

Surplus Free Cash Flow, Earnings Management and Audit Committee

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ABSTRACT

The objective of this study is to examine whether high surplus free cash flow is related to earnings management. This study hypothesizes managers of high surplus free cash flow companies have incentive to engage in earnings management. However, earnings management occurs less frequently when the audit committee is more independent. Independent audit committees provide an effective monitoring over earnings management practices. This study expects that the positive relationship between surplus free cash flow and earnings management is moderated by independent audit committee. Using a sample of 155 companies listed on the main board of Bursa Malaysia in 2001, this study obtains empirical evidence consistent with the prediction in all hypotheses. This study shows that independent audit committee help companies with high surplus free cash flow to reduce income increasing earnings management practices.

Keyword: Earnings Management, Surplus Free Cash Flow, Audit Committee

INTRODUCTION

Earnings management occurs in corporations where managers attempt to present a more favourable financial picture of the company performance through discretionary accruals (Aini, Takiah, Pourjalali & Teruya, 2006). Managers use flexible accounting principles to manage earnings (Davidson III, Jiraporn, Kim & Nemeč, 2004). Previous studies on earnings management mainly focus on identifying incentives for managers of listed companies to manage earnings (Bauwhede, Willekens & Gaeremynck, 2003). Incentives for earnings management include explicit contract such as bonus plans (Gaver, Gaver & Austin, 1995) and debt covenants (DeFond & Jiambalvo, 1994), implicit contract (Bowen, DuCharme

& Shores, 1995), capital markets and need for external financing (Teoh, Welch & Wong, 1998a), the political and regulatory process (Han & Wang, 1998) and some specific circumstances such as earnings decreases or losses (Burgstahler & Dichev, 1997). Earnings management may lead to misrepresentation of financial information as a result of conflicting interests between the agent and principle.

The opportunity for earnings management is higher among companies with high surplus free cash flow. Past studies indicate that companies with high surplus free cash flow face major agency problems (Chung, Firth & Kim, 2005) particularly when the free cash flow is high but investment opportunities are low (Gul, 2001). Managers of these companies act opportunistically for personal gain, and tend to get involved in unprofitable projects, over investments and misuse the funds (Jensen, 1986). They tend to carry out non-value maximizing activities amounting to agency problems (Jensen, 1986). Their activities may bring benefits or rewards for themselves at the expense of the shareholders. These companies are found to have engaged in expenditures that decrease shareholders' wealth (Chung *et al.*, 2005). Managers may employ accounting procedures that increase reported earnings to hide the negative impact of projects (Chung, *et al.*, 2005). In order to conceal these activities, managers are forced to manage earnings via accounting discretions. However, the managers' opportunistic behaviour may be minimised if the company internal corporate governance monitoring mechanism, such as independence of audit committee, is effective (Bedard, Chtourou & Courteau, 2004).

As specified in the Code on Corporate Governance, the independence of audit committees is an important aspect of corporate governance (FCCG, 2001). This characteristic of audit committee is included as one of the principles and best practices required for the listing of companies on the Bursa Malaysia. In order to ensure the independence of audit committee, the code requires companies to maintain the membership of audit committee with at least three directors of which the majority must be independent from management. Independent audit committees are able to perform an intermediary role in resolving conflicts between management and outside auditors and reconciling differences in their views which would generate a balanced and more accurate report (Klein, 2002). It is argued therefore independent audit committees offer a monitoring mechanism to reduce earnings management practices and able to effectively control the management from an opportunistic behaviour relating to accounting choices.

Although characteristics of audit committees of listed companies are clearly specified in the listing requirement, the question of whether companies are in compliance of the Code is effective in controlling earnings management remains an issue (Turley, 2003). Past studies show that the existence of an independent audit committee reduces earnings management (Bedard *et al.*, 2004; Klein, 2002; Xie, Davidson & DaDalt, 2003). Independent audit committee is expected to weaken the positive association between surplus free cash flow and earnings management. However, this issue has not been fully addressed in previous studies.

The purpose of this study is to examine whether independent audit committee is able to reduce the practice of earnings management in companies when surplus free cash flow is high. In order to gain an insightful understanding of the role of independent audit committee, the study examines the relationships between discretionary accruals, being the measure of earnings management, and surplus free cash flow, independent audit committee, and the moderating effect of independent audit committee on the relationship between and discretionary accruals discretionary accruals.

This study wishes to provide evidence on the minimization of agency problem of surplus free cash flows in terms of opportunistic accounting choices of the managers. The issue of agency problem is very relevant particularly to the use of surplus free cash flows by managers in Malaysia where the legal protection of minority shareholders is relatively weak compared to some developed countries (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1998). A study in the United States examines the moderation of Big6 auditors and institutional investors on the relationship between surplus free cash flow and earnings management (Chung *et al.*, 2005). However, Chung *et al.* (2005) do not address the role of independent audit committee. In this study, independent audit committee is recognized as a moderating variable in the relationship between surplus free cash flow and earnings management.

This paper is organised in the following manner. The following section presents the literature review on earnings management and hypotheses development. Section 3 presents the methodology and section 4 offers the analyses of data. The final section concludes and discusses findings of this study.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Agency Theory

Agency theory is commonly used to explain certain accounting issues such as conflicts of interest, incentive problems, and mechanisms for controlling incentive problems (Lambert, 2001). The agency relationship occurs when one or more persons or the principles employ another person or the agent to perform some services on their behalf (Jensen & Meckling, 1976). Conflicts of interest among principles (shareholders) and agents (managers) frequently happen. The agency problem becomes more evident if both the managers and shareholders are utility maximizers because the presumption is that the managers will not act in the best interest of the shareholders (Jensen & Meckling, 1976). The agency theory provides logical predictions about what rational individuals may do if placed in such a relationship.

