CORPORATE GOVERNANCE AND CASH HOLDINGS: Evidence from Family Controlled and Non-Family Business in Pakistan

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Abstract

In this paper we examine corporate governance and its impact on firm's cash holdings in the context of the family-controlled firms and stand-alone firms in Pakistan, employing several measures of corporate governance. Empirical results show that family-controlled businesses hold more cash as compared to stand-alone firms, possibly alluding to the more prevailing agency problems between controlling shareholders and the minority shareholders. Results further shows that managerial ownership has a significant negative relationship with corporate cash holdings; big-five ownership is positively related to cash holdings while board size, CEO duality and institutional shareholders have no effect on firm's cash holdings. Overall, these results are consistent with the agency predictions of Jensen and Mackling (1986) that higher managerial stakes provide managers with incentives to hold optimum levels of cash holdings. Results also support the view that institutional activism is low in Pakistan's market providing institutional shareholders less incentives to monitor firm's financial decisions.

Key words; family and non-family business, cash holding, managerial ownership, big five ownership, CEO duality, board size, audit quality, institutional shareholder.

I. Introduction

A vast body of literature exists that has documented that firms hold too much cash than is required [Ditmar and Smith (2007), Duchin (2010), Bates, Kahle and Stulz (2009), Liu, et al. (2015)]. For instance, Bates, et al. (2009) document that U.S. firm's cash ratio has more than doubled from 1980 to 2006. Various explanations are provided for corporate cash holdings such as precautionary motive, transactional motive, R&D intensity [Bates, et al. (2009)], agency theory [Jensen (1976)]. These motives argue that firms hold cash for operational and investment opportunities while the agency theory argues that firm's level of corporate cash holdings is influenced by the agency conflicts between managers and shareholders as managers have an incentive to hold more cash as they tend to pursue private benefits [Harford (1999), Harford, et al. (2008)] . An emerging area that has got little attention of researchers is whether cash holdings are also affected by the agency conflict between controlling shareholders and minority

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shareholders, especially for family-controlled firms, a phenomenon ubiquitous in developing markets where a group of firms are typically controlled by a family through a pyramidal structure [Claessens, et al. (2002), Liu, Luo and Tian (2015)].

Another important area of research is the impact of corporate governance on the level of cash holdings. Dittmar and Smith (2011) reports substantial impact of corporate governance on the firm value channeled through the cash holdings. They also find that well-governed firms hold efficient levels of cash while poorly governed firms have excess cash and such firms also have subsequently lower operating performance, indicating to the poor utilization of firm resources. One of the main features of firms in the developing markets is the predominance of family-controlled firms. However, familycontrolled firms are viewed as less efficient structure where they have strong incentives to pursue private rents [Fama and Jensen (1985), Demestz (1983)]. We examine whether family firms with excess control hold more cash as compared to non-family firms in Pakistan. Although this paper mainly focuses on family-controlled firms but we also examine variations in the relationship between control rights and cash holdings in family and non-family firms. We additionally examine this relationship in the context of corporate governance mechanisms. Empirical results of the study show that family-controlled firms hold more cash than stand-alone firms. Furthermore, the study also found that corporate governance mechanisms do affect the level of cash holdings in the firm. The rest of the paper is organized as follows. Next section reviews the relevant literature, followed by data section including data, sources for data collection and all sort of variables than detailed methodology and data analysis while last section concludes the paper.

II. Literature Review

1. Corporate Governance and Cash Holding

Two main explanations are provided in the literature for why firms hold cash, namely operational consideration and agency issues. Operational consideration implies that firms prefer to hold cash due to investment opportunities and financial constrain which the firms face while agency conflict between manager and shareholder may affect the corporate cash holding because manager may prefer to hold more cash to utilize it for their private benefits. In the family controlled firms family members are deeply involved in the management and board of director and have an influential controlling power which may increase the risk to expropriate the minority shareholders through increasing debt level of the firms [Faccio, et al. (2010), Xu, et al. (2012)] presents that excess control right also enable the ultimate owner to focus more on debt financing and utilize it for their private benefits and expropriate minority. Excess control right also facilitate the controlling shareholder to hold more cash for their benefits because cash and cash equivalent can easily be utilized and converted into private benefits than other assets [Kim, et al. (1998)].

