regulation. The interview protocol was pilot-tested with experienced representatives from stakeholder groups to reach a stable and well-functioning protocol. Consistent with good research practice for interview-based research<sup>1</sup>, the authors 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 helped to ensure that the interviewees were not unduly prompted or primed to focus on financial statements. Only later in the protocol did

<sup>1</sup> Yin (2013), Galletta (2013), Schultze and Avital (2011).

the authors 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 statement, the protocol was worded so as not to bias responses either for or against the role of financial statements in investor decision making.

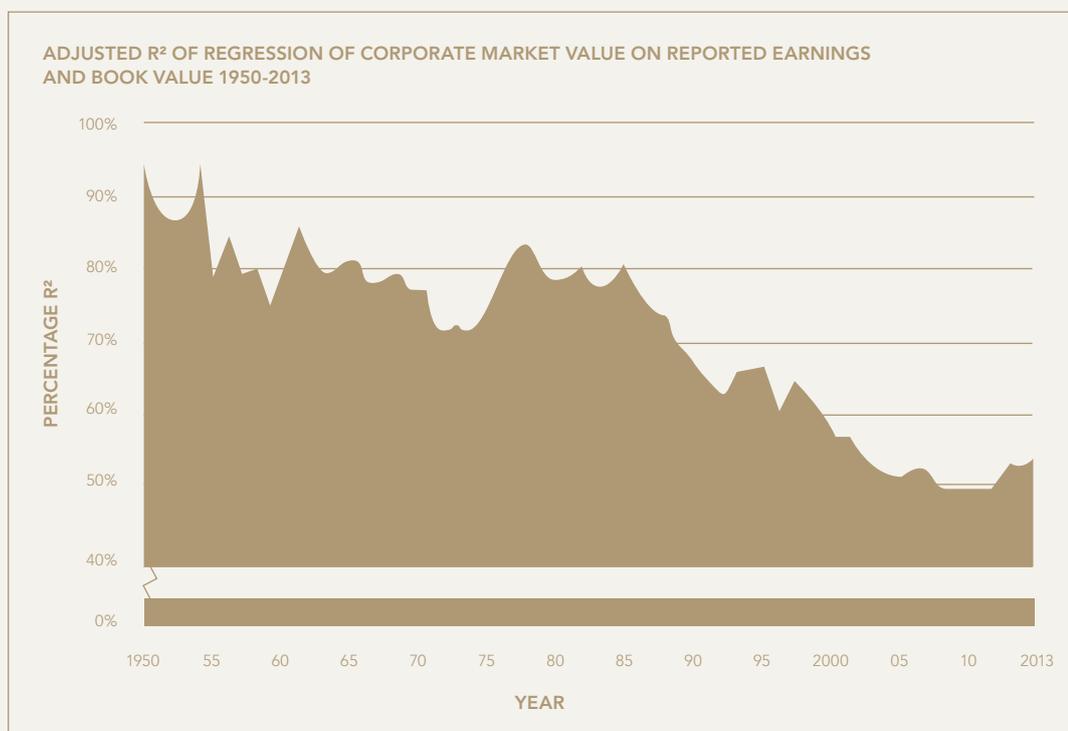
The use of a standard protocol ensured there was a base set of questions that were asked of all interviewees. The protocol comprised seven main questions, with prompts to ensure elaboration by the interviewee on issues of particular concern. The conduct of the interview bore out the appropriateness of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

## 3.0 UNITED STATES-BASED EVIDENCE

In their recent book titled *“The end of accounting and the path forward for investors and managers”*, Baruch Lev and Feng Gu paint a bleak future for financial reports. The authors 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, the authors undertake regression analysis and calculate, over time, the extent to which companies’ share prices incorporate reported net profit and shareholders’ equity – two key accounting numbers contained within financial reports.

As depicted in Figure 1 below, their findings show a significant decline in the relevance of these numbers to equity investors, as their incorporation into share prices (the R-square) falls over time. For example, in the 1950’s, reported net profit and shareholders’ equity explain over 90 per cent of share price information (on average), whereas by 2013 reported net profit and shareholders’ equity only explain approximately 50 per cent of a company’s share price. The authors attribute these findings primarily to those reasons given above, and call for a revamp in the type of report prepared to communicate information to users.

