A TEST OF AUDIT COMMITTEE CHARACTERISTICS AND FREE CASH FLOWS

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Abstract

The study concentrates on audit committee characteristics and their influences on free cash flow. A panel of 120 firms from the trading and services industry from the year 2005 to 2008 is examined. The results show a significant and positive relationship between Audit Committee characteristics (size, independence, frequency of meetings) and free cash flows. These findings suggest that effective audit committee governance leads to availability of higher free cash flows. Our study draws upon the lack of understanding on the impact of audit committee characteristics on free cash flow along the two views; agency theory and pecking order/transaction cost theory and finds support for the later.

Keywords: Free Cash Flows, Audit Committee

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1. Introduction

The issue of agency problem is very relevant particularly to the use of surplus free cash flows by managers, especially 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). The Malaysian corporate governance scene is overshadowed by a number of weak corporate governance elements[7]. While the topic of free cash flow has gained considerable attention in relation to firms' stock returns (see Livnat and Zarowin, 1990; Ali, 1994; andKallunki et al., 1998), debt structure and investment (see Harvey, Lins, and Roper , 2004) and executive compensation (see Garvey, 1997; Broussard, Buchenroth, and Pilotte, 2004) little attention has been paidin relation to audit committee on the former. It would amount to an overstatement to state free cash has not been examined in corporate governance studies and in particular audit committee. But ironically most of these studies examine free cash flow as one of the many antecedents[8] together with corporate governance in relation to topic or outcome of their studies. Little attention has been paid to the antecedents of free cash flow itself whilst it is established in the literature that aneffective and efficient audit committee do resolve agency conflicts(Klein, 2002) of which the free cash flow issue remains a central contention.

Considering such agency problems in corporations, agency theorists concentrated their research on identifying mechanisms that discipline management's opportunistic inclinations and decrease the negative effects on wealth for stockholders.Agency theorists perceive the board's effectiveness in monitoring management as being critical for the survival of all corporations that are characterized by the separation of ownership and decision making (Fama and Jensen, 1983). Within this framework, the effectiveness of the board will largely depend on the directors' identification with stockholders' interests and their expertise and experience in strategic decision making and control.Governance mechanisms can be broadly characterized as being internal or external to the firm, yet they work interdependently in mitigating agency problems (Jensen and Meckling 1976; Morck, Shleifer and Wishny 1989). The audit committee which is considered an internal governance mechanism reduces agency conflicts by segregating the management and control aspects of the monitoring and decision making process (Fama and Jensen, 1983; Karamanou and Vafeas, 2005; Carcello and Neal, 2000).

[7]The common features of weak corporate governance in Malaysia are, large corporations are usually family-owned (Thilainathan, 1999; Cutler, 1994; Lang et al, 1999), large percentage of insider holding, weak minority shareholders rights (Reed, 2002; Thilainathan, 1999), financial scandals and government bailouts (Gomez and Jomo, 1999).

8 See e.g. Basiddiq, H. and Hussainey, K. (2011); John and Knyazeva, (2006); Al-Najjar and Hussainey (2009)

We contribute to the growing body of literature in this domain in a number of ways. Free cash flows have been understudied as a central theme in corporate governance research. Primarily seen as a contributing factor to other research theme, the antecedents of free cash flows itself is least understood. Corporate governance is a mechanism to effectively mitigate agency conflicts and the audit committee's effectiveness in alleviating concerns over free cash flows is examined in our study. Most studies on cash flow rather concentrated on cash holding as opposed to free cash flows and its association with corporate governance. In the true of spirit of Jensen (1986) free cash flow hypotheses it is vital to understand the impact audit committee would exert on free cash flows to gauge the efficacy of the audit committee itself in terms of proper governance and mitigations of agency concerns.Our study draws upon the lack of understanding on the impact of audit committee characteristics on free cash flow along the two views; agency theory and pecking order/transaction cost theory and finds support for the later. Our next contribution is reflected number of previous studies conducted in this area where only Agostinho and Canadas (2010) have examined this topic directly. Furthermore, this study is conducted in Malaysia, where the capital market is still at the infancy stage and Malaysia is an appealing case to study because it is likely that CG practices and capital market behavior of the Malaysian firms could differ from those in developed countries.

The remainder of the paper is organized as follows. Section 2 provides an overview of previous studies and develops the hypotheses. Section 3 describes the date, variables, control measures and analysis techniques. Section 4 presents and discusses the results and finally Section 5 concludes the paper.

2. Background literature and hypotheses

According to the free cash flow (FCF) hypothesis (Jensen, 1986), internally generated cash in excess of positive NPV projects (termed free cash flow (FCF) allows managers to pursue personal goals without having to go to the bond or equity markets. Therefore, having FCF creates an opportunity to put management's interests at odds with the interests of shareholders (Jenson, 1989, 1991, 1993).Jensen (1986) relates equity-agency problems as the existence of excessive free cash flows at the discretion of firms' management. Agency problems between managers and shareholders occur when there are substantial free cash flows in a firm and there is insufficient monitoring of these cash flows. For firms with substantial free cash flows, the tasks of monitoring equity-agency costs are becoming increasingly difficult.

The literature on cash and capital structure policies typically consider the decisions on the former to be that of the firms', studying why firms accumulate certain levels of cash holdings (Kim, Mauer, and Sherman, 1998; Foley, Hartzell, Titman and Twite, 2007; Harford, Mansi, and Maxwell, 2008). Firms accumulate more cash if future cash flows are more volatile and investment opportunities are less predictable (Opler, Pinkowitz, Stulz, and Williamson, 1999).The agency theory views free cash flow as source of negative behavior by management. Jensen (1986) and Stulz (1990) develop the free cash flow hypothesis, predicting that shareholders will choose to limit managers' access to free cash flow to mitigate agency costs over its deployment. However free cash flow has its potential benefits for firms too. The pecking order theory by Myers (1984) and Majluf (1984) suggested the cost of issuing risky equity or debt overpower the forces that determine the optimum level of leverage, thus permeating the pecking order theory. The 'order' in the pecking order theory as such profess that firms finance their investment with retained earning first, followed by safe debt to risky debt and finally with equity. In this regards it would be beneficial for firms to generate higher cash flows. Rozeff (1982) further echoes the arguments of the pecking order theory by arguing that low free cash flow forces firms to seek finance from external capital markets more frequently and thus incur transaction costs. Firms are further assumed to prefer to finance their investment through retained earnings because it represents the lowest cost avenue (Basiddiq and Hussainey, 2011). Keynes (1936) transaction cost theory further argue it is costly to raise funds and the fixed costs of accessing outside markets induces firms to raise funds infrequently and to use cash and liquid asset holding as a buffer.