Managers may have self interest that conflict with their shareholders. A conflict of interests has potential agency cost such as management decisions that do not maximise shareholders' interests. Managers may manage reported earnings to obscure their actions. Earnings management may lead to an agency cost when investors make non-optimal investment decisions from reported earnings. In a situation where a company has high free cash flow, the manager may be engaged in earnings management to show better performance of the company. Then, this relation can be explained by using agency theory.

Agency theory proposes a series of mechanisms that seek to reconcile the interests of shareholders and managers. Companies can choose certain mechanisms to align the interests of agents and principals and to monitor the behaviour of agents (Coles, McWilliams & Sen, 2001). These mechanisms include external governance instruments such as takeovers (Easterwood, 1997) and merger (Erickson & Wang, 1999). The potential for shareholder–manager conflict may also be reduced by the utilization of internal control mechanisms such as monitoring by non-executive directors (Klein, 2002), monitoring by institutional shareholders and auditors (Chung *et al.*, 2005), and the incentive effects of executive share ownership (Jensen & Meckling, 1976). An additional instrument of shareholder monitoring is the statutory audit whereby independent auditors report annually to shareholders on the appropriateness of the financial statements prepared by the management (Watts & Zimmerman, 1983).

Earnings Management

The practice of earnings manipulation is very common among companies as a result of serious agency problems (Healy & Whalen, 1999). The nature of earnings manipulation ranges from earnings fraud to earnings management. Earnings fraud relates to fraudulent financial reporting which involves intentional misstatements or omission of amounts or disclosures in the financial statements to deceive financial statements users (MIA, 2002). Earnings management may involve manipulation of accounting records, intentional omission or intentional misapplication of accounting principles. Earnings management, on the other hand, is a practice by the management that often results in inaccurate and misleading financial reports (Aini *et al.*, 2006). “Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers” (Healy & Wahlen, 1999: p. 6).

The practice of earnings management occurs because of the availability of different acceptable accounting accrual choices to be applied for the determination of reported income (Healy & Wahlen, 1999; Dechow & Skinner, 2000). According

to Teoh, Welch and Wong (1998b), sources of earnings manipulations within generally accepted accounting principles include the choice on the application of accounting methods, and the timing of asset acquisitions and dispositions. The alternative representations of accounting events permitted by generally accepted accounting principles through accrual accounting provides some flexibility for managers in their discretions when deciding on actual earnings. The management has the opportunity to manage the timing and recognition of actual expense items such as advertising expenses or research and development expenditures, and the timing of revenue recognition through an early recognition of credit sales revenue or deferral of losses by establishing loss reserves (Teoh *et al.*, 1998a).

In practice, managers are often motivated to gain personal benefits through direct reward such as salary and bonus or indirect reward such as future promotions, prestige, and job security. These rewards are given to managers based on the company earnings performance. If the incentives are based on the company financial performance, managers may be tempted to act in their self interest and to impress the shareholders and other stakeholders of the company good performance through earnings management. The management discretion over reported earnings and its effect on the management compensation lead to a potential agency problem. A compensation incentive is only one example of many other opportunities of earnings management in free cash flow. However, this study does not intend to examine directly the compensation incentives. The study focuses on earnings management based on discretionary accounting accruals.

As a result of earnings management, the reported accounting numbers do not reflect the economic conditions of the company resulting in non-optimal decisions. Investors use financial information to make economic decisions which are reflected in share prices. The market efficiency is based upon the information flow to capital markets. Securities may be valued inappropriately because of the use of the 'managed' information by the investors. Managers' behaviour of obscuring the real performance through earnings management may create agency costs such as costs to undo the managed earnings, to resolve misallocations of resources, or to seek for other information (Xie *et al.*, 2003).

Past studies investigate the relationships between earnings management and certain corporate events which resulted in the occurrence of agency conflicts. The studies found mixed results. Wu (1997) finds supports for the assertion that managers are motivated to understate earnings in an attempt to acquire a company at a lower price. In contrary, DeAngelo (1988) finds no evidence of earnings management practices among managers. Generally, studies on earnings management are conducted in the context of capital markets where contractual incentives may exist for companies to manage earnings such as lowering the price for an acquisition of companies. Wu (1997) finds supports for the above statement.

In contrary, Easterwood (1997) and Erickson and Wang (1999) find evidence of earnings management in both hostile takeovers and in stock for stock mergers.

Easterwood (1997) finds that in hostile takeover attempts companies increase their earnings for the period prior to the takeover in order to discourage shareholders from supporting the takeover. In the case of mergers, Erickson and Wang (1999) find similar results where companies engaging in stock for stock mergers increase their earnings prior to the merger in order to inflate their stock price and thereby reduce the cost of the merger.

Other researchers investigate managers' motivation to manipulate earnings in trying to influence investors and other stakeholders. Teoh *et al.* (1998a), Rangan (1998) and Dechow, Sloan and Sweeney (1995) provide evidence that managers inflate earnings prior to seasoned equity offerings. The studies show that managers seek to manage pre-issue earnings in order to improve investors' expectations of the company future performance. There is, however, a cost associated with the earnings management. Teoh *et al.* (1998b) show that companies which managed earnings prior to initial public equity offerings experience poor stock return performance in the subsequent three years.

