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ACCRUAL MANAGEMENT AND THE INDEPENDENCE OF THE BOARDS OF DIRECTORS AND AUDIT COMMITTEES

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ABSTRACT

The recent revelation of the misleading audited accounts of several big companies in the US has heightened public concern about the integrity of a firm's financial reporting processes. The management of the accounts is commonly known as accrual management as it is effectively accomplished through manipulation of discretionary accruals. A firm's internal corporate governance systems should be able to constrain the extent of earnings being managed. To this end, this paper investigates one important aspect of the internal corporate governance, namely the independence of the board of directors and the audit committee. It is argued that the extent to which the board and the audit committee are independent of management determines their ability to constrain the management of discretionary accruals. Using data from the Kuala Lumpur Stock Exchange (KLSE) non-financial Main Board listed companies in 1998 evidence showed that neither board independence nor the audit committee independence effectively constrained the accrual management level. The interactive effects of board independence and audit committee independence were also found to be insignificant. Evidence in this paper, therefore, casts doubt that the independence of boards and the audit committee can lead to high quality accounting information, which is thereby useful to users.

JEL classification: G34, M41

Key words: Accrual management, Audit committee independence, Discretionary accruals

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1. BACKGROUND

The recent cases in the US involving two big corporations, namely Enron Energy and Worldcom Corporation in 2001 and 2002, respectively, have intensified the already high public interest in the issue of corporate governance. The management of these two companies had manipulated the accounts in such a way that the bottomlines did not reflect the companies' underlying financial positions and "[T]he collapse of Enron was particularly shocking because its accounts made the firm appear to be healthy and prosperous." (BBC News, 2003). Though the issue of corporate governance in the US, particularly that of audit committees, has been a subject of interest to regulators, practitioners and academicians since the early 1940's, the revelation of the two cases has eroded the public's confidence in any firm's financial reporting processes and auditors' independence. This is evidenced by the increased frequency of the issue involving auditors becoming newspaper headlines worldwide and the various steps taken in the US in order to restore public confidence in auditors. In the UK, the issue of corporate governance became an important topic following high profile cases, the Maxwell case being one example, in the early 1990's. The publication of the Cadbury Report in the UK in 1992 was seen as an attempt to address the issue of corporate governance among companies in the UK.

Corporate governance is about the manner in which a firm's top officers are being monitored and to discipline them accordingly with the primary objective of enhancing shareholders' long-term value (Finance Committee on Corporate Governance, 1999). The issue of the boards of directors naturally emerges, being regarded as the most powerful and cost-effective mechanisms that regulate the internal affairs of a company. Corporate takeovers, being at the other end of the corporate governance system, are regarded as the most effective external corporate governance mechanism to discipline poor management. These two important corporate control mechanisms, being corporate governance at the one end and corporate takeovers at the other end, are substitutes for each other (Shivdasani, 1993). It is argued that having an effective internal corporate governance structure would lead to a better monitoring of management which could, in turn, lead to the management pursuing activities that increase the long-term value of the company. Having an effective internal corporate governance means that there exist appropriate checks and balances to ensure the

management performs their tasks as expected by the shareholders.

In today's modern businesses, a company is typically headed by a board of directors, which is regarded as the peak of a firm's corporate governance (Malaysian Code on Corporate Governance, 2001). In fact, the Cadbury Report (1992), which was published in the UK to address the issue of corporate governance, has discussed extensively the roles of a board of directors and the importance of it being independent of management, in which it requires a board consisting of a sufficient number of outside directors and the separation of the roles of the Board Chairman and the CEO. The objective is to ensure that the decisions made during the board meetings are not biased towards the management or the shareholders represented by the directors. Several studies have shown the extent to which having outside directors on the board was effective in constraining earnings management (e.g., Peasnell, Pope and Young, 2000) and the extent of fraudulent financial reporting (Beasley, 1997).

The issue of audit committees emerged in the US following the stock market crash in 1939. However, the New York Stock Exchange (NYSE) only made the formation of audit committees mandatory in 1987. The Treadway Committee (1987) argues that an audit committee could enhance a firm's financial reporting process. To ensure its independence and effectiveness, the Cadbury Report (1992) recommends audit committees be established with at least three non-executive directors with written terms of reference with regard to their authority and duties. Following the recommendation of the Cadbury Report, the London Stock Exchange in 1993 made the establishment of audit committees by the listed companies mandatory. In Malaysia, the audit committee issue surfaced in the middle of the 1980's with the financial fiasco of Bumiputra Malaysian Finance Ltd (BMF). The Central Bank of Malaysia (BNM) required all finance institutions under its jurisdiction to form audit committees through its BNM/GP1 issued in 1986. This requirement was extended to all insurance companies in 1990. In 1993, the Kuala Lumpur Stock Exchange (KLSE) took an important step by making audit committee formation mandatory as was earlier done by the NYSE (in 1978) and the London Stock Exchange (LSE) (in June 1993). Though audit committees have been argued to improve a firm's financial reporting processes, very few countries have actually incorporated their formation in their Companies Act. Thus far, only Canada and Singapore have required audit committee formation

through the respective countries' Companies Act.

Evidence about firms' incentives to form an audit committee and its effectiveness in carrying out its duties thus far is mixed. It was argued that the level of audit committee independence was an important criterion for its effectiveness. Cobb (1993) found evidence of a negative association between the number of independent members of a firm's audit committee and the likelihood of fraudulent financial reporting. In Malaysia, Shamsul Nahar Abdullah (1999) found evidence that audit committee independence was effective in carrying out its financial reporting oversight. However, the study relies on the extent of price revision surrounding earnings announcements. The present study, therefore, intends to investigate the extent to which the independence of the board of directors and audit committee permits them to play their roles in the firm's financial reporting. Specifically, the study seeks to study whether the independence of the board of directors and audit committee effectively constrains the ability of accrual management. The focus of this study is the period before the publication of the Report on Corporate Governance in 1999. Compliance with recommendations that were contained in the Report was voluntary. The Report was subsequently named the Malaysian Code on Corporate Governance in 2001. In 2001, the KLSE, in its "Revamped Listing Requirements", required listed companies to make statements of their compliance with the Malaysian Code on Corporate Governance (2001) in relation to the application of the principles set out in Part 1 of the Code and compliance with Part 2 of the Code and reasons for non-compliance (KLSE Revamped Listing Requirements, 15.24).

The period being studied was considered as a period during which the definitive form of the board of directors in Malaysia was non-existent. Therefore, during this period the form of the board of directors was at the discretion of respective firms. In addition, this was the period during which companies in Malaysia were facing severe financial turmoil. Hence, it would be interesting to examine the extent to which the board's independence and audit committee's independence are important in addressing the issue of the quality of financial reporting. This period may be classified as a "crisis" as argued by Kosnik (1987), who claims that boards that were facing a "crisis" would likely use their powers to monitor management. The issue of the confounding effects of the crisis does not arise as the whole economy was affected by the crisis.

