

## Characteristics of Companies Disclosing Non-GAAP Earnings

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## **Abstract**

**Purpose:** This study investigates factors that are associated with the likelihood of New Zealand listed companies disclosing non-GAAP earnings performance measures.

**Design/methodology/approach:** The study uses logistic regression analysis of 516 firm year observations of New Zealand companies for the period 2009 to 2014.

**Findings:** The research evidence suggests that New Zealand listed companies that are most likely to disclose non-GAAP earnings are larger, have higher analyst following and have a higher proportion of independent directors compared with other companies. In addition, firms with higher incidence of restructuring charges are more likely to disclose non-GAAP earnings.

**Research limitations/implications:** The study uses the population of New Zealand listed companies which is small by international standards. However, the financial reporting practices of New Zealand companies is important to for the efficient and effective operation of the sharemarket for investors. The results suggest that New Zealand listed companies that are under greater scrutiny because of their size and analyst following are motivated to provide additional disclosures of non-GAAP profit information to the market.

**Originality/value:** The study contributes to the literature on the voluntary disclosure of non-GAAP earnings in the New Zealand capital market.

**Keywords:** non-GAAP earnings, informativeness of earnings, strategic earning benchmarks

## Introduction

Adjustments to statutory earnings (non-GAAP (generally accepted accounting principles) earnings) are a common occurrence in the financial reporting environment in a number of countries. This trend has been well documented and researched in the United States both before (Bhattacharya *et. al.*, 2003; Bhattacharya *et. al.*, 2004) and after regulations to improve reporting practice (Black *et. al.*, 2015).

This study investigates factors that are associated with the likelihood of New Zealand listed companies disclosing non-GAAP earnings performance measures. The study considers characteristics of earnings that may be more likely associated with companies disclosing non-GAAP earnings. The study also investigates the effect of company ownership and governance characteristics on the likelihood of companies disclosing non-GAAP earnings.

Market regulators raise concerns about the use of non-GAAP earnings (International Organisation of Securities Commissions, 2014, European Securities and Markets Authority). Managers have the flexibility to adjust audited earnings which may vary from period to period and company to company. Managers also are free to decide how to communicate non-GAAP earnings through the media. These potential weaknesses can reduce the usefulness of the non-GAAP earnings measures and potentially mislead investors.

The common practice of reporting non-GAAP earnings measures raises doubts about the credibility of generally accepted accounting practice report financial performance that meets the needs of a range of users. In particular, the focus of GAAP reporting on the balance sheet and subsequent adjustments to avoid overstating assets has been criticised as impacting the usefulness of earnings for measuring and predicting performance (Ohlson 2006; Dichev and Tang 2008).

The New Zealand Financial Markets Authority (FMA) introduced non-GAAP earnings disclosure guidelines from 1 January 2013 to reduce the potential for non-GAAP information to be

misleading (FMA, 2012). Non-GAAP earnings measures are permitted but they are to be unbiased, calculated consistently from period to period and reconciled to audited GAAP earnings (FMA, 2012).

The sample consists of 516 firm year observations of New Zealand listed companies for the period 2009 to 2014. A logit regression is used to examine the determinants of companies disclosing non-GAAP earnings. The results show that companies under scrutiny by the market because of their size and greater number of analysts following are more likely to disclose adjusted earnings. The results also show that companies with more independent boards are also more likely to report non-GAAP earnings consistent with prior research on voluntary disclosure and incentives for independent directors protect their reputations and mitigate director liability (Lim, et. al., 2007). There is a positive association with the number of restructuring and the disclosure of non-GAAP earnings indicating that managers wish to exclude the effect of restructuring on operations even though such items can be separately disclosed under international financial standards (NZ IAS 1 impact on .

This study contributes to developing research of non-GAAP earnings in different countries. Research on non-GAAP earnings has been predominantly conducted in the United States, however, institutional and market features may differ from country to country which may change managers' incentives to report non-GAAP earnings. Thus it is appropriate to examine factors influencing the reporting of non-GAAP earnings in New Zealand. New Zealand is a small country with an open economy with stable political and legal frameworks operating on free market principles with export trade being of fundamental importance to the country's long term growth. The effective functioning of the capital market is an important component to achieve long term growth. Although New Zealand's sharemarket is small by international standards it has been experiencing growth and improved turnover in recent years (Rosborough, *et al.*, 2015).