Family-controlled firms also prefer to hold more cash that can further be used for inter-corporate loan to the controlling shareholder or to the affiliates, because it is beneficiary for the firms to lend large amount of funds to affiliates. Inter-corporate loan benefits the barrower because of low borrowing cost and less restrictive credit condition while it benefit the lender to increase investment in the same group which is less risky as compare to investing in unrelated firms. Ultimate owner of the family firm also used cash generated through debt financing for the co-insurance effect, Choi, et al. (2013), examine ownership structure and cost of debt in Korean business group (Chaebols), study was conducted to find out that whether debt financing is used for tunneling or co-insurance purposes. Result of the study presents that debt financing in Korea is used for helping affiliated firms or co-insurance effect instead of tunneling.

Controlling shareholder also use their excess control to hold more cash for tunneling which is the transferring of resources from those companies where the controlling shareholder have less right to cash flow to that one where they have excess cash flow right. Mehta, et al. (2002) also presents evidence of substantial tunneling among same line group. Family controlled firms have excess control which is used for holding more cash which are tunneled rather than investing or distributing among shareholders [Liu, et al. (2015), Xu, et al. (2012)]. Tunneling is mostly used in countries with weak legal structures. In such countries, the entrepreneur controlling the firms use funds for their private benefits. Sadegh, et al. (2013) finds no effect of ownership structure, financial leverage, cash holding and corporate governance on the value of the firm while investment opportunities and firm size affect the firm value positively. Ditmar, et al. (2003) finds that those countries where the shareholder rights are not properly protected hold cash twice more than from those countries where the right of shareholder are protected.

Baghat and Bolton (2013) examines impact of Sarbanes Oxley act 2002 on the relationship between corporate governance and company performance. Result of the study find out that prior to 2002 there is negative relationship between corporate governance and firm performance but finds a positive relationship in post-act period. Maxwell, et al. (2008) investigates the impact of corporate governance based on antitakeover provision and inside debt on the firm cash holding and finds that the firms which have weak governance structure hold less cash and that firm value and weak governance structure are negatively related to each other. Anabestani and Shourvarzi (2014) examine relationship between cash holding, corporate governance and firm value and find a positive significant relationship between cash holding and corporate governance. Raposo, et al. (2005) examines relationship between business condition and cash holding. Business condition acts as a determinant of cash holding, a penal of publicly traded non-financial US firms were used for the period 1971-2002. Result of the study was found that during recession those firm which are financially constrained hold more cash while the unconstrained firms can easily adjust its cash holding according to the business cycle.

2. Evidence from Pakistan

Pakistan's market, like many other developing markets, is characterized by family-controlled large and diversified businesses [Cheema (2003), Abdullah, Shah and Khan (2012)]. However, research on the family-controlled businesses and their implications for firm's financial decisions and firm's performance are scant. Yasir, et al. (2005), analyze the impact of corporate governance practices on firm's financial performance employ corporate governance index consisting of 30 parameters. Results show that the CG index scores were statistically significant and positively related to financial performance. Mansoor, et al. (2011), reports that there is positive relationship between firm performance and three indicator of corporate governance while firm performances are not significantly related with CEO duality. A recent study by Masood and Shah (2014), find that ownership percentage of big 5 shareholder, concentration of share and institutional shareholding are positively related while director ownership and board size are negatively related with cash holding. Abdullah, et al. (2012) examines role of ownership structure on firm's financial performance using accounting and market-based measures. The study finds positive impact on firm's market-based measures (particularly Tobin's Q) when ownership of associated holdings and block holdings is above the median values, suggesting that such ownership structure may alleviate the agency costs.

3. Family and Non-Family Business

Family-controlled business are a ubiquitous phenomenon in many developing and developed countries [La Porta, et al. (1999), Khanna and Rivkin (2001)]. These business groups are typically controlled by few large shareholders. Family controlled business have a large number of benefits or positive aspect like quick decision, flexibility, better future planning, better investment policies and strategies, less monitoring cost, well define culture and better and long term involvement of the family member. The family business has also a negative aspect like giving priority to family interest instead of business, autocracy, nepotism and conflict among the family members. The impact of family controlled business is one of the emerging issues which affect various important and vital area of the firm.

