EARNINGS MANAGEMENT, DIRECTORS' DISCRETIONS AND INFORMATION CONTENT AFFECTING DISCRETIONARY ACCRUALS OF MALAYSIAN PUBLICLY LISTED COMPANIES

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Abstract

Managers have reporting discretion permitted by accounting standards over a combination of earnings management choices. The objective of this study is to identify the types of discretionary accounting choices that are indicative of earnings management. Based on a sample of 947 companies listed on the Malaysian stock exchange, the results indicate that a number of firm specific financial variables that proxy for agency cost, political costs and information asymmetry capture discretionary accruals behaviour. This study also seeks to examine the explanatory power of the earnings management in predicting future earnings and firm value. The results indicate that discretionary accruals can improve the informativeness of a firm's current and past earnings when predicting future earnings and share price.

Keywords: Earnings Management, Discretionary Accruals, Information Content

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1. Introduction

Earnings Management refers to the actions taken by a firm to adjust its earnings to achieve a desired level of profits or the dampening of fluctuations in reported earnings over time (Roychowdhury, 2006). This can be achieved through fraudulent accounting, accruals management and real earnings management (Dechow & Skinner, 2000). Fraudulent accounting involves accounting choices that violate accounting standards. However it is important to note that earnings management is not necessarily the result of an intentional fraud but can also arise from managerial discretion over accounting method choice and interpretation of accounting rules. For example managers might increase earnings upwards when earnings are relatively low or decrease earnings when earnings are relatively high. Examples include under providing for bad debt expenses and delaying asset write-offs. Alternatively under "Big Bath" accounting, firms recognize unexpectedly large provisions in the current year when earnings are low to avoid decreasing future earnings and, therefore, future bonuses (Strong and Meyer, 1987). In contrast, real earnings management is accomplished by changing the firm's underlying operations such as increasing sales by reducing prices.

As of January 1, 2005, companies listed in the Malaysia are required to present their consolidated financial statements applying International Financial Reporting Standards (IFRS). While the IFRS aims to improve comparability of companies across countries, managers may still exercise considerable discretion accorded by the accounting standards. For example, to change reported income, managers may choose among various accounting policies and methods, revise estimates for bad debts or accelerate or defer of revenues and expenses. Additionally, the strategic timing of investments, sales, expenditure, and financing decisions may also be used to smooth reported earnings. The smoothing of fluctuations in reported earnings is assumed to take place through accounting choices and judicious application of accounting standards.

In this paper, we examine the motivation for earnings management and its information content. First, we identify what factors may influence managers to engage in earnings management. Positive accounting theory suggests that these motivations are a consequence of agency costs, information asymmetries and political costs (Watts & Zimmerman, 1986). To investigate this issue we decompose total accruals into discretionary and non-discretionary accruals. Expenses such as management bonuses and R&D expenditure are discretionary expenses that allow managers some leeway in deciding when these expenses should recorded within the accounting system (Albrecht and Richardson, 1990). In contrast non-discretionary accruals such as utility expenses and employee wages refer to mandatory expenses that the business is forced to incur but has yet to be paid. Second, we investigate

how earnings management should be interpreted by financial statement users. For example how does earnings management increase the information content of financial statements with regard to earnings quality and predictive value? Schipper and Vincent (2003) define earnings quality as the extent to which reported earnings faithfully corresponds to the "change in net economic assets other than from transactions with owners". Earnings quality is improved when earnings variability decreases and which indicates less risk for investors. Lower firm risk in turn leads to a lower cost of capital and higher share price. Ryan et al. (2002) for example documents a positive association between earnings variability and firm value. This is further supported by empirical evidence that find investors are generally attracted to firms that do not report fluctuating earnings (Michelson et al., 2000). This is because companies that engage in earnings management have significantly higher cumulative average abnormal returns compared to firms that do not.

The on-going academic debate is whether managerial discretion over the use of discretionary accruals improves the quality of disclosure. On one hand, these manipulations could enhance the value-relevance of reported earnings by communicating a manager's private information regarding future profitability (Subramanyam, 1996). Other studies propose that it decreases reporting quality because managers use it to mislead stakeholders about the true economic performance of the company. Beaver (2002) argues that earnings management becomes problematic only if managerial intent is to mislead users of financial statements. Conversely if managerial intent is to informthen this would improve the financial reporting quality in terms of the value relevance of information provided. However because managerial intent is not directly observable, in this study we examine the association between the extent of earnings management and future firm performance. If earnings management is intended to signal management's insider knowledge to improve shareholder value, we should observe a positive relationship between the extent of earnings management and future firm performance.