The study also contributes to New Zealand policy making in financial markets by providing a greater understanding of voluntary financial reporting disclosures.

The paper begins by providing background to non-GAAP earnings disclosures followed by hypotheses identifying factors likely to influence firms to adjust non-GAAP earnings. The research model is defined and the sample selection described. The data is analysed and commentary on the hypotheses is made.

### **Background and Hypotheses**

The disclosure of (non-GAAP earnings is a common feature of the financial reporting environment both in New Zealand and overseas (Black *et. al.*, 2015, Deloitte 2014).

Non-GAAP earnings are defined by the New Zealand FMA (2012) as a measure of profit not defined in NZ International Accounting Standard 1. Common terms used for these measures are “underlying profit”, “normalised earnings”, and “earnings before interest and taxation” amongst others.

In the accounting literature it is common for agency theory to be used to explain the voluntary disclosure of financial information (Cotter, *et.al.*, 2011). Listed companies have diffuse ownership which creates agency relationships between the managers (the agent) and the shareholders (principal) (Jensen and Meckling, 1976). The shareholders delegate the strategic and operation decisions of the company to the managers. The transfer of decision control results in the agency problem as managers may act to maximise their own wealth rather than that of the shareholders. The separation of ownership and management results in information asymmetry where the managers know more about what is going on in the firm and its potential future value. To ensure that managers act in the interests of the company monitoring and bonding costs are incurred. Monitoring costs include the appointment of independent directors and the production of audited financial statements and other disclosures. A primary incentive for voluntary disclosures by managers is to reduce information asymmetries and the problem of adverse selection.

In the context of non-GAAP earnings, managers may be motivated to disclose non-GAAP earnings to provide additional information to the market about earnings. Research evidence indicates that non-GAAP earnings as compared with GAAP earnings are more persistent, value relevant and give a better picture of permanent earnings (Bhattacharya *et al.*, 2003; Brown and Sivakumar, 2003; Entwistle *et al.*, 2010). However there is also evidence that indicates that managers use non-GAAP earnings opportunistically to change investors' perceptions. Evidence of opportunistic behaviour has been identified in research studies (Bhattacharya *et al.*, 2004; Doyle *et al.*, 2011).

In summary the voluntary disclosure of non-GAAP earnings reduce information asymmetries between internal management of companies and parties external to the firm. Based on agency theory factors that may influence companies to voluntarily disclose non-GAAP earnings are examined.

## **Hypothesis Development**

### ***Earnings characteristics***

Earnings are a key metric for external stakeholders and managers may disclose non-GAAP earnings to provide more information to the market. Predictability of earnings is a major concern for company financial executives and strategies are used to smooth earnings in order to avoid negative market reactions to changes in earnings (Graham *et al.*, 2005). Firms may exclude non-recurring items from GAAP earnings to report "core earnings" for improving predicting cash flows and valuing firms (Black and Christensen, 2009). Bhattacharya, *et al.* (2003) find that non-GAAP earnings are more informative and persistent than GAAP earnings if adjustments to earnings are one-off and non-recurring such as gains and losses on selling assets, extraordinary items and discontinued operations. In an international financial reporting standards environment, Rainsbury *et al.* (2015) find that non-GAAP earnings are more powerful in predicting future earnings compared with audited net profit after tax while Malone *et al.*, (2015) find that companies with a higher

number remeasurement adjustments and non-recurring items are associated with disclosing non-GAAP earnings.

Earnings of firms in the United States have become more volatile and less persistent (Dichev and Tang 2008). Dichev (2008) argues that these earnings attributes have deteriorated because the financial reporting framework emphasises the balance sheet and that if current earnings are not a good predictor of future earnings then managers will use non-GAAP earnings to inform the market and reduce information risk. Non-GAAP earnings disclosures are found to be associated with firms that have less persistent earnings that include loss making firms (Bhattacharya *et. al.*, 2003; Bhattacharya *et. al.*, 2004; Lougee and Marquardt, 2004, Frankel *et. al.*, 2013) and firms with high earnings volatility (Frankel *et. al.*, 2013).