Relationship between Earnings Management and Surplus Free Cash Flow

Jensen (1986) stated that if free cash flow in a company is not used or invested to maximize or to balance the best interest of shareholders, then it raises agency problems. The manager may choose to invest in an unprofitable project due to his or her self interest. As a result, the company may be in the position of low growth. In the absence of effective monitoring or disciplinary actions by other independent stakeholders, the manager can conceal information on the activities by providing minimal disclosure or manipulating accounting number. Investors as a group of stakeholders do not have access to inside information. Managers may not provide adequate discloses to investors on the investment cash flows or the underlying assumptions of the project. Based on this minimal information, investors may not be able to know the prospect and the advantages or disadvantages of the project for their wealth (Chung *et al.* 2005).

Managers may not provide the internally projected cash flows for some investments. As a result of personal interests, managers overlook the need for preparing projected cash flow and profit forecast. The choice for making poor investments may reduce future earnings and lead to a move to remove directors or senior executives. In order to avoid the risk of facing the management turmoil, managers may employ accounting numbers to increase reported earnings. It is assumed that investors are completely unravelled of earnings numbers. Hence, managers are motivated to manage earning in order to fulfil their needs. The first hypothesis is:

Hypothesis 1: Surplus free cash flow and is positively related to discretionary accounting accruals.

Relationship between Audit Committee and Earnings Management

An audit committee plays an important role in monitoring the company financial reporting process. The audit committee meets regularly with the company's external auditors and internal financial managers to review financial statements, audit process, and internal accounting controls of the company (Klein, 2002).

Independent audit committees are hypothesized to have an effect on discretionary accounting accruals. The presence of independent audit committee may protect the interest of shareholders. Their monitoring function reduces earnings management, hence decreases agency problems (Bedard *et al.*, 2004). Klein (2002) found that audit committee independence is negatively related to earnings management. This result suggests that independent audit committees are able to effectively control earnings management practices. Hence, the second hypothesis is:

Hypothesis 2: Independent audit committee is negatively related to discretionary accounting accruals.

Moderating Role of Audit Committee

Menon and Williams (1994) used agency theory to explain the tendency that companies of high agency costs would reduce these costs by undertaking increased monitoring activities through the audit committee. A high proportion of non executive directors as members of audit committee is expected to increase independence of the committee and improve the ability of the committee to handle agency issues. Independent audit committees are more effective in controlling managers because they are less likely to be manipulated by managers than non independent audit committees (Fama and Jensen, 1983).

This study hypothesizes that independent audit committee would weaken the positive relationship of surplus free cash flows and earnings management. The audit committee may have a more direct control over earnings management (Xie *et al.*, 2003). Its function is to monitor the company financial performance and financial reporting. This function of audit committee is expected to reduce agency costs and to resolve problems arising from information asymmetry. This study expects that audit committees with a large proportion of their members are independent outside directors are more effective monitors. Therefore, an independent audit committee reduces the significance of positive relationship between surplus free cash flow and discretionary accounting accruals. The following hypothesis is developed.

Hypothesis 3: Independent audit committee weakens the positive relationship of surplus free cash flow and discretionary accounting accruals.

METHODOLOGY

Research Model and Measurement of Variables

This is a cross-sectional study using regression models of company (i) and time (t) (see equation (1)). The basic model incorporates discretionary accounting accruals as the dependent variable. Surplus free cash flow and independent audit committee are the independent variables. Model 1 includes independent audit committee as a moderating variable which moderates the relationship between surplus free cash flow and discretionary accounting accruals. The interaction between surplus free cash flow and independent audit committee is represented in the model by $SFCF * InAC$. The model, with company (i) for the year 2001 as follows:

$$DAC_{it} = \beta_0 + \beta_1 SFCF_{it} + \beta_2 InAC_{it} + \beta_3 SFCF * InAC_{it} + \beta_4 RELCF_{it} + \beta_5 SIZE_{it} + \beta_6 TAC_{it} + \epsilon \quad (1)$$

Where:

DAC	=	Discretionary Accounting Accruals
SFCF	=	Surplus Free Cash Flow
InAC	=	Independent Audit Committee
SFCF*InAC	=	Interaction of Surplus Free Cash Flow and Independent Audit Committee
RELCF	=	Relative Cash Flow
SIZE	=	Log of Market Value of Equity
TAC	=	Absolute Value of Total Accrual

Dependent Variable: Discretionary Accounting Accruals

Discretionary accounting accruals is measured based on the modified Jones (1991) model (see equation (2)). This study estimates the cross-sectional discretionary accounting accruals for each company for the year 2001 using the modified Jones (1991) model. This study focuses on current accruals (Xie *et al.*, 2003). The model is:

$$TAC_{it}/TA_{it-1} = \alpha_0 (1/TA_{it-1}) + \alpha_1 [(\Delta REV_{it} - \Delta AR_{it})/TA_{it-1}] + \alpha_2 (PPE_{it}/TA_{it-1}) + \epsilon_{it} \quad (2)$$

Where:

TAC	=	Total Accruals
TA	=	Total Assets
ΔREV	=	Change in Sales Revenues
ΔAR	=	Change in Accounts Receivables
PPE	=	Property, Plant, and Equipment
ϵ	=	Unspecified Random Factors

This study reduces the heteroskedasticity of the regression by deflating each variable in the model by the book value of total assets from the prior year (Chung *et al.*, 2005). Total accruals (TAC) are calculated as follows:

$$\text{TAC} = (\Delta \text{ current assets} - \Delta \text{ cash}) - (\Delta \text{ current liabilities} - \Delta \text{ short-term debt} - \Delta \text{ taxes payable}) - \text{depreciation}$$

Where Δ represents the change from year t-1 to year t.

