Discussion of 'IFRS non-GAAP earnings disclosures and fair value measurement'

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1. Introduction

Malone *et al.* (2015, hereafter MTW) state, 'Our underlying research questions are: (i) To what extent is the release of non-GAAP earnings associated with IFRS remeasurements? and (ii) To what extent are non-GAAP adjustments for IFRS remeasurements useful for analysts?'[1] Alternatively speaking, MTW intends to investigate the informativeness of non-GAAP earnings arising from fair value (FV)-related items. In doing so, they first document if FV-related remeasurement items provided in the financial statements are associated with more non-GAAP earnings disclosure (*NON-GAAP*). They then document if analysts' adjustments of these items are associated with the non-GAAP earnings disclosures. Furthermore, they document the association between the non-GAAP disclosure and financial analysts' forecasting errors and forecasting dispersion.

The authors hand-collect data about disclosures of non-GAAP earnings for large Australian companies (the ASX 200, this share market index comprising the largest 200 Australian companies by market capitalisation) from three media sources: financial statements, earnings announcements and investor presentations. They construct a sample of 576 firm-year observations from 2008 to 2010. Among the sample, they found that 371 firm-years reported non-GAAP earnings. Of these companies, 330 (89 percent) reported non-GAAP earnings in their annual reports, 270 (73 percent) reported non-GAAP earnings in their earnings announcements, and 284 (76 percent) included non-GAAP earnings in their investor relations presentations for the year. In evaluating the adjustment items, the authors identify six groups of items as described below.

[1] Extracted from end of the second paragraph of their paper presented at the conference.

FININST = net gain or loss taken to profit and loss for the fair value remeasurement of financial instruments,
REVAL = net gain or loss from revaluation of investment properties and agricultural, insurance and pension assets,
IMPAIR = impairment loss (or reversal),
AMORT = amortisation expense,
MERGER = gains or losses associated with mergers, integrations, divestments, redundancies and restructuring of business operations,
OTHER = all other nonrecurring (nonoperating) remeasurements not included in the previous five items.

As *FININST*, *REVAL* and *IMPAIR* are related to fair value adjustments, the authors also develop two summation variables based on these three items. *COUNT* is the sum of indication of nonzero items for each of *FININST, REVAL* and *IMPAIR*, scored as 0 to 3. *MAGNIT* is the sum of total value (in dollars) of *FININST, REVAL* and *IMPAIR*.

Panel A of Table 6 reports the results on the association between these FV-related items provided in the financial statements and the release of non-GAAP earnings (*NONGAAP*). When the logistic regression model uses the combined scores (*COUNT* and *MAGNIT*), the results show a significantly positive association between these two variables and *NONGAAP*. When the model uses the remeasurement of individual items, some individual item variables are also significant. These results are consistent with the authors' prediction that if a firm has more FV-related remeasurement items included in their earnings, then managers are more likely to provide non-GAAP earnings.

This is their research question (1). The authors support their prediction by arguing that these FV-related remeasurements may not be associated with the underlying profit and loss; hence, it is likely that the managers will provide a non-GAAP earnings number to better reflect the firm's underlying profitability.

The authors are much less clear in discussing their research methodology for the research question (2). I will summarise their analyses briefly here, in which some may not have a direct relation to their research question (2). One impressive aspect of this paper is that the authors spent much effort on collecting the adjustments of the individual items made by the managers and by the financial analysts. For managers' adjustments, they refer to the reconciliation statement between IFRS profit or loss and non-GAAP earnings.[2] For analyst adjustments, they use the list of analysts' adjustments for each company-year compiled by the Aspect Huntley analysts following the company. These data can be very useful in analysing the bias/incentives of the managers and analysts. In the paper, the authors report many interesting descriptive statistics of the individual items including those amounts reported

[2] Out of 371 firm-years disclosing non-IFRS earnings, 329 firm-years (89 percent) provided a reconciliation table.