Senior financial executives consider that it is important to meet earnings targets to build the reputations of the company and management in the capital market and to maintain and increase share prices. Failure to meet benchmarks creates uncertainty for stakeholders about the future of the company and speculation about underlying problems in the company. In the United States the most important benchmarks to meet are quarterly earnings for the prior period and analysts' consensus of earnings (Graham *et. al.*, 2005). Research evidence suggests that companies are more likely to disclose non-GAAP earnings to avoid an earnings decline (Bhattacharya *et. al.*, 2004) or when they enhance core earnings. (Curtis *et. al.*, 2014). Some studies also show that adjustments to earnings can be opportunistic (Black and Christensen, 2009; Doyle *et. al.*, 2011, Barth *et. al.*, 2012).

This leads to the first hypothesis:

H1 Companies with (a) a high incidence of remeasurement and non-recurring items (b) losses, (c) high earnings volatility, (d) a decline in GAAP earnings from the prior year, are more likely to disclose non-GAAP earnings.

### **Substantial share ownership**

As outlined previously information asymmetry occurs between managers and providers of capital as managers will have more information about the performance of a company compared with shareholders. When ownership is more widely spread owners have less power to demand the information they require. However, shareholders that have substantial ownership will have the power to access the information they require reducing the need for voluntary disclosures by managers. This suggests a negative association between the disclosure of non-GAAP earnings and substantial **shareholding**.

The second hypothesis is:

H2 Companies with a high proportion of substantial shareholders are less likely to disclose non-GAAP earnings.

### **Analysts**

Analysts are sophisticated users of financial information and monitor the performance of companies. Research shows a positive association between companies disclosing information voluntarily and the number of analysts following the firm because voluntary disclosures reduce the costs for analysts of acquiring information and increases the supply of private information (Lang and Lundholm, 1993).

Consistent with this argument, non-GAAP earnings disclosures in press releases are positively associated with the number of analysts following a firm (Bowen *et. al* 2005; Isidro & Marques, 2013). In Australia, companies disclosing non-GAAP earnings are larger and have higher analyst following compared to other listed companies (Malone *et. al*, 2015).

The third hypothesis is:

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H3 Companies with higher analyst following are more likely to disclose non-GAAP earnings.

#### **Board of Directors**

Independent directors are recommended as part of good corporate governance (FMA, 2014). Information asymmetries exist between managers and shareholder. Independent directors have incentives to seek and disclose voluntary information and enhance their reputations and reduce their exposure to litigation risk from being a director.

Research studies find that more independent boards of directors are associated with higher quality of financial reporting. Cheng and Courtenay (2006) find a positive association between board independence and voluntary disclosure suggesting that a more independent board will disclose information to the market. Lim *et. al.*, (2007) also find independent boards provide voluntary disclosures that are forward looking and strategic but board composition has no impact on voluntary disclosures of a financial nature.

Research findings also show that more independent boards play a role in monitoring the quality of non-GAAP earnings. Items excluded from non-GAAP earnings by firms with more (less) independent boards are generally less (more) persistent and not associated (associated) with future returns (Frankel *et. al.*, 2010, Jennings and Marques 2011). In addition, Entwhistle *et. al.* (2012) find that non-GAAP earnings exclusions are more informative for firms with stronger corporate governance, auditor quality and a history of higher reporting quality.

The fourth hypothesis is:

H4 Companies with a higher proportion of independent directors are more likely to disclose non-GAAP earnings.

## Leverage

Agency conflicts can arise between shareholders and creditors with increases in debt (Jensen and Meckling, 1976). Managers under greater scrutiny of creditors may voluntarily disclose information to reduce agency costs. Alternatively the existence of debt covenants and close business relationships with relationships with bankers may reduce the need for voluntary disclosures. Given that the relation between leverage and voluntarily disclosures is unclear Hypothesis 5 is stated in the null form.

H5 Firms with higher levels of debt are not associated with disclosure of non-GAAP earnings.