The remainder of this study is organized as follows. Section 2 develops the research hypothesis. Section 3 describes the sample, research method and variables. Section 4 presents the results and Section 5 concludes.

2. Related Literature and Hypothesis Development

Insights into why managers engage in earning management can be gained from a number of theories. The first deals with agency theory and the second with information asymmetry. The occurrence of earnings management is indicative of agent-principal problems, where directors seek to enhance their personal wealth at the expense of shareholder wealth (Godfrey, Hodgson, & Holmes, 2003). The agency problem exits largely due to the flexibility accorded by accounting standards and because of information asymmetry between the management and owners. Under this setting, managers are motivated to engage in earnings management to increase net income because their compensation depends on the profitability of the company. This is supported by Shuto (2007) who documented a positive relationship between discretionary accruals and executive compensation in Japanese firms. To minimise their employment risk, managers may also engage in earnings management to reduce the possibility of company failure. Specifically for firms that are highly geared, managers have more incentive to alter earnings to delay debt covenant default and hence avoid bankruptcy (DeFond & Jiambalvo, 1994).

An alternative view is that discretionary accounting choices are made to reveal managers' private information about the future prospects of a firm to investors (Subramanyam 1996) Under this premise, managers utilize the flexibility accorded by accounting standards to enhance the relevance and reliability of the reported accounting information to improve its predictive usefulness and representational faithfulness. This branch of the literature suggests that managers normally have more information about the "true" financial position and performance of a company than the absent investors. This creates the opportunity for manager to use their reporting discretion in choice of accounting method and practice discretionary accruals to signal future firm performance (Bartov et al. 2002). In summary the motives for accrual management are either opportunistic or signalling. The former is problematic because the managerial intent is tomislead which impairs reporting quality while the latter increases the informativeness of accounting earnings and predictive value of financial statements. In summary managerial intent determines how accounting choice is exercised.

Positive accounting theory provides an alternative lens through which to understand why managers engage in earnings management (Watts & Zimmerman, 1978). The perspectives offered by positive accounting theory include the opportunistic perspective, efficiency perspective and political cost. Given an assumption that 'self-interest' drives all individual actions, positive accounting theory predicts that firms will seek to put in place mechanisms that aligns the interests of the managers of the firm (agent) with the interests of the owners of the firm (principal). The first objective of this study is to test if the above three factors do indeed influence the use of discretionary accruals by Malaysian listed companies. The opportunistic behaviour hypothesis which is based on agency theory suggests that earnings management is consistent with management's desire to maximise their compensation. Hence managers are more likely to make income increasing accounting

decisions if their annual bonus is based on reported income (Shuto, 2007). Similarly to reduce employment risk, managers of firms with high debt levels more likely to make income-increasing discretionary accruals to avoid violating constraints contained in debt covenants (DeFond & Jiambalvo, 1994).Thus agency theory predicts managers of firms with high agency costs will choose current income-increasing methods to achieve earnings target.

Under the efficiency perspective, managers possess private information regarding the company's risk and cash flows and which is costly for outside suppliers of capital to acquire from alternative sources. Hence managers can reveal their insider knowledge using discretionary accruals. Trueman and Titman (1988) show empirically that the existence of information asymmetry between management and shareholders is a necessary condition for earnings management. Furthermore, management's discretionary ability to manage earnings increases as the information gap between management and shareholders increases. Under the assumption that outsiders rely on financial disclosure, Chanay & Lewis (1995) show that investment efficiency is improved because high accounting quality in terms of smoothed earnings reduces information asymmetry between managers and providers of capital. The efficiency version of positive accounting theory further assumes managers will choosing accounting policies that minimize firm cost and this can include political costs (Watts and Zimmerman, 1986). Under the political cost hypothesis firms will tend to record lower profits by using different accounting methods to mitigate their political costs. Political costs are costs imposed on the firm as a result of external political actions. According to Watts and Zimmerman (1986), politicians have the power to effect upon firm's wealth re-distributions by way of corporate taxes, regulations, subsidies etc. Hence the higher a firms political visibility, the stronger the managers' incentives to use accounting policies that shift reported earnings from current periods to future periods. For example firms may adopt income-decreasing accounting methods to pre-empt higher wage demands by trade unions or adopt voluntary social and environmental disclosures in their annual reports to avoid regulatory attention or political intervention (Cahan *et al*. 1997). Cahan *et al* (1997) also finds that the magnitude of these political costs are highly dependent on firm size and the larger the firm, the higher a firm's potential political costs.

