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Institutional Ownership and Cash Holding

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Abstract

Background/Objectives: This paper examines the influence of companies' specific governance mechanisms, namely managerial ownership, board size, institutional ownership and CEO-duality, in determining cash holdings in an emerging market setting. **Methods/Statistical Analysis:** Sample companies are non financial and publicly listed on Bursa Malaysia Main Market for the year between 2008 and 2010. Companies in the financial, utility and infrastructures (IPC) sectors are excluded as they are subjected to different regulatory requirements. Those companies with missing financial data are also excluded. The final sample consists of 2022 observations. Based on Hausman's specification test, fixed-effects panel data model is preferable to random effects model. Therefore, the fixed-effects model is employed. **Findings:** This study finds that managerial ownership and CEO-duality can significantly influence higher level of cash holdings while the existence of Government Linked Institutional Companies (GLICs) and leverage level can significantly curb the existence of cash pile up. The significant influence of CEO-duality and director ownership on cash holdings suggests that agency problems are much higher for companies with these types of characteristics and it is consistent with the findings of[6,20,21]. Government ownership, through shareholdings by GLICs, could reduce information asymmetry problems as GLICs could monitor managerial actions and reinforces the finding of[25]. The findings of this study show that the Securities Commission of Malaysia's recommendation to separate the roles of CEO and chairman is good as it could reduce the abuse of power. Furthermore, institutional investors with significant shareholdings, such as GLICs, can play a role in monitoring managerial actions so that managers will not take actions that are detrimental to the interest of the minority shareholders. **Application/Improvements:** External monitoring, as prescribed by Malaysian Codes on Corporate Governance, either in the form of GLICs or debt holders, can curb excessive cash holdings.

Keywords: Cash Holdings, CEO Duality, Institutional Ownership

1. Introduction

Handling cash liquidity is possibly the most, perplexing financial strategy a company must deal with as companies are not able to bear the price of running out of cash as this may cause serious operational backlashes, including the winding up from the company if it consistently ceases to pay bills while they fall due. In contrast, holding too much idle cash is just not cost efficient as this idle asset should be invested elsewhere to harness profit and cash flow to the firm. Striking equilibrium between these goals (liquidity and profitability) can be very challenging. Given the character of cash is incredibly liquid and easily transferable; it is therefore very crucial that companies have proper mechanism to manage and safeguards this asset to prevent unwarranted losses due to mismanagement. The key is always to balance among liquidity, profitability and opportunity. The manager needs to ensure that the firm has sufficient liquidity in the form of cash to meet with day-to-day expenses, to shield against unplanned expenditures and at the same time is able to take advantage of upcoming and promising opportunities.

Corporate governance is a control mechanism formed to improve the potency of the company's policies such as cash management. Degrees of governance mechanisms

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as recommended by the Malaysian Codes on Corporate Governance incorporate board characteristics and involvement of other controlling shareholders[1–3]. Previous studies indicate that the corporate governance mechanism can drastically influence company policy and could subsequently affect business performance[4–7]. As an example[8] find that excess free earnings in the hands of entrenched managers are more likely to lead to overinvestment and lower profitability.

Using a sample of 2022 firm-year observations for the period between 2008 and 2010, this study examines the influence of CEO duality and institutional investors on the level of companies' cash holdings. The study evidences that weak shareholder protection as proxies by the incidence of CEO duality is related to higher cash holdings. Likewise, high concentrated ownerships by managers can significantly affect the level of cash pile up. On the other hand, institutional investors have great influence to reduce the level of cash pile up which imply that these institutional investors can play good monitoring role for effective cash management. Control variables such as better performance in the form of profitability and growth generate a higher level of cash while higher leverage level leads to lower cash holdings.

The paper is organized as follows. The next section provides a brief summary of relevant literature and hypothesis development. Data and methodology section describes data collection procedures and model specification. Next, analysis of findings and results are provided. Finally, the last section concludes the study with summary of findings, limitations, and suggestions for future research.

2. Literature Review and Hypotheses Development

In[9] states that agency problem between majority and minority interests are more apparent in emerging markets, such as in Malaysia, where high ownership concentration is prevalent. The problem appears when the majority shareholders act in their own interests at the expense of minority shareholders' interests. An example is when the majority shareholders use their controlling position and try to capture advantages of the business for themselves at the expense of minority shareholders[10]. These are commonly known as private benefit of control. Therefore, the high concentration of ownership will give rise to the agency problem when the controlling owner is able extract private benefits at the expense of minority interests.