Good governance on the other hand could lower the costs of agency conflict (Puleo et al, 2009). This function of audit committee is expected to reduce agency costs and to resolve problems arising from information asymmetry (Bukit and Iskandar, 2009). The AC is required to be of a certain size, expected to be made of both independent and executive directors, meet at periodically and possess financial expertise, among others. The Audit Committee (AC) is responsible for monitoring the financial reporting process of listed companies, Pincus et al. (1989). The presence of AC has been associated with fewer occurrences of financial reporting irregularities (Leng and Mansor, 2005), fewer material errors in financial statements, McMullen (1996) and lesser possibility of enforcement actions by the Securities Commission (SEC) (DeChow, 1996). The potential benefits of audit committee firms in terms of effective governance and functioning could alleviate some of the concerns on possible inappropriate use of free cash flows by the management.

However the association corporate governance areas like audit committee would have on free cash flow is still least understood. On one hand, agency theory backed arguments would possibly see firms with stronger audit committee characteristics in

relation to good governance having lower free cash flows as these firms would either use it appropriately on investments projects or release it as dividends in view of the many negative outcomes free cash flow could result in. The view that better governance could result in lower free cash flow also stems from the notion that in view of the many negative outcomes that could result from high cash flow in relation to agency conflict, well governed firms signal to the market that they are bent on having lower free cash flows to appease agency conflict concerns and are confident of obtaining funds from the external market if needed. On the other hand, the pecking order theory and transaction costs theory backed arguments could see firms with stronger audit committee characteristics in terms of good governance having higher free cash flows in view of lower costs attached to it and prospects for seizing good investment opportunities that come by. The view that stronger governance could result in higher free cash flow also stems from the notion that in spite of the dangers of having free cash flows in relation to agency conflict, this negative outlook for shareholders is alleviated by the strong governance practices by firms, which would prevent any abuse and thus enable the free cash flow to be put to good use.

The actual relationship audit committee characteristics would have with free cash flow drawn from the two opposing views above remains largely unexplored. One reported study so far examined the topic of corporate governance and its impact on free cash flows. In a study of 298 firms listed in the Euronext (from Spain, Belgium, France, and Netherlands) in 2007, the aspects of corporate governance examined are board size, boards and non-executive. The study found positive and significant relationship between board size and non-executive directors with free cash flows. Another study coincidentally from Malaysia investigated the moderating effect of audit committee independence on free cash flows and earnings management. Bukit and Iskandar (2009) found that the existence of audit committee weaken the positive and significant link between free cash flows and discretionary accruals. The finding from this study lends support to the effectiveness of audit committee in mitigating agency conflicts but does not give any clues on the predictable direction of the relationship AC characteristics would share with free cash flows.

On strand of the body of knowledge on cash flows and corporate governance took the path of 'cash holding and corporate governance[9]. However free cash flow and cash holding are distinguishable where cash holding has been defined as the ratio of cash and marketable securities to net assets computed as total assets minus cash and marketable securities (Opler, Pinkowitz, Stulz, Williamson, 1999). The literature on cash holding has to date received considerable degree of attention since its inception by Opler et al. (1999) who tested cash holding in relation to firm specific financial antecedents. Subsequently empirical research on cash holding went on to examine the anteceding affects of corporate governance on the former. Harfotd et al (2008) examined a large section of US firms' corporate governance practices in relation to cash holding. Other recent studies on corporate governance and cash holdings include Harford, Mansi, and Maxwell (2008); Dittmara andMahrt-Smith (2007); Chen (2008); Lee and Lee (2009)Kusnadi and Wei (2011).

Cash holding relates to the actual cash retained from free cash flows after all disbursements have been made while free cash flows relates to the gross free cash flows available from the business activities after capital expenditure. The knowledge on the effect of corporate governance on free cash flows is as imperative as the affect of corporate governance on cash holding. In the true of spirit of Jensen (1986) free cash flow hypotheses it is vital to understand the impact audit committee would exert on free cash flows. It is imperative to understand the impact of AC characteristics on the amount of free cash flow available in as much as how much cash is retained (cash holding) at the end for a good number of reasons. First, a direct examination of audit committee's impact on free cash flows provides an avenue to gauge efficacy of the audit committee itself in terms of proper governance and mitigations of agency concerns. Free cash flows represent cash available for managers to utilize for research and development, capital expenditurecommittee and possibly self-benefiting agenda. In relation to this anomaly of free cash flow, it would be interesting to determine if a stronger audit committee would indeed effectively alleviate agency concerns over the use of free cash flow and proliferate free cash flows available for use by managers, or vice versa.If indeed free cash are higher in firms with stronger audit committee, it could be concluded that the audit committee has in fact been effective in mitigating agency concerns over available free cash flows for usage by managers. A few fundamental firm specific factors have been controlled in our study. Following Jensen (1986) arguments, two important factors (dividends and debt) have been included in our study to control its affect on free cash flows. The free cash measure examined in our study thus seeks to explore the association audit committee share with the former after having controlled for the two most fundamental firm-specific determinants of free cash flow itself. On a different note in terms of the novelty of our study, previous studies on cash holding and corporate governance cited above primarily employed the Corporate Governance Index to examine its affect on

[9] (see e.g. for example Hartford et al, 2008; Dittmar&Mahrt-Smit, 2007; Opler, Pinkowitz, Stulz, Williamson, 1999).

the former, but none of these indexes[10] includes audit committee characteristics but the its importance in mitigating agency conflict is undeniable. Our study therefore draws upon the lack of understanding on the impact of AC characteristics on free cash flow along the two views (agency theory and pecking order/transaction cost theory) presented above and intends to establish a clear understanding of this domain.

2.1 Hypotheses

Audit committees have been long seen as a vital institution in assisting the board of directors in enhancing the transparency and integrity of financial reporting (BRC, 1999; SOX, 2002). 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 (Bukit and Iskandar, 2009). Specially, effective audit committees could improve financial reporting quality by fulfilling its many responsibilities including, controlling accounting policies, reviewing the financial statements, maintaining and reviewing the sufficiency of internal controls. Furthermore, audit committees are also expected to play as an important role in enhancing the effectiveness of external auditors over financial reporting quality by, assuming responsibilities for the appointment and remuneration of external auditors. It means that they can control external audit committee by reviewing the auditors work.