Therefore, based on the review of the literature above, the model we want to test if earnings management is a function of agency costs, information asymmetry cost and political costs.

H1: Earnings management is affected by agency costs, political costs or information asymmetry cost.

The second objective of this study is to investigate if the use of earnings management

improves or reduces the value relevance of reported earnings of Malaysian listed companies. Can managers use earnings management to communicate their private information about the firm's future profitability? As Subramanyam (1996) emphasizes, the pricing of discretionary accruals is consistent with two alternative market conditions: (1) market efficiency, if such accruals communicate a manager's private information regarding future profitability; or (2) market inefficiency, if discretionary accruals create distortions in the earnings information. Under the first market condition, earnings management has two componentswhich is predicted to increase information quality, a component and an artificial component. Real earnings management affects cash flows (Imhoff, 1981). For example generating sales or increasing production to reduce cost of goods sold by reducing per unit fixed costs are real economic activities of firms that results in high sales revenue and cash. On the other hand, artificial smoothingis achieved through the use of accrual accounting and its objective is to shift cost or revenue from one period to another while leaving cash flow unaffected (Albrecht and Richardson, 1990). The results of prior studies suggest that both discretionary and non-discretionary accrual accounting practices can be used to control earnings volatility. For example Michelson, Jordan-Wager and Wootton (2000) test whether the share prices are related to the smoothness of reported earnings. They argue that a smooth income stream facilitates a stable dividend policy and enhanced investor confidence while volatile earnings streams typically lead to lower market valuations. They find that companies that report smoother incomes have significantly higher cumulative average abnormal returns than firms that do not. Under the second market condition if manager's exercise their accounting discretion opportunistically to distort true performance then the current earnings are less informative about future earnings. For example Teoh et al. (1998) reports that firms that manage their earnings upwards through income-increasing accruals at the time of IPOs in order to increase offering proceeds tend to perform poorly in future periods.This leads to the second hypothesis:

H2:-The level of earnings management does have incremental information content relative to current profitability when predicting future profitability.

A further research issue investigated in this study is how value-relevant is earnings management in predicting firm value. Some studies indicate that there is a positive and significant association between stock price and earnings management (Kothari, 1992).This is based on the premise that use of discretionary accruals to smooth income results in less variability in earnings suggesting lower firm risk and hence a higher share price. The research of Subramanyam, (1996) and Tucker and Zarowin (2005) provides evidence that this is indeed the case

with income increasing discretionary accruals having a favourable effect on share value and cost of capital. Barth et.al. (2001), whose model disaggregates earnings into cash flow and six major accrual components finds that the accrual component of earnings has predictive ability over future cash flows also implying that managerial accounting discretion enhances earnings quality. Alternatively, if managerial intent is to mislead or to transfer wealth from owners to themselves this could impair the predictive quality of financial statements (Beaver (2000). In contrast to the above studies, Dechow and Skinner (2000) argue that under the efficient market hypothesis earnings management does not matter as long as it is fully disclosed or the cost of obtaining the information and observing the managerial intent is low. The implication that can be drawn from the above studies is that if earnings management is beneficial, it increases the predictive value of current earnings and cash flows about future share prices. With this in mind, the third hypothesis tests if earnings management results in a higher share price.

H3:-The level of earnings management does have incremental information content relative to current profitability when predicting future share price.

Hypothesis 2 and 3 is consistent with the literature that argues that accruals are predictor of future earnings and that accruals are priced in equity valuation (Subramanyam, 1996). To the extent that discretionary accruals have incremental information content beyond that of other income statement components, the relationship between these manipulations and the changes in firm value will be significant and positive. Moreover, we expect the relationship between investigated firms' discretionary accruals and the future earnings and share price to be significant and positive, if such accruals are used by managers to convey their private information about firm performance to investors.