## Research Model

A logistic regression model is used to test the hypotheses. The dependent variable is an indicator variable of 1 if a listed company discloses non-GAAP earnings. The explanatory variables are determinants of non-GAAP earning disclosures. The model is:

$$\text{Log} (p/(1-p)) = \beta_0 + \beta_1\text{Loss} + \beta_2\text{VarEarn} + \beta_3\text{Rem} + \beta_4\text{NonRecurr} + \beta_5\text{DecEarn} + \beta_6\text{SubSh} + \beta_7\text{Analyst} + \beta_8\text{Bind} + \beta_9\text{Lev} + \beta_{10}\text{Auditor} + \beta_{11}\text{Size} + \beta_{12}\text{Guide} + \beta_{13}\text{Ind}$$

Five variables measure characteristics of earnings that may motivate firms to disclose non-GAAP earnings. The variables are defined as follows: (1) Loss is an indicator variable of 1 if GAAP earnings are negative, (2) VarEarn is the variability of earnings and is measured by the standard deviation of the return on assets (Frankel *et. al.*, 2011) for the last four years. (3) Firms with remeasurements are split into two types of adjustments. The first are the number of accounting remeasurement adjustments (Rem) for revaluation of property (including investment property), plant and equipment investment property, impairment expenses and changes in the fair value of financial instruments. The second type of adjustments are often referred to by companies as nonrecurring items (Nonrecurr) and include the number of restructuring charges and one –off

charges such as gains and losses on disposal of businesses. (5) DecEarn is an indicator variable of 1 if there is a decrease in GAAP earnings from the prior year or zero otherwise.

The next set of variables consider firm characteristics. Substantial shareholders (SubSh) is the percentage of shares held by substantial shareholders. A substantial shareholder is defined as a person that has a 5% shareholding of a listed issuer (Financial Markets Conduct 2013, section 274). Analyst is the number of analysts following a listed company. Board independent (Bind) is the percentage of board members who are independent as disclosed in company corporate governance statements. Leverage (Lev) is the total liabilities as a proportion of total assets.

Control variables are included for the quality of auditor (Auditor) which is an indicator variable of 1 if a company is audited by a Big 4 audit firm, zero otherwise. Dummier variables are included for the type of industry (Ind) as disclosures levels may vary depending upon the nature and competitiveness of the industry, firm size (Size) – information asymmetry problems (Jensen and Meckling, 1976) and political costs may increase as firms grow. The last variable is Guide to control for the introduction of disclosure guidelines from the Financial Markets Authority in 2013.

### **Population and Sample**

The population is observations of earnings and firm characteristics of companies listed on the NZX from 2009-2014. Excluded from this are unit trusts and overseas companies. Companies that listed during the period each year or had missing data are excluded. A summary of the sample is shown in Table 1.

### **Results**

#### *Descriptive Statistics*

Table 2 summarises the descriptive statistics. Losses are incurred by an average of 28% of the firm observations and the average standard deviation of earnings is 16.21. Remeasurements of assets are recorded by dollar amount and number. Revaluations average -2.164 million due to

revaluations upwards and downwards on property (including investment property), plant and equipment. The maximum and minimum results along with the standard deviation show considerable variation in the adjustments for revaluations of property plant and equipment, fair value changes in financial instrument and restructuring charges. The average number of remeasurements per company is 0.78.

Restructuring charges average 1.5 million and the average number of adjustments per company of 0.27. Overall restructuring charges and other times average 0.72 per company.

Earning decreases occur for 45% of the firm observations. Substantial shareholders hold an average of 45% shareholding. Board independence averages 62%. Average gearing of the firms is 49% and Big 4 auditors dominate the audit market auditing 85% of the sample.

Table 3 reports the descriptive statistics for the variables distinguishing between companies disclosing non-GAAP earnings and those that are not. The non-GAAP earnings disclosure group report less losses, earnings are less volatile compared with the other reporting companies. The non-GAAP earnings disclosure group are more likely to have a greater incidence of revaluations, financial instrument fair value adjustments, restructuring and other charges. The non-GAAP earnings disclosure group are larger, have a lower proportion of substantial shareholders, higher board independence and audited by a non-Big 4 auditor.

Table 4 presents the results of the regression. The Nagelkerke  $R^2$  is high indicating that the model accounts for 52% of the variability of the dependent variable, with the model predicting the dependent variable 85% of time.