Extant empirical studies restraint companies on having a large cash pile up relative to its assets as this may lead to unwarranted usage of companies' resources. Previous studies argue that the benefit of holding cash is not only to improve the firm's value by increasing its abilities to uplift valuable investments, but also can help avoid the excessive cost of external financing[11,12]. On the other hand, in[13] raises the issue that directors of cash-rich companies are more prone to severe agency problems. With more idle cash in their jurisdiction, directors are more likely to over-invest in uneconomical projects, devour more discretionary perquisites for personal use, or merely hold cash excessively. In[14] contends that directors may turn cash into the private benefits at lower cost than other assets.

Studies on determinants regarding cash holdings have long been contested within the corporate finance literature. There are several reasons as to why companies hold cash, which includes a tradeoff between the marginal costs and benefits of holding cash to corporate governance[15].

2.1 Board Size

Malaysia has, over time, introduced 3 Malaysian codes on corporate governance (MCCG) beginning from year 2000, a revised MCCG in 2007 and the new updated MCCG code in 2012. Taken together, these codes focus on empowering the directors by strengthening their fiduciary role. Directors have a responsibility to be effective stewards of the company in establishing strategic route, supervising business operations, confirming that the company conducts are in compliance with business laws, ethical and social values as well as maintaining an effective governance structure.

Board of directors play an important role in ensuring that managers act in the interests of shareholders[16]. Previous studies argue that large boards are less effective than small boards because of the difficulties in solving the agency problem among the members of the board[17,18]. In[18] endorses small boards because of efficiency in decision making. Smaller boards is easier to coordinate and has lesser communication problems. On the contrary, large boards are associated with communication dilemma, cohesiveness and conflict. Thus, the board becomes more symbolic and neglects its monitoring roles.

It is arguable whether board size can have any implication on the level of cash holdings. Therefore, the first hypothesis will attest whether board size can significantly affect the level of cash holdings:

H_1: Ceteris paribus, board size negatively influences cash holdings.

2.2 CEO Duality

Securities Commission of Malaysia[3] also recommends separating the roles between chairman and CEO. This will reduce the conflict of interests that occur when the same individual performs both functions. By separating these two positions, monitoring of managerial performance becomes more effective.

In[19] suggests that agency problems are much higher when the CEO and the chairman is the same person. Therefore, the authors find a positive relationship between CEO duality and cash holdings. In addition[20], finds the relationship between CEO duality and cash holdings is positive and significant. Further[21], finds that the separation between CEO and chairman positions leads to lower cash holdings suggesting that the separation reduces the propensity to hoard excessive cash. Finally[22], finds that cash holdings are not related to CEO duality.

The following hypothesis is developed to attest the relationship between CEO-duality and cash holdings:

H_2: Ceteris paribus, the presence of CEO duality positively influences s cash holdings.

2.3 Managerial Ownership

Ownership might lead to greater entrenchment of managers if substantial shareholders serve as managers. According to[18], ownership concentration arises as a natural response to high managerial agency costs.

In[23] states that concentration of ownership and control in Malaysia lies in families, government, and private institutions. In the case of concentrated ownership, large shareholders can have a momentous role in monitoring management. Therefore, a problem associated with this kind of ownership is the potential expropriation of minority interests rights by the controlling shareholders. Thus, the following hypothesis is developed to gauge the relationship between managerial ownership and cash holdings:

H_3: Ceteris paribus, managerial ownership positively influences cash holdings.

2.4 Institutional Ownership

In Malaysia, government ownership includes both federal and state government investments in publicly listed companies. Federal government investments are made through Government-Linked Investment Companies (GLICs) [There are seven major GLICs: Khazanah Nasional Berhad, Kumpulan Wang Amanah Pencen, Ministry of Finance Inc, Armed Forces Fund, Permodalan Nasional Berhad, Pilgrim Fund, and Employee Provident Fund][1], while state government investments are carried out through their economic subsidiaries. There is inconclusive evidence as whether institutional ownership can influence the level of cash holdings. In[24] finds that agency costs are higher in government-owned firm. This is related to difficulties in achieving conflicting objectives between two goals: business goal in maximizing profits and government goal of serving public interests. Furthermore, high levels of state ownership in emerging economies often lead to higher moral hazard problems as it is very much related to lower pay but greater authority for managers[25].