3. Data and Research Method

3.1 Sample data

The target population of this study included all the listed companies on Bursa Malaysia as at 31 December 2010. This involved a total of 1256 firms obtained from the list of companies published on the Bursa Malaysia website (http://www.bursamalaysia.com/market/listed-companies). We excluded61 companies listed under financial sector as these firms are highly regulated and are less likely to engage in earnings management compared to firms listed under the other sectors. A further 247 companies were removed due to incomplete or missing data. Removing these observations yielded a final sample of 947 firms from the Construction Consumer, Hotel, Mining, Plantations, Infrastructure Project, Industrial, Trading

and Technology sectors. The data used comprised of financial information for 2010 and 2009 obtained from Datastream.

3.2 Methodology & Variable Measurement

To test the Hypotheses 1, the discretionary portion of total accruals is used in this study to capture earnings management. Total accruals consist of discretionary accruals which are management determined and non-discretionary accruals which arise from exogenous factors. The rationale for this approach is that managers have more control over discretionary accruals than they have non-discretionary accruals. As discretionary accruals depend on managerial intent which is unobservable the discretionary portion of accruals is calculated using the modified cross-sectional Jones (1991) model. Dechow et. al. (1995) concluded that while the modified Jones model tends to overestimate the magnitude of discretionary accruals for firms with extreme performance it does exhibits the most power in detecting earnings management. Therefore following Dechow et al. (2002), we have:

$$\frac{TA_{it}}{A_{it-1}} = \frac{\alpha}{A_{it-1}} + \beta_1 \left[\frac{(\Delta REV_{it} - \Delta AR_{it})}{A_{it-1}} \right] + \beta_2 \left[\frac{PPE_{it}}{A_{it-1}} \right] + \varepsilon_{it} \quad (3.1)$$

where:

Total Accruals (TA$_{it}$) for firm $i$in year t = ΔCurrent Assets − ΔCurrent Liabilities − ΔCash + ΔCurrent Maturities of Long-Term Debt − Depreciation and Amortization Expense.

A_{it-1}= Net total assets for firm i in year t–1,

ΔREV_{it}= Change in revenue for firm i from year t–1 to year t,

ΔAR_{it}= Change in accounts receivable for firm i from year t–1 to year t,

PPE_{it}= Gross property, plant and equipment for firm i in year t,

ε_{it} = Error term for firm i in year t.

First, we regress total accruals on the change in revenues and the gross property, plant, and equipment to give an estimate of α, β1, β2. The estimated coefficients α and β1, β2 are then used to calculated non-discretionary accruals (NDA) using the equation below:

$$NDA_{it} = \frac{\alpha}{A_{it-1}} + \beta_1 \left[\frac{(\Delta REV_{it} - \Delta AR_{it})}{A_{it-1}} \right] + \beta_2 \left[\frac{PPE_{it}}{A_{it-1}} \right] + \varepsilon_{it} \quad (3.2)$$

Non-discretionary accruals arise from the economic activities of the firm and are expressed as a function of revenues, accounts and gross property, plant and equipment. Finally the discretionary current accruals (DCA) are calculated as the difference between totalcurrent accruals and nondiscretionary

current accruals. In contrast, discretionary accruals are not closely related to the economic circumstances of the firm and arise from accounting changes, extraordinary items and restructuring provisions