In relation to earning characteristics, the model shows that that there is no significant association between companies incurring losses, decreases in earnings, higher volatility of earnings, the number of remeasurements items and the likelihood of disclosing non-GAAP earnings. However, companies with restructuring charges are weakly positively associated with disclosure of non-GAAP

earnings measures. Controlling for other variables, a one unit increase in restructuring count increases the odds of a company disclosing non-GAAP earnings increases by 57.7% (1.5 times higher odds to disclose non-GAAP earnings). Thus hypothesis 1 is only weakly supported for non-recurring items. The analysis is repeated for the dollar amounts for remeasurements and non-recurring adjustments for the dollar amounts but the coefficients are not significant. This result may be due to the offsetting effect of debit and credit adjustments.

The results show that analyst following is significantly positively associated with non-GAAP earnings disclosures thus supporting Hypothesis 3. Controlling for other variables, a one unit increase in analyst following will increase the odds of a company disclosing non-GAAP earnings 2.15 times.

Hypothesis 4 is supported with firms with a higher proportion of independent directors more likely to disclose non-GAAP earnings.

The spread of ownership of the firms and leverage have no significant impact on non-GAAP earnings disclosures. Thus H2 and H5 are not supported.

The control variables are not significant except for firm size.

### **Summary and Conclusion**

New Zealand listed companies frequently report non-GAAP earnings measures which adjusted from profit reported under generally accepted accounting practice. This research paper investigates factors associated with the voluntary disclosure of non-GAAP earnings by New Zealand listed companies.

New Zealand listed companies that are most likely to disclose non-GAAP earnings are larger, have higher analyst following and have a higher proportion of independent directors compared with other companies. In addition, firms with higher incidence of restructuring charges are more likely to disclose non-GAAP earnings.

The results suggest that New Zealand listed companies that are under greater scrutiny because of their size and analyst following are motivated to provide additional disclosures of non-GAAP profit information to the market. The results also suggest that the more independent boards are associated with voluntary disclosures which may suggest a desire for improve their reputations and mitigate the risks of a listed company director.

## References

Barth, M., Gow, I. and Taylor, D. (2012), "Why do pro forma and street earnings not reflect changes in GAAP? Evidence from SFAS 123R", *Review of Accounting Studies*, 17, pp. 526-562.

Bhattacharya, N., Black, E., Christensen, T. and Larson, C. (2003), "Assessing the relative informativeness and permanence of pro forma earnings and GAAP operating earnings", *Journal of Accounting and Economics*, Vol 36, pp. 285-319.

Bhattacharya, E.L., Black, E. L., Christensen, T.E., and Mergenthakler, R.D. (2004), "Empirical evidence on recent trends in proforma reporting", *Accounting Horizons*, Vol. 18 No1. pp. 27-73.

Black, D.E. and Christensen, T. (2009), "US managers' use of 'pro forma' adjustments to meet strategic earning targets". *Journal of Business Finance and Accounting*, Vol. 36 No. 3, pp. 297-326.

Black, E.L., Christensen, T., Kiosse, P.V. and Steffan, T.D. (2015). "Has the regulation of non-GAAP disclosures influenced managers' use of aggressive earnings exclusions?". *Journal of Accounting, Auditing & Finance*, Vol

Bradshaw, M.T. & Sloan, R.G. 2002. "GAAP versus The Street: An empirical assessment of two alternative definitions of earnings", *Journal of Accounting Research*, Vol 40. No 1, pp. 41-66.

Brown, L. & Sivakumar, K. (2003), "Comparing the relevance of two operating income measures", *Review of Accounting Studies*, Vol. 8, pp. 561-572.

Cheng, E.C.M & Courtenay S.M. (2006) Board composition, regulatory regime and voluntary disclosure. *The International Journal of Accounting*, 41, 262 -289.

Cotter, J., Lokman, N., & Najah, M. (2011). "Voluntary disclosure research. Which theory is relevant? *Journal of Theoretical Accounting Research*, 1, pp. 77-95.

Dichev, I.D. (2008), "On the balance sheet-based model of financial reporting", *Accounting Horizons*, Vol. 22 No. 4 , pp. 453-470.

Dichev, I.D. & Tang, V. W. (2008), "Matching and the changing properties of accounting earnings over the last 40 years", *The Accounting Review*, Vol 83 No. 6, pp. 1425-1460.