in the financial statements (FS) and those adjusted by the managers (COY) and by the financial analysts (AA). Panel C of Table 3 provides correlations between these three measures. The authors note that the correlations between these three measures are very high for the *IMPAIR* item. I wonder if these correlations can imply the quality of the non-GAAP earnings. The authors state, 'The variation in correlations for *IMPAIR, REVAL* and *FININST* may reflect the quality of additional information available to analysts. For items in the *REVAL* and *FININST* groups, analysts may have access to prices in active markets that could assist them in determining the assets' values. For the *IMPAIR* group, analysts may be more dependent on information provided by the company leading to the higher correlation for this item-group'. These conjectures can be interesting in their own rights, but for the purpose of assessing the information quality of the non-GAAP earnings, I would like to see more discussion of the quality of managers' adjustments. In a later analysis, the authors suggest using financial analysts' forecast errors and dispersion to assess the informativeness of non-GAAP earnings without referring to the correlations between the managers' and the analysts' adjustments. I think that a very interesting analysis is to investigate whether the high correlation between the managers' and the financial analysts' adjustments implies high quality of the non-GAAP earnings provided by the managers.

Panel B of Table 6 focuses on documenting the association between *NONGAAP* and the items adjusted by the financial analysts. The authors suggest that if more *NONGAAP* is associated with financial analysts' adjustments, then the non-GAAP earnings reporting is useful for financial analysts. The authors find a significant relation between the combined scores ($COUNT^{AA}$ and $MAGNIT^{AA}$) and *NONGAAP*. However, for individual items, I want to point out that only the indicator of financial analysts-adjusted *REVAL* (i.e. $REVAL^{AA}$) is significant.

The authors further use the 2SLS regression model to analyse whether *NONGAAP*, along with reconciliation (*RECON*) and disclosures released in all three medias (*ALLMEDIA*), reduces analysts' forecast errors and forecast dispersion. The results show that *NONGAAP* (also *RECON* and *ALLMEDIA*) is negatively associated with analysts' forecast errors and forecast dispersion. The authors then conclude that the incidence of non-GAAP earnings disclosure is informative rather than opportunistic.

This paper explores an interesting research question and deals with an important accounting problem using unique data. My detailed comments are as follows.

2. Background and literature

Bradshaw and Sloan (2002) suggest that more and more companies report *pro forma* earnings since 1985. Many studies have investigated the character-

istics of non-GAAP earnings, including pro forma earnings and street earnings. Two views about non-GAAP earnings exist among prior studies: one is the informative view and the other is the opportunistic view.

2.1. Informative view

Some studies propose that because non-GAAP earnings exclude nonrecurring items that are not predictable for future performance, non-GAAP earnings should be informative. Brown and Sivakumar (2003) argue that managers and analysts tend to provide more value-relevant earnings and the non-GAAP earnings provided by them have fewer transitory components and thus have more predictive ability. Bhattacharya *et al.* (2003) further examine the difference between pro forma earnings and GAAP earnings, including the proportion of profit versus loss and the proportion of EPS above versus below analyst forecast. Using the cumulated abnormal returns around the announcement day to measure the market response to earnings announcements, Bhattacharya *et al.* (2003) conclude that pro forma earnings are more informative and permanent than GAAP earnings.

2.2. Opportunistic view

Studies also argue that non-GAAP earnings disclosure is opportunistically used by managers to boost up investors' expectations or to meet or beat market expectations, such as analysts' forecast, when the GAAP earnings fail to do so. Doyle *et al.* (2003) study the predictive value of expenses excluded from pro forma earnings and find that these expenses have predictability for future cash flows. Landsman *et al.* (2007) extend Doyle *et al.* (2003) and find that the total exclusions are value-relevant and predictive of future performance. Christensen *et al.* (2011) find that managers actively use earnings guidance to influence the analysts' street earnings exclusions so that they can meet the market expectation, and Doyle *et al.* (2013) find that managers opportunistically define non-GAAP earnings either by increasing the amount of excluded expense or by creating a new type of exclusion items to increase the non-GAAP earnings and thus meet or beat analysts' forecast. Barth *et al.* (2012) suggest that managers opportunistically exclude stock compensation expenses to increase earnings, smooth earnings and meet earnings benchmarks.