$$DCAit = \frac{TA_{it}}{A_{it-1}} - NDAit \qquad (3.3)$$

The independent variable of agency cost is proxied by directors' renumeration and we hypothesise a positive relationship between income increasing accruals and directors' renumeration (Godfrey, Hodgson, & Holmes, 2003). Political costs are proxied using firm size (Cahan *et al*, 1997) and leverage (DeFond & Jiambalvo, 1994). Large firms are associated with potential exercise of monopoly power and are likely targets for regulatory attention and public criticism due to the potential abuse of monopoly power. Additionally, large firms tend to have higher profits that attract increased consumer and media attention It is predicted that managers of these firms will select income-reducing accounting methods if their political costs are high and choose income-increasing methods if debt levels are high. Information asymmetry costs are proxied using current year income tax provision, dividend yield and net operating cash flow per share. Under conditions of information asymmetry, Schipper (1989) suggest that the complexity of tax expense computations and the judgement involved in estimating tax accruals exacerbate the information asymmetry problem for investors. This provides an opportunity for managers to use tax expense to achieve earnings targets. Other ways in which managers can use discretionary accruals to convey their private information include dividends and net operating cash flows. For example, Bhattacharya (1979) provides evidence that if information asymmetry exists, dividends can be used as a signal to convey information about future firm profitability (Bhattacharya, 1979). One of the most obvious warning signs that companies are engaging in improper revenue recognition is a lack of correlation between cash flow from operations and earnings. This is because cash-flow from operations as a measure of performance is less prone to distortion than is the net income figure. Bernstein (1993) suggest that firms with high levels of net income and a low levels of operating cash flows may be using discretionary accruals that are suspect. Hence current earnings performance is less likely to persist if it is attributable more to the accrual component of earrings rather than to the cash flow component. However naïve investors focus more on reported net income and do not correctly interpret information on cash flows when forecasting future earnings and share price performance (Sloan, 1996).

The combined effects of agency costs, political costs, information asymmetry cost on earnings management is estimated by the following regression model:

Model 1: $DCA_{it} = \beta_1 Dr_{it} + \beta_2 Sz_{it} + \beta_3 Lev_{it} + \beta_5 IT_{it} + \beta_6 DY_{it} + \beta_7 NCOA_{it} + \varepsilon_{it}$ (3.4)

where:
DCA = Discretionary Accruals
DR = Directors Remuneration
SZ = Firm size measured by total assets
Lev = Total borrowings as a percentage of total assets
DY = Dividend Yield
IT = Income tax provision
NCOA = Net Cash from Operating Activities per share

The second hypothesis is tested by examining the association between investigated firms' discretionary accruals and future earnings in Model 2 below. If such accruals communicate a manager's private information regarding future profitability, Subramanyam (1996) predicts that the estimated coefficient on the DCA variable will be statistically significant and positive

Model 2: $EPS_{it+1} = \beta_1 EPS_{it} + \beta_1 DCA_{it}$ (3.5)

where:
EPS_{it+1} = Earnings per share for 2011
EPS_{it} = Earnings per share for 2010
DCA_{it} = Discretionary accruals for 2010

We address the third hypothesis by examining the information content of discretionary accruals relative to earnings quality to predict future share price. Previous research shows that there is a positive and significant association between stock prices with earnings quality (Kothari, 1992). Earnings quality is measured by current and prior year profitability. A positive net income and positive cash flows from operating activities are indicative of earnings quality and this is expected to increase firm value (Sloan, 1996). This relationship is expressed in Model 3 below.

Model 3: $SP_{it+1} = \beta_1 EPS_{it} + = \beta_1 EPS_{it-1} + \beta_7 NCOA_{it} + \beta_1 DCA_{it}$ (3.6)

where:
SP_{it+1} = Average share price for 2011
NCOA = Net Cash from Operating Activities per share
DCA = Discretionary accruals

To the extent that discretionary accruals have incremental information content beyond that of cash flow and earnings components, the relationship between discretionary accruals and firm value is expected to be significant and positive.

4. Results and Implications

Table 1 presents the descriptive statistics for the variables of interest.

Table 1. Descriptive Statistics for Sample (N=947)

Table 1: *Descritptive Statistics for Sample (N=947)*

Variables		Abbreviation	Mean	Minimum	Maximum	Std Dev
Average share price for 2011	RM	SP_{2011}	1.15	0.01	46.87	2.64
Company Size	RM'000	SZ	1,145,841	99	49,014,100	4,154,725.05
Earnings per share for 2011	RM	EPS_{2011}	0.06	(1.55)	2.52	4.77
Earnings per share for 2010	RM	EPS_{2010}	0.08	(1.43)	2.56	2.66
Earnings per share for 2009	RM	EPS_{2009}	0.07	(2.62)	3.12	2.18
Discretionary Accruals for 2010		DCA_{2010}	(0.03)	(124.84)	27.49	5.15
Directors Renumetation for 2010	RM'000	DR	2,306	0.00	111,484	5,588.20
Dividend Yield for 2010	%	DY	1.49	0.00	39.13	2.80
Income Tax Provision for 2010	RM'000	IT	16,227	(12,209)	1,406,715	76,505.41
Leverage 2010	%	LEV	21.105	0.00	2,328.29	90.86
Net Cash from Operating Activies per share 2010	RM	NCOA	0.12	(3.64)	6.62	6.46