**FIGURE 1:**  
**POWER OF NET INCOME AND BOOK VALUE COMBINED IN EXPLAINING SHARE PRICES (US EVIDENCE)**



## 4.0 AUSTRALIAN-BASED EVIDENCE

### 4.1 DECISION-USEFULNESS OF ANNUAL FINANCIAL STATEMENTS TO INVESTOR DECISION-MAKING

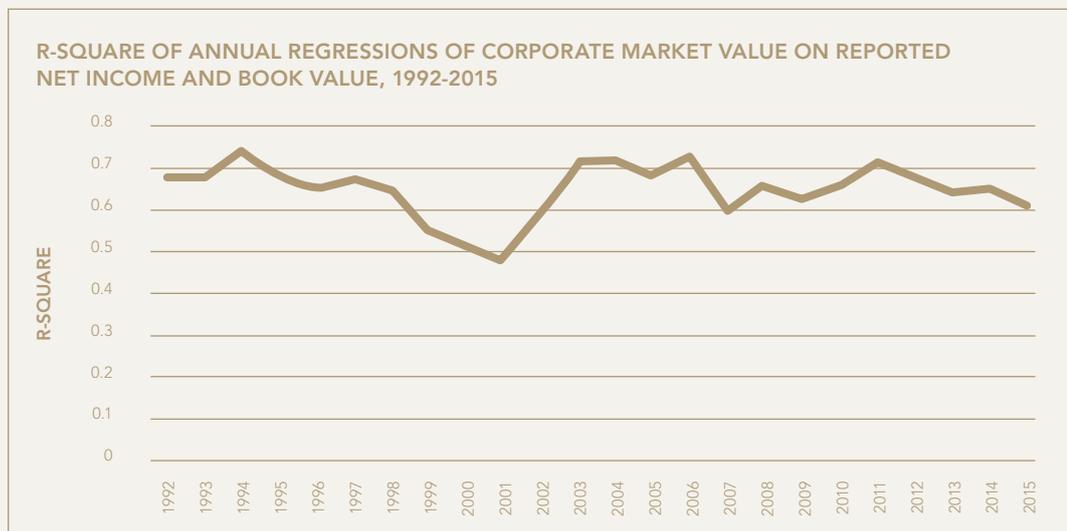
#### 4.1.1 Archival evidence on the combined relevance of net income and shareholders' equity

The authors follow the research approach of Lev and Gu, and find that reported net profit and shareholders' equity are relevant for investment decisions, and remain so over time. As Figure 2 indicates, reported net profit and shareholders' equity are consistently incorporated into companies' share prices over the time period examined. The results show that the mean Adjusted  $R^2$  is 64 per cent.

This means that, on average, a company's financial performance and position, measured as reported net income and shareholders' equity respectively, explain 64 per cent of a company's share price. These results contrast with the US-based research outlined above.

As shown in Figure 2, this result for the combined value relevance of net income and book value of equity has remained relatively constant over time in Australia, ranging from a high of 73.2 per cent in 1994 to a low of 48 per cent in 2001. For 2015, the most recent year examined, on average, a company's financial performance and position explains 61 per cent 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 (AUSTRALIAN EVIDENCE)**



Overall, the archival results show that financial reporting has not declined in relevance in Australia over the period studied.

Accordingly, 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<sup>2</sup>, 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.

<sup>2</sup> See for example Lev and Zarowin (1999), Balachandran and Mohanram (2011) and Lev and Gu (2016).

#### 4.1.2 Interview-based evidence on the relevance of annual financial statements

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.

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)

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 recognising 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)

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.

## 4.2 DECISION-USEFULNESS OF THE BALANCE SHEET AND PROFIT AND LOSS STATEMENT TO INVESTOR DECISION-MAKING

### 4.2.1 Archival evidence on the separate relevance of net income and shareholders' equity

Having established that the combined relevance of net income and shareholders' equity has not declined in Australia, the next aspect examined by the research is 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 the effect on share price of reported net income and shareholders' equity are analysed, separately, on an annual basis.