Philippe, et al. (2004), examines market and accounting performance of family controlled business and finds that profitability and market value was higher for family-business as compare to stand-alone firms, and when family members are actively involved in operating the business then the firms have better accounting and market performance. In Family controlled firm the controlling shareholder have excess control right which tend to hold more cash within the firm for tunneling instead of investing or distribute among shareholder as dividend [Liu, et al. 2015)]. Miller, et al. (2008) examine the merit of stewardship and stagnation by comparing

family and non-family business, and finds support of the stewardship aspects that are continuity, community and connection of the family owned business while no support for any aspects of the stagnation perspective was found. Dalton and Daily (1992) examine the linkage between firm performance and organization agent in the family owned business by focusing the CEO and board of directors. The result was found that within the successful entrepreneurial firm the CEO doesn't elect the inappropriate governance structure which will hurt the firm performance. Difference in the firm value between family and non-family business was also investigated by Saravanan (2006), result present that there is no significant difference in the value of firm between family and non-family business.

Corporate governance is one of an important issues in the family business the majority shareholder hire and elect such a board which will give benefits to family member and will hurt the minority shareholder. The relationship between corporate governance, firm performance and family ownership was analyzed by Klein, et al. (2005), for Canadian firms and find that corporate governance matter but there is no evidence that total governance index have impact on firm performance. Family businesses are complex because in family business the desire of owner must be considered along with other business activities. In family and non-family business there is separation of control right, cash flow right, chair duality and director ownership and all these significantly affect cash holding policy of the family and non-family business, Chu, et al. (2011). The family ownership and board size have significant and positive effect on cash holding, networking capital has negative and insignificant and firm size has negative and significant effect on firm cash holding [Khalil and Ali (2015)]. Bashir (2014) document that leverage, liquidity and bank borrowing are negatively related to cash holdings. Family controlled business also affects value of excess cash holdings. Hessen (2015); shows that when controlling families are involved in the management then the value of excess cash holding become low. Jensen (1986) and Stulz (1990) argue that excess cash create agency problem as managers can use this excess cash to pursue their own private benefits at the cost of the shareholders. The agency problem and cash holding was examined internationally by Lins, et al. (2007) and documents that when shareholder protection is poor then the firm value become low, when more cash are held by controlling manager.

III. Data and Variables

1. Data

To study the impact of corporate governance on cash holdings in family and non-family businesses, we use data of non-financial publically listed companies listed in Pakistan. We collect data for a total 272 firms (151 family-controlled firms and 121 stand-alone firms) out of the companies listed in the Pakistan stock exchange (PSX) for a period from 2001 to 2014. Data for not all firms are available for all years of the sample, yielding a total of 2933-year observations. Firm-specific accounting data such as total assets, liabilities, and cash were sourced from State Bank of Pakistan's (SBP) annual publication entitled as 'Balance Sheet Analysis of Joint Stock Companies Listed at the Pakistan Stock Exchange (PSX)'. Firm's ownership composition, board size, number of independent directors and other corporate governance measures were sourced from the annual reports of the companies. We winsorize all the numeric data at 1 per cent and 99 per cent of their respective distributions to remove the effect of outliers from the data.

2. Variables

We use six different variables as measures of corporate governance. These variables are discussed with some justification that how they are linked to the corporate cash holding. Board size is the total number of directors of the firm's board. The same variable is used in the previous study of Yasser, et al. (2011), Sanda, et al. (2005) find that there is positive relationship between board size and firm performance. Eisenberg, et al. (1998), report a negative relationship between board size in the study because increasing or decreasing the board size, the decision power of the firm is affected which lead to affect the firm performance, firm value and cash holding of the firm. CEO duality is a dummy variable taking value of one if CEO is also chairman of the Board of Directors and zero otherwise. Levy (1981) finds that CEO duality decreases monitoring of the board and entrench CEO to be more powerful and weaken the effectiveness of the board, and this may lead to affect firm performance and financial decisions [Yang and Zhao (2014), Guilleta, et al. (2013), Jensen (1993), Deya, et al. (2011)].

