

The Impact of Cash Management and Corporate Governance on Firm Performance, and the Moderating Role of Family Ownership on the Emerging Economy

Arsalan Abdul Hamid^a, Rana Tahir Naveed^b, Tasawar Abdul Hamid^c,
Muhammad Waris Rao^d, ^aADWOC - Arab Drilling and Workover Company,
^bDepartment of Business administration, Art & Social Sciences Division,
University of Education, Lahore, ^cCardiff Metropolitan University, UK,
^dResearch scholar Air University Multan, Email:
^aArslan.abdulhamid@gmail.com, ^bTahir.naveed@ue.edu.pk,
^ctasawar.abdulhamid@gmail.com, ^dwarisraobzu051@gmail.com

Objectives: The objective of this paper was to find the impact of cash management and corporate governance on firm performance with the moderating role of family ownership in Pakistani listed firms. **Methods/Statistical analysis:** This study is based on hypothesis testing. 317 firms are listed on a Pakistan stock exchange for the period of 2010-19 used for the data analysis. **Findings:** In our results, board independence has a positive and significant relationship with the firm performance. Board size has a negative and significant relationship with firm performance. Cash management has a positive and significant relationship with firm performance. Firm size has a positive and significant relationship with firm performance. Institutional ownership has a significant and positive relationship with firm performance. With the moderator of family ownership, the relationship between cash management and firm performance should be stronger as compared to simple regression with a large co-efficient. With the addition of family ownership as a moderator, Cash management has a negative and significant relationship with firm performance.

Key words: *Corporate governance, Cash management, family ownership, intentional ownership, Pakistan, Emerging economy.*

Introduction

Corporate cash management is an important issue in finance, and receives increased attention from different stakeholders (Vo, 2018). It has been a selected research area of finance and management academics. The academic literature on cash holdings was previously conducted by Keynes (1936). He suggested that holding cash has two main benefits: one, reducing transaction costs, since you don't have to discharge assets when encountering a payment, and two, serving as a valid buffer to meet unanticipated possibilities. In addition, Kahle and Stulz (2009) recognised four important objects for firms to hold cash. These are protective reason, transaction motive, tax motive and activity motive. Mikkelsen and Partch (2003) suggested that complex cash stocks are associated with higher company value. Harris and Raviv (2017) highlight that companies which have a large amount of cash can easily invest in cash equivalents. They argued that for US companies, their cash stocks grew 10% in the 1995-2010 period and were much higher than 7% in the 1980-1995 period. Similarly, other studies (D'Mello, Krishnaswami and Larkin, 2008) showed that the weight of cash management to total assets was between 8% and 10.5%. In addition, as seen in the survey in Europe by Browning, (2004), managers give priority to financial flexibility and financing policies, believing that this feature is more important than tax benefits. Miller and Orr (1966) developed a clearing model to determine the optimum level of cash stocks by balancing cash depletion costs and interest-free cash holding costs. Azmat (2014) also investigated the relationship between firm performance and cash holdings in Pakistani firms for the period 2003-2008.

On the other hand, studies show that managers prefer larger cash holdings because they can use it without restrictions (Tong, 2011). Moreover, some researchers (Brealey, Myers, Sandri and Bigelli, 2003) suggested that cash availability could lead to problems with opportunism and agency costs in the company. Construction, settlement, investment and the allocation of private interests come at the expense of private property. From agency theory, larger shareholder rights bring lower cash amounts. This shows that shareholders want to limit cash at the cash management level at the discretion of managers (Dittmar et al. 2003, Jensen, 1986). Managers' value-creating behaviour discourages them with higher cash when investing in negative NPV projects. Low monitoring of additional cash management causes managers to accumulate purchases and special benefits that lead to high cash-related agency issues (Harford, 1999).