Doyle, J., Jennings, J. and Soliman, M. (2011), "Do managers define non-GAAP earnings to meet or beat analyst forecasts?", *Journal of Accounting and Economics*, Vol. 56 No. 1, pp. 40-56.

Entwistle, G., Feltham, G. and Mbagwu, C. (2010), "The value relevance of alternative earnings measures: A comparison of pro forma, GAAP, and I/B/E/S Earnings", *Journal of Accounting, Auditing & Finance*, Vol. 25 No. 2, pp. 261–88

Entwhistle, G., Feltham, G. and Mbagwu, C. (2012), "Credibility attributes and investor perceptions of non-GAAP earnings exclusions", *Accounting Perspectives*, Vol. 11, No. 4, pp. 229-257.

European Securities and Markets Authority. (2014), "ESMA guidelines on alternative measures", available at <http://www.esma.europa.eu/content/ESMA-Guidelines-Alternative-Performance-Measures>

External Reporting Board. (2011), *New Zealand Equivalent to International Accounting Standard 1 Presentation of Financial Statements (NZ IAS 1)*, available at [https://xrb.govt.nz/Site/Accounting\\_Standards/Archived\\_Standards/old\\_framework/Standards\\_For-Profit\\_Entities.aspx](https://xrb.govt.nz/Site/Accounting_Standards/Archived_Standards/old_framework/Standards_For-Profit_Entities.aspx)

Fama, E. (1980). "Agency problems and the theory of the firm". *The Journal of Political Economy*, Vol88, No. 2, pp. 288–307.

Financial Markets Authority. (2012), "Guidance note: Disclosing non-GAAP financial information", available at [http://www.fma.govt.nz/media/1027578/guidance\\_note\\_-\\_disclosing\\_non-gaap\\_financial\\_information.pdf](http://www.fma.govt.nz/media/1027578/guidance_note_-_disclosing_non-gaap_financial_information.pdf).

Financial Markets Authority. (2014). *Corporate Governance in New Zealand. Principles and Guidelines. A handbook for directors, executives and advisers.*  
<https://fma.govt.nz/assets/Reports/141201-FMA-Corporate-Governance-Handbook-Principles-and-Guidelines2014.pdf>



Financial Markets Conduct Act (2013), available from  
<http://www.legislation.govt.nz/act/public/2013/0069/latest/whole.html#DLM4091394>

Frankel, R. McVay, S. and Soliman, M. (2011), "Non-GAAP earnings and board independence"  
*Review of Accounting Studies*, Vol. 16, pp. 719-744.

Graham, J.R., Harvey, C.R. and Rajgopal, S. (2005), "The economic implications of corporate financial reporting", *Journal of Accounting and Economics*, Vol 40. pp. 3-73.

International Organisation of Securities Commissions (2014),. *Proposed Statement on Non-GAAP Financial Measures*, available at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD447.pdf>

Isidro, H. and Marques, A. (2013), "The effects of compensation and board quality on non-GAAP disclosures in Europe", *The International Journal of Accounting*, Vol 48, pp. 289–317.

Jennings, R. and Marques, A. (2011), "The joint effects of corporate governance and regulation on the disclosure of manager adjusted non-GAAP earnings in the US", *Journal of Business Finance & Accounting*, Vol 38, Nos. 3 & 4, pp. 364–394.

Jensen, M. and Meckling, W. (1976). "Theory of the firm: Managerial behaviour, agency costs and ownership structure". *Journal of Financial Economics*, Vol 3, pp. 305–360.

Lang, M. and Lundholm, R. (1993), "Cross-sectional determinants of analyst ratings of corporate disclosures", *Journal, of Accounting Research*, Vol. 93 No 2, pp. 246-271.

Lim, S., Matolcsy, M. and Chow, D. (2007). "The association between board composition and different types of voluntary disclosures". *European Accounting Review*, Vol. 16, No. 3, pp. 555-583.

Malone, L., Tarca, A. and Wee, M. (2015), "Non-GAAP earnings disclosures and IFRS. Working paper, available at SSRN: <http://ssrn.com/abstract=2626972>.

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Ohlson, J.A. (2006), "A practical model of earnings measurement" *The Accounting Review*, Vol. 81 No. 1, pp.271-279.

