

The Impact of Financial Crisis on Value Relevance of Published Financial Reports of Listed Australia Real Estate Companies

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ABSTRACT

This study aims to investigate the effect of the financial crisis on the value relevance of published financial reports of listed real estate companies in Australia. Based on the earlier research, the study uses three accounting quality timely loss recognition and value relevance price model and value relevance return model to evaluate the value relevance of financial reports. The results of the study show that the financial crisis has not made any significant effect on the value relevance of financial reports of real estate companies. The result of timely loss recognition shows an increase in the frequency of reporting large losses in the post-financial crisis period, but the improvement is not statistically significant to suggest a change in accounting quality. Value relevance measures that are founded on market information, on the other hand, show opposing results. Value relevance price modal shows a statistically significant decrease in value relevance and the return model shows a significant increase in value relevance and accounting quality. A close look into the result suggests that the measures based on the accounting information of the real estate sector show no change in the value relevance of financial reports, while the market-based measures show a mixed result. The market value and related information are influenced by a number of factors other than the accounting standards and accounting policies like the economic, legal, and political environment of companies. This can be the reason for the mixed result shown in value relevance measures. Australian regulatory bodies are always vigilant in maintaining the quality of financial reports. Moreover, the findings that the financial crisis has not affected the value relevance of Australian listed real estate companies can be because of the quality financial standard used and a good regulatory system in Australia. The findings of the study that

Australian real estate companies have maintained accounting quality even in periods of economic distress like financial crisis increases investors' confidence and can attract more foreign investors to Australian listed companies. The study also emphasises the importance of regulatory bodies in maintaining the quality of financial reports in bad economic periods.

1. INTRODUCTION

Many nations, notably Australia, made IFRS mandatory for financial reporting of publicly traded corporations starting on or after January 1, 2005, in order to enhance the quality and international recognition of the financial reports of listed companies. Mandating IFRS worldwide is an important financial reform in accounting history (de Moura, Altuwajri, & Gupta, 2020). It is expected that the adoption of IFRS can improve accounting quality (Barth, Landsman, & Lang, 2007; Opore, Houqe, & van Zijl, 2020), international acceptability, and comparability of financial reports published by companies (Parliament, 2005; Ding *et al.*, 2007; Kotlyar, 2008; Sanabria-García & Garrido-Miralles, 2020), stabilises financial markets, reduces the cost of capital (Leuz & Verrecchia, 2000; Ochi, 2014; El-Helaly, Ntim, & Soliman, 2020), protects investors interest and increases international mobility of funds (Outa, 2011; Gu, Ng, & Tsang, 2019; El-Helaly *et al.*, 2020). The adoption of IFRS increases certain accounting options, decreases managerial discretion in accounting treatment of some other transactions, diminishes opportunistic earning management, and through that enhances accounting quality (Ralf & Alfred, 2005; Michael, & Dechun, 2013). Now more than 140 countries are permitting the use of IFRS in the preparation of financial reports making it an integral part of globalisation (Cheong, Kim, & Zurbruegg, 2010; Tsalavoutas, Tsaligkas, & Evans, 2020). Since IFRS is a principles-based standard, it would be harder to hedge.

The adoption of IFRS by European Union (EU) countries and Australia increased the acceptability of IFRS and made it one of the most widely accepted accounting model (Paananen & Henghsiu, 2009; Opore *et al.*, 2020). But the financial crisis of 2008 changed the situation. Many economists alleged that the fair value accounting models used in IFRS led to the financial crisis. (Véron, 2008; Graënanin & Kalaè, 2011; Kothari & Lester, 2012; Rajni & Parmod, 2012; Task Force *et al.*, 2013; Menicucci & Paolucci, 2016; Menicucci, 2017). Magiera (2009) argued that mark to market accounting simplified a big problem to a basic one by lowering the price of the great majority of mortgages, corporate bonds, structured debts, and other financial assets that are still performing but have fallen below their

actual worth due to the market's freeze. There is an argument that the fair value accounting guideline, which mandates banks to write down their holdings to market value even if they do not intend to sell them at that price, culminated in the financial crisis. (Graèanin & Kalaè, 2011). According to G'unther and Zoltan (2011), utilising incurred loss technique resulted in less accurate loan loss recognition, leading to delayed recognition of future projected losses, along with the ideal reporting outcome of mandated IFRS adoption contributed to the financial crisis. A study by Chee, Anna, and Ralf (2011) found that the relationship between the real estate sector and market volatility was the strongest in the run-up to the financial crisis, and the real estate sector has the strongest unilateral association with market volatility. The fair value accounting in IFRS has radically impacted the financial reporting for the real estate sector.