In Table 1, the negative value of discretionary accruals indicates that on average the sample of 947 Malaysian public listed exhibited income-decreasing earnings management in 2010. Earnings management does not always result in an upward revision of income.There can be many instances when managers intentionally adjust firm earnings downwards.To reduce political costs, Zmijewski and Hagerman (1981) document that larger firms are more likely to use depreciation and investment tax credit policies that are in the aggregate income-decreasing. Alternatively, Fudenberg and Tirole (1995) suggest that income-decreasing accruals are employed by recognising more discretionary expenses now to reduce current earnings resulting in less expense that need be reported in future periods. For example, discretionary expenditure on R&D, repairs and maintenance, advertising expenditure and employee training programs and can accelerated to the current year to achieve a specific earnings target (Bartov, 1993).This is normally done when current earnings are high and future earnings are expected to be low. Therefore negative discretionary accruals are related to both current and future profitability.

Table 2. Discretionary Accruals

Table 2: *Discretionary Accruals*

Panel A: *Discretionary Accruals by Board*

Board	N	Mean	Median	Min	Max	Std Dev
Main Board	848	0.02	0.03	(124.84)	27.49	5.30
Ace Board	99	(0.45)	(0.01)	(35.02)	1.57	3.53
	947					

Panel B: *Discretionary Accruals by Sector*

Sector	N	Mean	Median	Min	Max	Std Dev
Construction	60	0.50	0.03	(9.65)	25.05	3.62
Consumer	142	0.12	0.02	(2.62)	2.69	0.52
Hotels	5	(0.03)	(0.01)	(0.24)	0.26	0.20
Industrial	274	(0.25)	0.05	(124.84)	14.66	7.69
Infrastructure Project Companies	9	(0.04)	(0.07)	(0.80)	1.26	0.56
Mining	1	(0.002)	(0.002)	(0.002)	(0.002)	-
Plantation	43	(0.15)	(0.01)	(5.82)	1.18	1.02
Properties	97	0.22	0.13	(57.51)	20.30	9.80
Technology	102	(0.35)	(0.01)	(35.02)	3.05	3.51
Trading Services	214	0.03	0.0004	(24.03)	27.49	3.55
	947					

For the current data set, Table 2, Panel A indicates that companies listed under the Ace board of the Malaysian stock exchange tend to have the highest discretionary accruals. Companies seeking a listing on the Bursa Malaysia Exchange are either listed on the Main Board if they are large companies or the Ace Board if they are medium-sized companies. Therefore the board on which a firm is listed captures the size effect. Prior studies have documented that risk tends to be higher for companies with a smaller capital

base, as they generally have less resources to compete with larger companies or sustain an economic downturn (Banz, 1981). Hence Ace board companies could be risker due to their smaller size compared to Main board companies. When analysed by sector, Table 2, Panel B indicates that companies listed under the Construction and Technology sector displayed the highest discretionary accruals. Companies in the construction and technology sectors tend to display higher volatility of earnings arising from nature of business. Empirical evidence shows that the level of systematic risk is higher in companies that have greater volatility in earnings (Lev& Kunitzky, 1974). Therefore to improve their risk perception to its investors, the management of these Malaysian companies may try to smooth out fluctuations in earnings by engaging in discretionary accruals

Table 3 reports the regression results of Model 1. The OLS regression method was used on a sample of 947 firms. The results indicate that Model I is significant at the 0.05% level (two-tailed) with an F-statistic of 86.67 (critical value: 2.42) and the explanatory power of the model is adequate (adjusted $R^2 = 0.35$).