The major objective of this study is to extend the previous study by Shamsul Nahar Abdullah (1999), which examined the impact of the independence of the board of directors and audit committee on the quality of earnings, an indicator of the quality of financial reports. The quality of earnings is used as an indicator of the quality of the financial statements as earnings is always regarded as the most important item in making investment-related decisions (Lev, 1989). In the study, the quality of earnings was measured by the extent of share price movements surrounding the firm's earnings announcement date. The approach used by Shamsul Nahar Abdullah (1999) was similar to the approach employed by Wild (1994) who investigated the informativeness of earnings by examining the earnings response coefficient (ERC). The informativeness of earnings was used as a proxy for earnings quality. The study argued that high quality earnings information should lead to users being better able to predict the firm's future earnings generating capacity, as the earnings should be sustainable as compared to low quality earnings, which cannot be sustained. The findings of the study generally support the hypotheses that board independence and audit committee independence lead to higher earnings quality. As an extension, this study investigates the roles of the board's independence and the audit committee is independence on the quality of earnings by examining directly the management of the discretionary accruals. It is expected that the board's independence and the audit committee is independence are inversely related to the level of discretionary accrual management.

2. INDEPENDENCE OF THE BOARD OF DIRECTORS

The Cadbury Report defines corporate governance as ". . . the system by which companies are directed and controlled" (p. 15). On the board of directors of a company the Cadbury Report states further that "[B]oards of directors are responsible for the governance of their companies" (p. 15). The Cadbury Report broadly defines the responsibilities of a board of directors to include: ". . . setting the company's strategic aims, providing the leadership to put them into effect, supervising the management of the business and reporting to shareholders on their stewardship" (p. 15). On the role of the auditors, the Cadbury Report argues that they provide the shareholders with an outside, independent check on the financial statements prepared by the

directors (p. 15).

The board of directors exists primarily to protect the interests of the shareholders of a firm. Thus, the board of directors should act in the interests of the shareholders by monitoring top management performance and protecting shareholders' rights and interests (American Law Institute, 1982; Kosnik, 1987 and 1990). The board's existence could also be viewed as an attempt to mitigate the firm's agency costs, which arise due to the separation of ownership and control with management holding only part of the interest in the firm (Jensen and Meckling, 1976). This results in an increase in the amount of "perks" being consumed as the owner-manager will no longer bear the full amount of "perks" (Jensen and Meckling, 1976). Thus, an effective board would play its monitoring roles to ensure that the management acts in the interests of the shareholders and thus the agency costs are reduced. Commenting on the board is role of monitoring the financial reporting processes, the Cadbury Report stresses ". . . we believe that a number of the recent examples of unexpected company failures and cases of fraud would have received attention earlier" (p. 12). Thus, the Cadbury Report was of the opinion that cases involving fraud could have been known much earlier had the boards been effective in discharging their financial reporting process duties.

The Cadbury Report stresses that the board is duty-bound to ensure the presentation of a balanced and understandable assessment of the company's position. This requires the active participation of the board of directors in the financial reporting processes. Thus, the board is expected to play a major role in the financial reporting process of the firm. If this is done effectively, the content of the financial reports is useful to users in evaluating the management performance. The Report on Corporate Governance also emphasizes the role of the board of directors in overseeing the firm's financial reporting process. The Malaysian Companies Act (1965), in Section 167, specifically states the responsibilities of the directors and the managers to properly keep accounting and other records to enable a true and fair profit and loss account and the balance sheet being prepared from time to time. This requirement is also contained in the MASB 3 (Net Profit or Loss for the Period, Fundamental Errors and Changes in Accounting Policies). These requirements reflect the important roles of the board of directors in determining the contents of a firm's financial reports. This is because it is the responsibility of the boards of directors to govern their companies

(Cadbury Report, 1992). The Malaysian Code also advances a similar contention when it says "[T]he key to good governance lies in getting the right board in place" (p. 26). Moreover, it is the board of directors who endorse their companies' financial statements before the financial statements are accepted at the companies' annual general meeting (AGM). In addition, the boards have the privilege to examine the audit reports related to the financial statements, which are not known to the investors. These requirements show the important role of the board of directors in the financial reporting process of the firm. Rezaee (2003) argues that quality financial reports are ones that are free of material misstatements, which ". . . can be achieved when there is a well-balanced, functioning system of corporate governance" (p. 26). He further stresses that "[A]ligning the interests of managers and shareholders requires vigilant, independent, effective boards" (p. 28) and "[T]he biggest corporate failures of recent times, Enron and Worldcom, raised concerns about the lack of vigilant oversight" (p. 28).

The board's vigilance is a prerequisite to the board's oversight function. The effectiveness of the board of directors depends on several factors, the most important and widely investigated being the extent to which the board is independent of management. It is argued that good corporate governance is said to exist when the independence of the board of directors is maintained (Shamsul Nahar Abdullah, 2002b). Empirical evidence of this generally shows that the effectiveness of the board is related to its independence (e.g., Brickley, Coles and Terry, 1994; Byrd and Hickman, 1992; Weisbach, 1988). Evidence, which showed that board independence was a substitute for outside corporate control mechanisms, such as takeovers, was provided by Kini, Kracaw and Mian (1995). Thus, empirical evidence suggests that the independence of the board increases its oversight intensity as it can carry out its function without the influence of management.

The issue of the board's independence is important because directors who are usually appointed to the board are those who are known to the top management of the firm and in the appointment the CEO usually has a significant influence in deciding who is to be on the board. This is the concern that was raised by Mace (1986) who argued that the board was not able to fulfill its oversight responsibility and protection of shareholder's interest. This is known as managerial "hegemony". Thus, directors are argued to act merely as ceremonial rubber stamps (Mallette

and Fowler, 1992). To ensure that the board oversight function is effectively carried out, outside directors are appointed who would bring to the board independent views and expertise. Daynton (1984, 35) claimed that ". . . the board must be independent of management" to enable it to carry out its oversight functions more effectively. Weisbach (1988) argues that high outside directors' incentives to monitor management arise because these directors would not want to associate themselves with troubled companies. Fama and Jensen (1983) suggest the market for "labor" hypothesis might explain the outside directors' incentive to monitor management who are argued to derive their value by actively monitoring the manager's performance. Outside directors are also argued to be experts in decision control (Fama and Jensen, 1983).

Studies on board independence (e.g., Benston, 1985; Coughland and Schmidt, 1985; Kosnik, 1987 and 1990; Hermalin and Weisbach, 1988; Weisbach, 1988) provided evidence of the importance of board independence on its monitoring effectiveness. Several studies that followed attempted to link the board's independence to the firm's processes of preparing external reports. Beasley (1997), for instance, found that the incidence of fraudulent financial reporting was negatively associated with the extent of outside directors' presence on the board. In his study, Beasley (1997) also showed that his findings were identical where the board's independence was measured by the extent of the presence of non-executive directors or outside directors. Thus, the definition of board independence could either be the extent of the presence of independent directors or the extent of the presence of non-executive directors on the board. The recent study by Klein (2002) provided additional evidence, which showed that board independence leads to lower levels of accrual management, suggesting the importance of board independence in increasing board vigilance. A study in the UK by Peasnell, Pope and Young (2000) also found that the higher extent of non-executive directors of the board was effective in constraining the level of manipulation through discretionary accruals both during the pre-Cadbury Report period and the post-Cadbury Report period. Thus, this evidence supports the role of the board's independence on the financial reporting processes. The evidence by Shivdasani (1993) reinforces the importance of board independence when he found that outside directors of hostile takeover targets hold fewer additional outside

directorships than outside directors of non-target firms.