However, prior research indicates that the construct of audit committee effectiveness over financial reporting is multidimensional and is affected by variety of audit committee characteristics such as committee size (Anderson et al., 2004; DeZoort and Salterio, 2001), independence (Klein,2002; Bedard et al., 2004) and frequency of meetings (Menon and Williams, 199; Beasley et al., 2000). Audit committee members' financial expertise is another important dimension of audit committee effectiveness that has gained the attention of regulators and academics (Treadway Commission, 1987; GAO, 1991; POB, 1993; Kalbers and Fogarty, 1993; DeZoort, 1997, 1998; BRC, 1999; SOX, 2002). Advocates propose that the presence of financial experts in audit committees will assist the committee in, critically analyzing accounting policies and financial statements, identifying potential problems and solving problems.

[10] Examples of CG index used in corporate governance and cash holding are G-Index of Gompers, Ishii, and Metrick. (2003), EIndex byBebchuk, Cohen, and Ferrell (2005), and GIndex by John and Knyazeva (2006).

2.1.1 Audit Committee Size

In order to make an audit committee effective in controlling and monitoring top management activities, the committee must have enough members to carry out the responsibilities (Vinten and Lee, 1993). An audit committee with a small number of members lacks variety of skills and knowledge, and it can leads to become ineffective. The positive relationship between size of an audit committee and company financial performance is supported by the argument in resource dependence theory (Pierce and Zahra, 1992). Under resource dependency theory, the effectiveness of an audit committee increases when the size of the committee is bigger, because when firms face problems it has more resources to be dedicated for solving these issues.

The Listing Requirements of Bursa Malaysia stipulates that the AC should comprise of at least three members of whom a majority shall be independent. AC size that larger AC is synonymous is with better CG practice (Khanchel, 2007). Larger AC is found to enhance the AC's status and power within an organization (Kalbers and Fogarty, 1993), receive more resources (Pincus et al, 1989), more talents (Lin and Hwang (2010), lower the cost of debt financing (Anderson et al, 2004) and improves firm performance (Pierce and Zahra, 1992).

There are two opposing views on the relationship between AC size and free cash flows. Larger audit committee tends to have more power and voice in controlling the free cash flow spending, whereas smaller audit committee tends to have weaker stand in challenging the free cash spending. In relation to the agency theory, audit committees which are larger are more able to curb management's access to free cash flows, and hence result in lower free cash flows. On the other hand, the pecking order theory and transaction costs theory backed arguments could see firms with larger audit committees having higher free cash flows in view of lower costs attached to it and prospects for seizing good investment opportunities that come by as agency conflicts concerns is alleviated by the strong governance practices by firms. Following the lines of argument above, there is no clear direction of the relationship between audit committee size and free cash flow and hence we propose the following hypotheses:

H1: There is significant relationship between audit committee size and free cash flow.

2.1.2 Audit Committee Independence

Para 15.10(1)(b) of Listing Requirements of Bursa Malaysia 2001 (LRBM) requires that the majority of the audit committee members must be independent (Kuppusamy et al., 2003). In the US, the Sarbanes-Act (SOX) of 2002 requires the AC be comprised of entirely independent members. From an agency theory perspective, independent directors can act as

arbiters in disagreements involving managers and outsiders (Fama and Jensen, 1983). A high proportion of independent 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 (Famaaand Jensen, 1983).

Lam (1976) found that the perception of independence of the committee enhance auditor independence and make the management and auditors more objective in financial reporting. Thus, independent directors have a greater incentive to avoid activities that would damage their reputation than non-independent directors (Abbott and Parker, 2000; Abbott *et al*. 2003; Hussain and Mallin, 2003). Beasley (1996) documented that firms committing financial statement fraud had a significantly lower percentage of independent outside directors than similar firms not committing such acts.

Independence of the AC has seen been associated with improved ability to protect the reliability of the accounting process (Felo et al, 3003; Carcello and Neal, 2000; Dechow et al, 1996; McMullen, 1996), lower corporate-debt yield spreads (Anderson et al, 2004; Xie et al, 2003), reduced perceived risk by external auditors (Muniandy; 2007) and less earnings management (Lin and Hwang, 2010; Zhou and Chen, 2004) and reduced fraud (Uzun et al, 2004). Institutional shareholders are willing to pay a premium for shares of firms with majority of independent directors (McKinsey and Co., 2000).

In relation to the agency theory, audit committees which are more independent are able to curb management's access to free cash flows, and hence result in lower free cash flows. On the other hand, the pecking order theory and transaction costs theory backed arguments could see firms with higher proportion of independent audit committees having higher free cash flows in view of lower costs attached to it the latter and prospects for seizing good investment opportunities that come by as agency conflicts concerns is alleviated by the strong governance practices by firms. Following the lines of argument above, there is no clear direction of the relationship between audit committee size and free cash flow and hence we propose the following hypotheses:

H2: There is significant relationship between audit committee independence and free cash flow.

2.1.3 Audit committee meeting

Audit committees should perform their responsibilities in order to maintain integrity of their monitoring function. Because diligence is extremely difficult to observe directly, research uses audit committee meeting frequency as a proxy for diligence (Raghunandan and Rama 2007; hereafter R. and R.). Meeting frequency is measured as the number of audit committee meetings held anually. The frequency of audit committee meetings would indicate their activeness.

The corporate governance requirements in Malaysia, MCCG (2002; 2007) is silent on the frequency of audit committee meetings in a financial year, similar to the Sarbanes-Oaxley Act 2002 of the US. Non-regulatory suggestions on the frequency of AC meting however exist. In the US, the National Association for Corporate Directors suggests a four half-day AC meeting in a year. AC that hold more meetings are more likely to pursue their duties diligently, Kalbers and Fogarty (1993). In Malaysia, Kang (2001) suggested that AC should meet at least five times a year. Although the importance of the AC meeting frequency in the context of good CG practices could not be under estimated, the knowledge into the practices and activity carried out AC meetings is minimal, Haron et al (2010). AC of strong CEOs companies tend to meet less frequently than their counterparts, (a sign of poor CG) Klein (1998), and independence of AC is less likely to be effective when AC meets less frequently, Menon and Williams (1994). In line with the expectations on AC to significantly enhance good CG practices, frequency of AC meetings have been associated with better diligence, Raghunandan& Rama (2007) reduced occurrence of financial reporting problems and greater external audit committee, DeZoort et al (2002), and better desire to fulfill responsibilities, Abbot et al (2000).