Table 3. Regression Results

Table 3 : *Regression Results for Hypothesis 1(N=947)*

$$DCA_{2010} = \beta_1 DR_{2010} + \beta_2 SZ_{2010} + \beta_3 LEV_{2010} + \beta_4 IT_{2010} + \beta_5 DY_{2010} + \beta_7 NCOA_{2010}$$

Independent Variables	Predicted Sign	Coefficient Estimate		Significance (p-value)	t-value	Variance Inflation Factor (VIF)
Intercept Term		3.28		0.014	2.46	
Directors Renumetation (DR)	+	0.06	*	0.032	2.14	1.303
Company Size (SZ)	-	(0.19)	*	0.000	(5.45)	1.701
Leverage (LEV)	+	0.07	*	0.014	2.46	1.034
Income Tax Provision for current year (IT)	+	0.14	*	0.000	4.17	1.637
Dividend Yield (DY)	+	0.07	*	0.005	2.82	1.027
Net Cash from Operating Activies per share (NCOA)	-	(0.58)	*	0.000	-20.98	1.101
R^2	0.36					
Adjusted R^2	0.35					
F value	86.67					
Durbin-Watson test	1.98					

* Coefficient is significant at the 0.05 level (2-tailed)

For each independent variable in Model 1, the *t* test indicates that all six variables are significant at the 5% level (two-tailed test) resulting in the the null hypothesis H_1 being rejected. The director's remuneration variable which captures agency costs is positively associated with discretionary accruals. This is consistent with the notion that firms with high agency costs engage in discretionary accruals to maximize director's remuneration (Godfrey, Hodgson, & Holmes, 2003). The signs of the coefficients for firm size and leverage that proxy for political costs are also consistent with their predicted direction. Large firms have a greater incentive to make income decreasing accruals to reduce the likelihood of capital and regulatory market scrutiny (Watts & Zimmerman, 1986). The sign of the leverage variable is also consistent with DeFond & Jiambalvo (1994) who provides evidence that firms are more likely to manage their earnings upwards when financial leverage is high. The results further confirm that discretionary accruals are affected by the information asymmetry. The income tax provision for the current year and dividend yield variables were found to be positively associated with discretionary accruals. The information gap that exists for the users and creates a situation in which the company can use the tax provision to achieve its earnings targets and use dividend increases to signal future cash flow. The negative correlation between income decreasing discretionary accruals and operating cash flows are indicative that companies are reducing earnings by recording higher expenses in current periods. The results are consistent with the study of Dechow, Kothari, and Watts, (1998) who documented a strong negative correlation between firm accruals and cash flows.

Table 4. Regression Results

Table 4 : *Regression Results for Hypothesis 2 (N=947)*

Model 2: $EPS_{2011} = \beta_1 EPS_{2010} + \beta_1 EPS_{2009} + \beta_2 DCA_{2010}$

Independent Variables	Predicted Sign	Coefficient Estimate		Significance (p-value)	t-value	Variance Inflation Factor (VIF)
Intercept Term		0.02	*	0.002	3.07	
Earnings per share for 2010 (EPS_{2010})	+	0.52	*	0.000	13.13	3.31
Earnings per share for 2009 (EPS_{2009})	+	0.25	*	0.000	6.20	3.31
Discrationary Accrauls for 2010 (DCA_{2010})	-	(0.06)	*	0.008	-2.65	1.00
R^2	0.55					
Adjusted R^2	0.55					
F value	385.95					
Durbin-Watson test	1.99					

* Coefficient is significant at the 0.05 level (2-tailed)

In Table 4, we report the regression results for Model II which the test the ability of current year discretionary accruals to predict future earnings. The *F*-statistic is significant with a value of 385.95 (*F* critical value is 3.13 at 5% significance, two-tailed test). Model fit is also good with the regression equation explaining 55% (R^2) of the variability in initial market returns. An examination of the VIF values further confirms that collinearity is not a concern, with none of the values exceeding 9. The *t* test indicates that indicate that the current earnings of 2010 and prior earnings of 2009 can predict future earnings of 2011. Additionally the discretionary accruals for the current year do have explanatory power relative to current and prior year profitability when predicting future profitability. For the sample firms that were profitable in 2010, the association between current periods discretionally accruals and future earnings are negative. This could be interpreted that firms use income decreasing discretionary accruals (e.g. asset write-downs) in the current period to strengthen future profitability. Similar results are reported by Atiase, Platt, and Tse (2004) who document the revision of current profits downwards to increase future profits.