However, limited evidence on the insignificant influence of board independence has also been documented. For instance, MacAvoy et al. (1983) found that the performance of firms whose boards were dominated by outside directors was not significantly different from those firms whose boards were not dominated by outside directors. Fosberg (1989) also did not find evidence to show that boards that were dominated by outside directors monitored better than boards that were not. Kosnik (1987) argues that the use of short-term financial measures might have failed to capture the roles of board independence.

Evidence in Malaysia on the effectiveness of the boards of directors in discharging their duties with regard to financial reporting is very limited. Shamsul Nahar Abdullah (1999) found that the greater extent of independent directors on the board led to higher earnings quality. His findings also showed that similar findings emerged when board independence was measured by the extent of non-executive directors making up the board. Another study by Shamsul Nahar Abdullah (forthcoming) found that the board's independence was not associated with a firm's higher performance, as measured by the ROE and ROA. The evidence thus far on board independence and its monitoring incentives in Malaysia is therefore indeterminate. On the determinants of board independence, Shamsul Nahar Abdullah (2002b) found that the extent of the board's interests, CEO duality and the firm's size negatively influence a board's independence. His study also found that a board's size and the extent of a single largest shareholder's interests in the firm are positively associated with the board's independence. The fact that large firms are associated with low board independence is surprising as it would be expected that large firms are considered to have high agency costs. Thus, these large companies are expected to lead in practicing good corporate governance by having independent boards. Evidence in Malaysia indicates that the boards of directors among Malaysian listed companies are found to be dominated in numbers by outside directors (Shamsul Nahar Abdullah, 1999; 2001 and 2002b). Nonetheless, evidence of the extent of board independence and its effectiveness in carrying out its duties is not clear, though evidence from developed countries indicates the influence of board independence on its monitoring incentives. Thus, the following null hypothesis is proposed:

H_{02}: *There is no significant influence of board independence on accrual management.*

3. THE INDEPENDENCE OF AUDIT COMMITTEES

Audit committees were first recommended in the US Stock Exchange Council's Accounting Series Release No. 19 which proposed the establishment of audit committees comprising non-executive directors. Vinten and Lee (1993) argue that the Council's effort for the establishment of audit committees was in response to the McKesson-Robbins case in the 1940's. Nonetheless, the SEC only required the formation of audit committees for all companies listed on the NYSE in 1978. The benefits of having an audit committee are well recognized in the literature (e.g., Chambers and Snook, 1978; Azham Md Ali, 1990). The Treadway Committee (1987) argues that an audit committee enhances the reliability of the firm's financial reporting process.

The audit committee is a sub-committee of the board of directors. Thus, the audit committee is formed by the board of directors whose terms of reference and memberships are determined at the board level. The audit committee is, therefore, accountable to and reports directly to the board. The establishment of the audit committee is aimed at providing an avenue for the firm's external auditors to communicate their findings in their audit to the board. Though the external auditors could report directly to the board, this is not expected to happen for fear that the management may think that they have gone over their heads (Buckley, 1979). Thus, it is argued that the audit committee boosts the independence of the firm's external auditors. Vinten and Lee (1993) further argued that the audit committee acts as a means of communication between the external and internal auditors. This is achieved because the nature of the work of the audit committee requires it to work closely with the firm's internal auditors. The close working relationship should enhance the independence of the internal auditors. The overall impact is an increase in the level of external auditor independence, which is important for the firm's financial process. Evidence, which shows a positive relation between big audit firms and the presence of audit committees (Eichenseher and Shields, 1985; Pincus, Rubarsky and Wong, 1989), should support this contention.

It has been argued that the establishment of audit committees assists

the outside directors of the board to fulfill their statutory duties in financial reporting and evidence supportive of this contention is also documented by Pincus, Rubarsky and Wong (1989). In their study, they found that the establishment of an audit committee was positively associated with the percentage of outside directors on the board. However, Bradbury's (1990) result did not support the evidence provided by Pincus, Rubarsky and Wong (1989). Rather, the study found that the existence of an audit committee is associated with a board's size and the presence of major outside shareholders. Thus, Bradbury (1990) argues that directors' incentives might have played an important role in determining the existence of an audit committee. Evidence thus far on the incentives for the formation of audit committees is mixed. It is also argued that audit committees are formed for window-dressing purposes (e.g., Menon and Williams, 1994). Menon and Williams (1994) argued that for an audit committee to be effective, it should be relied on by the board in that their recommendations are seriously considered by the board. In Malaysia, it was found that the majority of listed companies formed audit committees before the deadline set by the KLSE, i.e., 1 August 1994 (Al-Murisi et al., 1997). Thus, the motive for audit committee formation could primarily be interpreted as fulfilling the listing requirements. Al-Murisi et al.'s evidence was subsequently confirmed by Shamsul Nahar Abdullah (2002a) who found that the establishment of audit committees among Malaysian-listed companies was mainly to satisfy the Exchange's Listing Requirements.

Empirical evidence of the audit committee's roles in financial reporting generally showed that it is effective in discharging its duties (e.g., Wild, 1994; McMullen, 1992; Cobb, 1993). However, it is the attributes of the audit committee that make it effective, independence being the most important attribute. McMullen (1992) found that the incidence of errors, irregularities and illegal acts is negatively associated with the percentage of outside directors on the committee and the frequency of the meetings. This evidence supported the earlier contention by Jemison and Oakley's (1983) study in which they argue that an effective audit committee requires its members to be solely independent directors. In the UK, the Cadbury Report (1992) recommends that an audit committee be made up of at least three non-executive directors, reflecting the importance of the audit committee being independent of management. In Malaysia, audit committees have been required by the KLSE in its Listing Requirements effective since

1 August, 1994 (Section 15A). Details of audit committee functions were contained in Section 344A of the Listing Requirements. The KLSE Listing Requirements require listed companies to maintain audit committees with a minimum of three members, the majority of whom are non-executive directors. Klein (2002) argues that to be an active overseer of the firm's financial reporting process, the audit committee should be independent. His evidence supported his prediction that audit committee independence was negatively associated with earnings management.

However, they did not find evidence to show that either the extent of outside directors on the committee or the age of the audit committee had an impact on the audit committee effectiveness. Evidence on the influence of accountants on the audit committee effectiveness was consistent with the findings in the US (e.g., McMullen, 1992). Nonetheless, the insignificant influence of audit committee independence and the age of the audit committee on its effectiveness contradict the evidence in the US (e.g., Kolins, Cangemi and Tomasko, 1991; Abdolmohammadi and Levy, 1992; Cobb, 1993).

Evidence of the relation between board independence and its monitoring incentives is very limited and mixed. One of the earliest works on this was by Shamsul Nahar Abdullah and Al-Murisi (1997) who failed to establish the influence of audit committee independence on its effectiveness. Shamsul Nahar Abdullah (1999) discovered, however, that audit committee independence was found to be effective, which supports the findings provided by Wild (1994). Both studies relied on the earnings response coefficient as a measure of audit committee effectiveness. Nonetheless, a subsequent study by Shamsul Nahar Abdullah and Ku Nor Izah Ku Ismail (1999) failed to find evidence of the significant influence of audit committee independence on its effectiveness. In another study that followed, Takiah Iskandar and Romlah Jaafar (2001) showed that the audit committee was found to be effective in helping to improve the financial performance of the firm. Their study, nonetheless, did not examine audit committee independence.