These two views co-exist, and studies also show that (un)informativeness of non-GAAP earnings depends on characteristics of firms and the sophistication of users. For example, Gu and Chen (2004) investigate the items excluded and included in street earnings by analysts and show that the nonrecurring items excluded are more persistent than those included in street earnings, concluding that analysts do have expertise in processing earnings information. Also, Barth *et al.* (2012) find that analysts exclude the expense from earnings forecasts when exclusion increases earnings' predictive ability for future performance.

Lougee and Marquardt (2004) find that pro forma earnings are more useful when the GAAP earnings are less informative or the companies are confronted with less strategic considerations. Isidro and Marques (2015) find that countries' institutional and economic factors will affect the informativeness of non-GAAP earnings reported by managers. Bhattacharya *et al.* (2007) investigate the characteristics of the investors who trade on pro forma earnings information. Their results reveal that less sophisticated investors are those who mainly trade on pro forma earnings and tend to be misled by managers, and these investors bear losses.

Due to the opportunistic view of reporting non-GAAP earnings, the SEC started to regulate the disclosure of non-GAAP earnings. On 22 January 2003, the SEC finalised Reg G to regulate the disclosures of pro forma earnings. Reg G mandates that firms which provide pro forma earnings must also provide the most directly comparable GAAP number and a clearly understandable quantitative reconciliation of the two earnings numbers. Elliott (2006) uses experiments to explore the effect of reconciliation on nonprofessional investors and finds that reconciliation can mediate the investors' reliance on the intentional emphasis management places on pro forma earnings. Zhang and Zheng (2011) find that high-quality reconciliation reduces the extent of pro forma earnings' mispricing. These studies suggest that the regulation of SEC will help improve usefulness of non-GAAP earnings.[3]

To sum up, prior studies document that managers can be opportunistic to provide non-GAAP earnings; however, the non-GAAP earnings are often informative, especially for the sophisticated users. MTW extend these previous studies by investigating the informativeness of non-GAAP earnings in a special setting: IFRS adoption in Australia. As the authors state in the first paragraph, the reporting of non-GAAP earnings has increased following adoption of IFRS, which creates concern to many regulators around the world. I believe that a study investigating the non-GAAP earnings reporting affected by IFRS is interesting and should provide incremental contribution to this literature. One big change in the IFRS adoption countries is the use of fair value or market value. MTW is unique in that it identifies FV-related remeasurement items and investigates their relation with the non-GAAP earnings. The findings that these remeasurement items are associated with more reporting of non-GAAP earnings make sense. And if the increase in reporting of non-GAAP earnings is due to these FV-related remeasurements, which are likely to be nonrecurring and do not affect future performance, then we should expect these non-GAAP earnings to be informative. However, it is also likely that managers take the opportunities to adjust these items, as the managers can easily provide plausible reasons for their adjustments. Hence, it is important to provide direct empirical evidence on the usefulness of the non-GAAP earnings. I think that

[3] As many of the Australian firms in this paper's sample provide reconciliation voluntarily, it is likely that the non-GAAP earnings will be informative.

the authors identified a very good research setting and have provided meaningful results. However, there are some disconnections in the analyses. In the following sections, I will offer some discussions in the hope of stimulating more research in this area.

3. Research question 1: fair value items and non-GAAP earnings disclosure

The first research question is whether more fair value remeasurement items will lead to more non-GAAP earnings disclosure. Fair value items refer to the items which need managers' estimates and judgement or need to be remeasured using fair value in the fiscal year end. These remeasured items will cause changes in earnings. These items are likely to be nonrecurring. Prior studies suggest that managers and analysts will adjust GAAP earnings by excluding nonrecurring items and voluntarily disclose non-GAAP earnings to reduce information asymmetry between companies and external financial statement users. Hence, the authors propose that these items (likely to be nonrecurring) will lead managers to voluntarily exclude and disclose non-GAAP earnings. These arguments actually imply that the non-GAAP earnings disclosure arisen from the FV-related remeasurement will be informative.