In relation to the agency theory, audit committees which meet more frequently should able to curb management's access to free cash flows, and hence result in lower free cash flows. On the other hand, the pecking order theory and transaction costs theory backed arguments could see firms with higher frequency of audit committees meeting having higher free cash flows in view of lower costs attached to it the latter and prospects for seizing good investment opportunities that come by as agency conflicts concerns is alleviated by the strong governance practices by firms. Following the lines of argument above, there is no clear direction of the relationship between audit committee meeting frequency and free cash flow and hence we propose the following hypotheses:

H3: There is a significant relationship between audit committee meeting frequency and free cash flows.

2.1.4 Audit committee financial expertise

The educational background is a significant characteristic to make sure audit committees perform their roles in an effective way. Audit committee members who are financially literate are more professional in their approach and more adaptable to

changes and innovation (Hambrick and Mason, 1984). Therefore, audit committees with financially literate members are expected to adopt a high standard of accountability and high level of achievement and to strive for excellent corporate image and performance. It is evident that audit committees perform poorly when financial literacy is lacking (Kalbers, 1992). It is also evident that financial literacy is an important factor contributing towards the effectiveness of audit committees in the UK (Collier, 1993). Audit committees with good financial literacy are able to reduce the number of distressed companies (McMullen and Raghunandan, 1996).

The primary role of the audit committee (AC) is to monitor the financial reporting process of an organization. Independent directors with financial expertise and competency are effective monitoring agents in reducing earnings management behavior, Klein (2002); Xie et al (2003);Abbot et al (2004); Bedard et al (2004); Choi et al (2004); Jean et al (2004); Yang and Krishnan (2005); Lin and Hwang (2010). The quality of financial reporting is also found to be positively related with the percentage AC members having expertise in accounting and financial management, PricewaterhouseCoopers (1999); Felo et al (2003). Other evidence reported on AC financial expertise include McMullen and Rughunandan (1996) who found that AC financial expertise reduce the likelihood of SEC violations and DeZoort and Salterio (2001) who found that AC financial expertise is associated with likelihood that the AC support the external auditor in auditor-management dispute. All the evidence presented above support the notion that AC financial expertise and competency is synonymous with good CG practice.

The Part III Paragraph 15.09 of Bursa Listing Requirements dilutes the strict requirements expected to be possessed by an AC member to fulfill the criteria of a "financial expert". Strict rules, guidelines and assessment exist in order for a person to satisfy the criteria of an AC member. However the requirement in Part III is vaguely worded and provides no further guidelines on its interpretation. Most of the public listed companies in Malaysia accordingly 'cut and paste' the exact requirement above in their annual report with no further explanation which reveals if any of their AC members fall under Part III of the Bursa Listing Requirements.

Accountants and auditors are regarded as the "moral agents" of corporations and society, Schweiker (1993). Financial experts or more specifically accountants bound by the code of conduct imposed by the Malaysian Institute of Accountants (www.mia.org.my) and other professional bodies like ACCA (www.accaglobal.com) and CIMA (cimaglobal.com) should clearly exhibit greater competency and professionalism in duly discharging their duties as members of the AC.

In this regard, the importance of the presence of AC members with professional accounting qualification towards achieving high CG practices could not be undermined. Previous studies in AC financial expertise did not clearly define the measurement of this variable, i.e whether the general rules on listing requirements were used to denote AC financial expertise, Lin et al (2006) or more strict criteria like membership professional accountancy bodies were used. Davidson et al (2004); DeFond et al (2005); Krishnan (2005); Dhaliwal (2006) realized the weakness of the less-stringent regulations regarding AC financial expertise documented in Corporate Governance Codes and Listing Requirements of most jurisdictions and decided to use a stricter definition instead where AC financial expertise was measured as AC members having professional certification in accounting like the CPA or financial analysis like the Chartered Financial Analyst (CFA) or experience in finance and accounting.

In the US, the vague definition of the financial expertise of the AC only received attention in 2003, SEC (2003). The new rule differentiates between "accounting and non-accounting financial experts". Accounting financial experts are narrowly defined as persons who have previously held or currently holds job directly related to accounting and auditing expertise and include CPAs, CFOs and auditors, SEC (2003); DeFond (2005). Subsequent studies on accounting financial experts found these experts are associated with less earnings management and better internal controls, Bedard et al (2004); Krishnan (2005); Dhaliwal (2006). DeFond et al (2005) found the appointment of accounting financial experts being positively related to market effects. In comparison the market was not found to significantly react to the appointment of non-accounting experts to AC, Davidson et al (2004). However, in spite of the many benefits of appointing accounting financial experts to AC, many companies were found to not appoint such experts. In US, ninety of the Fortune 1000 public companies' AC financial experts were majority non-accounting financial experts, Deloitte &Touche (2003). Similarly DeFond et al (2005) and Davidson et al (2004) found less than 45% of their sampled companies had AC with accounting financial experts.

However it should be noted here that even the SEC or DeFond et al (2005) did not clearly narrow the scope of definition of accounting financial experts to those who possess professional qualifications only, but merely mentions "it includes CPAs, CFOs, etc…. As mentioned earlier accounting financial experts with professional membership and accountability should clearly exhibit greater competency and professionalism than financial experts with no professional obligations. The second contribution of this paper is therefore to apply the strictest criteria for accounting financial expert used to date measure financial expertise of the AC.

This study uses a stricter definition than SEC (2003); Bedard et al (2004); DeFond (2005) where financial expertise is strictly defined as members of

the AC who possess professional qualification like CPA, ACCA, CIMA, CFA and etc who are bound by their professional codes of conduct and previously held or currently holding accounting or auditing related job.

In a nutshell, it is therefore theorized that financial expertise presence in AC indicates better CG practices which leads to robust free cash flow management, whereby the subjective elements of investment options will be challenged in terms of future returns. In relation to the agency theory, audit committees with higher proportion of members with financial expertise should able to curb management's access to free cash flows, and hence result in lower free cash flows. On the other hand, the pecking order theory and transaction costs theory backed arguments could see firms with higher proportion of members with financial expertise having higher free cash flows in view of lower costs attached to it the latter and prospects for seizing good investment opportunities that come by as agency conflicts concerns is alleviated by the strong governance practices by firms. Following the lines of argument above, there is no clear direction of the relationship between audit committee meeting frequency and free cash flow and hence we propose the following hypotheses:

H4: There is significant relationship between audit committee financial expertise and free cash flow.

