THE MODERATING EFFECT OF SURPLUS FREE CASH FLOW ON OWNERSHIP STRUCTURE-EARNINGS QUALITY RELATIONSHIP

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ABSTRACT

Theoretically, good corporate governance mechanisms are expected to enhance the quality of reported earnings to financial statement users. Nevertheless, some existent literature on the association between ownership structure and earnings quality in both developed and developing countries have reported inconclusive results. Thus, the objective of this study is to empirically investigate the relationship between ownership structure and earnings quality of non-financial firms listed on the Bursa Malaysia when considering free cash flow agency problem. Stock ownership by management and institutions are used to represent ownership structure. The quality of earnings is analysed through earnings persistence, earnings predictability, and earnings informative. Ownership structure, financial, and stock price data are gathered from sample firms for the years of 2008 through 2009. Pooled hierarchical regressions for each model are conducted to test the hypotheses.

Keywords: *Corporate Governance, Earnings Quality, Free Cash Flow Agency Problem.*

Introduction

Earnings information has attracted interest of investors, creditors, and all users of financial information since the publication of a worthy research paper by Ball and Brown in 1986. Financial information users always relay on earnings information in making investment-related decisions and evaluating a particular firm as well as its managerial performance. Nonetheless, the 1997 financial crisis along with financial reporting

scandals of some Malaysian firms has shed doubt on the reliability of earnings information disclosed by the firms (Hashim & Devi, 2007). It has been claimed that the lack of good governance system in Malaysian firms has been one of the primary reasons for the devastating of investors' confidence towards the integrity of accounting information. Corporate governance mechanisms curb management propensity to aggressively manipulate earnings numbers, enhance financial reports' reliability, and consequently, improve the quality of reported earnings to financial information users (Jensen & Meckling, 1976). As elements of corporate governance system, to the extent that a high stock ownership by management and institutions are successful in aligning managers-shareholders interests and control management self-interested action, managers are less expected to manage earnings opportunistically, thus improving earnings quality (Sivaramakrishnan & Yu, 2008).

However, empirical studies on the relationship between ownership structure and reported earnings quality have reported unclear results and did not conclusively determine whether ownership structure affects earnings quality. On one hand, several studies evidence supports the significant impact of stock ownership by management and institutions on earnings quality (e.g. Warfield et al., 1995; Vafeas, 2000; Jung & Kown, 2002; Park & Shin, 2004; Velury & Jenkins, 2006; Koh, 2007; Zhao et al., 2008). On the other hand, evidence contained in Korckak (2004), Liu and Lu (2007), Chang and Sun (2008), Sirger and Utama (2008), and Lin et al. (2009) demonstrate that institutional and managerial ownership are not significantly related to the quality of earnings.

According to Jensen (1986) the function of both institutional and managerial ownership increases with the presence of free cash flow agency problem. He also asserts that in a situation when a firm has a high free cash flow but low growth opportunities (surplus free cash flow or free cash flow agency problem hereafter), the probability of squandering the cash unwisely by managers in non-value maximizing activities is prominent. These activities may be of self interest to managers and may provide them with a control over the firm resources (Chung et al., 2005). In order to cover the negative impact of the activities, managers are more likely to aggressively manipulate financial reports that would eventually impair the quality of reported earnings (Chung et al., 2005; Rahman & Mohd-Saleh, 2008; Bukit & Iskandar, 2009). As such, our study expects that the failure of the aforementioned empirical studies to find any significant relationship between ownership structure and the quality of reported earnings may be because agency conflict of free cash flow is not considered when examining the relationship.

Although agency conflict over firms' cash is considered as more sever type of agency conflicts in the U.S (Shleifer & Vishny, 1997), it is strongly emerged in Asian countries (Lee & Lee, 2009). Take Malaysia as an example; a high level of ownership concentration (Thillainathan, 1991; Abduallah, 2006), low quality of minority shareholders protection (La Porta et al., 1998), low quality of earnings information (Davis-Friday et al, 2006), and excessive free cash flow (Bukit & Iskandar, 2009) are significant features of Malaysian firms that distinguish the statues of their free cash flow agency problem from those of developed countries. These characteristics present remarkable obstacles for prompting a system of good corporate governance for Malaysian firms. Instead of traditional owner-agent conflict, in Malaysia, conflict of interests between controlling shareholders and minority shareholders is a major concern of corporate governance and free cash flow agency problem literature. Given the difference in ownership structure, legal system, and institutional environment between developed and developing countries, our study attempts to investigate relationship between ownership structure (i.e. managerial and institutional ownership) and earnings quality. It also seeks to examine the moderating effect of surplus free cash flow on the relationship for Malaysian firms after the newly amended listing requirement that are affective form 2008.