TAC is assumed to be the sum of both discretionary and non-discretionary components. TAC is made up of non- discretionary accounting accruals and discretionary accounting accruals that occur from the normal operations of the business resulting from choices made by the company managers. Thus,

$$\text{TAC}_{it} = \text{DAC}_{it} + \text{NDAC}_{it} \quad (3)$$

DAC is defined as the residual, ϵ_{it} , from equation (2) while non-DAC is defined as the fitted values from equation (2). The residual term (ie the difference between TAC and non-DAC) is used as the dependent variable in equation 1. Consistent with other studies, DAC is assumed to be the outcome of managers' opportunistic choices of accounting methods.

Independent Variable: Surplus Free Cash Flow

This study identifies the existence of surplus free cash flow agency problem by using two proxies, the free cash flow (Lehn & Poulsen, 1989) and growth prospects of a company indicated by price to book ratio (Holthausen & Larcker, 1992; Skinner, 1993). Free cash flow is measured by operating income before depreciation minus expenses such as tax expense, interest expense, and dividend (Lehn & Poulsen, 1989). Companies are categorized as having potential free cash flow agency problems when free cash flow is above-median and price to book ratio is below-median (Chung *et al.*, 2005). Surplus free cash flow is coded 1 if the free cash flow is above the median for the year and the price-to-book ratio is below the median for the year.

Four conditions that may occur in a company with respect to free cash flow are high free cash flow but low growth, high free cash flow and high growth, low free cash flow and low growth, and low free cash flow but high growth. The situation where companies have high free cash flow but experiencing low growth may raise agency problems (high surplus free cash flow (SFCF) = 1). However, the other three conditions most probably would not raise agency problems (low SFCF = 0).

Surplus free cash flow is a dummy variable set equal to 1 if the companies have high free cash flow (i.e. free cash flow is above the sample median for the

year) but low growth (i.e. the price-to-book ratio is below the sample median for the year). Otherwise surplus free cash flow is coded 0 (Chung *et al.*, 2005). See equation 3.

Independent Variable: Independent Audit Committee

Independence of audit committee members is classified into three categories, non-independence executive, non-independence non-executive and independence and non-executive (Klein, 2002). For the purpose of this study audit committee is independent when members are independent and non-executive directors. Independent audit committee is measured in term of the percentage of independent and non executive directors as members of audit committee over the total number of audit committee members (Klein, 2002; Xie *et al.*, 2003). This basis is chosen to ensure the independence of selected members who do not have any relationship with the company management. Independent audit committee is the percentage of non-executive directors on the company's audit committee (Klein, 2002).

Control Variables

This study includes three control variables, relative cash flow, size of company and total accruals. Prior studies suggested that relative cash flow had a negative relationship with discretionary accounting accruals (Becker, DeFond, Jiambalvo & Subramanyam, 1998). High cash flows (thus high profits) may encourage companies to adopt income-decreasing discretionary accounting accruals to smooth earnings. To control for the potential impact of cash flow, this study includes an indicator variable, relative cash flow. The relative cash flow is measured in terms of the difference between cash flow for the year divided by lagged total assets (year t-1) and the industry median for the year (Chung *et al.*, 2005). Thus, this study expects the negative sign on this coefficient to indicate the tendency of companies with high relative cash flows to practice income-decreasing accounting choices.

The log of market value of equity at fiscal year end is the proxy for size of company. This variable is included as a control variable in this study. Past studies have documented a positive coefficient on this variable (Becker *et al.*, 1998; Chung *et al.*, 2005). It means that larger companies prefer income-increasing accounting choices. Another control variable of this study is total accrual of the company. Total accrual is the absolute value of total accruals divided by lagged total assets (year t-1). Previous studies have documented a negative coefficient for total accrual (Becker *et al.*, 1998).

ANALYSIS OF DATA

Sample

This study selects 225 companies listed on the main board of Bursa Malaysia in the year 2001. The companies are selected based on the availability of data and after eliminating outliers and missing data. This study excludes the banks or finance industry, being a highly regulated industry. Out of 225 selected companies, 66 were excluded because of missing information on the proxy statements of annual report or insufficient data. Observations of two extreme ends which are values of the top 1% and bottom 1% are eliminated. The removal of outliers from the data is important because outliers can affect the least square estimates (Kleinbaum, Kupper, Muller and Nizam, 1998). Also, data of banks or finance industry can not be used to measure abnormal accruals based on the adopted formula because companies in the finance industry use different accrual procedures. The final sample includes only 155 companies for the year 2001. The year 2001 is chosen to evaluate the practice of earnings management one year after the issuance of the Code on Corporate Governance in Malaysia in 2000.