Perhaps, the effectiveness of the audit committee is explained by the motive for its formation. If the motive for its formation is to strengthen the financial reporting process and to preserve auditor independence, it is expected that the audit committee would be effective in carrying out its duties of overseeing financial reporting and its independence should

further enhance its effectiveness. Conversely, if the audit committee is formed for the purpose of compliance, its effectiveness can be questioned. The fact that the listed companies formed audit committees towards the deadline (i.e., 1 August 1994) (Al-Murisi et al., 1997) and the fact that companies formed audit committees with the primary objective of satisfying the KLSE Listing Requirements may suggest that they are not formed for the purpose of improving the financial reporting process.

H_{02}: Audit committee independence is not related to accrual management levels.

4. METHODOLOGY

All KLSE non-financial Main Board listed companies as at 31 December, 1997 were included in this study, excluding finance and trust companies. Financial companies were excluded because they are regulated by the Central Bank of Malaysia and their nature of operations had a significant impact on the accruals. The data were collected from companies' 1998 annual reports. Companies in the study had to be already listed on the KLSE in 1997 to enable the computation of DACC, which required data for 1998 and 1997.

The financial year-end 1998 was chosen because during this period, the issue of corporate governance became a very prominent topic as it was argued that the lack of corporate governance was the reason for the 1997 crisis in Malaysia. It is, therefore, of great concern to determine the state of corporate governance during this period and whether it was really weak and whether board independence and audit committee independence were able to constrain accrual management. Another reason is that the Report on Corporate Governance by the High Level Finance Committee was published in March 1999. The Report contained various recommendations regarding board composition to ensure its independence. Thus, the financial year 1998 should provide an opportunity to test the impact of board independence as well as audit committee independence in the absence of specific recommendations.

Manipulation of accounts could be achieved by various means, such as the use of accruals, switches in accounting policies or changes in the capital structure (Jones, 1991). Compared to other methods, the use of accruals is argued to be the most attractive method as it is very

difficult to detect. Total accruals are measured as the change in non-cash working capital before income taxes payable less total depreciation expense, being defined as the change in current assets other than cash and short-term investments less current liabilities other than current maturities of long-term liabilities and income taxes payable. Several studies (e.g., DeAngelo, 1986; Healy, 1985) partitioned the total accruals into discretionary and non-discretionary components.

In this study, accrual management was measured as the abnormal (or discretionary) working capital accruals (i.e. DACC). Manipulation through working capital accruals is very attractive as it has no direct cash flow consequences and is relatively difficult to detect (Gore, Pope and Singh, 2001). This working definition of DACC is different from Jones' (1991) model, which used total accruals that included depreciation of fixed assets. According to DeFond and Jiambalvo (1994), working capital accruals, which exclude depreciation as employed by Jones (1991), are more susceptible to manipulation than non-working capital accruals. Moreover, according to Beneish (1998), the use of long-term accruals, such as depreciation, for manipulation is more transparent and economically implausible. Another variant of the Jones' model was used by Klein (2002) who defined accrual management as total accruals.

The simple model developed by Jones (1991) to measure DACC is used and applied cross-sectionally and was earlier employed by Peasnell, Pope and Young (2000) and Gore, Pope and Singh (2001). Peasnell, Pope and Young (2000) found that the model was almost indistinguishable from the Dechow, Sloan and Sweeny (1995) modified version in detecting the levels of earnings management. Working capital accruals (WCA) is defined as the change in non-cash working capital. Total working accruals estimation is, therefore, computed as follows: WCA = Δ(CA–CASH) - Δ(CL–CBORR), where CA is current assets, CASH is cash and cash equivalent, CL is current liabilities and CBORR is borrowings repayable in one year.

The total working capital accruals would then be partitioned into discretionary accruals (DACC) and non-discretionary accruals (NDACC) and the following cross-sectional ordinary least squares (OLS) regression is used to estimate the parameters needed to estimate DACC and NDACC:

$$(1) \qquad WCA_{ijt} / TA_{ijt-1} = \beta_{0jt} + \beta_{1jt} \Delta REV_{ijt} / TA_{ijt-1} + \varepsilon_{ijt}$$

Where:

TA	= Total assets
REV	= Total sales
i, j, t	= Firm, industry and year

The NDACC is the predicted component of the regression while the residual of the regression represents the DACC. Thus:

$$(2) \quad DACC_{ijt} = WCA_{ijt} / TA_{ijt-1} = NDACC_{ijt}$$
$$= WCA_{ijt} / TA_{ijt-1} - (\beta_{0jt} + \beta_{1jt} \Delta REV_{ijt} / TA_{ijt})$$

Both the β_0 and β_1 are the industry-year OLS estimates found in the regression (equation 1).

4.1 TEST VARIABLES

Two test variables in this study were board independence (*BDIND*) and audit committee independence (*ACIND*). The variable *BDIND* was measured by the extent of outside directors on the board. Outside directors were defined as ones who were not presently officers of the company. *BDIND* was treated as a continuous variable being measured by dividing the number of outside directors by the number of directors on the board. The second test variable is the audit committee independence, labeled as *ACIND*. *ACIND* was treated as a continuous variable measured by dividing outside directors on the audit committee by the total directors on the audit committee. A further analysis would be carried out by treating *ACIND* as a dummy variable with "1" if all members were outside directors and "0" if members were a combination of both outside and executive directors. This would determine if the audit committee is composed of all outside directors, whether it improves its effectiveness.

4.2 CONTROL VARIABLES

Several control variables were included in the analysis. First, the presence of at least one director on the board with substantial interest. The variable is labeled as *LRGDIR*. This variable is treated as a dummy variable with "1" being given if the board has a director(s) with at least

five percent of shares and "0" if there was none. The presence of a significant director on the board could impair the board's independent views where the views of the significant directors are given more weight at the expense of the minority shareholders. The Malaysian Code on Corporate Governance (2001) does caution on the potential impact on the board's independence in the presence of significant shareholders in the company.

Second, board of directors' interest (*BDINT*) reflects the extent of the agency costs. High directors' shareholdings add to directors' greater monitoring incentives to constrain management manipulative behaviors. Thus, high board's interest should align closely the interest of the board with that of the shareholders resulting in a lower incident of accrual manipulation. Third, a variable measuring the presence of a dominant personality (*CEODLT*) is also included as a control variable. The role of the board of directors is nothing more than that of a "ceremonial rubber stamp" when the two top roles are combined (Kosnik, 1987). The presence of a dominant personality is predicted to lead to greater accrual manipulation as a deliberate attempt by the CEO cum Chairman to justify the combination of the roles. Moreover, the presence of a dominant personality could impair a board's independence. Fourth, auditor quality (*AUDTR*) is also expected to influence earning management. Due to the varying size of audit firms and the scope of audit work, the issue of auditor independence naturally emerges. Auditor independence leads to an auditor's ability to be able to detect irregularities by being able to independently determine the scope of audit work and the techniques to be employed and the extent of their implementation (Collier and Gregory, 1996). Thus, audit quality is operationalized by categorizing audit firms into the Big-6 and the non Big-6 (before 1998) and into the Big-5 and the non Big-5 (after 1998). This is because, for the financial year 1997, there were six big audit firms (known as the Big-6). During the financial year 1998, two of the big six audit firms merged resulting in five big audit firms (known as the big-5). Evidence by Gore, Pope and Singh (2001) found that the provision of non-audit services by non-big audit firms impaired the auditor's ability to constrain earnings management more severely than the big audit firms. This evidence should suggest that the type of auditor is associated with the auditor's independence and thus its ability to constrain earnings management.