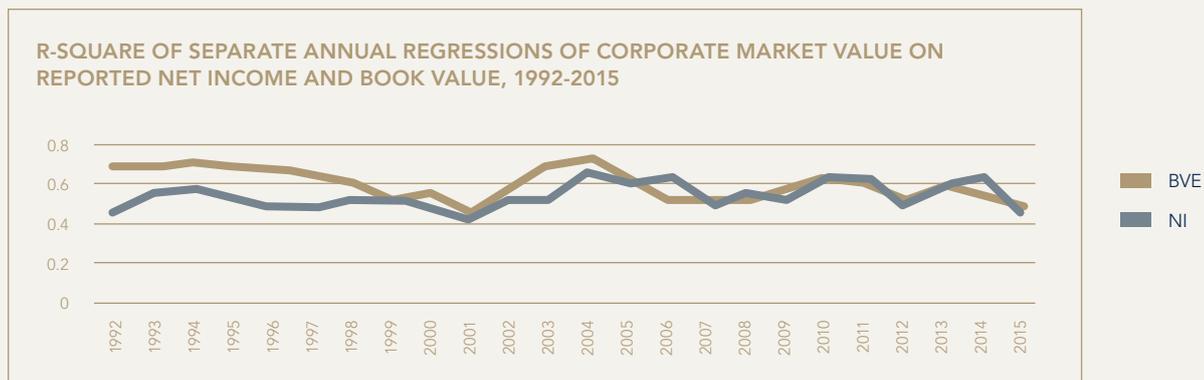
Our results from the archival analysis show that both shareholders' equity and net income are decision-useful for equity investors in making investment decisions in Australia. The results show that the mean Adjusted  $R^2$  for book value of equity is 60 per cent,

and for net income the mean Adjusted  $R^2$  is 52 per cent. In other words, on average, a company's financial position alone, measured as book value of equity, explains 60 per cent of a company's share price, while financial performance alone, measured as net income, explains 52 per cent of a company's share price.<sup>3</sup>

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 discernible difference between these two items in 2015. In 2015, shareholders' equity explains 49 per cent of the share price and net income explains 46 per cent of share price. This indicates that both elements are similarly important for investor decision making.

**FIGURE 3:**  
**POWER OF NET INCOME AND BOOK VALUE INDIVIDUALLY IN EXPLAINING SHARE PRICES (AUSTRALIAN EVIDENCE)**



<sup>3</sup> The decision-usefulness of the financial position for equity valuation as measured by explanatory power of 60 percent 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.

#### 4.2.2 Interview-based evidence on the relevance of the balance sheet and profit and loss statement

The evidence from the interviews provide 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 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)

All three stakeholder groups recognised that the focus in the financial statements was also 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.

### 4.3 DECISION-USEFULNESS OF CASH FLOWS TO INVESTOR DECISION-MAKING

#### 4.3.1 Archival evidence on the relevance of operating cash flows

The results from the archival analysis show the relevance of operating cash flows for equity investors in making investment decisions in Australia. The results show that the mean Adjusted  $R^2$  is 49 per cent. This means that, on average, a company's operating cash flows explain 49 per cent of a company's share price.

As shown in Figure 4 below, this result for operating cash flows are less stable than

reported net income, ranging from a high of 62.2 per cent in 2004 to a low of 28.6 per cent in 2000. For 2015, the most recent year examined, on average, a company's operating cash flows explain 48 per cent 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 in Australia. Prior to this date, however, operating cash flows were, on average, more volatile in explaining, and less able to explain, company share prices.

**FIGURE 4:**  
**POWER OF OPERATING CASH FLOWS IN EXPLAINING SHARE PRICES (AUSTRALIAN EVIDENCE)**



### 4.3.2 Interview-based evidence on the relevance of cash flows

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 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)

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 practitioner:

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, 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)

The cash flow statement, however, is not without its limitations. As one auditor succinctly described it:

I don't think enough investors really look at the cash flow statement. (Auditor 4)

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 practitioners 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.

## 5.0 WHY THE DIFFERENCE BETWEEN THE UNITED STATES AND AUSTRALIA?

There might be several reasons for the difference between our findings and those of Lev and Gu. First, there are differences between the two countries regarding the type of accounting standards. In the United States (US), reported net profit and shareholders' equity are calculated using US GAAP, which are often referred to as 'rules-based' standards. In Australia, however, net profit and shareholders' equity are calculated using IFRS-based accounting standards, which are often referred to as 'principles-based' standards and have a primary focus of capturing a transaction's substance over form. Second, differences in the countries' capital markets could also be a contributing

factor, with the US market being more liquid than Australia's with more frequent trading occurring based on information, some of which is non-accounting, obtained from various sources. Third, reported net profit, shareholders' equity and operating cash flows may still be key accounting numbers Australian investors rely on to make investment decisions, while US investors consider other firm fundamentals, including intangibles-related amounts. Finally, differences in the sample periods between the US (1950 – 2013) and Australian (1992 – 2015) studies may also be a contributing factor, as any decline in decision-usefulness may be more discernible over a longer sample period.