Institutional Shareholder variable is measured as the number of shares held by institutional investor and then divided by the total number of shares outstanding [Harford, et al. (2007), Shah and Masood (2014)]. Audit quality is an important part of the organization because it can enhance the firm performance and hence firm value. Audit quality is also an important element in the quality system standard. Dummy variable is used to measure audit quality that is '1' for the firm whose audit is performed by top five auditors and "0" otherwise. Previous study of Mehdi and fariba (2017) used it as independent variable. Big5 ownership can be measured as the top five shareholders holding large number of the firm's share divide by total number of outstanding share. Big 5 ownership is also an important variable used in this study and have a large impact on the corporate governance. The five biggest ownership or investor may take part in various important decisions regarding investment, financing, cash holding etc. and their taking part will affect all the vital area of the firm positively or negatively.

Managerial ownership is the number of share held by the top executive of the company divide by the total number of common share outstanding. The managerial ownership has an impact on the firm performance and important decision of the firm which may be regarding to the firm investment, firm cash holding dividend policy etc. The managerial ownership was found to affect the financial performance of the firm positively by Simoneti and Gregoric (2004). When the top management hold share of the same firm than they behave like a shareholder which will favor those decision which benefits the shareholder. It is also presented that firm financial policies are affected by the managerial ownership, high managerial ownership lead to decrease the tendency of firm to finance on debt, Arshad and Javid (2002). We use dummy variable for family and non-family companies. Family companies are those where majority of shares held by individual or individuals. This dummy variable takes the value of '1' for firms if it is family owned and '0''' if it is stand-alone firm.

We use several control variables that are used in the prior studies to affect corporate cash holdings. Size (SIZE) is measured as the natural log of total asset. Firm size affects firm's access to external financing and hence influences firm's level of cash holdings. This variable is used as control variable in previous studies of [Li, et al. (2012), Kuan, et al. (2011), Harford, et al. (2008), Shah and Khan (2007), Khan, et al. (2006)]. Leverage (LEV) is the ratio of total debt to total asset. Operating cash flow (CF) is the income after tax and interest but before depreciation, and then divides by total assets. Operating cash flow is used to control for firm's profitability and any change in it can affect cash holdings. Market to book ratio (MB) is used as a proxy for the growth opportunities and is measured as book value of assets minus book value of equity plus market value of equity and then divided by book value of assets. Market to book ratio is also used as control variable in the previous study of Li, et al. (2011), and Harford, et al. (2008). Return on asset (ROA) is net income divide by total assets.

IV. Methodology

We use the following model to analyze impact of corporate governance on cash holdings in the family and stand-alone businesses.

$$CHOLD_{it} = \alpha_0 + \beta_1 BSIZE_{it} + \beta_2 AUDQTY_{it} + \beta_3 IS_{it} + \beta_4 CEOD_{it} + \beta_5 B5OWN_{it} + \beta_6 SIZE_{it} + \beta_7 CF_{it} + \beta_8 CAPEXP_{it} + \beta_9 MB_{it} + \beta_{10} ROA_{it} + \beta_{11} LEVERAGE_{it} + \beta_{12} GROUPDUMMY + \varepsilon$$
(1)

where the dependent variable CHOLD stands for cash holdings for firm i at time t, and is measured as the ratio of cash and cash equivalents to net assets, while net assets is the total assets minus cash and cash equivalents. The same variable was used as dependent variable by Ferreira and Vilela (2004), Chen (2008), Masood and Shah (2014). Operational definitions of other variable are reported in Table 1.

TABLE 1

Variable Definitions and their Measurements

Board size (BS)	Total number of directors on the firm's board of directors.
CEO duality (CEOD)	Dummy variable equals 1 if CEO is also board chairman and 0 otherwise
Big 5 ownership (B5OWN)	Top five shareholders holding number of common Shares outstanding, divided by total number of shares
Managerial ownership (Mown)	Number of share held by top executives divide by the Total number of common share outstanding.
Institutional shareholder (IS)	number of shares held by the institutional shareholders, Divide by total number of common share
Audit quality (AQ)	Dummy variable equal to 1 for company audited by Top 5 auditors and 0 otherwise.
Firm size (SIZE)	Natural log of total assets.
Leverage (LEV)	Ratio of total debt to total assets.
Cash flow (CF)	Operating income or income after dividend, interest and Tax but before depreciation divide by total asset.
Market to book ratio (MB)	Book value of asset minus book value of equity plus Market value of equity divided by book value of asset.
Return on asset (ROA)	Net income divide by total asset.
Group-dummy	Dummy variable that takes value of "1" if the firm is family-controlled firm& "0" if the firm is non-family.