However, there is a tension here: whether these FV-related remeasurement items are informative to investors is debatable. Some studies find that earnings quality improve after the IFRS adoption (Barth *et al*., 2008), while Christensen *et al*. (2007) examine the economic consequences of IFRS adoption for UK firms and find that mandatory IFRS adoption may benefit some firms but harm others. One can argue that IFRS fair value items are uninformative and misleading for investors; hence, adjustments are necessary to improve the informativeness; however, as the authors point out, studies provide evidence that fair value measurements (Barth and Clinch, 1996; Landsman *et al*., 2007) and impairments (AbuGhazaleh *et al*., 2011; Amel-Zadeh *et al*., 2013; Laghi *et al*., 2013) have information content. If so, then the adjustments can be opportunistic. The key issue in investigating if the disclosure of non-GAAP earnings is informative or opportunistic should rely on the quality of the managers' adjustments. If the adjustments are of high quality, then the non-GAAP earnings will be of high quality (more informative). For example, one can verify if the correlation between the managers' adjustments and the analysts' adjustments can be used as a 'quality' indicator. One analysis can be carried out to examine if managers' adjustments coincide highly with analysts' adjustments, then the predictability power of the non-GAAP earnings is higher than that of the GAAP earnings. If so, this correlation may be used as a 'quality' indicator of managers' adjustments.

The authors probably agree that simply showing the high association between *NONGAAP* and FV-related remeasurements cannot conclude the quality of the non-GAAP earnings (that is why we need research question 2). However, this point should be made clear when H1 is discussed. Actually, it is

possible that more FV-related remeasurements may enable the managers to opportunistically provide non-GAAP earnings, because it is hard for the investors to see through the quality of the adjustments. This opportunistic argument will also predict that more reporting of non-GAAP earnings is associated with FV-related remeasurements. I believe that the informative view is likely to be dominant because previous studies (Elliott, 2006; Zhang and Zheng, 2011) have shown that if firms provide reconciliation, then the non-GAAP earnings are more informative.[4] As most Australian firms in the sample provide reconciliation, it is plausible to infer that non-GAAP earnings reported by large Australian firms are informative. However, the opportunistic view still should not be precluded. In sum, both the informative and the opportunistic views can lead to a positive association between the reporting of non-GAAP earnings and the FV-related remeasurement items and amounts. The authors should also consider the opportunistic view when analysing their research question 1 and hypothesis H1.

Moreover, the significance of the coefficients on the individual FV-related items (based on the dummy variable or magnitude) varies. For example, only the indicator measure of *REVAL* from financial statements (i.e. $REVAL^{FS}$) and *IMPAIR* (regardless of using indicator or continuous number) reported in financial statements (i.e. $IMPAIR^{FS}$) have significant associations with non-GAAP disclosures. Some detailed analyses of the reason why the individual items do not consistently explain the *NONGAAP* can strengthen the conclusion.

4. Research question 2: the usefulness of non-GAAP earnings disclosure for analysts

The second research question focuses on whether the disclosure of non-GAAP earnings is useful for analysts. As the research question 1 cannot be used to answer whether the non-GAAP earnings are informative or opportunistic, the research question 2 is essential for the paper to assess the informativeness of the non-GAAP earnings. I will discuss their analyses related to this research question.