Descriptive Statistics

Table 1 presents descriptive statistics of the sample. The table shows the mean value and median of discretionary accounting accruals are close to zero. The mean value of discretionary accounting accruals is -0.0048 ranging from -0.26 to 0.27. This is consistent with prior studies in Malaysia (Norman, Takiah and Mohd-Mohid, 2007). About forty three percent of the companies have surplus free cash flow suggesting potential agency problems. Data on audit committee composition which are collected manually from annual reports show that on average about 44% of the audit committee members are independent director.

Table 1 Descriptive statistics for variables

Variables	Mean	SD	Median	Minimum	Maximum
DAC	-0.0048	.0816	-.0090	-.2640	.2720
SFCF	0.4258	.4961	.0000	.0000	1.0000
InAC	-0.4388	.2067	-.4050	-1.3863	.0000
RELCF	0.0324	.1320	.0000	-.1630	.6080
SIZE	2.4276	.6012	2.2380	1.3900	4.5750
TAC	0.0634	.0650	.0450	.0000	.3360

Note: DAC = Discretionary Accounting Accruals
 SFCF = Surplus Free Cash Flow
 InAC = Independent Audit Committee
 RELCF = Relative Cash Flow
 SIZE = Log of Market Value of Equity
 TAC = Absolute Value of Total Accrual

Descriptive statistics for control variables are also presented in Table 1. The mean value of relative cash flow of the sample is 3.24 % and the median of 0. Size of company, measured by the log of market value of equity at fiscal year end, ranges from 1.39 to 4.57 with the mean value of 2.43. Finally, the mean of total accruals to total assets is 6.34% and the median is 4.50%.

Tests of Data

Table 2 reports the test of correlation of all variables. The magnitude of the correlations between independent variables under study (surplus free cash flow and independent audit committee) is small (ie 0.0376). Magnitudes of correlations between other independent variables are also small ranging from -0.3381 to 0.1271. Hence, multicollinearity is not a major problem in interpreting the regression coefficients (Judge *et al.*, 1988).

Table 2 Correlation between variables

Variables	DAC	SFCF	InAC	RELCF	SIZE	TAc
DAC	1.000	.3278***	-.1546**	-.2091**	-.0720	.1271*
SFCF		1.000	.0376	-.2844**	-.3381**	-.0689
InAC			1.000	-.0477	-.0147	-.1357**
RELCF				1.000	.1089**	-.0277
SIZE					1.000	-.0530
TAc						1.000

Univariate Results

Table 3 presents results of t-test of independent sample for the differences in discretionary accounting accruals mean between sub-samples of surplus free cash flow and audit committee. The table shows that the mean of discretionary accounting accruals of companies with high surplus free cash flow is significantly higher than those with low surplus free cash flow at $p = .000$. See panel A in Table 3. This finding is consistent with hypothesis 1 which suggests that companies with high surplus free cash flow tend to use income-increasing discretionary accounting accruals to show better reported earnings.

T-tests of independent samples are performed to see the difference in discretionary accounting accruals between more independent and less independent audit committee. More independent audit committee has >66.7% of its members consisting independent and non-executive directors. Less independent audit committee has <66.7% of its members comprising independent and non-executive directors. Panel B shows mean of discretionary accounting accruals for companies with more independent audit committee is significantly lower than that of companies

with less independent audit committee at $p = .001$. The result is as expected where more independent audit committees appear to refrain managers from making opportunistic decisions to choose income-increasing discretionary accounting accruals. This evidence is consistent with studies that examined audit committee and accounting accruals in other contexts (Bedard *et al.*, 2004).

Table 3 Univariate Test Differences in DAC between Sub-samples

Panel A: SFCF Sub-Samples - Low SFCF and high SFCF				
	Low SFCF	High SFCF	Mean Difference	<i>p</i>
Mean – DAC	-.0278	.0261	-.0539	.000
N	89	66		
Panel B: Audit Committee Sub-Samples - More Independent and Less Independent				
	More Independent	Less Independent	Mean Difference	<i>p</i>
Mean – DAC	-.0163	.0359	.0523	.001
N	121	34		
Panel C: SFCF and Audit Committee Sub-Samples				
		More Independent	Less Independent	<i>p</i>
Low SFCF	Mean – DAC	-.0393	-.0053	.033
	N	70	19	
High SFCF	Mean – DAC	.0078	.0882	.001
	N	51	15	
<i>p</i>		.000	.002	

Panel C reports mean of discretionary accounting accruals of combinations between different levels of surplus free cash flow and audit committee independence. Results suggest that companies with low surplus free cash flow and more independent audit committee have significantly lower discretionary accounting accruals compared to companies with low surplus free cash flow but less independent audit committee. On the other hand, companies with high surplus free cash flow and more independent audit committee tend to have significantly less discretionary accounting accruals compared to companies with high surplus free cash flow but less independent audit committee. It is argued that more independent audit committees lead to lower discretionary accounting accruals. Results on independence of audit committee are consistent across observations of low and high free cash flow. Similarly, results on surplus free cash flow are consistent across observations of more and less independent audit committee. It is important to note that the lowest discretionary accounting accruals occur when surplus free cash flow is low and the audit committee is more independent. The evidence is consistent with results in Panels A where high surplus free cash flow is associated with high

discretionary accounting accruals and in Panel B where more independent audit committee is associated with low discretionary accounting accruals.

Multivariate Results

This study uses multiple regressions to test the model. Table 4 presents results of the multiple regressions for various specifications of equation (1) with discretionary accounting accruals as the dependent variable, surplus free cash flow and independent audit committee as independent variables, and relative cash flow, size of company, and total accruals as control variables.