To account for the possible endogeneity that may exist between firm's level of cash holdings and ownership measures as pointed out by Demsetz and Lehn (1985); Demsetz and Villalonga (2001), and not accounting for the endogeneity may yield bias coefficient estimates, we employ firm fixed-effects model with robust standard errors. This specification accounts for firm-specific heterogeneity. Fixed effects model accounts for the endogeneity problem without resorting to other specifications such as instrumental variable approach.

V. Empirical Analysis

This section presents descriptive statistics showing mean, minimum, maximum and standard deviation for the variables used in the study followed by a univariate T-test for mean measurement which shows the difference between the average cash holdings in the family and non-family owned businesses, to achieve the main research objectives next section examines employing econometric specification. Hausman test is used to select the appropriate model form fixed and random effect model for the account of endogeneity problem. Result of hausman test shows that probability value (0.003) is less than the significance level (0.05), so the alternative hypothesis is accepted that is fixed effect model is more appropriate, so last section is the regression of the fixed effect model.

1. Descriptive Statistic

Descriptive statistic of all variable used in the study are presented in Table 2. The table shows that an average cash to asset ratio is 6.01 per cent. Twenty eight per cent of shares are held by managers, while institutional owner hold, on average, 31.43 per cent of shares in Pakistan. The summary statistics present that an average of 60 per cent of the total share are held by the top five shareholders, while the board size consists, on average, of 7.8 directors. Table 3 reports mean difference of cash holdings in family-controlled and stand-alone firms. It is evident from the table that family-controlled companies hold more cash (6 per cent) than stand-alone (1.78 per cent). This result provides preliminary support to our hypothesis that family-controlled firms hold more cash than the stand-alone firms. These results are consistent with the study of Ali, et al. (2015), Liu, et al. (2015). Next section provides results for the econometric specifications.

Variable	Mean	Std. Deviation	Minimum	Maximum
CHOLD	0.0601376	0.1275027	0	1.06508
ManagOwn	0.2852032	0.2764613	0	0.9669358
Institutional shareholder	0.3143226	0.2671652	0	0.9876792
Big5Own	0.6006444	0.2208121	0	0.9924
AudQ	0.5244499	0.4997074	0	1
Bsize	7.764706	1.347222	1	15
CEO	0.3752969	0.4844873	0	1
Size	3.09768	0.6368989	1.021189	5.194963
MB	1.191008	0.8183106	-3.561905	12.30348
CF	0.2952215	4.405588	-0.8615767	134.7695
NWC	-0.0608031	0.6256926	-13.73174	0.7872299
LEV	0.6711823	1.100216	0.0139018	29.40154
CapExp	0.2611611	4.365478	-4.666667	133.7163
ROA	0.0422467	0.1622522	-0.3739964	3.588611

TABLE 2

Average Cash to Asset Ratio

2. Regression Model

Table 4 presents regression results for equation (1). As shows by the table, group dummy is statistically significant at 1 per cent level and its coefficient is positive which shows that family-controlled firms hold more cash than stand-alone firms. Coefficient for Audit quality is significant and positively related to cash holdings, which indicate that if the audit quality of the firm, is good than such firm hold more cash within the firm. Weak audit quality lead to lose internal control system of the firms which will lead to decrease the value of cash holding Chau, et al. (2011). Managerial ownership is also significant and negatively related to cash holdings. This result is consistent with agency theory of Jensen and Mackling (1986) that posits that an increase in managerial ownership of the firms tends to align managerial interest with those of the shareholders and provides managers with an incentive to better manage firms and holding an optimum level of cash helps the firm to better utilize cash.