The financial crisis had a lower impact on the Australian economy than in many other nations, despite the fact that numerous markets were adversely impacted. (Groenewold, 2018). One reason for this could be because the Australian banks had relatively minor linkages to the US housing market and subprime and other high-risk loans accounted for a small portion of lending (Education, 2019). This study aims to examine the impact of the financial crisis on the accounting quality of Australian listed real estate firms and assesses how the international financial crisis affected the financial reporting quality of Australian listed real estate companies. The extant literature in this area largely focuses on the implication of IFRS adoption on the listed companies and points to a deficiency of studies that study the impact of the financial crisis on the accounting quality of a particular industry sector.

1.1. Implication of Financial Crisis on Australian Real Estate Sector

The real estate sector stimulates economic activity by attracting skills and capital from the rest of the world, thereby creating new opportunities. It is difficult for a developed country to flourish without ensuring adequate space for firms to function effectively. The real estate sector contributes significantly to economic activity by providing infrastructure facilities required for economic development. The adoption of IFRS has had a considerable impact on real estate companies' financial reporting systems, particularly in the investment property measurement choice of fair value model or historical cost model. (Chen, 2011b).

During the 2008 financial crisis, the housing market of Australia and New Zealand have experienced a downturn, but the magnitude of the price decline was not as intense as in many other countries like USA, UK, and

Ireland (Murphy, 2011). Many critics point out that the bubble in the real estate sector and the fair value accounting model of assets valuation are the contributing factors of the financial crisis. In the wake of this criticism, there was extensive pressure on IASB from different accounting bodies and regulators to make unjustifiable changes in the IFRS (Alali & Cao, 2010). This study also evaluates whether these pressures and the resulting changes made to the IFRS because of the financial crisis have affected the quality of the financial report. Moreover, the economic performance of most of the companies was badly affected by the economic distress of the financial crisis. Usually, the management of companies is under pressure to show better financial performance. This may prompt companies to manipulate accounts in bad economic periods to show better financial performance, which can affect the quality of the financial reports.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Adoption of IFRS

While previous research has focused on the consequences of IFRS adoption on a larger scale, no study has focused on the impact of the financial crisis on the real estate sector, which may have a significant impact on the accounting quality of these organisations. IFRS aims to develop internationally acceptable high-quality accounting standards. Numerous studies have been conducted to determine whether IFRS can achieve the aforementioned goal and to what extent it can increase value relevance, timely loss recognition, and earnings management (Barth, Landsman, & Lang, 2008; Chua, Cheong, & Gould, 2012). IFRS results in more detailed financial information disclosure, higher compatibility, and recognition, all of which improve the firm's accounting quality. Quality accounting standards are expected to minimise earnings management and information asymmetry in the market, enabling the capital market to receive valuable information (Ralf & Alfred, 2005; Barth, Landsman, & Lang, 2008;). Nevertheless, (Bryce, Ali, & Mather, 2015) concluded that the implementation of IFRS in Australia did not substantially enhance accounting quality, with their analysis focusing solely on the audit committee. (Houqe *et al.*, 2016) reported that the implementation of IFRS in Europe increases earnings quality, and they suggested that the IFRS impact is higher in countries with a higher level of financial secrecy. It is considered that a firm's accounting quality will be influenced by the political and legal background, history, culture, beliefs, and traditions (Scagnelli, Hellmann, & Tsunogaya, 2015). Considering this wider context, it might not be pertinent to underestimate the influence that may come with the global adoption of IFRS (Jones, 2003).

There is also the argument that limiting accounting alternatives on the adoption of IFRS may impede the firm's capability to report an amount that clearly reflects an entity's economic condition. It limits the discretion of the management to report accounting numbers that reflect the firm's financial position and performance in a better manner (Leuz & Verrecchia, 2000). It is also suggested that more detailed and longer disclosure required on the adoption of IFRS contributed complexity and led to reduced readability of annual report disclosures. (Richards & van Staden, 2015). Ahmed *et al.* (2012) noticed that IFRS adoption does not result in increased accounting quality and stated that countries with a solid enforcement mechanism were unable to counteract the initial implications of greater IFRS flexibility.