As mentioned above, the authors analysed the managers' adjustments and the analysts' adjustments for each of the FV-related remeasurement items. They find that most of the management adjustments are negative, that is, the non-GAAP earnings will be higher than the GAAP earnings. This may imply

[4] Elliott (2006) uses experiments to explore the effect of reconciliation on nonprofessional investors and finds that reconciliation can mediate the investors' reliance on the intentional emphasis management places on pro forma earnings. Zhang and Zheng (2011) find that high-quality reconciliation reduces the extent of pro forma earnings' mispricing. These studies suggest that the regulation of SEC will help investors to avoid the opportunistically used non-GAAP earnings.

managers' opportunistic behaviour; however, they also find that most of the analysts' adjustments are negative. Moreover, they find that the managers' adjustments and the analysts' adjustments of the FV-related remeasurements are highly correlated: *FININST* (0.417), *REVAL* (0.574) and *IMPAIR* (0.947) (refer to Panel of Table 3). They suggest that the high correlation for *IMPAIR* may reflect that the analysts have to rely on the managers' information while the analysts can get more information from outside regarding *FININST* and *REVAL*. I am not quite sure how these analyses can imply that the non-GAAP earnings are informative. The analyses seem to focus on the differences in 'ability'. For example, the authors suggest that analysts can get more information from outside but why can't the managers? Why do the analysts have to rely on managers regarding the *IMPAIR* item? Moreover, the correlations for the other two important items *AMORT* and *MERGER* are -0.012 and 0.213, respectively. If the analysts rely on the managers on *IMPAIR*, why would the analysts not rely on the managers on *AMORT*? Managers and analysts have different incentives. As pointed out by the authors, Barth *et al.* (2012) conclude that managers focus on investor perceptions while analysts focus on predictive ability for companies' future performance when excluding share-based payment expense from the GAAP earnings; therefore, it is likely that the correlation of -0.012 between the managers' and the analysts' adjustments implies their distinctive incentives.

While I have many questions on the detailed analyses of the differences in these adjustments, the main question that I am not clear about is why the authors choose to analyse these correlations. If we believe that analysts are the most important information intermediaries who intend to provide value-relevant information, then the high correlation may be used to judge the quality of the non-GAAP earnings reported by the managers. However, I do not find such an intention from reading the paper. I would suggest that the authors analyse whether the usefulness of non-GAAP earnings will increase when the managers' adjustments are more in line with the analysts' adjustments. Without such an analysis, the readers are left in the dark regarding the usefulness of knowing the correlation between these two adjustments.

The second analysis that relates to research question 2 is the regression analysis of the association between *NONGAAP* and the analysts' adjustments. It seems that the authors suggest if the association between *NONGAAP* and analysts' adjustments is significant, then the non-GAAP earnings are useful for financial analysts. This analysis is actually similar to the correlation analyses. As the non-GAAP earnings result from the managers' adjustments and if the managers' adjustments are highly correlated with the analysts' adjustments, then it is not surprising to see *NONGAAP* to be associated with analysts' adjustments. Panel B of Table 6 reports that the summed measures of the analysts' adjustments of the FV-related remeasurement items (i.e. $COUNT^{AA}$

and $MAGNIT^{AA}$) are significantly associated with *NONGAAP* (*t*-statistics are 5.496 and 2.562, respectively). However, for the individual FV items, only *FININST* (amount) and *REVAL* (indicator) variables are significant. In the same regression, analysts' adjustments of *AMORT*, *MERGER* and *OTHER* (regardless of indicator or amount) are all significantly associated with *NONGAAP*. The results are puzzling. As mentioned above, Panel C of Table 3 reports that the managers' adjustments are *negatively* correlated with the analysts' adjustments of *AMORT*. As the *NONGAAP* is partly due to managers' adjustments of *AMORT*, the significantly positive association between $AMORT^{AA}$ and *NONGAAP* implies that the correlation exists not through managers' adjustments but due to some other unknown reasons. To sum up, while it is interesting to see how the incidence of reporting the non-GAAP earnings relates to analysts' adjustments, the results may not be used to verify the quality of the non-GAAP earnings arising from the managers' adjustments. The last analysis that the authors offer – whether the disclosure of non-GAAP earnings can increase the accuracy of analysts' forecast and decrease the disagreement among the analysts – can bring insights to the usefulness of non-GAAP earnings.