3. Research methods and data description

The panel data consists of 120 firms (480 observations) for four years from year 2005 to 2008. The samples are selected from firms listed under the Trading and Services classification in BursaMalaysia (Malaysia's stock exchange). The Trading and Services sector is the second largest sector in Bursa Malaysia with a total of 182 companies and samples firms are randomly selected form this category. 120 firms represent 66 percent of the total population of Trading and Services firm listed in Bursa Malaysia. Due to the exploratory nature of this study, we chose to test the hypotheses on a particular industry first, with the possible extension to all industries in the near future. Driven by also motivation of previous studies on cash and corporate governance which examined specific industries in need of high cash holdings for investment purposes (Chen, 2008; Chen and Chuang, 2009), we choose the trading services sector which is comparatively a key growth sector in the Malaysian economy. Malaysia is moving towards a service based economy where this sector has been growing steadily (http://etp.pemandu.gov.my). The Malaysian government intends to transform the economy into a serviced based one and thus ample investment opportunities, growth potential and incentives is made available for the private sector in this industry. The data used for this study is hand collected from annual reports retrieved from the official website of BursaMalaysia. This study uses panel regression technique to analyze the model estimates. This study uses the panel data regression to estimate the outcomes of this research. By combining time series of cross section observations, panel data is argued to be more advantageous (Hsiao , 1989), informative and robust due to a greater degrees of freedom and variation in data (Gujarati, 2003). The commonly used Newey-West standardized error panel regression is employed to control for possible heteroskedastic and multicollinearityin the model. We thus posit the following model;

Equation

LNFCF it = a0INTERCEPT it + a1 ACSIZE it +a2 ACINDEP it + a3 ACMEET it +a4 ACFIN it + a5 LNTA it + a6 ROE it + a7 LEVERAGE it + a8 LNDPS it + e it

The experimental variables are in bold where:

Dependent variable

FCF - Natural logarithm of free cash flow, which equals to;

= Cash flows from operating activities– capital expenditure

Experimental variables

ACSIZE - Total number of audit committee members

ACINDEP - Proportion of independent audit committee members

ACMEET - The number of meeting held by the audit committee members in a year

ACFIN - Proportion of audit committee members with professional qualification

Control variables

ROE - Earnings divided by total equity

LEVERAEGE- Total debt divided by total assets

LNTA- Natural logarithm of total assets

DPS- Dividends per share

3.1 Dependent variable

The dependent variable is free cash flow. Jensen (1986, p.2) defines the free cash flow as "cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital.". In essence, free cash flow is calculated as: Cash flow from operations less any capital expenditures to maintain current growth. FCF has been formulated in different ways from the original formula to accommodate the needs of different firms, for example inclusion of different types of non-cash income and non-cash charges (AswathDamodaran, 2002). The computation adopted

for the purpose of this our study starts with net cash flows from operating activities less the capital expenditure, consistent with Jokipii and Vahamaa (2006); Zhang (2009).

3.2 Experimental variables

AC independence (ACINDEP) is measured as the number of independent directors in AC divided by total number of directors in the AC (fraction of independent directors on the AC), consistent with Rahmat et al. (2009); Anderson et al. (2004). ACSIZE is measured as total number of directors on AC, consistent with Yatim et al. (2006); Karamanou and Vafeas (2005). Financial expertise of the AC (ACFIN) is measured as the proportion of AC members with accounting or finance qualification, consistent with Bedard et al. (2004); AC meeting frequency (ACMEET) is measured as the number of AC meetings in a year, consistent with Menon and Williams (1994).

3.3 Control variables

LNTA represents the natural logarithm book value of total assets at year end and generally larger firms generate higher cash flows. LNTA is the proxy for firm size, consistent with Hartord et al (2008) and Griffin et al, (2010). Profitability, which is a key measure of firm's performance is represented by return on equity (ROE), is expected to show positive relationship with free cash flows. Firms with high ROE makes surplus return from the equity investment, and therefore, expected to possess more cash flows.

Dividends are also expected to be negatively related with free cash flows. Conflicts of interest between shareholders and managers over payout policies are especially severe when organizations generate substantial free cash flow (Jensen, 1986). Dividends distribution thus reduces the free cash flow available at managers' discretion (Jensen, 1986; Agostinho and Canadas, 2010). Dividends are measured as dividends per share, consistent with Jokipii and Vahamaa (2006).

Debt is an effective substitute for dividends. Debt reduces the agency costs of free cash flow by reducing the cash flow available for spending at discretion of managers (Jensen, 1986). Leverage is measured as total debt divided by total assets, consistent with Zhang (2009) and Opler at al., (1999).

4. Results

4.1 Descriptive statistics

Table 1 presents the descriptive statistics for sample used in this study. The average free cash flow is RM57,462,347 and has a median of RM17,716,069 and ranges from cash deficit of RM9.4m to cash surplus of RM9.35m. Audit committee size (ACSIZE) has a mean of 3.667 and a median of 4 and varies from 3 to 8 members and shows that ACSIZE among Malaysian firms are relatively small and barely meets the requirements of Section 4.60 of the MCCG (2000) which requires an AC size of at least three members. The ACSIZE results are slightly higher than another Malaysian study Yatim et al (2006) who report it at 3.49. The mean size is slightly above the minimum required number of audit committee members and it is considered small. Audit committee independence (ACINDEP) has a mean of 0.735 and a median of 0.750. It varies from 0.25 to 1.00. The average number of independent audit committee members is close to the maximum number of independent audit committee members. This indicates the high proportion of independent audit committee members on the audit committee lineup. However the requirement in Malaysia is far lacking when compared with the US where the AC is required to be entirely made up of independent members. [11]An audit committee meeting (ACMEET) has a mean of 4.72, a median of 5 and varies from 1 to 7[12]. The more the audit committee meetings, the stronger the audit committee will be in terms of robust free cash flow management. Audit committee financial qualification (ACFIN) has a mean proportion of 0.319, median proportion of 0.33 and ranges from 0 to 0.75[13]. This tells us that the proportion of audit committee members with professional financial qualifications is still low. Audit committee team with higher proportion of audit committee members with professional financial qualification will be able to challenge any financial malpractices, therefore, limiting the chances that free cash flows being invested in the unprofitable investments.

Return on equity (ROE) and Dividend per share (DPS) stood at 0.231 and 0.14 respectively. LEVERAGE shows an average of 0.48 indicating firms' debt level is considerably moderate.

[11]However this study reports a slight increase in ACINDEP as Muniandy (2007) on Malaysia report the average percentage of independent AC members stood at 64% in Malaysia in 2007.