Fifth, gearing (*GRG*) is the ratio of a firm's total debt to its total

assets. This ratio measures the closeness of a company to breaching debt covenants. High gearing is predicted to positively influence earnings manipulation. Alternatively, high gearing could also result in contractual renegotiation and income–decreasing accruals (Gore, Pope and Singh, 2001). Thus, the direction of *GRG* is indeterminate. As for a firm's size, the natural log of the firm's total assets is used. The political cost hypothesis predicts that large companies would be inclined to employ income-deceasing accruals in order to avoid political visibility. Nonetheless, it could also be argued that, by virtue of its large size, a large company is more likely to generate more accruals.

The variable size (*SIZE*) is also included as it is argued that this variable to measures the extent of a firm's political costs (Watts and Zimmerman, 1990). High political costs could lead to close scrutiny by the government resulting in the possible withdrawal of subsidies or wealth transfers. Thus, this could lead to big firms manipulating accrual so that the reported earnings are low. Finally, tightness of shareholdings (*TIGHTN*) could result in lower information asymmetry. Moreover, a low degree of shareholders' dispersion signals low agency costs. This variable is measured by a firm's top twenty shareholders' total shareholdings.

The following model was developed to test the hypotheses:

$$DACC_{it} = \beta_0 + \beta_1 BDIND_{it} + \beta_2 ACIND_{it} + \beta_3 BDINT_{it} + \beta_4 CEODLT_{it} + \beta_5 LGDIR_{it} + \beta_6 AUDTR_{it} + \beta_7 GRG_{it} + \beta_8 SIZE_{it} + \beta_9 TIGHTN_{it} + \varepsilon_{it"} \quad (3)$$

The coefficients of interest are and β_1 and β_2 and they are expected to be negative in value.

5. RESULTS

A total of 454 companies were listed on the KLSE Main Board in 1998. After excluding finance and trust companies, a total of 350 companies with available data were included in the analysis. Table 1 presents the descriptive statistics of all the variables.

The discretionary accruals (*DACC*) were found to be close to zero (and the *t*-test also found they were not significantly different from zero). This was expected as they should be close to zero by construction.

TABLE 1
Descriptive Statistics (n=350)

Panel A: Continuous Variables

Variable	Range	Mean	Standard Deviation	Skewness
DACC	-.73 – 2.58	.00752	.214	4.6219
BDIND	25% - 100%	68.23%	15.69	-.0001
BDINT	0% - 81.91%	26.27%	23.10	.0001
TIGHTN	11.98% - 98.07%	73.10%	15.59	-.0001
GRG	0 – 633.4	30.24	41.52	.0667
SIZE	8.39 – 17.55	13.228	223.44	.0000

Panel B: Binary Variables

Variable	Value 0	Value 1	Mode
ACIND	21.5%	78.5%	1
CEODL	22.1	77.9%	1
LRGDIR	32.5%	67.5%	1
AUDTR	20.3%	79.7%	1

About two-thirds of board's members are outside directors and almost eighty percent of audit committees consisted of entirely of outside directors. Figures in Table 1 also show that about seventy-eight percent of the companies separated the roles of the board chairman and CEO. Thus, both of these figures suggest that the boards of directors and audit committees are independent of management and that the top two roles in a firm are generally held by two different persons. Thus, the form of the corporate governance seems to be satisfactory as the requirements by the KLSE were to form an audit committee the majority of whom are directors independent of management (KLSE Listing Requirements, Section 15A). The composition of the boards of directors and the prevalence of CEO non-duality are generally consistent with the recommendations in the Cadbury Code. With the exception of *DACC*, the skewness of each of the continuous variables is satisfactory. Thus the normality assumption is satisfied.

One prominent feature of the boards of directors in Malaysia was the presence of directors holding a substantial interest. This evidence is shown in Table 1, which indicates that two-thirds of the companies

maintain at least one director with a substantial interest in the company. The presence of directors on with substantial interest on a board could impair the board's independence as its decisions might be biased towards the majority shareholders at the expense of a firm's minority shareholders.

The pattern of ownership suggests that a firm's interests are tightly controlled where more than seventy-three percent of interest is held by the firm's top twenty shareholders. Moreover, the board holds more than twenty-five percent of the firm's interest. This evidence, therefore, confirms the earlier suggestions made by Fatimah Abu Bakar (2001).

Table 2 presents the results from the regression analysis. Three regression models were run. The first model measured *BDIND* and *ACIND* by the percentage of outside directors. The second model measured *ACIND* as a dummy variable with "1" being all the audit committee comprising all outside directors and "0" if it did not. In the third model, the effects of the interaction between *BDIND* and *ACIND* were tested. Results from the regression analysis for all the models were corrected for heteroskedasticity.

Results from Table 2 show that neither board independence nor audit committee independence influences the extent of accrual management. The insignificant influence of both *BDIND* and *ACIND* was consistent in all the three models. The interactive effects of *BDIND* and *ACIND* were also not found to be significant. Thus, both null hypotheses were accepted. Nonetheless, the sign of the influence of the board's independence and audit committee independence was generally in the predicted direction. Only one controlled variable was found to be significant: *TIGHTN*. The evidence implies a positive influence of the degree of ownership dispersion on accrual management level. This is not consistent with our expectations. None of the models suffered from severe multicollienarity problems, as the variance inflation factors ranged between 1 and 3. A Pearson correlation analysis was also carried out to determine the association between *BDIND* and *ACIND* and the correlation coefficient was found to be .315 (p<.000). Thus, the correlation between BDIND and ACIND was not very serious as it is only serious when the correlation coefficient is above .80 and it is significant.

Further analyses were carried out to determine the roles of the boards of directors when being faced with a "crisis". Kosnik (1987)

TABLE 2
Multiple Regression Results Corrected for Heteroskedasticity (n=347)

Parameter	Model 1		Model 2		Model 3	
	Coeff.	*t*-ratio	Coeff.	*t*-ratio	Coeff.	*t*-ratio
Constant	-.299	-.3.076*	-.300	-3.401*	-.2198	-1.026
BDIND	-.0004	.0006	.0287	1.215	-.0006	-.237
ACIND	-.0003	.0006	-.0050	-.255	-.0014	-.533
BDINDxACIND					.00002	.431
LRGDIR	-.0078	.0296	-.0121	-.424	-.0079	-.266
CEODL	.0215	.0209	.0221	1.030	.02145	1.025
BDINT	.00012	.0006	.0002	.311	.00013	.197
AUDTR	.0070	.0217	.0069	.318	.0066	.303
GRG	-.0002	.0002	-.0002	-1.148	-.0002	-1.12
SIZE	.0087	.0055	.0080	1.495	.0086	1.569
TIGHTN	.0022	.0007*	.0021	3.090*	.00256	3.122*
Adjusted-R^2	.0533		.0563		.0508	
F-ratio	3.16*		3.31*		2.85*	
Durbin-Watson	2.189		2.192		2.192	
VIF range	1.034	-3.051	1.031	-3.141	1.034	-93.97
Breusch-Pagan	20.18		19.81		20.35	

Note: * indicates significance at the 5% level.

suggested that a "crisis" situation could unveil the "real" roles of the board of directors. Two crisis situations were examined: change in turnover and change in operating profits. A negative change in turnover could signal that the firm was facing difficulty and thus the board of directors could be expected to "flex" its muscles by ensuring that the management does not manage accruals to meet the earnings target. Hence, two sub-samples were created; one being companies that experienced zero or positive change, while the other being companies that experienced negative change. Table 3 presents the results from the regression analysis which had been were corrected for heteroskedasticity.