Our study contributes to existent literature in several aspects. There is currently few empirical research to examine the relationship between ownership structure and earnings quality in free cash flow agency problem context. Only two related studies in the U.S have investigated the moderating role of governance mechanisms in surplus free cash flow-earnings management relationship (Chung et al., 2005), or whether governance mechanisms increase the value of firms with high free cash flow (Chi & Scott Lee, 2010). Our study extends such research by link governance mechanisms of Malaysian listed firms with high surplus free cash flow to the quality of reported earnings. Second, as good governance mechanisms are expected to enhance the reporting quality of earnings numbers, our study reconciles and makes better understanding to the inconclusive findings of existing studies by suggesting that the presence of free cash flow agency problem affects the quality of governance mechanisms that align managers-shareholders interests and increase the reliability of reported earnings. Third, cash holding and the valuation of cash literature focus merely on the existence of cash (the ratio of cash to total assets) when investigating governance mechanisms' function in controlling firms' cash policy and increasing the valuation of the firms' cash. Our study extends this line of literature by focusing on how

strong elements of corporate governance alleviate free cash flow agency problem (high free cash flow but low growth opportunities) and improve earnings quality. Finally, Wu (2004) investigates only the ability of stock ownership by insiders and institutions in restricting management scope for wasting firms' excess cash in non-profitable projects. Our study extends his empirical work by investigating whether the relationship between ownership structure and earnings quality is contingent on surplus free cash flow.

Earnings Quality

It has been noted that earnings quality concept is qualitative in nature and cannot be observed (FASB, 1980). As result, several proxies have been employed by academic researchers to infer reported earnings quality (see e.g. Baber et al., 1998; Francis et al., 2004; Ball & Shivaknmar, 2005; Boonlert-U-Thai et al., 2006; Jankins et al., 2006; Krishnan & Parson, 2008; Atwood et al., 2010; Dimitropoulos & Asteriou, 2010; Ye et al., 2010). Among the proxies, earnings numbers are viewed to be of high quality when they are more persistent and less volatile, more strongly related to future cash flow realization, and more strongly related to contemporaneous share price performance (Dechow & Schrand, 2004).

Earnings Persistence

Persistence refers to the sustainability or recurrence of earnings numbers. The effect of sustainability or recurrence on earnings is positive because a high quality of earnings numbers associated with the earnings that can be recurred or sustained for a long period of time (Boonlert-U-Thai et al., 2006). Thus, the two features of earnings, sustainability and recurrence, are utilized by financial and accounting researchers to define persistence and decide whether the current level of earnings is good proxy for the expected level of earnings in coming years (Ahrens, 2010; Melumad & Nissim, 2009).

Earnings Predictability

Earnings predictability, on the other hand, refers to the extent to which investors can predict future earnings and/or future cash flows. It has been argued that a high quality of accounting information should enable investors to better estimate a firm future prospects (Hussainey, 2009). As such, since the current earnings information is more useful in

anticipating future earnings and/or future cash flows, investors prefer earnings with high predictability and view these earnings as having high quality (Kiattikulwattana, 2008).

Earnings Informativeness

Earnings numbers are informative when they have significant impact on investors' expectation in respect of the quality of reported earnings, as reflected in share price changes (Kormendi & Lipe, 1987). Investors, creditors, analysts, and all users of accounting information strive for predicting stock price and returns through using earnings numbers contained in financial statements. Further, Earnings Response Coefficient (ERC) is the widely used indictor by academic researchers to assess the informativeness of firm earnings numbers (see e.g. Gul & Lai, 2002; Korczak, 2004; Ahmed et al., 2006; Jenkins et al., 2006; Niu, 2006; Velury & Jenkins, 2006; Firth et al., 2007; Rakhman, 2009).

Institutional ownership

Earnings information, as part of accounting information, provides investors with relevant information that would help them in making correct asset pricing and investment decisions (Yuan & Jaing, 2008). Institutional investors, relative to individual investors, have more capability of gathering, interpreting financial reports and detecting managerial opportunism over earnings numbers. They also interested in monitoring a firm's financial reporting quality when invest heavily in the firm (Chung et al, 2005, Velury & Jenkins, 2006). The active monitoring hypothesis views institutional investors as long-term investors with raving incentives and motivations to closely monitor management action (Jung & Kown, 2002). Consistent with this notion, Jung and Kown (2002) and Velury and Jenkins (2006) provide evidence that firms with high stock ownership by institutions experience earnings numbers of high quality. Park and Shin (2004) and Koh (2007) document similar findings in which they conclude that active institutional investors are more likely to effectively constrain unethical behavior of earnings management and enhance the credibility and reliability of financial reporting.