There are different studies on the impact of IFRS in the global financial crisis of 2008 and how the financial crisis affected IFRS. Many critics consider IFRS which embraced fair value accounting as one of the contributing factors to the financial crisis. In the study made by Mala and Chand (2012), they point out that some EU countries threatened to curve out from the convergence of IFRS if changes are not made to the FVA. But, the improvements to FVA made by IASB based on the recommendations from regulators and accounting bodies around the world have enhanced the financial accounting quality, restored confidence in the market, and regained global financial stability and economic growth. The study by Kothari and Lester (2012) suggests that it is the poor implementation and application of IFRS which lead to the financial crisis. If it is properly implemented it would have given clear information about the financial health of banks which would have reduced the impact of the financial crisis. Another study by Iatridis and Dimitras (2013) was made on companies from different EU countries as to whether the implementation of IFRS helped in maintaining the quality of accounting in financial crisis period and whether audit by Big4 audit firms can influence the quality. The finding showed a mixed result in different countries and concluded that audit firms have not helped in reporting lower-earning management or higher value relevance. These studies suggest that the adoption of IFRS can help in maintaining the accounting quality even in bad periods like financial crises.

The adoption of IFRS and the development of complex financial instruments have increased the use of fair value measurement attributes which had great implications on the measurement of accounting numbers (Šodan, 2015). The FVA measures provide the most relevant and timely measures of assets and liabilities and influenced the financial decisions of investors (Schacht, 2007). On the other hand, the critics consider fair value measurements in financial statements to be one of, if not the primary causes

of the financial crisis (Menicucci & Paolucci, 2016). The global financial crisis of 2008 affected almost all the countries throughout the world. Many economists consider IFRS, especially the use of FVA as one of the factors that contributed to the financial crisis. In the light of the criticism from the banking sector, regulators, accounting bodies, and governments of different countries, IASB made some changes in the accounting standards to suit this particular situation. In the literature discussed above it is also mentioned that the motivation to change accounting policies, to present better financial position in the financial reports is very high in bad periods like financial crisis. Based on this literature, this research evaluates the influence of the financial crisis on the importance of the published financial reports of Australian listed companies. Value relevance of financial reports of the Australian listed companies before and after the financial crisis are compared using the two accounting quality measures; timely loss recognition and value relevance. To test the effect of the financial crisis on the value relevance of Australian listed companies the following hypothesis is proposed:

H01: The global financial crisis 2008 affects the value relevance of published financial report of Australian listed real estate companies.

This hypothesis will be tested using quality metrics, timely loss recognition, and value relevance.

We study three attributes of value relevance namely, timely loss recognition, and value relevance price model, and value relevance return model which are frequently utilised in studies measuring the impact of accounting quality (Gassen & Sellhorn, 2006; Barth, Landsman, & Lang, 2008; Kouki, 2018). Timely loss recognition is a measure based on accounting information, whereas value relevance is a measurement based on market information. Frequency of large negative operating savings (LNEG) is the metric used to evaluate timely loss recognition (Yetman, 2003; Lang, 2006; Soderstrom & Sun, 2007; Barth, Landsman, & Lang, 2007; Paananen & Henghsiu, 2009; Chua, Cheong, & Gould, 2012). . The value relevance, the market-based measure, uses two models, the price model and the return model to evaluate the explanatory power of book and market information. The price model explains that with everything that remains the same, firms with high value relevant accounting information are predicted to have a significant association between share price and accounting data (Perotti & Wagenhofer, 2014; Kouki, 2018). The return (Collins, Maydew & Weiss, 1997; Barth, Landsman, & Lang, 2007; Chen, 2011a; Chua *et al.*, 2012) model is based on the explanatory power of net income per share scaled by the beginning of the year share price (NIOP) on annual return per share

(RETURN) (Collins *et al.*, 1997; Barth *et al.*, 2007; Paananen & Henghsiu, 2009; Chen, 2011a; Chua *et al.*, 2012; Kouki, 2018).