Emerging markets are often considered to have severe information asymmetries, making it problematic for shareholders to monitor managers or directors and to make them to behave in the interests of shareholders. In[24] argues that government or state ownership has easy access to information from many sources and are more likely to gain easier access to different channels of financing than non-state firms. Furthermore, in[25] finds a negative relationship between government ownership and cash holding. This finding suggests that government ownership could reduce information asymmetric problems. Therefore, it can be argued that ownerships by GLICs have the potential to mitigate agency problem by forcing corporate managers to take decisions in the interests of minority shareholders. This will lead to an unfavorable relationship between government ownership and cash holdings thus the following hypothesis is developed:

H_4: Ceteris paribus, Institutional Government Link Investment Company (GLICs) ownership negatively influences cash holdings.

Previous studies acknowledge the importance of other important factors that may significantly affect the level of cash flow such as the level of debt or leverage, the level of profitability and size of companies[26,27]. These variables are included in the panel data regression model as control variables.

3. Data and Methodology

This study investigates the influence of ownerships structures and board characteristics on cash holdings (cash balances) for Malaysian non-financial listed firms for the year 2008 to 2010. Previous studies have shown inconclusive evidence as to how ownership and board characteristics affect company's cash holdings.

Table 1. Sample collection procedure

Companies	No.	Firm-year
All main board	783	2349
Less: Finance related &utility	58	174
Possible observations	725	2175
Less: Missing observations		153
Final observations		2022

Sample companies are listed non-financaial companies on Bursa Malaysia's Main Market for the period between 2008 and 2010. Companies in the financial, utility and infrastructures (IPC) sectors are excluded for they are subjected to different regulatory requirements. Those companies with missing financial data from Thomson Reuters DataStream database are also excluded. The final used consists of 2022 observations as summarized in Table 1.

4. Findings and Analysis

Table 2 presents the descriptive statistics for variables of interests. On average (median), board size has about 7.5 (7) directors, with the maximum value of 18 directors and minimum value of 2 directors. Out of 2,022 observations, only 220 observations or 10% of the total sample have the same person serving both functions as chairman of the board and CEO. Managerial ownerships range from 0 to maximum interest of 83% while the mean ownership of GLICs is about 6%.

The maximum value of leverage ratio is almost triple of the total assets value which is very high, while the average (median) level is about 22% (20%). On average, Earnings Before Interest and Taxes (EBIT) to total assets is 5% and companies size as measured by total assets ranges from RM11.7 million to RM74,025 million. Firm size is transformed using natural logarithm, while leverage and earnings are winsorised at 1% and 99% levels to reduce sample bias due to extreme values or outliers.

Table 2. Descriptive statistics

	MEAN	MED	MAX	MIN	ST-DEV
BOARDSIZE	7.50	7.00	18.0	2.00	1.97
CEODUAL-ITY	0.10	0.00	1.00	0.00	0.31
MGROWN	0.32	0.33	0.83	0.00	0.23
INSTOWN	0.06	0.00	0.96	0.00	0.13
LEVERAGE	0.22	0.20	2.85	0.00	0.19
EARNINGS	0.05	0.06	0.64	-3.01	0.13
FIRM-SIZE(RMmil)	1,388	287	74,025	11.7	4,968

All independent variables are checked for collinearity. Table 3 indicates that none of these pairwise correlations are significantly above 0.5 which suggests that there is no significant correlation which might cause multicollinearity problems.

Table 3. Correlation matrix

	1	2	3	4	5	6	7
BOARD-SIZE	1.00						
CEODU-ALITY	-0.07	1.00					
MGROWN	0.01	0.15	1.00				
INSTOWN	0.24	-0.09	-0.28	1.00			
LEVER-AGE	0.00	0.04	0.01	0.00	1.00		
EARN-INGS	0.16	0.54	0.05	0.06	-0.28	1.00	
FIRMSIZE	0.36	-0.66	-0.07	0.43	0.18	0.19	1.00

To reduce heteroscedasticity problems, robust standard error is used. Hausman's specification test was then performed to select the better specification model between random effects and the fixed-effect model. The Hausman's specification test has a p-value of 0.00; therefore, fixed-effects panel data model is employed.