Regression A in Table 4 provides information on the relationship between surplus free cash flow and discretionary accounting accruals. The result shows surplus free cash flow is positively and significantly related to discretionary accounting accruals. It means that companies with high surplus free cash flow use income-increasing discretionary accounting accruals. Hence, an increase in reported profits reduces the pressure on the management such that the management can easily engage non-value-maximizing expenditures. The result is consistent with hypothesis one which suggests a positive relationship between surplus free cash flow and discretionary accruals.

Regression B offers information on the relationships between discretionary accounting accruals and surplus free cash flow and independent audit committee respectively. Results show a positive and significant relationship between discretionary accounting accruals and surplus free cash flow but a negative and significant relationship between discretionary accounting accruals and independent audit committee. It means that, when both independent variables, surplus free cash flow and independent audit committee, are included in the regression, both their relationships with discretionary accounting accruals are significant but are in the opposite directions. Results suggest that companies with high surplus free cash flow use income-increasing discretionary accounting accruals and companies with low surplus free cash flow use income-decreasing discretionary accounting accruals. In addition, independent audit committee has a negative coefficient in all model specifications and has a statistical significant relationship with discretionary accounting accruals in Regression B. More independent audit committees reduce practices of earnings management. Results show that the presence of highly independent audit committee has benefited the company through controls on earnings management practices. The evidence is consistent with the prediction from the hypothesis which suggests a negative relationship between independent audit committee and discretionary accounting accruals.

Results show Regression C in Table 4 includes both independent variables, surplus free cash flow and independent audit committee, and the interaction of surplus free cash flow and independent audit committee (SFCF*InAC). When the interaction between surplus free cash flow and independent audit committee

is included in the model (Regression C), the direct relationships between each of the independent variables, surplus free cash flow and independent audit committee respectively and discretionary accounting accruals are no longer significant. The insignificant relationships between surplus free cash flow and independent audit committee and discretionary accounting accruals upon the inclusion of the interaction, ie SFCF*InAC, indicates that the role of audit committee in companies with high surplus free cash flow is very important. The significance of surplus free cash flow and independent audit committee is less when the interaction between surplus free cash flow and audit committee is included in Regression C. The negative relationship between independent audit committee obtained in Regression B may be due to surplus free cash flow status of the companies themselves. This negative sign is consistent with the univariate results reported in Table 3, Panel B.

Table 4 Regression estimates (t statistics) on discretionary accounting accruals model

Variables	Predicted sign	Regression A	Regression B	Regression C
Intercept	?	.0562 (-1.8201)*	-.0806 (-2.4576)**	-.0596 (-1.6995)*
SFCF	+	.0533 (3.8748)***	.0535 (3.9348)***	.0047 (.1417)
In AC	-		-.0611 (-2.0485)**	-.0322 (-.9305)
SFCF*In AC	-			-.1096 (-1.6218)*
RELFCF	-	-.0737 (-1.5133)	-.0782 (-1.6210)*	-.0793 (-1.6527)*
SIZE	+	.0079 (.7251)	.0076 (.7067)	.0054 (.5029)
TAc	-	.1874 (1.9636)*	.1608 (1.6867)*	.1261 (1.2970)
N		155	155	155
Adjusted R ²		.1231	.1414	.1507

Note: *** significant at 1% level

** significant at 5% level

* significant at 10% level

Regression C in table 4 shows that the coefficients of interaction between surplus free cash flow and audit committee is negative and it is significantly related to earnings management at 10% level. The result shows that the positive and significant relationship between surplus free cash flow and discretionary accruals is weakened by the existence of independent audit committee. The result suggests

that the presence of majority independent directors in the audit committee is associated with better monitoring in companies with high surplus free cash flow. The role of highly independent audit committee is important in reducing the practice of earnings management via discretionary accounting accruals. The evidence is consistent with the prediction in H3.

Several control variables are also tested in this study to minimise confounding effects. The control variable, relative cash flow, has negative sign and significant at the 0.10 level as predicted. This result is consistent with prior research (Becker *et al.*, 1998; Chung *et al.*, 2005; DeAngelo *et al.*, 1994; Dechow *et al.*, 1996). Results show the coefficient on size of company is positive but not significant. The sign of the variable size is consistent with the prediction; however this coefficient is not significant. Finally, total accruals is positively but not significantly associated with discretionary accounting accruals. This result contradicts with that of Becker *et al.* (1998) who report a negative and statistically significant coefficient on their measure of accruals.

CONCLUSIONS AND DISCUSSIONS

This paper links earnings management, audit committee, and agency theory. The discretionary accounting accruals variable, the proxy for earnings management, provides a mechanism for managers to adjust earnings towards some preferred levels. In a situation where a company has high free cash flow but low growth opportunities, agency problems may be created. Managers may engage in earnings management to show a better performance for the company. As a result, the published financial data do not present a true economic picture of the company since the manager increases or decreases the reported earnings. It leads to non-optimal decision making by shareholders, thus creates agency costs.

This study extends this line of research by investigating the relationship between surplus free cash flow and discretionary accounting accruals and the direct and moderating effects of audit committee variable on the surplus free cash flow and discretionary accounting accruals relationship. It is hypothesised that earnings management is more likely to occur in high surplus free cash flow companies. The results provide supports for this hypothesis, suggesting that managers tend to use their discretions to increase reported earnings, so their actions for not investing in wealth maximizing projects can be concealed. Managers use discretionary accounting accruals to obscure the poor performance of the company from the non-shareholders' wealth maximizing projects funded from high free cash flow.