Coefficient for Big-five ownership is positive and statistically significant. This result is also in line with the agency problems associated with existence of majority and minority shareholders where the majority shareholders with control powers tend to expropriate minority shareholders in different ways such as holding too much cash in the firm and possibly utilizing it to extract private benefits Coefficients for Board size, Institutional shareholders, and CEO duality are insignificant independent variables which indicate that these variables may not be related to cash holdings. In case of control variables, return on asset is significant and positively related to corporate cash holdings, such finding is consistent with the study of Philippe, et al. (2006), Abushammala and Sulaiman (2014), Bates, et al. (2009), who report positive relationship between profitability and cash holdings of the firms. Coefficient for Market to book ratio (Leverage) is significant and positively (negatively) related to cash holdings, consistent with the previous studies of Afza (2009), Masood and Shah (2014).

VI. Conclusion

The purpose of this study is to examine the impact of corporate governance on cash holding and to examine whether patterns of cash holdings differ across family-controlled and stand-alone firms in Pakistan's market. Result of the study presents that family-controlled firms, on average, hold more cash than stand-alone firms. These results are consistent with the agency conflicts between minority shareholders and the majority-controlling shareholders, and this sub-optimal cash holding increases the risk of expropriation of minority shareholders by the controlling shareholders as cash can be more easily utilized to extract private benefits. Further results also show that corporate governance has impact on firm's cash holding levels. Empirical results for the managerial ownership (manage)supports the agency predictions of Jensen and Mackling (1986) that increase in managerial stake in the firm

TABLE 3

Mean Difference of Cash Holdings

Group	Mean	Std. Err	Std. Dev
Non-family	0.0178037	0.0038233	0.0175205
Family-Owned Business	0.0606572	0.0068866	0.1382476

TABLE 4

Results of the Regression (Equation 1)

Chold (Dependent .V)	Coefficient	Std. Error	T-stat	Prob.
Manage	-0.0745655	0.035523	-2.1	0.037**
Institutional shareholders	-0.0660288	0.047795	-1.38	0.168
Big5own	0.0702041	0.039761	1.77	0.079*
AudQ	0.0461197	0.013792	3.34	0.001***
Bsize	-0.0050632	0.004511	-1.12	0.263
CEO	0.0196339	0.018202	1.08	0.282
Groupdummy	0.0451217	0.017021	2.65	0.008
Size	-0.0202896	0.012411	-1.63	0.103
MB	0.0304511	0.014848	2.05	0.041**
CF	0.111119	0.068632	1.62	0.107
Lev	-0.0969177	0.028685	-3.38	0.001***
ROA	0.1559049	0.069648	2.24	0.026**
R-squared	0.2337			
F	3.76	Prob> F		0

Note: *Significant at 0.1, **significant at 0.5, ***significant at 0.01. Cash hold (CHOLD) is the dependent variable which is cash and cash equivalent to net assets. The independent variables include managerial ownership (Manage) which is the number of shares held by top executives divide by total number of shares outstanding. Institutional shareholders are the number of shares held by institutional shareholders divide by total number of shares outstanding. Big five ownership (Big5own) is the number of shares held by top five shareholders divide by total number of shares outstanding. Board size (Bsize) is the number of directors on the board. CEO duality (CEO), dummy variable equal to 1 if CEO is board chairman and 0 otherwise. AudQ represent is dummy variable equal to 1 if the firm is family owned and "0" otherwise. Size of the company (Size) is the natural log of total assets. Market to book ratio (MB) is the book value of assets minus book value of equity plus market value of equity divided by book value of assets. Cash flow (CF) is the operating income divide by total assets. Leverage (Lev) is total debt divide by total assets. Return on asset (ROA) is the net income divide by total assets.

provides managers with an incentive to better manage firms with an attempt to increase firm's financial performance and hence add to firm value. Maintaining an optimum level of cash in the firm adds to better investment and financing decisions and adds to firm value. Results for majority shareholder measure (Big five ownership-Big5own) are also significant and positively related to firm's cash holding. This result is also consistent with agency problems between majority shareholders and minority shareholders. One of the features of the family-controlled firms is separation of cash flow rights (ownership) and control rights [La Porta, et al. (1999)] which gives rise to the possibility of expropriation of minority shareholders by the majority-family controlled shareholders in different ways and one of the ways is to hold more than optimal level of cash in the firm and utilize it to extract private benefits [Beak, et al. (2006), Fan and Wong (2002)].

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