[12]The results for ACMEET are also consistent with Johl et al (2012) study in Malaysia who reports it to be at 4.79 times a year.

[13]The results are lower than that reported by Johl et al. (2012) at 59.1 percent on Malaysia but is not surprising given the stricter measurement criteria for the variable used in former study.

Table 1. Descriptive Statistics (2005-2008, n=120)

	Mean	Median	Maximum	Minimum	Std. Dev.
Dependent Variable					
FCF	57,462,347	17,716,069	9,350,000,000	(940,000,000)	1,470,000,000
Experimental Variables					
ACSIZE	3.667	4.000	8.000	3.000	0.816
ACINDEP	0.735	0.750	1.000	0.250	0.161
ACMEET	4.720	5.000	7.000	1.000	0.833
ACFIN	0.319	0.330	0.750	-	0.149
Control Variables					
TA	1,950,000,000	645,000,000	17,600,000,000	25,000,000	2,960,000,000
ROE	0.231	0.111	2.899	-0.129	0.452
LEVERAGE	0.479	0.410	2.450	0.006	0.359
DPS	0.140	0.030	2.650	0.001	0.415

This table presents the descriptive statistics for the sample of 480 firm-year observations on 120 firms over the 2005-2008 time periods. The dependent variable *FCF* is *free cash flows.* Experimental variables *namely ACSIZE* is the size of audit committee, *ACINDEP* is the proportion of independent audit committee members, *ACMEET* is the number of audit committee meetings held in a year and *ACFIN* is the proportion of audit committee members with professional financial qualification. *TA* is total assets. *ROE* is earnings divided by total equity. *GEARING* is non-current liability divided by total equity. *DPS* is dividend per share.

4.2 Correlations matrix for sample firms (2005-2008)

Table 2 presents the correlations between the variables. Consistent with the predicted sign of this study, free cash flow (dependent variable) show positive association with all the experimental variables. All the control variables have positive relationship with free cash flow except for leverage and dividends.

Table 2. Correlation matrix (2005 – 2008, n=120)

	LNFCF	ACSIZE	ACINDEP	ACMEET	ACFIN	LNTA	ROE	LEVERAGE	LNDPS
LNFCF	1.000								
ACSIZE	0.142	1.000							
ACINDEP	0.150	-0.156	1.000						
ACMEET	0.225	0.020	0.159	1.000					
ACFIN	0.124	-0.100	0.124	-0.099	1.000				
LNTA	0.576	0.050	-0.045	0.090	0.093	1.000			
ROE	0.251	-0.088	-0.007	-0.088	0.244	0.032	1.000		
LEVERGE	-0.072	-0.074	0.053	0.007	0.131	0.097	0.583	1.000	
LNDPS	-0.333	0.029	-0.076	-0.160	0.057	0.511	0.413	0.140	1.000

The dependent variable *LNFCF* is the natural logarithm of free cash flows. Experimental variables *namely ACSIZE* is the size of audit committee, *ACINDEP* is the proportion of independent audit committee members, *ACMEET* is the number of audit committee meetings held in a year and *ACFIN* is the proportion of audit committee members with professional financial qualification. *LNTA* is natural logarithm of total assets. *ROE* is earnings divided by total equity. LEVERAGE is total debt divided by total assets.*LNDPS* is natural logarithm of dividend per share.

4.3 Multivariate Results

Table 3. The affects of Audit committee on Free Cash Flows and the moderating effects of control variables (2005-2008, n=120)

		Newey-West estimate				
			Moderator			
	Expected sign	Base model (1)	LNDPS (2)	LNTA (3)	LEVERAGE (4)	ROE (5)
Constant	?	-2.895	1.339	-13.577	-2.347	-3.348
		-1.189	0.336	-0.6236	-0.909	-1.323
ACSIZE	+	0.430	0.214	0.877	0.175	0.465
		2.475***	0.657	0.287	0.853	2.416***
ACINDEP	+	1.604	0.689	8.482	1.520	1.871
		1.903**	0.272	0.803	1.536**	1.914**
ACMEET	+	0.392	0.231	0.865	0.443	0.401
		2.697***	0.487	0.364	2.907***	2.657***
ACFIN	+	0.026	1.009	7.166	-0.479	0.406
		0.027	0.528	0.327	-0.445	0.378
LNTA	+	0.787	0.757	1.317	0.802	0.796
		7.581***	7.057***	1.229	7.774***	7.498***
ROE	+	1.082	1.040	1.075	1.134	1.896
		3.753***	3.198***	3.604***	3.917***	0.355***
LEVERAGE	-	-0.144	-0.155	-0.145	-3.136	-0.161
		-0.784	-0.833	-0.772	-1.091	-0.852
LNDPS	-	-0.034	-0.881	-0.037	-0.056	-0.051
		-0.384	-1.277	-0.403	-0.612	-0.545
ACSIZE*LNDPS			-0.068			
			-0.741			
ACINDEP*LNDPS			-0.521			
			-0.932			
ACMEET*LNDPS			-0.033			
			-0.353			
ACFIN*LNDPS			-0.327			
			-0.687			
ACSIZE*LNTA				-0.021		
				-0.142*		
ACINDEP*LNTA				-0.347		
				-0.656		
ACMEET*LNTA				-0.029		
				-0.188*		
ACFIN*LNTA				-0.345		
				-0.326		
ACSIZE* LEVERAGE					0.781	
					2.184***	
ACINDEP* LEVERAGE					1.526	
					1.532*	
ACMEET* LEVERAGE					0.443	
					2.907	
ACFIN* LEVERAGE					0.966	
					0.791	
ACSIZE*ROE						-0.077
						-0.168*
ACINDEP*ROE						-0.672
						-0.227
ACMEET*ROE						-0.141
						-0.274
ACFIN*ROE						1.204
						0.538
R-squared		0.496	0.505	0.498	0.523	0.502
Adjusted R^2		0.465	0.457	0.45	0.477	0.454
F-statistic		15.930***	10.639***	10.371***	11.451***	10.513***

Notes: Significant at: *10, * *5 and * * *1 per cent levels, respectively; t-statistics are *italicized*.
This table reports the base model regression results in model (1) and models (2), (3) (4) and (5) reports the moderating effects of firm financial factors on the relationship between audit committee characteristics and free cash flow. Dependent variable *LNFCF* is the natural logarithm of free cash flows. Experimental variables *namely ACSIZE* is the size of audit committee, *ACINDEP* is the proportion of independent audit committee members, *ACMEET* is the number of audit committee meetings held in a year and *ACFIN* is the proportion of audit committee members with professional financial qualification. *LNTA* is natural logarithm of total assets. *ROE* is earnings divided by total equity. LEVERAGE is total debt divided by total assets. *LNDPS* is natural logarithm of dividend per share.