Family-controlled firms are common in numerous Asian nations. In family-controlled organisations, a family or its individuals have a few offers that surpass the basic control level. Family-controlled firms regularly manage the family legacy or move the organisation to the people to come (Kuan et al., 2011). Furthermore, firms with higher board freedom are putting away less money for their business techniques. Family-controlled firms with higher board freedom hold more money. Notwithstanding, Yeh, Lee and Woitke (2001) contend that

family-controlled investors can urge the organisation to embrace strategies that are in accordance with their own advantages as opposed to the arrangements of minority investors. Maury (2006) analyses how family-controlled firms perform in contrast to firms with non-family accomplices in Western Europe. The results show that family control lessens organisation issues among proprietors and supervisors, however, prompts clashes among family and minority investors when investors are low in security and control is high.

However, there is little research on the relationship between cash holdings and firm performance within family businesses (Kuan et al., 2011) and corporate ownership companies (Isshaq et al., 2009). There is growing interest in how they work in these contexts and their impact on firms in emerging markets and in the context in which family ownership is common (Witt & Redding, 2013).

Therefore, the following issues will be addressed: "What is the effect of the family and corporate property structure of the association between cash management and firm performance?" This research study tried to pay attention to the property literature by researching the role of family and corporate property in terms of cash management and firm performance in emerging economies, especially in Pakistan.

The objectives of the study are:

1. To examine the association between cash management and firm performance.
2. To examine the impact of family ownership on cash management and firm performance.
3. To examine the impact of corporate governance attributes and firm performance.

This study will expand the literature on corporate cash policies, ownership structure and firm performance by providing evidence from the developing economy. In particular, this study tries to investigate whether ownership structure in the form of family and corporate ownership affects firm economic performance in Pakistan.

Literature Review and Hypothesis Development

Some studies have attended the association between cash management and firm performance. In fact, empirical literature has found both negative and positive relationships. Evidence shows that there is a positive association between cash management and firm performance (Y. R. Chen, 2008; Kalcheva & Lins, 2007; La Rocca & Cambrea, 2018). Why do companies hold cash reserves? Keynes (1936) is the first motive for examining the main reasons behind holding cash reserves, which are to avoid having to liquidate assets during payment and to reduce transaction costs due to limited funds to avoid inadequate investment losses. Mikkelson and

Partch (2003) found that fixed cash stocks did not lead to poor performance. Y. R. Chen (2008) suggested the reasons for holding cash in companies include prudential reason, transaction cost motives and financial hierarchy theory. Ferreira and Vilela (2004) show that there is a significant amount of cash on the balance sheets of European firms as well as US firms. Dittmar et al. (2003) explains three important models; Order theory, exchange theory and free cash flow theory. Based on these main models of cash flows (Beşir, 2014), as the determinant of cash management, it has accepted growth opportunities, cash flows, financial leverage, firm size and liquid assets. Firms hold money for exchanges to evade raising support costs in the capital market, which comes about because of data asymmetry as per the hypothesis of monetary chain of importance and outer financing cost for speculation ventures higher than the household financing cost. Boyle and Guthrie (2003) clarify that an elevated level of money from the executives is required for potential ventures. Organisations keep preparatory money to maintain a strategic distance from gainful speculations because of money deficiency (Opler et al., 1999). Subsequently, holding genuine money builds the estimation of firms by diminishing the expense of financing and expanding the quantity of speculation activities that make an incentive by the firm. Hofmann (2006) has given the exchange hypothesis, which clarifies that organisations depend on inner financing instead of depending on outer financing, and the purpose for this is lower cost or moderately minimal effort for interior financing. Hence, firms hold a lot of money as a wellspring of interior subsidising. Moreover, having huge money allows organisations to get a handle on the chance to adapt to eccentric prospects that will confine access to outside capital markets (Almeida, Campello and Weisbach, 2004). Data asymmetry issues and an excessive amount of cost of outside financing can create limitations regarding access to credit for firms, i.e. money related imperatives that impede the development and improvement of the firm (Fazzari, Hubbard, and Petersen, 1987). Subsequently, organisations will be keen on aggregating monetary savings when monetarily compelled (Almeida et al. 2004).