2.2. Timely loss recognition

Numerous firms are hesitant to report substantial losses on a timely basis. Firms' ability to recognise major losses in a timely manner is regarded as an indication of quality accounting. Following the mandatory adoption of IFRS, corporate finance plays a significant role in determining the timeliness of loss recognition. (Chan, W-H, & Lee, 2015). The incidence of extreme negative earning outcomes increases with timely loss recognition. The difference in timely loss recognition between pre and post financial crises is taken as the first measure to evaluate the importance of relevant financial reports. A proper accounting system acknowledges substantial losses as they occur rather than delaying them to a future period. (Yetman, 2003; Yi Lin, Chee Seng, & Graeme, 2012). Timely loss recognition is also connected to income smoothening. Firms that identify losses in a timely manner and do not engage in any earnings smoothing activities are more likely to disclose substantial losses. The incidence of reporting large losses will be greater in a value-relevant financial report. Based on the extant literature, large negative losses (*LNEG*) is considered a dummy variable that equals 1 for observations with annual net income scaled by total assets less than 0.20 and zero otherwise (Chamisa, 2000; Barth, Lang, & Mark, 2008; Paananen & Henghsiu, 2009; Yi Lin *et al.*, 2012). This study modifies the measure used by Barth *et al.* and follows Yi Lin *et al.*, using the frequency of reporting large losses (*LNEG*) as the dependent variable and *POST*, together with the control variables used in the previous metric, as the independent variable in analysing timely loss recognition. The following hypothesis is developed to analyse the result from the regression.

H02. Recognizing large losses frequently is a sign of value relevant financial report.

Regression of (*LNEG*) as dependent variable and post and other control variable is:

$$LNEG_{it} = \alpha_0 + \beta_1 POST_{it} + \beta_2 SIZE_{it} + \beta_3 GROWTH_{it} + \beta_4 EISSUE_{it} + \beta_5 LEV_{it} + \beta_6 DISSUE_{it} + \beta_7 TURN_{it} + \beta_8 CF_{it} + \beta_9 AUD_{it} + \beta_{10} NUMEX_{it} + \beta_{11} XLIST_{it} + \beta_{12} CLOSE_{it} + Error_i \quad (1)$$

LNEG = Dummy variable that is set at 1 (one) if net income scaled by total assets is less than - 0.20 and 0 (zero) otherwise.

SIZE = natural logarithm market value of equity;

GROWTH = percentage change in sales;

EISSUE = percentage change in common stock;

LEV = total liabilities divided by equity book value;

DISSUE = percentage change in total liabilities;

TURN = sales divided by total assets;

CF = annual net cash flow from operating activities divided by total assets;

AUD = dummy variable that equals 1 if the firm's auditor is Z, KPMG, Arthur Andersen, Ernst & Young, or Deloitte Touche Tohmatsu, and 0 otherwise;

NUMEX = number of exchanges on which a firm's stock is listed;

XLIST = dummy variable that equals 1 if the firm is listed on any U.S. stock exchange, and *Worldscope* indicates that the U.S. exchange is not the firm's primary exchange;

CLOSE = percentage of closely held shares of the firm as reported by *Worldscope*;

The coefficient β_1 from Eq. (5) is used to assess the likelihood that firms report big losses differently throughout the pre and post-financial crisis periods.

2.3. Value relevance

According to the literature, when a firm adapts its national accounting standards to internationally recognised standards such as IFRS, its value relevance improves. (Christensen *et al.*, 2015; Cormier & Magnan, 2016; Rodríguez García *et al.*, 2017; Wu *et al.*, 2017). However, a number of research publications paint an entirely different picture of IFRS's effectiveness in improving accounting quality. Although it has been claimed unequivocally that IFRS enhances accounting quality, there are some researchers who strongly question this. (Lenormand & Touchais, 2009; Aledo, Abellán, & Henghsiu, 2014; David, Allan, & Shaban, 2016; Kouki, 2018).

Another measure for assessing accounting integrity is value relevance. In contrast to the variables used previously in measuring timely loss recognition, all of which are based on accounting information, value relevance is an assessment based on capital market-oriented information. A high-quality accounting that is the outcome of the implementation of international accounting standards usually has three characteristics. One, it correctly acknowledges the amounts that are intended to represent a firm's underlying economies. Second, it is less vulnerable to opportunistic managerial discretion (Perotti & Wagenhofer, 2014). Third, quality accounting practice reflects reduced non-opportunistic mistakes in accrual

estimation (Barth, Landsman, & Lang, 2008). These three characteristics of a high-quality financial report result in accounting earnings that are more valuable. As a result, the reported income and equity book value will be more valuable in a high-quality financial report. (Cheong *et al.*, 2010) reported that the adoption of IFRS may indeed provide more value relevant information on net operating income and intangible assets in financial statements of companies.