To control for endogeneity, the authors use two-stage least squares (2SLS) regression models to analyse the relationship between *AFE*/*FD* and *NONGAAP* (equations 4 and 5). The first stage is based on the association of *NONGAAP* with occurrence of nonzero values for any of the six item-groups in companies' financial statements (*FININST, REVAL, IMPAIR, AMORT, MERGER* and *OTHER*). The second stage uses the predicted value of the first stage. Alternatively, the authors also examine the effect of *RECON* (= 1 if the company provides a reconciliation between non-GAAP and IFRS earnings) and *ALLMEDIA* (= 1 if the company makes non-GAAP disclosure in three medias – earnings announcement, investor presentation and annual report) on forecast error/dispersion. Table 8 reports that *NONGAAP*, *RECON* and *ALLMEDIA* are all negatively significantly associated with forecast error and forecast dispersion; however, *ALLMEDIA* does not provide additional explanatory power when combined with *NONGAAP*. On the basis of Table 8 results, the authors conclude, 'Overall, the results support H3a and H3b because we find that non-GAAP earnings disclosure is associated with lower forecast error and less forecast dispersion 3 months subsequent to yearend'.[5]

Now I would like to discuss whether the above analyses have answered the research question 2: 'To what extent are non-GAAP adjustments for IFRS remeasurements useful for analysts?' It seems that the authors intend to use H2 and H3 to answer this question. The authors suggest the following hypotheses:

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[5] Prior to this conclusion, the authors did not clearly state what H3a and H3b are. I presume that 'a' is for forecast error and 'b' is for forecast dispersion.

H2: Companies disclosing non-GAAP earnings are more likely to have a higher (a) incidence and (b) magnitude of analyst adjustments for financial statement items reflecting gains and losses on fair value measurements and impairment.

H3: Companies releasing non-GAAP earnings are more likely to have lower forecast error and less forecast dispersion in the following year.

For H2, the authors argue that 'if companies' non-GAAP disclosures serve to highlight relevant items to analysts and provide additional information, we would expect to observe an association between companies' non-GAAP earnings disclosures and analyst adjustments'. However, as discussed before, management has made adjustments to convert earnings to non-GAAP earnings. If management's adjustments differ from analysts' adjustments significantly, then the association between *NONGAAP* and the analysts' adjustments can only show that the financial analysts are also paying attention to these items, and the question on the informativeness of non-GAAP earnings is still unanswered.

The rationale behind H3 is clear; however, the test cannot be strictly used to answer research question 2 regarding the extent that non-GAAP adjustments for IFRS remeasurements are useful for analysts. In their 2SLS regression, the authors choose the FV-related remeasurement items reported in the financial statements as the first-stage independent variables. Why not use management's adjustments of these items? If the predicted value from management's adjustments of the FV-related remeasurement items is significantly related to analyst forecast performance, would this not be a more direct test for research question 2? The current analyses can only conclude that firms providing non-GAAP earnings enjoy lower forecast errors and dispersion, but we cannot know if this is due to the FV-related remeasurement items (i.e. *FININST*, *REVAL* and *IMPAIR*).

5. Additional comments

Below I provide some comments that could be interesting.

5.1. Effect of reconciliation

Previous studies have suggested that reconciliation improves the information quality of non-GAAP earnings reporting (e.g. Elliott, 2006; Zhang and Zheng, 2011). In analysing the effect of reconciliation, the authors construct a variable *RECON* and evaluate if it is associated with forecast error/dispersion. I am not quite sure of the effectiveness of this test because out of 326 non-GAAP earnings reporters, 298 cases provide reconciliation. I am not surprised that the coefficient on *RECON* is significant, as it is very similar to *NONGAAP*. I am

more interested in contrasting performance of the 28 cases that do not provide reconciliation with performance of the 298 cases that provide reconciliation.