Peasnell, K. V., Pope, P. F. and Young, S. (2000), "Board monitoring and earnings management: Do outside directors influence abnormal accruals?", *Journal of Business Finance & Accounting*, Vol. 32 No. 7-8, pp. 1311-1346

Rosborough, L. Rei, G. and Hunt, C. (2015). "A primer on New Zealand's capital markets", *Reserve Bank of New Zealand Bulletin*, Vol. 78, No 3. pp. 1-22.

Young, S. (2014). "The drivers, consequences and policy implications of non-GAAP earnings reporting", *Accounting and Business Research*, Vol, 44 No. 4, pp.444-465.

### Variable Definitions

Non-GAAP earnings		An indicator variable that a listed company disclosed non-GAAP earnings, Yes=1, 0 otherwise
Loss	+	An indicator variable of 1 if GAAP earnings in current year are negative, 0 otherwise
Volatility of earnings	+	Standard deviation of the return on assets for the last four years

### Remeasurement Items

Revaluation	+	The number of items in current year for revaluation of investment property, property plant and equipment
Impairment	+	The number of items in current year for impairment expense
Financial Instruments	+	The number of items in current year for changes in fair value of financial instruments

### Restructuring and Other Items

Restructuring	+	The number of items in the current year for restructuring items
Other items	+	The number of items in the current year for one-off charges such as gain or loss on sale of business
Dec Earn	+	An indicator variable where GAAP earnings in the current year is less than the previous year, 0 otherwise
SubSh	-	Percentage of shares held by substantial shareholders
Analyst	+	Number of analysts following a listed company
Bind	+	Percentage of board members who are independent
Leverage	+	Total assets/total liabilities
Auditor		An indicator variable of 1 if the company auditor is a Big 4 audit firm, 0 otherwise
Lev	-	Leverage, total assets/total liabilities
Size		Log of total assets
Guide	?	An indicator variable for FMA Guidelines applicable for years 2013-14 years, 0 otherwise
Industry	?	

**Table 1**  
**Sample Summary**

	<b>n</b>
NZSX listed companies 2009-2014	912
Less unit trust companies	-114
Less overseas companies	-54
Less companies listed in 2010-2014	-186
Less companies with missing data	-42
<b>Total Sample</b>	<b>516</b>

**Table 2**  
**Sample Descriptive Statistics (2009-2014) (n=516)**

	Variable	Mean	Std Dev	Min	Max
Loss	Loss	0.28	0.45	0	1
Variability of earnings	Var Earn	16.21	87.03	0.05	1,793
<b>Remeasurements</b>					
<i>Dollars (\$'000)</i>					
Revaluations		-2,164	27,701	-248,301	174,019
Financial Instruments		401	18,383	-118,000	366,000
Impairments		-58	1,277	-28,988	152
<b>Total</b>		<b>-1,822</b>	<b>32,262</b>	<b>-269,170</b>	<b>285,000</b>
<i>Number</i>					
Revaluations		0.41	0.64	0	4
Financial instruments		0.36	0.58	0	3
Impairments		0.01	1.00	0	1
<b>Total</b>		<b>0.78</b>	<b>0.95</b>	<b>0</b>	<b>6</b>
<b>Non-Recurring and Other Items</b>					
<i>Dollars (\$'000)</i>					
Restructuring		1,525	34,839	-105,000	705,000
Other		1,309	24,087	-321,143	357,612
<b>Total</b>		<b>3,107</b>	<b>46,466</b>	<b>-322,727</b>	<b>846,000</b>
<i>Number</i>					
Restructuring		0.27	0.53	0	3
Other		0.45	0.73	0	4
<b>Total</b>		<b>0.72</b>	<b>0.96</b>	<b>0</b>	<b>6</b>
Earnings decrease	DecEarn	0.45	0.50	0	1
Substantial shareholder (%)	SubSh	44.91	25.21	0	95.64
Analyst following	Analyst	1.03	0.94	0	3
Board independence (%)	Bind	61.69	19.90	0	100
Leverage		0.49	0.52	0	6.60
Auditor		0.85	0.35	0	1
Total Assets (\$'000)	Size	857,050	1,498,702	79	7,492,000
Net profit after tax (\$'000)		29,576	71,919	-306,505	460,000

Refer to variable definitions