In the second hypothesis, this study proposes that independent audit committee would reduce earnings management practices. As expected, the evidence shows that a more independent audit committee is more effective in constraining the propensity of managers to engage in earnings management.

The majority of independent audit committee deals with the fact that companies are responsible to protect the interest of shareholders. The result is consistent with the third hypothesis where independent audit committee weakens the positive relationship between surplus free cash flow and earnings management. An independent audit committee acting as an intermediary agent between the management and investors restrains managers from engaging in an opportunistic behaviour of managing earnings dealing with surplus free cash flow of the company. To eliminate the confounding effect of three control variables, relative cash flows, size of company, and total accruals, effects the influence of these variables is are tested. It is noted that relative cash flows are negatively and significantly related to discretionary accounting accruals. This finding is consistent with prior studies. However, the relationships between size of company and total accruals with discretionary accounting accruals are not significant.

The findings have important implications for policy makers and practitioners. Results suggest that the practice of earnings management may exist when a company is in a condition of having high free cash flow but low growth prospects. The results also provide an insight into the role of highly independent audit committee in monitoring the possibility of income increasing earnings management practices among companies with high surplus free cash flow.

The results reveal an association, not a causal link, between surplus free cash flow condition and the level of earnings management and between audit committee characteristics and the level of earnings management. Also, inferences in this paper are limited by the selected sample and time period, and the sample size is relatively small. For example, results on the negative and significant relationship and the interaction between surplus free cash flow and independent audit committee with earnings management was based only on ten percent level of the change in the level of earnings management. A larger sample size may be necessary in order to obtain a more statistical power for the data analysis and significant results of hypothesis testing. Thus, future research may employ a larger sample size to include the second board companies of Bursa Malaysia in order to also improve the generalizability of results.

This study uses data of listed companies for the year 2001 following the issuance of the Code of Corporate Governance in this country. The use of such data which is generated after one year after the of implementation of the Code may not fully reflect the effect of the corporate governance mechanism. At the early stage of the implementation, companies are given a year grace period for adoption of the Code. Hence, it may be too early to evaluate effects of the implementation. A panel data approach for a number of years after the introduction of the Code may be a better approach to examine the effect of audit committee as a controlling mechanism of earnings management. Hence, future study is necessary to address this issue.

REFERENCES

- Aini, A., Takiah M.I., Pourjalali, H and Teruya, J. (2006) Earnings Management in Malaysia: A Study on Effects of Accounting Policy, *Malaysian Accounting Review*, **5(1)**, 185 – 209.
- Bauwhede, H.V., Willekens, M. and Gaeremynck, A. (2003) Audit Firm Size, Public Ownership, and Firms' Discretionary Accruals Management, *The International Journal of Accounting*, **38**, 1 – 22.
- Becker, C.L., DeFond, M.L., Jiambalvo, J. and Subramanyam, K.R. (1998) The Effect of Audit Quality on Earnings Management. *Contemporary Accounting Research*, **15**, 1 – 24.
- Bedard, J., Chtourou, S.M. and Courteau, L. (2004) The Effect of Audit Committee Expertise, Independence, and Activity on Aggressive Earnings Management, *Auditing, A Journal of Practice and Theory*, **23**, 13 – 35.
- Bowen, R.M., DuCharme, L. and Shores, D. (1995) Stakeholders' Implicit Claims and Accounting Method Choice, *Journal of Accounting and Economics*, **20**, 255 – 295.
- Burgstahler, D. and Dichev, I. (1997) Earnings Management to Avoid Earnings Decreases and Losses, *Journal of Accounting and Economics*, **24**, 99 – 126.
- Chung, R., Firth, M. and Kim, J.B. (2005) Earnings Management, Surplus Free Cash Flow, and External Monitoring, *Journal of Business Research*, **58**, 766 – 776.
- Coles, J.W., McWilliams, V.B. and Sen, N. (2001) An Examination of the Relationship of Governance Mechanisms to Performance, *Journal of Management*, **27**, 23 – 50.
- Davidson III, W.N., Jiraporn, P., Kim, Y.S. and Nemeč, C. (2004) Earnings Management Following Duality-Creating Successions: Ethnostatistics, Impression Management, and Agency Theory, *Academy of Management Journal*, **2**, 267 – 275.
- DeAngelo, L.E. (1988) Managerial Competition, Information Costs, and Corporate Governance: The Use of Accounting Performance Measures in Proxy Contests, *Journal of Accounting and Economics*, **10**, 3 – 36.
- DeAngelo, H., DeAngelo, L. and Skinner, D.J. (1994) Accounting Choice in Troubled Companies, *Journal of Accounting Economic*, **17**, 113 – 43.
- Dechow, P.M. and Skinner, D.J. (2000) Earnings Management: Reconciling the Views of Accounting Academics, Practitioners and Regulators, *Accounting Horizons*, June, 235 – 250.
- Dechow, P., Sloan, R. and Sweeney, A. (1995) Detecting Earnings Management, *Accounting Review*, **70**, 193 – 225.
- Dechow, P., Sloan, R., and Sweeney, A. (1996) Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC, *Contemporary Accounting Research*, **13**, 1 – 36.
- DeFond, M.L. and Jiambalvo, J. (1994) Debt Covenant Violation and Manipulation of Accruals, *Journal of Accounting and Economics*, **17**, 145 – 176.
- Easterwood, C. (1997) Takeovers and Incentives for Earnings Management: An Empirical Analysis. *Journal of Applied Business Research*, **14**, 29 – 48.