Myers and Majluf (1984) clarify that when operational incomes are high, firms use them to back new gainful tasks, reimburse obligations, deliver profits, and lastly collect money. At the point when benefits are inadequate to fund new ventures, a firm first uses its money and afterward loans new credits; finally, when the obligation is out of administration limit, the firm issues protections. This is called the Pecking request hypothesis. This can be avoided if a firm holds a sufficient amount of cash within the company to meet profitable investment opportunities (Myers & Majluf, 1984). In addition, Bigelli and Sánchez-Vidal (2012) have suggested that dividend payments are associated with more cash management. They also announced that net working capital and bank debt represent good cash substitutes for private or financially constrained companies.

Besides benefits, cash-related costs (Akhtar et al., 2018) include: the cost of transport or the opportunity cost and agency cost to hold capital in the form of liquid assets. Kalcheva and Lins

(2007) stated that cash stocks are negatively related to firm performance. It is stated that cash management is not required for investments or transactions that can be easily spent by management (Azmat, 2014). Jensen (1986) concluded that managers encourage cash storage to increase the amount of assets under their control and to obtain optional power over the firm investment decisions. In addition, Jensen and Meckling (1976) have the costs of managerial discretion because managers have larger assets under their control. In addition, Myers and Rajan (1998) explain that liquid assets can be converted into private interests at a lower cost than other assets. Opler et al. (1999) also concluded that managers prefer control over cash management rather than paying dividends to shareholders. Faulkender and Wang (2006) found that the cash marginal value decreased with larger cash management. Özkan and Özkan (2004) argue that there is a negative relationship between cash conglomerates and board activity (hence (Locorotondo, Dewaelheyns and Van Hulle, 2014; Yousaf Khan, 2016). An effective board of directors can help reduce asymmetric information and thus the firm's external resources. Dittmar et al. (2003) argued that the firm could bear the opportunity cost by holding high cash levels, and Ferreira and Vilela (2004) argued that the main cost of holding cash is the opportunity cost. There is an opportunity to use cash in waste projects, such as acquisitions and other loss-making investments that increase cash management costs known as agency costs (Jensen, 1986). On the basis of above arguments I propose the following hypothesis:

H1: There is a positive relationship between corporate cash management and firm performance.

Family Ownership

Family ownership is prevalent in India and Pakistan, and speculators regard monetary property higher in organisations with low family ownership than firms with low family ownership (Paskelian, Bell and Nguyen, 2010). In the USA, firms constrained by an open family speaking to 33% of organisations have higher Firm exhibitions and better yield on resources than practically identical non-family firms (Villalonga and Amit, 2006). Paskelian et al. (2010) shows that the money of the executives of Pakistani firms, which have higher ownership from the inside, have been decidedly checked by investors. The fundamental distinction among private and open firms is ownership structure. Open organisations have a great many investors and privately-owned businesses have at least one investor (Bigelli and Sánchez-Vidal, 2012). Rancher et al. (2019) will look at the connection between Turkey, for instance, alluding to inward corporate administration and firm execution. They found that organisations that performed better with more family-arranged ownership and cross-ownership development didn't influence advertise execution yet were adversely identified with bookkeeping execution. S. Singh, Tabassum, Darwish, and Batsakis (2018) found that an ownership focus adversely influenced the connection between board autonomy and hierarchical execution and CEO duality and authoritative execution.

Kuan et al. (2011) analysed the connection between corporate administration and money strategy in family-controlled firms. Utilising open market organisations in Taiwan somewhere in the range of 1997 and 2008, more money was held for the business techniques of family-controlled firms with higher board autonomy, while non-family-possessed firms with higher board freedom contribute less. Özkan and Özkan (2004) found that organizations with families as conclusive controllers will, in general, hold more money than firms not in family control.

On the other hand, previous studies suggest that family ownership may also be detrimental to firm performance (Oreland, 2007). Holderness and Sheehan (1988) found that firms controlled by the majority of a family have lower performance. Therefore, family ownership can harm minority shareholders and take measures to benefit family members at the expense of firm performance. In the emerging market economies, the presence of high ownership concentrations has been shown to be a response to the lack of legal protection for shareholders (Connelly, Limpaphayom and Sullivan, 2018). Agency theorists also suggested that family businesses suffer from harsh corporate governance issues. These firms face the problem of agency conflicts between dominant family shareholders and minority shareholders (Khan and Nouman, 2017; Young, Peng, Ahlstrom, Bruton, and Jiang, 2008). Hasan (2017) investigated the impact of ownership structure and excessive control in Pakistan on firm performance. The results show that both family-controlled and family-owned companies have significantly lower financial performance than non-family companies in Pakistan.