## 6.0 CONCLUSION

While financial reports have been criticised for increasingly not meeting the needs of users, recent Australian evidence indicates they are still of relevance to investors.

While the results suggest there is room for improvement, the findings do not mark the end of accounting as we know it, as has been the call from some industry and academic writers. The existing research in this report is based on the combined and separate decision-usefulness of net income (P&L) and shareholders' equity (B/S) for valuation, as well as the decision-usefulness of operating cash flows. In the next phase of the research project, the authors will be looking at the decision-usefulness of alternative performance metrics including EBIT and EBITDA.

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## 8.0 GLOSSARY

ASX	Australian Stock Exchange
B/S	Balance Sheet
EBIT	Earnings Before Interest and Taxation
EBITDA	Earnings Before Interest, Taxation, Depreciation and Amortisation
P&L	Profit and Loss
R-squared	The extent to which variation in the dependent variable is associated with variation in the explanatory variables.
Regression analysis	A statistical technique that examines the correlation between a dependent variable (e.g., share price) and one or more explanatory variables (e.g., net profit and shareholders' equity)
US GAAP	United States Generally Accepted Accounting Principles

## 9.0 AUTHORS



### **PROFESSOR MICHAEL DAVERN**

Professor Michael Davern holds the Chair of Accounting and Business Information Systems in the Faculty of Business and Economics, at the University of Melbourne where he is a co-founder of the Melbourne Centre for Corporate Governance and Regulation. The overarching theme of his research is the role of data and information in business decision making by both external and internal stakeholders, including in areas such as investment decision making, enterprise risk management, and business analytics. He has board level experience with several privately held investment companies, a superannuation fund, and a charitable not-for-profit. Michael's research and executive education work has included collaboration and support from EY, Microsoft, NAB, PETRONAS, and CUA, among others.



### **NIKOLE GYLES**

Nikole Gyles is an Enterprise Fellow in the Department of Accounting, University of Melbourne. Nikole's background is as an accounting standard-setter (2011 – 2016) and Big 4 accounting practice (2004 – 2011). Her current role as Enterprise Fellow has a focus on developing engagement with the University by contributing to Industry-related research activities, such as the AASB Research Forum. The role also involves leading, and contributing to, University-Industry linkages, partnerships and networks and Executive Education for Industry. In this role, Nikole aims to help ensure that research undertaken provides insights into relevant issues faced by standard-setters, regulators and/or practitioners and to develop high-quality thought leadership that contributes to the future of financial reporting.



### **DR DEAN HANLON**

Dean Hanlon is a senior lecturer in the Department of Accounting, Monash University. He has been recognised for his pedagogy at the faculty, university and national level as the recipient of several teaching excellence awards. Dean’s current research interests are in taxation and financial reporting. He has presented his research at numerous international and domestic conferences, having won best paper awards on several occasions. He has been the recipient of several competitive industry-based research grants and has published his research in journals including *Accounting and Finance*, *Australian Tax Forum*, *Australian Tax Review*, *Journal of Accounting and Public Policy*, *Journal of Contemporary Accounting and Economics*, and *Pacific-Basin Finance Journal*.



### **PROFESSOR MATTHEW PINNUCK**

Matthew is Professor of Financial Accounting and Head of Department of Accounting, University of Melbourne.

Matthew’s research cuts across the areas of financial accounting and capital markets, asset pricing and the performance of fund managers, audit markets and the measurement and valuation of greenhouse gas emissions. This research has been published in premier international journals including *Accounting Review*, *Accounting Organizations and Society* and *Journal of Finance and Quantitative Analysis*.

Matthew has a significant amount of past and on-going direct engagement with industry including, most recently, involvement in the audit industry with issues associated with fees setting and low-balling and with CPA Australia in developing models to estimate greenhouse gas emissions (supported by a large ARC Linkage Grant). Matthew is also involved in teaching financial accounting across the undergraduate, post-graduate, and research higher degree programs.

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