The following model is estimated to test the influence of board characteristics and ownership structures on cash holdings:

$$CASH_{it} = \beta_0 + \beta_1 \, BOARDSIZE_{it} + \beta_2 \, CEODUALITY_{it} + \beta_3 \, DIROWN_{it} + \beta_4 \, INSTOWN_{it} + \beta_5 \, LEVERAGE_{it} + \beta_6 \, EARNING_{it} + \beta_7 FIRMSIZE_{it} + \varepsilon_{it}$$

where

CASH	=	Cash and short term investments divided scaled total assets.
BOARDSIZE	=	Number of directors or managers on board.
CEODUALITY	=	Dummy variable, 1 if CEO and chairman are the same, 0 otherwise.
MGROWN	=	Percentage of total shares held by managers.
INSTOWN	=	Percentage of total shares held by the seven GLICs.
LEVERAGE	=	Total debt to total assets.
EARNING	=	Earnings before tax and depreciation scaled by total assets.
FIRMSIZE	=	Firm size is measured by the natural logarithm of total assets.

Table 4 presents the regression results of ownership structures, board characteristic and control variables on cash holdings using fixed effect panel data model. As expected, managerial ownership is significantly associated with high level of cash holdings. Likewise, CEO duality can positively influence cash pile up.

On the other hand, the existence of GLICs as a controlling shareholder can significantly mitigate the problem of excess cash holdings. Similarly, leverage levels can positively constraint companies from having too much cash on hands[28]. Taken together, both institutional ownerships as well as debt holdings can positively improve companies' use of resources as they can effectively monitor companies' cash holdings policy.

It is also expected that when a company is profitable, it would have high cash holdings as predicted by pecking order theory. Similar to[29,30], the finding of this study supports that suggestion. Table 4 indicates that earnings as the proxy for firm profitability significantly influence cash holdings. Board size and firm size do not have any significant relationship with the level of cash holdings.

5. Conclusion, Limitation and Future Analysis

This study investigates the importance of ownership structures and board characteristics in determining the level of cash holdings. Using panel data fixed effect and robust regression model, this study finds that managerial ownership and CEO duality have positive significant influence on cash holdings. On the contrary, GLICs ownership and leverage level have negative significant effects on cash level. Profitability positively influences level of cash while board size and firm size do not have any significant relationship on cash holdings.

This study is limited to the assessment of cash level. Only one proxy of cash holdings or cash level is used.

Table 4. Regression results

	Exp sign	Coeff	Robust std error	t-stat	P-value
BOARD SIZE	+ve	-0.001	0.021	-0.27	0.786
CEO DUALITY	+ve	0.010	0.007	1.40	0.081#
MGROWN	+ve	0.040	0.015	2.58	0.005###
INSTOWN	-ve	-0.077	0.026	-2.91	0.002###
LEVERAGE	-ve	-0.176	0.044	-4.01	0.000###
EARNINGS	+ve	0.111	0.052	2.15	0.016##
FIRMSIZE	+ve	0.004	0.022	0.19	0.852
CONST		0.098	0.282	0.35	0.728
Sigma u	0.099				
Sigma e	0.052				
rho	0.783				
F	6.95				
R-sq overall	0.166				

#,##,### denote significant at 10%,5% and 1% level using one-tailed test.

BOARDSIZE is the number of directors on board; CEODUALITY is Dummy variable, 1 if CEO and chairman are the same, 0 otherwise; MGROWN is the percentage of shares held by managers; INSTOWN is the percentage of total shares held by the seven GLICs and state government, LEVERAG is the winsorised Total debt to total assets; EARNING is the winsorised Earnings before tax and depreciation to Total assets and FIRMSIZE is the size of firms measured by natural logarithm of total assets.

Future research should make use of different proxies of cash levels such as changes in cash holdings and changes in cash flows. Improvement and future investigations can also be highlighted to pursue the value of cash holdings and its implications on predicting firm performance as well as social and non-economic goals.