The results in Table 3 show that both board independence and audit committee independence remained insignificant for both sub-samples. The influence of control variables on the extent of accrual

TABLE 3
Multiple Regression Results with Revenue Change Corrected for Heteroskedasticity

Parameter	Positive Revenue Change (n=159)		Negative Revenue Change (n=188)	
	Coefficient	t-value	Coefficient	t-value
Constant	-.0581	-.486	-.3914	-2.668*
BDIND	-.0005	-.561	.0006	.731
ACIND	-.0006	-.769	.0001	.157
LRGDIR	-.0605	-1.46	.0325	.802
CEODL	.0319	1.59	.0215	.595
BDINT	.0017	1.90**	-.0013	2.208*
AUDTR	.0372	1.159	-.0075	-.277
GRG	-.0000	-.203	-.0008	-1.32
SIZE	.0002	.027	.0134	1.494
TIGHTN	.0014	1.563	-.0024	2.208*
Adjusted-R^2	.010		.092	
F-ratio	1.14		3.06*	
Durbin-Watson	1.99		2.07	
Breusch-Pagan	22.6		15.28	
VIF range	1.042	-3.086	1.055	-3.334

Note: *, ** indicate significance at the 5% and 10* levels respectively.

management remained almost the same as found in the full model in Table 2. Thus, the extent of change in the revenue did not have a significant impact on the pattern of accrual management.

Finally, an analysis of the effect of change in the operating profits was carried out. A reduction in the operating profit could mean that the firm was facing a "crisis" and thus the board would be expected to be more effective when facing this situation. Two sub-samples were created: one sub-sample with either zero or positive change, and the other with negative change. The results corrected for heteroskedasticity are shown in Table 4.

The findings from both sub-samples failed to show any significant influence of either the board's independence or the audit committee on accrual management. The model for sub-samples with zero and positive

TABLE 4
Multiple Regression Results with Operating Profit Change Corrected for Heteroskedasticity

Parameter	Positive Profit Change (*n*=93)		Negative Profit Change (*n*=254)	
	Coefficient	*t*-ratio	Coefficient	*t*-ratio
Constant	-.3942	-2.638*	-.2081	-.1.857**
BDIND	.0016	1.489	-.0014	-.198
ACIND	-.0012	-1.173	-.00001	-.016
LRGDIR	.0340	.703	-.0306	-.873
CEODL	-.0624	-2.329*	.0602	2.362*
BDINT	-.0005	-.542	.0002	.214
AUDTR	-.0355	-.727	.0288	1.189
GRG	-.0003	-1.045	.0003	.506
SIZE	.0120	1.274	.0060	.862
TIGHTN	.0035	3.011*	.0013	1.634
Adjusted-R^2	.204		.026	
F-ratio	3.59*		1.75**	
Durbin-Watson	2.08		2.16	
Breusch-Pagan	38.53		6.029	
VIF range	1.2	-3.699	1.051	-3.23

Note: *, ** indicate significance at the 5% and 10% levels, respectively.

operating income change explained the variance in the accrual management better than the other models. The findings of control variables remained generally identical to those found in other regression models.

6. DISCUSSION AND CONCLUSIONS

The findings of this study showed that neither board independence nor audit committees are significant in explaining the level of accrual management. This evidence is, therefore, consistent with evidence provided by Shamsul Nahar Abdullah (forthcoming), in which he found that boards of directors did not significantly influence firm's performance. The findings on the insignificance of board independence on the financial reporting process contradict the findings of Klein (2002). Perhaps, the boards of directors in Malaysia focus more attention on the long-term aspects of the firm instead of on the operational details. Thus, the issue of financial reporting details may not be an important item on the agenda in the board meetings. Moreover, the roles of overseeing the firm's financial reporting have been delegated to the firm's audit committee since 1993 when the KLSE required all listed companies to form audit committees. Another explanation could be that the year of the study, i.e., 1998, was the period in which companies in Malaysia were facing a severe financial crisis. Thus, more attention might have been directed towards improving the financial health of the firm than on the issue of financial reporting. The third explanation could be related to the appointment of outside directors to the board of directors. The outside directors who are appointed to the boards are "truly" outside directors and they have no connection with the management. Among Malaysian companies, it is very difficult to find outside directors who are truly independent as Malaysian companies are very closely held and mostly are family controlled. The fact that the average top twenty shareholdings was at seventy-three percent found in the present study confirmed the tightness of ownership. This evidence might explain the insignificant influence of board independence on accrual management and its contradiction with the evidence of Klein (2002).

The fact that the independence of audit committees did not effectively constrain accrual management is perplexing. This evidence is not, therefore, consistent with that found by Klein (2002). Audit

committees had been required by the KLSE since 1993, and therefore, during the period of this study, the audit committees should have been mature and able to carry out the role of overseeing financial reporting. Earlier studies on audit committees (e.g., Shamsul Nahar Abdullah and Al-Murisi, 1997; Shamsul Nahar Abdullah and Ku Nor Izah, 1999; Shamsul Nahar Abdullah, 1999) showed that findings on the effectiveness of audit committees were not consistent. One argument for the inconsistent findings was that the audit committees were new in the Malaysian corporate governance system. Thus, they needed time to mature. However, the findings of the present study suggest that even though audit committees have been in the Malaysian corporate system for quite some time, their effectiveness is still doubtful. Therefore, an alternative explanation is plausible, i.e., the mandatory requirement of audit committee formation. According to Shamsul Nahar Abdullah (2002a), the major motivation for forming audit committees among the listed companies was the mandatory requirement by the KLSE. Thus, audit committees are not voluntarily formed to improve the internal corporate governance system rather companies were forced to maintain audit committees. Thus, realizing the benefits of having an audit committee may not be the primary goal of a listed firm, which could contribute to it not being effective. Findings in Shamsul Nahar Abdullah's2002a) study showed that the reasons for forming audit committees for the purpose of assisting directors in discharging statutory responsibilities with regard to financial reporting and of preventing frauds, irregularities and errors were ranked eighth and ninth, respectively (out of twelve items). These two areas are among the primary roles of an audit committee and, therefore, these two items should have received higher ranks if companies were serious about the objectives of having an audit committee.

The recent issuance of Practice Notes 13 (PN13) by the KLSE could increase the pool of qualified candidates who could become audit committee members. The contents of PN13 state that those who are not members of the Malaysian Institute of Accountants could also serve as audit committee members (as per paragraphs 9.27 (c) and 15.10 (c)(iii)) if they have relevant accounting or finance qualifications with a minimum of three years of working experience in accounting or finance. It is expected that the practice note would make listed companies appoint audit committee members with appropriate accounting and finance skills.