5.2. *Non-GAAP earnings in all 3 medias*

In testing the forecasting error/dispersion, the authors also create a dummy variable *ALLMEDIA* to test whether the non-GAAP earnings provided in all 3 medias provide any additional explanatory power. The authors propose that providing non-GAAP disclosure in multiple releases could increase the credibility and visibility of the disclosures. I am not sure of these claims. Maybe the managers want to push the non-GAAP earnings because they want to boost up investors' expectation? I am interested in exploring if these *ALLMEDIA*=1 cases (172 of 326) involve more FV-related remeasurement amount in the financial statements. Do these cases show very large differences between the non-GAAP earnings and GAAP earnings? Do these cases have managers' adjustments highly associated with the financial analysts' adjustments? Some descriptive statistics of these 172 cases in comparison with the rest should bring some insights.

5.3. *Effect of financial crisis*

In general, market values go up and down, the FV-related remeasurements should be equally positive or negative. As financial crisis has significant negative effects on market value, the significantly negative FV-related remeasurements and the adjustments reported by this paper can be due to the 2008 financial crisis. It is interesting to see the effect if the year of financial crisis (2008 or even 2009) is excluded from the sample.

5.4. *Effect of NONGAAP when forecasts are closer to actual announcements*

In analysing the effect of *NONGAAP* on forecast dispersion, the paper finds insignificant effects when forecasts are closer to actual earnings announcements. Forecast errors/dispersion should be smaller when forecasts get closer to actual earnings announcements; then, should firms with *NONGAAP* enjoy more reduction in forecast error/dispersion through time? Some *a priori* discussion may be helpful.

5.5. *Timeline of the managers' and the analysts' adjustments*

For many items, adjustments made by analysts on average are larger than those by the managers. This is an interesting phenomenon. Is this due to a different definition of earnings to be forecasted by analysts? The authors suggest that analysts may rely on the managers' adjustments; what is the

corresponding reporting timeline of management adjustment and analysts' adjustments?

5.6. Testing for the 'opportunistic' non-GAAP reporting

A different methodology has been implemented for testing the opportunistic and informative views. These views can exist simultaneously. For example, in testing the informative view, studies investigate if the non-GAAP earnings are associated with the market responses more strongly than the GAAP earnings (Bhattacharya *et al*., 2003). In a similar vein, this paper tests the reduction in analysts' forecast error/dispersion. However, this study focuses on a dummy variable of releasing non-GAAP earnings rather than contrasting adjusted versus unadjusted earnings. Studies (e.g. Doyle *et al*., 2003) also examine if the excluded items are predictive of future cash flows, raising questions about their classification as nonrecurring. This study does not investigate if the excluded items (or the management's adjustments) have any association with future profitability. One may find the non-GAAP earnings to be informative but at the same time, the excluded items may also have some predictive power of future performance. The authors can also look into whether the excluded items are associated with future profitability.

5.7. Cross-sectional analyses

Many previous studies investigate informativeness of non-GAAP earnings *conditional* on firm characteristics. For example, Choi and Young (2015) find that whether non-GAAP earnings are informative or not depends on when GAAP earnings beat the market expectations. If GAAP earnings beat the benchmark, the non-GAAP earnings are informative. This paper did try to analyse the effect for firms providing reconciliation, but the results are inconclusive. It shall be interesting to conduct some cross-sectional analyses conditional on firm characteristics, for example corporate governance characteristics or if GAAP earnings meet or beat the financial analysts' forecasts, as did Choi and Young.

6. Concluding remarks

MTW (2015) investigate whether IFRS fair value remeasurement accounting will lead managers to provide more non-GAAP earnings disclosure and whether the non-GAAP earnings reporting is useful for analysts. The analyses are based on a rich hand-collected data set including non-GAAP earnings disclosures and adjustments made by both the managers and the analysts. The empirical results show that when more remeasurement items and amounts are provided in the financial statements, more managers will

release non-GAAP earnings. The adjustments by the managers and by the analysts are often significantly correlated. Most importantly, the study finds that firms releasing non-GAAP earnings enjoy less forecast error and forecast dispersion.

The paper investigates a very interesting research question using unique data from Australia and contributes to the debate on fair value accounting and non-GAAP earnings. More in-depth analyses using this unique data set can help us understand more about the economic consequences of the IFRS fair value-related accounting standards.

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