In addition, the literature has admitted that corporate ownership improves firm performance (Çiftçi et al., 2019; Durnev & Kim, 2005; Hasan, 2017; Mishra & Kapil, 2017). McConnell and Servaes (1990) found that corporate ownership is positively associated with a firm's Q. In addition, Elyasiani and Jia (2008) have suggested that corporate ownership has a significant positive impact on bank performance. Institutional investors have a bigger share in firms, so paying attention to management and information shared by firms is in their own interest. They have the ability to monitor and influence the decisions of managers (Harford, Kecskés and Mansi, 2012). In addition, Thanatawee (2013) concludes that firms pay more dividends, which has the largest share in corporate ownership compared to other ownerships. This contradicts this study regarding Chinese companies because they tend to pay less dividends with more corporate ownership than the government and companies are owned by the largest shareholders. Sindhu, Hashmi and Ul Haq (2016) analysed the impact of ownership structure on the dividend payment rate of 100 companies related to the non-financial sector which traded on the Karachi Stock Exchange in the 2011-2015 sample period. They found that there was a significant relationship between the dividend payment rate and the partnership structure. They also found that corporate shareholders and managerial shareholders have more control over the firm's policies than other types.

Ward, Yin and Zeng (2018) examined how the attention of institutional investors affected governance in monitoring a firm's corporate cash management. They found that motivating corporate property was related to higher marginal values of corporate cash management. Harford et al. (2012) examined the effect of investor horizons on corporate cash management related to US companies. They found that firms with longer investor horizons hold more cash, and when they have more cash, they invest less and pay more to shareholders. Institutional investors will be willing to spend time and resources due to the size of their assets to monitor the audit activities of the companies they invest in and to contribute to the efficiency of corporate activities through monitoring activities (Ward et al., 2018), as well as the cash stocks of accounting based performance measurements with the cash stocks of the institution monitoring firm. They found it to be related. Therefore, we suggest the following hypothesis,

H2: family ownership has a moderating impact between cash management and firm's performance.

Corporate Governance

Corporate administration (CG) alludes to the instrument of control and the executives of an organisation by its CEO, directorate and senior administration (S. Singh et al., 2018). Numerous investigations have inspected the connection between money possessions and firm worth. Most reacted to this wonder with regards to administration.

Y. R. Chen, (2008) contended that setting up powerful administration systems can successfully expand the level of opportunity and lead to an improvement in firm worth so firms can settle on convenient business choices. The monetary framework can work with development procedure in creating nations and in industrialised nations (La Rocca and Cambrea, 2018). Rajan and Zingales (2001) contended that the budgetary framework has its own personality that can offer the scope for fundamental administrations to help the monetary advancement of its own organisations regarding the lawful framework and assent. The investigation of Bigelli and Sánchez-Vidal (2012) expect that privately owned businesses have more grounded administration approaches than open organisations. They contended that, because of solid corporate administration, private firms delivering profits will, in general, have more money, on the grounds that the free incomes of the profit approach in private firms are not influenced by institutional expenses. S. Singh et al. (2018) examined the connection between corporate administration and corporate execution estimated by Tobin's Q with regards to Pakistan. They found that the quantity of board advisory groups, board size, and proprietorship thickness are emphatically connected to firm execution.