Nonetheless, proponents of the strategic alliance hypothesis contend that earnings quality of firms with high institutional shareholdings is low. This contention is consistent with the premise that institutional investors are expected to force firms management to focus on current earnings,

rather than long-term earnings, to avoid reporting disappointing earnings to interested parties. Empirical research findings reveal that the quality of financial reporting impaired as institutional ownership of equity increases (Bradbury et al., 2006, Pizzaro et al., 2007). In addition to significant findings, existent studies on the relationship between institutional ownership and financial reporting quality have reported insignificant results. For example, a research conducted by Betra (2002) does not provide any significant effect of institutional ownership of equity on reported earnings quality. Sirger and Utama (2008) and Lin et al. (2009) document similar findings in which they provide no empirical support of the high equity holdings by institutions enhances the reliability of financial information. Based on the active monitoring hypothesis' notion, our main primary hypothesis (stated in alternative form) is as follows:

H1a: institutional ownership is positively associated with the quality of reported earnings.

Managerial Ownership

Apart from institutional ownership, managerial ownership is an important device in aligning managers interests with those of shareholders, and therefore, improve earnings quality (Warfield et al. 1995). The supporters of agency theory believe that managerial ownership of equity help in alleviating moral hazard problem between managers and shareholders, and managers with large stake of equity are less likely to involve in self-interested action because value decreasing behavior is costly for them (Jensen & Mekling, 1976). As the conflict of interests between the two parties is removed, managers are less likely to opportunistically manage earnings numbers, thus improving the quality of reported earnings. Consistent with this notion, Warfield et al. (1995), Vafeas (2000), Petra (2002), and Zhao et al. (2008) provide evidence that firms with a large stock ownership by management report earnings numbers of high quality, supporting the agency theory's and the alignment hypothesis's contentions that both managers and shareholders interests will be converged when management own a large stack of shares. Saleh et al. (2005) and Bradbury et al. (2006) provide similar findings in which their results indicate that the reliability of financial information improves as managerial ownership increases.

Nonetheless, advocates of the entrenchment hypothesis view managers with large stake of shares as self-interested actors who pursue their own interests. To achieve this end, those managers are more likely to

aggressively manipulate earning numbers that eventually may lead to low quality of reported earnings (Korczak, 2004). In light of this notion, Gul and Lai (2002) and Pergola (2006) state that a high stock ownership by management has negative effect on the reporting quality of earnings numbers. Hutchinson and Leung (2007), Pizzaro et al. (2007), and Johari et al. (2008) find similar findings in which they conclude that firms with high management ownership of equity are more likely to experience earnings of low quality because their managers engage in self-interested behavior of earnings management. In addition to the significant results, empirical studies on the relationship between managerial ownership and the reporting quality of earnings numbers have reported insignificant findings. For example, a research conducted by Korczak (2004), Velury and Jenkins (2006), and Chang and Sun (2008) reveals that management ownership and earnings quality is not significantly correlated. Liu and Lu (2007) do not find any significant impact of managerial ownership on the reliability of earnings information. Based on the agency theory's theory and alignement hypothesis's notion, our main secondary hypothesis (stated in alternative form) is as follows:

H2a: managerial ownership is positively associated with the quality of reported earnings.

The moderating effect of surplus free cash flow

It has been stated that the effectiveness of governance mechanisms improves with severe agency conflict of free cash flow (Jensen, 1986). Chi and Scott Lee (2010) asserts that ignoring this conditional nature of corporate governance may lead to erroneous implication that governance mechanisms and firm value are not significantly correlated. The presence of strong corporate governance is necessary for firms with excess cash since managers of these firms are expected to dissipate the cash in destructive investments (e.g. Dittmar & Mahir-Smith, 2007; Harford et al., 2008; Lee & Lee, 2009; Chi & Scott Lee, 2010). On the other hand, managers of firms with low free cash flow are less likely to overinvest and therefore governance mechanisms have no significant role in these firms (Chi & Scott Lee, 2010). In addition to the high cash, free cash flow agency theory views growth opportunities as important factor in the agency conflict of free cash flow because high growth opportunities firms, compared to those with low growth opportunities, are able to utilize all available cash to finance positive return projects (Jaggi & Gul, 1999). Furthermore, empirical studies document that firms with high free cash flow but low growth opportunities experience earnings numbers of low quality (Chung et al., 2005; Rahman & Mohd-Saleh, 2008; Bukit & Iskandar, 2009).