In Model III we examine the relationship between earnings management and firm value to investigate whether earnings management is opportunistic or beneficial. If managers engage in earnings management to signal earnings quality and reduce the information differential between insiders and outsiders, we should observe a positive relationship between discretionary accruals and firm value. On the other hand if earnings management is for self-serving purposes, and not for the purpose of maximizing shareholders' wealth, we should find an inverse relationship between the degree of earnings management and firm value. The regression output for Model III is presented in Table 5. The model is statistically significant (at the 5% level) for the investigated firms. All four estimated coefficients are significant (at a 5%, two-sided level), indicating that each of these four variables has incremental information content in predicting share price. Additionally, the signs of current and prior year earnings coefficients are positive confirming our general expectations on the favourable effect of earnings on share prices. The sign of the regression coefficient for discretionary accruals is also positive indicating that income increasing accruals tend to increase share prices. The evidence above is consistent with the findings of Subramanyam (1996) and Bartov et al. (2002) who argued that shareholders may benefit from earnings management because it signals managerial knowledge of positive future performance.

Table 5. Regression Results

Table 5 : *Regression Results for Hypothesis 3 (N=947)*

Model 2: SP$_{2011}$ = β_1EPS$_{2010}$+ β_2EPS$_{2009}$+ $\beta3$NCOA$_{2010}$ + $\beta4$DCA$_{2010}$

Independent Variables	Predicted Sign	Coefficient Estimate	Significance (p-value)	t-value	Variance Inflation Factor (VIF)
Intercept Term		0.07	0.1658	1.39	
Earnings per share for 2010 (EPS$_{2010}$)	+	0.40 *	0.0000	11.88	3.47
Earnings per share for 2009 (EPS$_{2009}$)	+	0.43 *	0.0000	12.91	3.36
Net Cash from Operating Activies per share for 2010 (NCOA$_{2010}$)	+	0.06 *	0.0147	2.44	2.01
Discrationary Accrauls for 2010 (DCA$_{2010}$)	+	0.05 *	0.0358	2.10	1.62
R^2		0.69			
Adjusted R^2		0.69			
F value		515.35			
Durbin-Watson test		1.90			

* Coefficient is significant at the 0.05 level (2-tailed)

5. Conclusion

This paper contributes to understanding of the factors influencing earnings management. In this paper, we examine if discretionary accrual measures are associated with firm-level characteristics (i.e., earnings increasing or earnings decreasing) in a specific period. To the extent that discretionary accruals serve as a measure of earnings management, this study identifies a number of firm specific factors that are indicative of earnings management. Firm specific characteristics such as director's remuneration, firm size, leverage, current period tax accruals, divided yield and net cash flow from operating activities are documented in this study as indicators of discretionary accruals. This study also finds that earnings management has an opportunistic as well as a signaling component. We provide evidence that the existence of agency cost, political cost and information asymmetry provide conflicting motivations for managers to engage in earnings management. Agency problem exists largely due to information asymmetry between the management and outsiders. This information asymmetry allows management to exercise their accounting discretion opportunistically to increase their remuneration and safeguard their job security. The high degree of association between discretionary accruals with future market prices and earnings further suggests that the discretionary accruals contains information that the market can use to predict firm performance. The signaling component of discretionary accruals can help companies strengthen their financial reporting quality.

The results of this study also have implications for regulatory bodies who are concerned with how much discretion they should allow firms to adjust reported earnings. For example, should opportunistic earnings management be reduced by tightening accounting standards? The above findings can have implications for users of financial statements.

Investors may want to use earnings information contained in annual report but do not fully understand the effect managerial accounting discretion has on earnings. In particular, financial statement users should be aware of the motivations behind earnings management when they rely on financial statements to make decisions. Additionally to the extent that discretionary accruals are able to predict future earnings and market values of shares, it provides new and relevant content for investors to base their investment decisions. Specifically, users should note the influence of agency cost and political cost on the distorting effect it has on earnings. Also, excessive earnings management may lead to inadequate or misleading income disclosure. Therefore the findings should be useful to regulators when they decide on the extent to which earnings management needs to be monitored and controlled.

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