- Erickson, M. and Wang, S. (1999) Earnings Management by Acquiring Firms in Stock for Stock Mergers, *Journal of Accounting and Economics*, 149 – 176.
- Fama, E.F. and Jensen, M.C. (1983) Separation of Ownership and Control. *Journal of Law and Economics*, **26**, 301 – 325.
- Finance Committee on Corporate Governance (FCCG) (2001) *Malaysian Code on Corporate Governance*. March.
- Gaver, J.J., Gaver, K.M. and Austin, J.R. (1995) Additional Evidence on Bonus Plans and Income Management, *Journal of Accounting and Economics*, **19**, 3 – 28.
- Gul, F.A. (2001) Free Cash Flow, Debt Monitoring and Managers' LIFO/FIFO Policy Choice, *Journal of Corporate Finance*, **13**, 475 – 492.
- Han, J. and Wang, S. (1998) Political Costs and Earnings Management of Oil Companies During the 1990 Persian Gulf Crisis, *The Accounting Review*, **73**, 103 – 117.
- Healy, P.M. and Whalen, J.M. (1999) A Review of Earnings Management Literature and Its Implication for Standard Setting, *Accounting Horizons*, **13**, 365 – 393..
- Holthausen, R.W. and Larcker, D.F. (1992) The Prediction of Stock Returns using Financial Statement Information, *Journal of Financial Economics*, **15**, 373 – 411.
- Jensen, M.C. (1986) Agency Costs of Free Cash Flow, Corporate Finance and Takeovers, *American Economic Review*, **76**, 323 – 329.
- Jensen, M. and Meckling, W. (1976) Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure, *Journal of Financial Economics*, **3**, 305 – 360.
- Jones, J. (1991) Earnings Management during Import Relief Investigations, *Journal Accounting Research*, 193 – 228.
- Judge, G.G., Hill, R.C., Griffiths, W.E., Lutkepohl, H., Lee, T.C. (1988) *Introduction to the Theory and Practice of Econometrics*. 2nd ed. Wiley: New York
- Klein, A. (2002) Audit Committee, Board of Director Characteristics, and Earnings Management, *Journal of Accounting and Economics*, **33**, 375 – 400.
- Kleinbaum, D.G., Kupper, L.L., Muller, K.L. and Nizam, A. (1998) *Applied Regression Analysis and Other Multivariable Methods*, 3rd ed. Duxbury Press.
- La Porta, R., Lopez-de-Silanes, F, Shleifer, A. and Vishny, R.W. (1998) Law and Finance, *Journal of Political Economy*, **106**, 1113 – 1155.
- Lambert, A.L. (2001) Contracting Theory and Accounting, *Journal of Accounting and Economics*, **32**, 3 – 87.
- Lehn, K. and Poulsen, A. (1989) Free Cash Flow and Stakeholder Gains in Going Private Transactions, *The Journal of Finance*, **44(3)**, 771 – 787.
- Malaysian Institute of Accountants (MIA) (2002) The Auditors' Responsibility to Consider Fraud and Error in An Audit of Fiancial Statements.
- Malaysian Institute of Corporate Governance (MICG) (2001) *Malaysian Code on Corporate Governance*.
- Menon, K. and Williams, J.D. (1994) The Use of Audit Committee for Monitoring, *Journal of Accounting and Public Policy*, **13**, 121 – 139.

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- Norman, M.S., Takiah, M.I., and Mohd-Mohid, R. (2007) Audit Committee Characteristics and Earnings Management: Evidence from Malaysia, *Asian Review of Accounting*, **15(2)**, 147 – 163.
- Rangan, S. (1998) Earnings Management and the Performance of Seasoned Equity Offerings, *Journal of Financial Economics*, **50**, 101 – 122.
- Skinner, D.J. (1993) The Investment Opportunity Set and Accounting Procedure Choice: Preliminary Evidence, *Journal of Accounting Economic*, **18**, 407 – 445.
- Teoh, S.H., Welch, I. and Wong, T.J. (1998a) Earnings Management and the Underperformance of Seasoned Equity Offerings, *Journal of Financial Economics*, **50**, 63 – 99.
- Teoh, S.H., Welch, I. and Wong, T.J. (1998b) Earnings Management and the Long-run Market Performance of Initial Public Offerings, *Journal of Finance*, **53**, 1935 – 1975.
- Turley, S. (2003) Audit Committees-Performing Corporate Governance, *The British Accounting Review*, **35**, 195 – 196.
- Xie, B., Davidson, W.N. and DaDalt, P.J. (2003) Earnings Management and Corporate Governance: The Role of the Board and the Audit Committee, *Journal of Corporate Finance*, **9**, 295 – 316.
- Watts, R.L. and Zimmerman, J.L. (1983) Agency Problems, Auditing, and the Theory of the Firm: Some Evidence, *Journal of Law and Economics*, **26**, October, 613 – 633.
- Wu, W.Y. (1997) Management Buyouts and Earnings Management, *Journal of Accounting, Auditing and Finance*, **12(4)**, 373 – 389.