In the view of strong empirical evidence that documents effective role of governance mechanisms for free cash flow agency problem firms (e.g. Wu, 2004; chung et al.,2005; Richardson, 2006; Bukit & Iskandar, 2009), it can be argued that the relationship between corporate governance and earnings quality will be contingent on the level of the problem. The higher the free cash flow agency problem within a firm, the greater the probability the firm will apply strong elements of governance to alleviate this problem. As a result, the stock market's response to the governance elements will be high, and the relationship between corporate governance mechanisms and earnings quality will be stronger, accordingly. As one of external mechanisms of corporate governance, stock ownership by institutions plays crucial role in mitigating the agency conflict of free cash flow. A research conducted by Brush et al. (2000) reveals that managers are more likely to distribute the free cash among shareholders as dividends when mutual funds own a large stake of shares, rather than investing it in value destroying projects. Richardson (2006) finds that activist institutions ownership moderates the likelihood that managers will overinvest firms' free cash flow in non-value maximizing activities. Evidence contained in Dittmar and Mahrt-Smith (2007) indicates that public pension funds with large stake of shares, by better monitoring on firms use of cash, increase the valuation of firms with excess cash. In recent study, Chi and Scott Lee (2010) provide evidence that the relationship between institutional ownership and firm value is more pronounced in free cash flow agency problem firms. These findings serve as a foundation for our study's expectation that institutional investors with large of firm shares will more closely monitor management opportunistic behavior over the firm's cash, and the relation between institutional ownership and earnings quality will be stronger if there is a high surplus free cash flow. Our moderating primary hypothesis (stated in alternative form) is as follows:

H1b: the effect of institutional ownership on earnings quality is stronger for firms with high surplus free cash flow than for those with low surplus free cash flow.

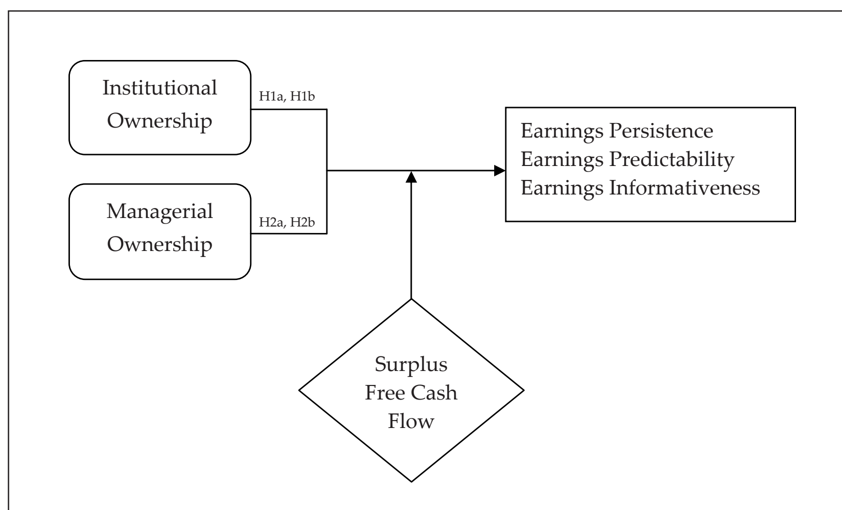
Managerial ownership is another mechanism that constrains management self-interested behavior over firm's resources. Evidence contained in Gul and Tsui (2001) indicates that a high equity ownership of directors, by better alleviating the conflict of interests between managers and shareholders over sampled firms' cash, moderates the probability that external auditors ask free cash flow agency problem firms to pay a high audit fees. Wu (2004) states that that the conflict of interests between owners and managers over excess cash is greater for high free cash

flow but low growth opportunities firms, and therefore, the role of managerial shareholding is more important for these firms. He also finds that a large management ownership of equity substitutes the leverage role in reducing agency costs of free cash flow in these firms. A research conducted by Pawlina and Renneboog (2005) documents that firms with higher shareholdings by insiders are less likely to rely on internally generated cash to finance their non-profitable investments.

Moreover, Oswald and Young (2008) provide evidence that firms with large stock ownership by management are more expected to distribute cash through share reacquisition than squandering it value destroying activities. Recently, Chi and Scott Lee (2010) provide evidence that the effect of equity ownership by management on firm value is more prominent in free cash flow agency problem firms. The aforementioned findings serve as a foundation for our study's expectation that managers with large stake of firm shares are less likely to unwisely dissipate the firm's cash in non-value increasing investments, and relationship between managerial ownership and earnings quality will be stronger if there is a high surplus free cash flow. Our moderating secondary hypothesis (stated in alterantive form) is as follows:

H2b: the effect of managerial ownership on earnings quality is stronger for firms with surplus free cash flow than for those with low surplus free cash flow.

Theoretical Framework



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