Our value relevance measurements are based on previous research that indicated that all else being equal, organisations with high quality accounting are predicted to have a high correlation between share price and accounting data (Barth, Lang, & Mark, 2008; Yi Lin *et al.*, 2012; Perotti & Wagenhofer, 2014). In keeping with the above, the first value relevance metric is based on the explanatory power of a stock price regression on net income and equity book value. To achieve an adjusted R2 that is unaffected by industry or time, we employ the two-stage regression techniques used in the studies of (Barth, Landsman, & Lang, 2008; Yi Lin *et al.*, 2012). After regressing the stock price (P) on industry and time fixed effect, we proceed to regress the residual (P^*) on equity book value per share (BVEPS) and net income per share (NIPS). Following previous studies, this study takes the stock price six months after the end of the fiscal year as section 319 of the Corporate Act 2011 requires that Australian listed companies lodge their financial report with the Australian Securities and Investment Commission (ASIC) within three months of the end of the fiscal year, with an additional three months cooling period. The regression of P on (BVEPS) and (NIPS) is as follows:

$$p_i^* = \delta_0 + \delta_1 BVEPS_i + \delta_2 NIPS_i + Error_i \quad (2)$$

Where:

P = share price three months after fiscal year end;

P^* = residual from the regression of P on industry and time (year) fixed effect;

BVEPS = book value of equity per share;

NIPS = net income per share.

In line with past research, the above model is run separately for the pre- and post-financial-crisis periods, pooling observations for each.

Second, value relevance measures are based on the explanatory power of a net income per share (NIPS) regression on annual share price return (RETURN) (Collins *et al.*, 1997; Barth, Landsman, & Lang, 2008; Yi Lin *et al.*, 2012). To obtain the value relevance un-affected by industry and time fixed effect, the first net income per share (NIPS) divided by the beginning

of the fiscal year price will be regressed for on industry and time fixed impact, as in the prior measure. The residual NIPS is then regressed on RETURN. The second value relevance metrics are the R^2 from regression given in Eq. (7):

$$NIPS^* = d_0 + d_1 RETURN_i + Error_i \quad (3)$$

Where:

NIPS = net income per share divided by the beginning of the fiscal year share price

*NIIP** = residual from the regression of NIPs on industry and time (year) fixed effect and

RETURN = shareholders' total annual return from nine months before the fiscal year-end to 3 months after the fiscal year-end.

Regression Eq. (7) intends to determine the impact of the adoption of the financial crisis on value relevance for pre-financial crisis and post-financial crisis.

3. SAMPLE SELECTION AND DESCRIPTIVE STATISTICS

This study utilises secondary data from real estate businesses listed on the Australian Stock Exchange (ASX) as of March 2016 using stratified random sampling. The data comes from the financial statements of Australian listed real estate companies from 2002 to 2015. The data for 19 real estate companies that have full financial statements of fourteen years were collected from 39 listed companies using DataStream (Thomson Reuters). This constitutes more than 50 percent of the population and for many of the remaining listed company's data for full 14 years are not available. The sample is quite centered as all of the observations are from the real estate industry. Fourteen years of data, consisting of seven years before the global financial crisis (until 2008) and seven years after the global financial crisis (until 2015) were considered to determine the impact of the financial crisis in the Australian real estate industry. The year 2008 is included in pre-financial crisis periods as all company's financial year ends before 31 December. So far, no study has been undertaken to determine the impact of an economic crisis, such as the financial crisis, on the value relevance of the financial reports of the real estate business, which is directly related to the financial crisis.

The descriptive statistics provide basic information about the effects of the financial crisis. Table-1 addresses the descriptive statistics of all variables for the study period (2002-2015), and it also provides basic information on the pre-financial crisis (2002-2008) and post-financial crisis (2008-2015).

The descriptive statistics of all the variables in the pre and post-financial crisis periods are shown in Table 1. Among the variables the mean value of two periods for P and NIPS shows the statistically significant difference between the two periods. The decrease in the mean value of P and NIPS are statistically significant at 0.01 confidence intervals. The bad economic condition due to the financial crisis affected companies and financial markets all over the world including Australia and it is quite natural to have a significant reduction in cash flow, market price per share, and net income of listed companies.