Only one control variable was found to be significant in influencing the level of discretionary accruals, i.e., the degree of dispersion of shareholdings (*TIGHTN*). The direction of the influence was found to be positive. The positive direction means that the more closely-held the shares, the more likely the incidence of accrual management. This evidence contradicts the agency theory expectation. The agency theory predicts a negative direction. One explanation for this contradictory finding is that the degree of dispersion was measured by the total shareholdings of the top twenty shareholders. These shareholders include both active and passive investors. Active investors are the ones who have developed a long-term interest in the firm. They are usually individual investors who hold substantial shares in the firm as opposed to retail investors who are interested in quick profits. Examples of passive investors are institutional investors and fund managers. These investors usually hold a significant amount of shares but they are not usually involved actively in the affairs of the firms as they have a number of firms in their portfolio to be managed. The findings of Shamsul Nahar Abdullah, Mohd Azlan Yahya and Faisol Elham (1999) supported this contention in that they found that the extent of shareholdings by institutional shareholders was partly driven by a firm's profitability. Perhaps, the incentives to show high profits had motivated management to manipulate earnings through accrual manipulation due to the pressure from profit-oriented investors (e.g., Dobryzynski et al., 1986).

The presence of directors with substantial interest on a board was not found to have a significant effect on the level of accrual management. These directors either held the shares for themselves or as a representative of their family investments in the firm. These directors are expected to be active in the monitoring of management and they may well be in the management team themselves. However, the fact that they were not found to play an active role in constraining the management to manipulate earnings might be explained as follows. First, these "substantial directors" may not have a detailed knowledge of accounting. Thus, their ability to contribute actively in the financial reporting process is limited. Second, these "substantial directors" may be part of the scheme to mislead the other shareholders, especially the minority shareholders. This contention, though not tested in this study, may be consistent with the claim of Mohd Khairi Mohd Isa (2002) about the case of Tat Sang Holdings Bhd. The company showed how

the management of Tat Sang effectively manipulated projected earnings when the actual earnings were far below the projected earnings with big losses. Another incident in the company was the sale of an asset worth millions of ringgit for only fifty thousand ringgit without approval from the shareholders. The case of Tat Sang provides anecdotal evidence, which is consistent with the findings of this study on the roles of the board which are not necessarily consistent with the shareholders' expectations.

Three conclusions could be drawn from this study, which are as follows. First, the board independence does not influence the level of accrual management. Second, audit committee independence is not associated with the accrual management level. Thus, neither the board's nor the audit committee's structures are related to accrual management. Third, the extent to which ownership is closely-held (measured by *TIGHTN*) does influence the accrual management level in a positive direction. This evidence suggests that the more closely-held the shares are, the more likely management is to manipulate earnings through accruals.

Finally, four limitations are acknowledged. First, this study investigates the outcomes rather than the process. Thus, future research might investigate the process and the extent to which both the board and the audit committee's are involved in the financial reporting process. Second, this study employed the model developed by Jones (1991). Though this model was shown by Peasnell, Pope and Young (2000) to be indistinguishable from the model developed by Dechow, Sloan and Sweeny (1995), future studies may employ the latter's model to see which model is more powerful in detecting earnings management in Malaysia. Finally, the low explanatory power of the regression model implies that there are other variables that are not included in the model. Perhaps, in the future, these omitted variables could be identified and tested. Fourth, this study only focused on one financial year, i.e., 1998. Perhaps, in the future, a longitudinal study should be carried out to determine the effect of time period on the accrual management tendency.

REFERENCES

Abdolmohammadi, M.J., and S.L. Levy. "Audit Committee Members' Perception of their Responsibilities." *Internal Auditing* 8, no. 1

(1992): 53-63.

Al-Murisi, A.L.S.M., Adika Shiraz, Iskandar Adon, and A. C. Valida. "Audit Committees in Malaysia: Patterns of Establishment and Characteristics." Unpublished Working Paper, School of Accountancy, Universiti Utara Malaysia, 1997.

American Law Institute. *Principles of Corporate Governance and Structure: Restatement and Recommendations*. New York: American Law Institute, 1982.

Azham Md Ali. "The Invaluable Audit Committee." *Malaysian Management Review* 25, no. 3 (1990): 63-76.

BBC News. "Enron Bribed Tax Officials." February 14 (2003). (http://news.bbc.co.uk/1/hi/business/2756345.stm.) (accessed on February 26, 2004).

Beasley, M. "An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud." *The Accounting Review* 71, no. 4 (1997): 443-65.

Beneish, M.D. "Discussion of 'Are Accruals during Initial Public Offerings Opportunistic?' *Review of Accounting Studies* 3, no. 1&2 (1998): 209-21.

Benston, G. "The Self-serving Management Hypothesis: Some Evidence." *Journal of Accounting and Economics* 7, no. 1/2/3 (1985): 67-84.

Bradbury, M.E. "The Incentives for Voluntary Audit Committee Formation." *Journal of Accounting and Public Policy* 19, no. 1 (1990): 19-36.

Brickley, J. A., J. L. Coles, and R. L. Terry. "Outside Directors and the Adoption of Poison Pills." *Journal of Financial Economics* 35, no. 3 (1994): 371-90.

Buckley, R. *Audit Committees: Their Roles in the UK Companies*. England: Auditing Practices Committee of the Consultative Committee of Accounting Bodies, 1979.

Byrd, J. W., and Hickman, K.A. "Do Outside Directors Monitor Managers? Evidence from Offer Bids." *Journal of Financial Economics* 32, no. 2 (1992): 195-222.

Cadbury Report. *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee & Co., 1990.

Chambers, A.D., and A.J. Snook. "Survey of Audit Committees in the United Kingdom: A Summary of Findings." Working Paper No. 10,

City University Business School, 1978.

Cobb, L.G. "An Investigation into the Effect of Selected Audit Committee Characteristics of Fraudulent Financial Reporting." Doctoral Dissertation, University of South Florida, 1993.

Collier, P., and A. Gregory. "Audit Committee Effectiveness and Audit Fee." *European Accounting Review* 5, no. 2 (1996): 177-98.

Coughlan, A.T., and R.M. Schmidt. "Executive Compensation, Management Turnover and Firm Performance: An Empirical Investigation." *Journal of Accounting and Economics* 7, no. 1/2/3 (1985): 43-66.

Daynton, N.K. "Corporate Governance: The Other Side of the Coin." *Harvard Business Review* 62, no. 1 (1984): 34-37.

DeAngelo, L.E. "Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders." *The Accounting Review* 61, no. 3 (1986): 400-20.

Dechow, P.M., R.G. Sloan, and A.P. Sweeny. "Detecting Earnings Management." *The Accounting Review* 70, no. 2 (1995): 193-225.

DeFond, M.L., and J. Jiambalvo. "Debt Covenants Violation and Manipulation of Accruals." *Journal of Accounting and Economics* 17, no. 1/2 (1994): 145-176.

Dobrzynski, H. J., Z. Schiller, G. L. Miles, J. R. Norman, and R. W. King. "More Than Ever, It's Management for Short Term." *Business Week*, November 24 (1986): 92-3.

Eichenseher, J.W., and D. Shields. "Corporate Director Liability and Monitoring Preferences." *Journal of Accounting and Public Policy* 4, no. 1 (1985): 13-31.

Fama, E., and M.C. Jensen, "Separation of Ownership and Control." *Journal of Law and Economics* 26, no. 2 (1983): 301-26.