Table 3 represents the Newey-West panel standardized error panel regression results for the 120 firms for four years from 2005 till 2008.The adjusted R square for all the models are above 0.49, indicating the explanatory power of the estimate is strong. The coefficient is positive for all experimental variables and control variables except for LEVERAGE and LNDPS.

Model 1 considers the relationship between audit committee characteristics and free cash flow. Audit committee characteristics are experimental independent variables and FCF is the dependent variable in this model. The results in Model 1 shows ACSIZE is significant at 1 percent level, indicating firms with larger audit committee size tend to have higher free cash flows. ACINDEP is significant at the 5 percent level in Model 1. Therefore, the higher the proportion of independent audit committee members, the higher the FCF of firms is. ACMEET is also positively associated with FCF and is significant at 1 percent level in Model 1. Thus, higher the frequency of audit committee meetings results in higher FCF of firms.The last experimental variable is ACFIN and its does not exhibit significant relationship with FCF. All the experimental variables showed positive association with free cash flows. The results favor more the pecking order and transactional cost motive theories as opposed to agency theory. It can be observed from the results that the presence of stronger audit committee characteristics results in firms generating higher cash flows. The possible explanations for these results are twofold. First firms with stronger audit committee characteristics generate higher cash flows as in view of lower costs attached to it the latter and prospects for seizing good investment opportunities in line with the pecking order and transactional cost motive theories. Secondly free cash flows are higher possible due to agency conflicts being alleviated by the strong governance practices by firms. The findings further possibly reveal firms with stronger audit committee characteristics could be generally expected to possess more free cash flows for possibly investment and other purposes.

ROE is statically significant at 1 percent level with LNFCF and consistent with the predicted outcome. LEVERAGE and LNDPS (consistent with Agostinho and Canadas, 2010) both are both negatively associated with LNFCF but insignificant as shown in Table 3.

It can be concluded that audit committee which forms an important element in corporate governance plays an important role in challenging management decisions and management planning concerning free cash flows. There are mixed views on whether it would be better to have small or large audit committee in size for good corporate governance; however, it has been shown that there is a positive relationship between audit committee member size and free cash flow. It suggests that larger audit committee size leads to availability of more free cash flow. Larger audit committee provides a boarder range of experience (business and financial) and views for managers to make better decisions on improving the free cash flows of the firm. Audit committee members with more views and experience may challenge the SAF (suitability, acceptability and feasibility) aspects of the investment options and act as guardians of the free cash flows of the firms to prevent the chances that the free cash flows being wasted in uneconomic investments. Also having more independent audit committee member leads to higher free cash flows in firms. Independent audit committee members do not have relationships with the executive board members and they can bring independent views as to the financial and operating decisions made by the executive management of the firm. An independent audit committee mitigates the agency problems that arise from investments in uneconomic projects, whereby, they challenge the more subjective elements of investment options in order to prevent the free cash flows being invested in loss-making projects. Holding more audit committee meetings will keep the audit committee members being informed about the financial position and financial performance of the firms. They will also be up-to-date with critical financial issues relating to free cash flows and financial reporting processes. These issues will then be discussed with the executive board members and the senior management, whereby, they will be challenged by the audit committee members on the SAF aspects of the investment options. Audit committee members with financial reporting knowledge and expertise are more easily communicated on audit issues and to support the auditors when there is are conflicts with management inside a firm (Dezoort and Salterio, 2001). Therefore, according to prior researches having financial expertise lead to have less conflicts and it could be a good support for auditors, however, it cannot be guaranteed that having financial expertise alone can lead to availability of more free cash flow. Audit committee with the mix of financial and other expertise are able to discharge their monitoring

responsibilities more effectively as the mix of expertise leads to issues concerning free cash flows being approached from various perspectives.

It is thus established that hypothesis 4 is rejected while hypothesis 1, 2 and 3 are accepted in this study.

Table 4. Estimations of Audit committee and Free Cash Flows: The moderating effects of each audit committee variables (2005-2008, n=120)

		Newey-West estimate Moderator			
	Expected sign	ACSIZE (1)	ACINDEP (2)	ACMEET (3)	ACFIN (4)
Constant	?	-1.263	1.784	-6.796	-1.841
		-0.219	0.345	-1.187	-0.462
ACSIZE	+	0.202	1.297	1.68	0.167
		0.143	1.330**	1.685***	0.278
ACINDEP	+	7.345	5.444	2.656	4.696
		1.514	0.816	0.642	2.353***
ACMEET	+	1.459	0.222	1.214	0.023
		1.878***	0.371	1.13	0.051
ACFIN	+	1.667	6.435	4.24	0.812
		0.279	1.512	0.717	0.101
LNTA	+	0.789	0.781	0.791	0.761
		7.438***	7.592***	7.533***	7.125***
ROE	+	1.163	1.004	1.159	1.029
		3.984***	3.437***	3.912***	3.491***
LEVERAGE	-	-0.242	-0.213	-0.168	-0.152
		-1.287	-1.099	-0.847	-0.825
LNDPS	-	-0.017	-0.013	-0.026	-0.013
		-0.194	-0.152	-0.291	-0.146
ACSIZE*ACINDEP		2.693			
		1.865**			
ACSIZE*ACMEET		-0.29			
		-1.389**			
ACSIZE*ACFIN		0.539			
		0.316			
ACINDEP*ACSIZE			2.59		
			1.800**		
ACINDEP*ACMEET			0.228		
			0.29		
ACINDEP*ACFIN			-8.022		
			-1.525**		
ACMEET*ACSIZE				-0.272	
				-1.281	
ACMEET*ACINDEP				-0.208	
				-0.258	
ACMEET*ACFIN				0.952	
				0.744	
ACFIN*ACSIZE					0.758
					0.436
ACFIN*ACINDEP					-9.187
					-1.697**
ACFIN*ACMEET					1.197
					0.918
R-squared		0.517	0.518	0.505	0.51
Adjusted R^2		0.474	0.476	0.461	0.467
F-statistic		12.265***	12.319***	11.692***	11.942***

Notes: Significant at: *10, * *5 and * * *1 per cent levels, respectively; t-statistics are *italicized*.
The models (1) (2), (3) and (4) in Table 4 reports the moderating effects of each audit committee characteristics on the relationship between audit committee characteristics and free cash flow. Dependent variable *LNFCF* is free cash flows.