Among other variables, the SIZE, market value of shares, marked a significant increase from 2.194 to 2.451, and TURN denoted by sale, shows a significant decrease from 0.471 to 0.315 at a 0.01 confidence interval. DISSUE reduced to 12.509 from 34.993 and CLOSE also marked reduction from 44.559 to 38.664 in mean value at 95 percent confidence intervals. Even if the market value of the shares increased the sale has reduced significantly in the post-financial crisis period. In the same way, the reduction in DISSUE and CLOSE indicates the reduction of public investment in the real estate industry due to the economic depression. All other variables do not show a significant difference between pre and post-financial crises.

4. EMPIRICAL FINDINGS

The following section analyses the influence of the financial crisis on the value relevance of financial reports of listed real estate firms in the Australian stock exchange.

4.1. Impact of Financial Crisis

Table-2 gives the result of the first measure of timely loss recognition related to the pre and post-financial crisis periods.

Recognition loss as and when they arise is another important sign of quality accounting. Based on the earlier studies, the frequency of reporting large negative income (*LNEG*) is the manifestation of timely loss recognition. A regression is run with large negative income (*LNEG*) as the dependent variable and *POST* and other control variables as independent variables. A positive value of the coefficient of *POST* is interpreted as the incremental frequency of large negative income and a negative coefficient is a sign of less occurrence of large negative income. Table -2 gives the coefficient of *POST* as 0.036 with a probability value of 0.534. The result indicates that there is a small increase in the frequency of reporting large negative net income which is not statistically significant indicating that

there is n much difference in timely reporting of losses and value relevance of financial reports.

Based on the stock market information of the listed real estate companies two sets of analyses are made to evaluate the value relevance of the financial information of companies and through that the accounting quality. The explanatory power of accounting numbers and market-based information is assessed using the price model and the return model. The price model of value relevance evaluates stock price (P) on net income per share ($NIPS$) and a book value of equity per share ($BVEPS$). In addition, the return model measures the value relevance of net income per share ($NIOP$) on return ($RETURN$) using regression. The R^2 from these regression models describes the explanatory power of financial reporting information and market information. Higher R^2 is an indication of higher explanatory power and value relevance and thus a higher quality financial report.

The result shown in table -3 gives an adjusted R^2 value of 46.5 percent in the pre-financial crisis period and an R^2 value of 36.5 in the post-financial crisis period. The decrease in the value of R^2 is 10%. Thus, the goodness of fit of the equation represented by adjusted R^2 decreased in the post-adoption period. This is a clear sign of a decrease in the value relevance of price on net income and book value per share, which can be interpreted as the decrease in the explanatory power and value relevance of financial reports. The second value relevance measure is the explanatory power of $NIOP$ on $RETURNS$. The adjusted R^2 from the regression of $NIOP$ on $RETURN$ increased to 38.5 percent in the post-financial crisis period from 17.6 percent in the pre-financial crisis period. The increase of R^2 by 20.9 percent is a sign of improvement in the explanatory power and value relevance. Showing an improvement in accounting quality in the post-adoption period. The increase in the return model can be the result of the changes in the fair value hierarchy made by IFRS and the dividend policy changes followed by real estate companies after the financial crisis.

The result of the analysis of the impact of the financial crisis on the value relevance of the real estate sector gives a mixed outcome. The timely loss recognition measures indicate that there is no significant change in accounting quality between the pre-financial crisis period and the post-financial crisis period. But the value relevance measure is giving an opposing result. The price model shows a clear sign of a reduction in value relevance but the return model indicates an increase in value relevance and accounting quality of the financial reports.

5. CONCLUSION

The financial crisis of 2008 affected almost all the economies worldwide. It affected all the business sectors throughout the world and Australia was not an exception to this. The real estate business was the sector affected the most. Many economists and countries blamed IFRS especially the fair value accounting method of assets valuation as the basic cause for the financial crisis. Many regulatory bodies and finance ministers of some countries pressurised IASB to make changes in IFRS. This adverse economic condition of the financial crisis and the following changes made to IFRS can affect the accounting quality of financial reports. The result of the measures timely loss recognition shows no change in the frequency of reporting large losses and the value relevance price model indicates that the financial crisis has not made any statistically significant effect on the value relevance of financial reports. On the other hand, the value relevance return model shows an increase in the explanatory power of financial report value relevance after the financial crisis. The market value and related information are influenced by a number of factors other than the accounting standards and accounting policies like the economic, legal, and political environment of companies. This can be the reason for the mixed result shown in value relevance measures.