Fatimah Abu Bakar. "Corporate Governance in Financially Troubled Companies." Paper Presented at the *Seminar on Corporate Governance: Issues and Challenges*, Universiti Utara Malaysia, 10 June 2001.

Finance Committee on Corporate Governance. *Report on Corporate Governance.* Kuala Lumpur: High Level Finance Committee on Corporate Governance, 1999.

______. *Malaysian Code on Corporate Governance.* Kuala Lumpur: Malayan Law Journal Sdn. Bhd., 2001.

Fosberg, R. H. "Outside Directors and Managerial Monitoring." *Akron Business and Economics Review* 20, no. 2 (1989): 24-32.

Gore, P., P.F. Pope, and A.K. Singh. "Non-audit Services, Auditor Independence and Earnings Management." Working Paper. Lancaster University, January 2001.

Healy, P. "The Effect of Bonus Schemes on Accounting Decisions." *Journal of Accounting and Economics* 7 no. 1/2/3 (1985): 261-79.

Hermalin, B. E., and M. S. Weisbach. "The Determinants of Board Composition." *RAND Journal of Ecomonics* 19, no. 4 (1988): 589-606.

Jemison, D., and P. Oakley. "Corporate Governance in Mutual Insurance Companies." *Journal of Business Research* 11, no. 4 (1983): 501-22.

Jensen, M. C., and W. H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics* 3, no. 4 (1976): 305-60.

Jones, J. "Earnings Management During Import Relief Investigation." *Journal of Accounting Research* 29, no. 2 (1991): 193-228.

Kini, O., W. Kracaw, and S. Mian. "Corporate Takeovers, Firm Performance, and Board Composition." *Journal of Corporate Finance* 1, no. 3 (1995): 383-412.

Klein, A. "Audit Committee, Board of Director Characteristics, and Earnings Management." *Journal of Accounting and Economics* 33, no. 3 (2002): 375-400.

Kolins, W. A., M. P. Cangemi, and P. A. Tomasko. (1991), "Eight Essential Attributes of an Audit Committee." *Internal Auditing* 7, no. 1 (1991): 3-18.

Kosnik, R. D. "Greenmail: A Study of Board Performance and Corporate Governance." *Administrative Science Quarterly* 32, no. 2 (1987): 163-85.

______. "Effects of Board Demography and Directors' Incentives on Corporate Greenmail Decisions." *Academy of Management Journal* 33, no. 1 (1990): 129-50.

Lev, B. "On the Usefulness of Earnings: Lessons and Directions from Two Decades of Empirical Research." *Journal of Accounting Research* 27, Supplement (1989): 153-92.

MacAvoy, P. W., S. Cantor, J. Dana, and S. Peck. "ALI Proposal for

Increased Control of the Corporation by the Board of Directors: An Economic Analysis." In: *Statement of the Business Roundtable on the American Law Institute's Proposed Principles of Corporate Governance and Structure: Restatement and Recommendations*. New York: Business Roundtable, 1983.

Mace, M. L. *Directors: Myth and Reality*, Boston: Harvard Business Review, 1986.

Mallette, P., and K. L. Fowler. "Effects of Board Composition and Ownership on the Adoption of "Poison Pills"." *Academy of Management Journal* 35, no. 5 (1992): 1010-35.

Malaysian Accounting Standards Board 3 (MASB 3). Net Profit or Loss for the Period, Fundamental Errors and Changes in Accounting Policies, Kuala Lumpur: Malaysian Accounting Standards Board, 1999.

McMullen, D. A. "Audit Committee Structure and Performance: An Empirical evidence of the Consequences and Attributes of Audit Committees." Doctoral Dissertation, USA: Drexel University, 1992.

Menon, K., and J. D. Williams. "The Use of Audit Committees for Monitoring." *Journal of Accounting and Public Policy* 13, no. 2 (1994): 121-39.

Mohd Khairi Mohd Isa. "Small Investors Should Have More Level Playing Field." *The New Straits Times* (Business Times), July 22, 2002: 2.

Peasnell, K. V., P. F. Pope, and S. Young. "Accrual Management to Meet Earnings Targets: UK Evidence pre- and post-Cadbury." *British Accounting Review* 32, Special Issue on Corporate Governance (2000): 415-45.

Pincus, K., M. Rubarsky, and J. Wong. "Voluntary Formation of Corporate Audit Committees among NASDAQ Firms." *Journal of Accounting and Public Policy* 8, no. 3 (1989): 239-65.

Rezaee, Z. "High-Quality Financial Reporting: The Six-Legged Stool." *Strategic Finance*, February (2003): 26-30.

Shamsul Nahar Abdullah. "The Role of Corporate Governance and Ownership Structure on Accounting Earnings Quality." Unpublished Ph.D Thesis, Universiti Utara Malaysia, 1999.

______. "Characteristics of Board of Directors and Audit Committees among Malaysian Listed Companies in Period leading to 1997 Financial Crisis." *Akauntan Nasional*, October (2001a): 18-21.

______. "Audit Committee Establishment in Malaysia: Some Insights

Prior to the Asian 1997 Financial Crisis." *Utara Management Review* 3, no. 1 (2002a): 1-18.

______. "Board of Directors' Independence among Listed Companies in an Emerging Economy." *Utara Management Review* 3, no. 2 (2002b): 27-46.

_______. "Board Composition, CEO Duality and Performance among Malaysian Listed Companies." *Corporate Governance: International Journal of Business in Society* 4, (forthcoming).

Shamsul Nahar Abdullah, and A. L. S. M. Al-Murisi. "Perceived Audit Committee Effectiveness in Malaysia." *The Malaysian Management Review* 32, no. 4 (1997), 34-42.

Shamsul Nahar Abdullah and Ku Nor Izah Ku Ismail. "Audit Committee Effectiveness among Malaysian Listed Companies." *The Malaysian Management Journal* 3, no. 2 (1999): 1-13.

Shamsul Nahar Abdullah, Mohd Azlan Yahya, and Faisol Elham. "Institutional Shareholdings and Financial Characteristics of Malaysian Listed Companies." *The Malaysian Management Journal* 3, no. 1 (1999): 39-49.

Shivdasani, A. "Board Composition, Ownership Structure, and Hostile Takeovers." *Journal of Accounting and Economics* 16, Issue on Managerial Incentives and Corporate Performance (1993): 176-208.

Takiah Iskandar, and Romlah Jaafar. "Audit Committees and Performance." *The 4th AAM Conference Proceedings 2001 Vol. 2*, Penang: Universiti Sains Malaysia, 2001.

Treadway Committee (National Commission on Fraudulent Reporting). *Report of the National Commission on Fraudulent Reporting*, Washington DC: NCFFR, 1987.

Vinten, G., and C. Lee. "Audit Committees and Corporate Control." *Managerial Auditing Journal* 8, no. 3 (1993): 11-24.

Watts, R., and J. L. Zimmerman. "Positive Accounting Theory: A Ten Year Perspective." *The Accounting Review* 65, no. 1 (1990): 131-56.

Weisbach, M. "Outside Directors and CEO Turnover." *Journal of Financial Economics* 20, no. 1/2 (1988): 431-60.

Wild, J. J. "Managerial Accountability to Shareholders: Audit Committees and the Explanatory Power of Earnings for Returns." *British Accounting Review* 26, no. 4 (1994): 353-74.