Experimental variables *namely ACSIZE* is the size of audit committee, *ACINDEP* is the proportion of independent audit committee members, *ACMEET* is the number of audit committee meetings held in a year and *ACFIN* is the proportion of audit committee members with professional financial qualification. *LOGPBT* is natural logarithm of earnings before interest and tax. *LOGTA* is natural logarithm of total assets. *ROE* is earnings divided by total equity LEVERAGE is t*otal debt divided by total assets*. *LNDPS* is natural logarithm of dividend per share.

The moderating effects of control variables with the Audit committee characteristics on free cash flows

We further examine the moderating effects of the control variables on audit committee characteristics on free cash flows. Each one of the four control variables (LNTA, ROE, LEVERAGE and LNDPS) is examined in relation to how they moderate the relationship between the audit committee characteristics on free cash flows. The results are reported in Table 3 above. Model 2 examines the moderating effect of dividends (LNDPS) on each of the audit committee variables on free cash flows where none are significant. Model 3 examines the moderating effect of firm size (LNTA) on each of the audit committee variables on free cash flows. The results show firm size (LNTA) negatively moderates the association between ACSIZE and ACMEET with free cash flow at the 1 percent level.The results indicate that the smaller the firm, the lower the impact of ACSIZE and ACMEET on free cash flows. These results could be attributed to the lower confidence in smaller firms on the concerns over free cash flows which could be alleviated by a stronger audit committee on free cash flows. Model 4 examines the moderating effect of LEVERAGE on each of the audit committee variables on free cash flows. The results indicate LEVERAGE positively moderates the association between ACSIZE and ACMEET with free cash flow. The results reveal that in firms with higher LEVERAGE the concerns over the agency costs of free cash flow is alleviated and more confidence is possibly attributed to the use of free cash flows for possibly investment and other purposes and hence positive affect of ACSIZE and ACMEET is more profound on availability free cash flows. Model 5 examines the moderating effect of ROE on each of the audit committee variables on free cash flows. The results indicate ROE negatively moderates the association between ACSIZE with free cash flows at the 1 percent level. The results reveal that in firms with lower financial performance the impact of ACSIZE on free cash flows is negative. These results could be attributed to the lower confidence in financially less well performing firms on the concerns over free cash flows that otherwise could be alleviated by a stronger audit committee with a resultant free cash flows.

The moderating effects of each audit committee variables with other audit committee characteristics on free cash flows

We further examine the moderating effects of each audit committee other audit committee characteristics on free cash flows. Each one of the four audit committee variables (ACISIZE, ACINDEP, ACMEET, ACFIN) is examined in relation to how they moderate the relationship between the audit committee characteristics on free cash flows. The results are reported in Table 4 above.Model 1 examines the moderating effect of ACSIZE on each of the audit committee variables on free cash flows. The results show ACSIZEpositivelymoderates the association between ACINDEP with free cash flow at the 5 percent level but negatively moderates the association between ACMEET with free cash flow at the 5 percent level.Thus these findings may infer that ACSIZE enhances the positive affect of ACINDEP on free cash flows but reduces the positive impact of ACMEET on free cash flows. Model 2 examines the moderating effect of ACINDEP on each of the audit committee variables on free cash flows. The results show ACINDEP positively moderates the association between ACSIZE with free cash flow at the 5 percent level but negatively moderates the association between ACINDEP and ACFIN with free cash flow at the 5 percent level. The inference that could be made is when the audit committee possesses more members who are financially qualified, it reduces the need for a strong independent audit committee in alleviating agency costs concerns and boosting shareholders confidence on prudent usage of free cash flows by management. Model 3 examines the moderating effect of ACMEET on each of the audit committee variables on free cash flows. None of the audit committee variables show significant affect as a result of the moderating force of ACMEET.Model 4 examines the moderating effect of ACFIN on each of the audit committee variables on free cash flows.The results show ACFIN negatively moderates the association between ACINDEP with free cash flow at the 5 percent level and the inference is similar to the results on ACINDEP and ACFIN in Model 2.

4.4 Endogeneity

The problem of endogeneity is a true and serious one in much of CG related literature (Brown,Beekes and Veerhoeven, 2011) and accordingly the Granger causality test of endogeneity (Granger, 1969) is applied to test the reverse causality of free cash on all the four experimental and control variables studied.

Our results (not reported here) rules out the presence of endogeneity among the free cash flow and all the experimental and control variables.

5. Conclusion

5.1 Overall conclusion

This study examines the relationship between audit committee characteristics with free cash flows in Malaysia. Our panel analysis of 120 firms for the period from 2005 till 2008 finds a significant relationship between most of audit committee characteristics with free cash flow. The only variable that showed insignificant relationship with FCF was audit committee financial expertise (ACFIN). Further tests conducted to examine the moderating affectof firm specific financial variables on audit committee and secondly the moderating affect of each audit committee variable on other audit committee variables showed a reasonable degree of significance.

The results obtain favor the pecking order/ transactional cost theory in explaining the positive link between audit committee characteristics and free cash flows. Agency concerns on the possible misuse of free cash flows seem less severe. Audit committees with strong characteristics are thus effective in mitigating agency concerns and proliferate available free cash flow for investment and other purposes.

5.2 Limitations and direction for future research

Our study is drawn upon a small sample size of 120 firms from a particular industry, thus limiting the generalizability of our findings. We also did not probe further to determine how the higher free cash flows experienced as a result of stronger audit committee characteristics are eventually spent by managers apart from debt obligations and dividends payout. Future studies could extend our framework by examining how audit committee affects capital expenditure-post free cash flows similar to that examined in cash holding and corporate governance studies. Future studies should explore if audit committee characteristics' association with free cash flow share similar characteristics in other key industrial sectors of Bursa Malaysia firms Malaysia (namely the plantation sector, property sector, consumer products sector, industrial products sector, construction sector, technology sector, financial sector and mining sector) thus arriving at more generalizable conclusions. The domain of free cash flow and corporate governance study could further be extended to cover other committees of the board i.e. remuneration, nomination and risk management committees. A cross-country study which could pool a large number of jurisdictions is also desirable to understand the topic on a global scale. And finally tackling the sticky issue of endogeneity in corporate governance research could be attempted with more robust techniques like the Generalized Methods of Moments (GMM) estimates.

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