The study analysed the impact of a major incident that occurred in the first decade of the 21st century, the financial crisis of 2008, on the value relevance of the financial reports of Australian listed real estate companies. The result indicates that the financial crisis has not made any significant impact on the value relevance of published financial reports of the real estate sector. There can be a different reason for that. Accounting quality is a relative factor and there are different factors that influence accounting quality. The accounting standards used, the legal, and political system of the country, the working of regulatory bodies, and the incentive to publish a quality financial report are the major factors that can affect the accounting quality of the financial report. When this study shows that financial crisis can adversely affect the value relevance it may be because Australia has a strong regulatory system that monitors the preparation and publication of financial reports of companies.

A strong regulatory system prevailing in a country is an important factor that helps in maintaining value relevance and accounting quality. To maintain the quality of financial reports, there are a number of regulatory bodies that oversee the preparation and disclosure of financial reports of Australian listed companies. When the financial crisis has not affected value relevance, it is proof of a strong regulatory system in Australia. Australian

Securities and Investments Commission (ASIC), Financial Reporting Council (FRC), Australian Accounting Standards Board (AASB), Australian Securities Exchange (ASX), corporate law board, etc. are some of the regulatory bodies that ensure the quality of financial reports. This gives scope for further research to evaluate the impact of regulatory bodies on the value relevance of published financial reports.

Table 1
Descriptive Statistics- Pre and Post Financial Crisis

<i>Test variables</i>	<i>Mean Difference</i>			<i>Variance Ratio Test</i>				
LNEG	0.045	0.038	0	0.764	0.208	0.191	0	0.317
P	3.872	2.63	2.261	0.000***	4.505	2.735	1.709	0.345
NIOP	0.091	0.021	0.097	0.059*	0.358	0.256	0.074	0.000***
BVEPS	2.89	2.5	1.388	0.139	3.231	2.44	1.756	0.001***
NIPS	0.342	0.163	0.231	0.002***	0.734	0.667	0.107	0.091*
RETURN	7.611	2.801	11.46	0.19	38.716	17.45	5.71	0.000***
SIZE	2.194	2.451	2.178	0.000***	0.969	0.812	2.435	0.043*
GROWTH	46.37	22.761	9.071	0.1	138.762	92.116	5.869	0.000***
EISSUE	9.615	7.391	2.287	0.259	17.787	14.315	0.948	0.013**
LEV	0.79	0.648	0.464	0.105	0.974	0.7	0.457	0.000***
DISSUE	34.993	12.509	14.509	0.016**	83.877	63.053	2.548	0.001***
TURN	0.471	0.315	0.242	0.001***	0.57	0.342	0.137	0.000***
AUD	0.737	0.737	1	---	0.442	0.442	1	---
CF	0.04	0.022	0.027	0.066*	0.098	0.07	0.019	0.000***
NUMEX	1.789	1.789	2	---	0.523	0.523	2	---
XLIST	0.105	0.105	0	---	0.309	0.308	0	---
CLOSE	44.559	38.664	43.7	0.018**	22.583	26.627	40.47	0.060*

Note: To compare the mean value of pre-IFRS and post-IFRS periods, two sample t-test is used and F-ratio test is used to comparison of standard deviation between these two time periods. The symbols *, **, *** indicate the statistical significance of the difference between pre-IFRS and post-IFRS at 0.10, 0.05, and 0.01, respectively

Table 2
Timely Loss Recognition - Pre and Post Financial crisis

<i>Timely Loss Recognition</i>	<i>Prediction</i>	<i>Pre-FC adoption</i>	<i>Post-FC adoption</i>	<i>Significance</i>
Large negative net income	+	0.036		0.534

Table 3
Value Relevance Metrics in Real Estate Industry - Pre and Post Financial Crisis

<i>Value Relevance</i>	<i>Prediction</i>	<i>Regression adjusted R²</i>	<i>Significance</i>	
Price model	POST FC > PRE FC	0.465	0.365	0.000***
Return model	POST FC > PRE FC	0.176	0.385	0.000***

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CONFLICT OF INTEREST

There is no conflict of interest involved in the publication of this paper.

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