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7. References

1. Securities Commission. Malaysian Code on Corporate Governance. Kuala Lumpur, Malaysia.
2. Securities Commision. Malaysian Code on Corporate Governance – Revised. Kuala Lumpur, Malaysia. 2007.
3. Securities Commision of Malaysia. Malaysian Code on Corporate Governance. Kuala Lumpur, Malaysia. 2012.
4. Kuan T, Li C, Chu, S. Cash holdings and corporate governance in family-controlled firms. Journal of Business Research. 2012; 64(7):757–64.
5. Almeida H, Campello M, Weisbach MS. The cash flow sensitivity of cash. Journal of Finance. 2004; 59(4):1777–804.
6. Gill A, Shah C. Determinants of corporate cash holdings: Evidence from Canada. International Journal of Economics and Finance. 2012; 4(1):70–9.
7. Kalcheva I, Lins K. International evidence on cash holdings and expected managerial agency problems. Review of Financial Studies. 2007; 20:1088–112.
8. Wei KCJ, Zhang Y. Ownership structure, cash flow and capital investment: Evidence from East Asian economies before the financial crisis. Journal of Corporate Finance. 2008; 14:118–32.
9. Mitton T. A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. Journal of Financial Economics. 2002; 64(2):215–41.
10. LaPorta R, Lopez-de-Silanes F, Shleifer A. Corporate ownership around the world. Journal of Finance. 1999; 54:471–17.
11. Mikkelson WH, Partch M. Do persistent large cash reserves hinder performance? Journal of Financial and Quantitative Analysis. 2003; 38:275–94.
12. Dittmar A, Mahrt-Smith J, Servaes H. International corporate governance and Corporate cash holdings. Journal of Financial and Quantitative Analysis. 2003; 38:111–33.
13. Jensen MC. Agency costs of free cash flow, corporate finance and takeovers. American Economic Review. 1986; 76:323–9.
14. Myers S, Majluf N. Corporate financing and investment decisions when firms have investment information that investors do not. Journal of Financial Economics. 1984; 13:187–221.
15. Subramaniam V, Tang TT, Yue H, Zhou X. Firm structure and corporate cash holdings. Journal of Corporate Finance. 2011; 17:759–773.
16. Allen F. Corporate governance in emerging economies. Oxford Review of Economic Policy. 2005; 21(2):164–77.
17. Lipton M, Lorsch JW. A modest proposal for improved corporate governance. Business Lawyer. 1992; 48(3):59–77.
18. Jensen MC. The modern industrial revolution, exit, and the failure of internal control systems. Journal of Finance. 1993; 48:831–80.
19. Drobetz W, Gruninger MC. Corporate cash holdings: Evidence from Switzerland. Financial Markets Portfolio. 2007; 21:293–24.
20. Kusnadi Y. Do corporate governance mechanisms matter for cash holdings and firm value? Pacific-Basin Finance Journal. 2011; 19(5):554–70.
21. Lee KW, Lee CF. Cash holdings, corporate governance structure and firm valuation. Review of Pacific Basin Financial Markets and Policies. 2009; 12(3):475–508.
22. Ozkan A, Ozkan N. Corporate cash holdings: An empirical investigation of UK companies. Journal of Banking and Finance. 2004; 28(9):2103–34.
23. Singam K. Corporate governance in Malaysia. Bond Law Review. 2003; 15(1):313–44.
24. Eng L, Mak, Y. Corporate governance and voluntary disclosure. Journal of Accounting and Public Policy. 2003; 22(4):325–45.
25. Megginson WL, Wei Z. The determinants and value of cash holdings: Evidence from China's privatized firms. 23rd Australasian Finance and Banking Conference; 2010.
26. Buck T, Liu X, Skovoroda R. Top executive pay and firm performance in China. Journal of International Business Studies. 2008; 39(5):833–50.
27. Hasan A, Butt SA. Impact of ownership structure and corporate governance on capital structure of Pakistani listed companies. International Journal of Business and Management. 2009; 4(2):50–7.
28. Chon M, Choi J. An analysis of cash holdings of ICT firms. Indian Journal of Science and Technology. 2015 Jan; 8(1):412–9.
29. Myers S, Rajan R. The paradox of liquidity. Quarterly Journal of Economics. 1998; 113(3):733–71.
30. Ferreira M, Vilela A. Why do firms hold cash? Evidence from EMU countries. European Financial Management. 2004; 10(2):295–319.