Pinkowitz et al. (2006) expressed that the connection between the money of executives and the firm is an incentive in nations with powerless financial specialist security, which more

vulnerable than in different nations. Pakistan falls into the class of nations with solid investor rights yet powerless authorisation (Porta et al., 1998). Furthermore, within the sight of an ineffectively evolved money related market, a wasteful institutional setting just as low financial specialist insurance makes hazardous advantage conditions (Djankov, La Porta, Lopez-de-Silanes and Shleifer, 2008). S. Singh et al. (2018) estimated the connection between corporate administration and corporate execution with regards to Pakistan by Tobin Q and found that CEO duality and board freedom demonstrated a negative relationship with the TK. The market estimation of firms with high money holds diminishes significantly when they are ineffectively overseen (Dittmar and Mahrt-Smith, 2007). Nevertheless, another result line emerging in the literature is that there is no statistically significant relationship between corporate management and firm performance. According to the following literature we proposed the following hypothesis.

H3: Corporate governance attributes have a positive impact on the firm's performance.

Data and Methodology

The data is collected from the annual reports of firms listed in PSX for the period 2010-2019. A set of 317 firms were selected from the firm list through random sampling. The financial sector is not selected because it has dual regulatory authorities and thus faces a strict corporate governance mechanism (Jackling & Johl, 2009).

Table 1. Variables and Measurement

Variable Name	AB.	Calculation	Reference
Firm performance	FV	Tobin's Q is measured by market/ book ratio ROA = EBIT to Total Assets	Kumar and Singh (2013); Mishra and Kapil (2017); Reddy et al. (2008) Anderson and Reeb (2003); Ciftci et al. (2019); Hasan (2017); Javid and Iqbal (2008); O'Connor et al. (2014)
Cash ratio	C	Cash and cash equivalent items to total assets	Azmat (2014)
Operating cash flow	OCF	Operating income plus depreciation less tax paid by the firms	Sindhu and Jinnah (2014)
Family Ownership	F-OW	Family ownership is measured by the family or member of the family hold 50% share or more in total shareholding of the firm.	Maury (2006)
Institution Ownership	I-OW	Share owned by any institution and its divided by total share that is outstanding	Kuan et al. (2011)
Board Size	BS	Measured as number of directors	
Board Independence	BI	Ratio of independent directors and supervisors to the total number of directors and supervisors.	Kuan et al. (2011)
Chair Duality	CD	Equals one if the chairman of the board is also the general manager, otherwise, it equals zero.	

Firm Size	FS	Measured by natural logarithm of total assets	
Leverage	LEV	Ratio of total debts to total assets.	Kuan et al. (2011);
Market-To-Book ratio	M/B	Market value of equity to its book value	
Cash Flow ratio	CF	Ratio of the operating income (loss) to the non-cash management	Opler et al. (1999)

Model of Study

I model the suggestions of cash holdings, ownership structure and control variables on firm performance as follows:

Firm performance = Cash management + Family ownership + corporate governance attributes + Control variables + ε_{it}

$$FV_{it} = \beta_0 C_{it} + \beta_1 OCF_{it} + \beta_2 F_OW_{it} + \beta_3 I_OW_{it} + \beta_4 BS_{it} + \beta_5 BI_{it} + \beta_6 CD_{it} + \beta_7 SIZE_{it} + \beta_8 LEV_{it} + \beta_9 M/B_{it} + \beta_{10} CF_{it} + \varepsilon_{it}$$

$$FV_{it} = \alpha_0 + \beta_1 C_{it} + \beta_2 OCF_{it} + \beta_3 (C^*F_OW)_{it} + \beta_4 (C^*I_OW)_{it} + \beta_5 (OCF^*F_OW)_{it} + \beta_6 (OCF^*I_OW)_{it} + \beta_7 BS_{it} + \beta_8 BI_{it} + \beta_9 CD_{it} + \beta_{10} FS_{it} + \beta_{11} LEV_{it} + \beta_{12} M/B_{it} + \beta_{13} CF_{it} + \varepsilon_{it}$$

Where subscript i and t represent the firm and time, respectively

FV = Firm performance (firm performance) is measured by Tobin's Q and ROA.

C and OCF = Cash and Operating cash flow, included to observe the effect of cash holdings for firm performance.

F-OW = Family ownership

I-OW = Institutional ownership (as a control variable)

BS = Board Size

BI = Board Independence

CD = Chair Duality

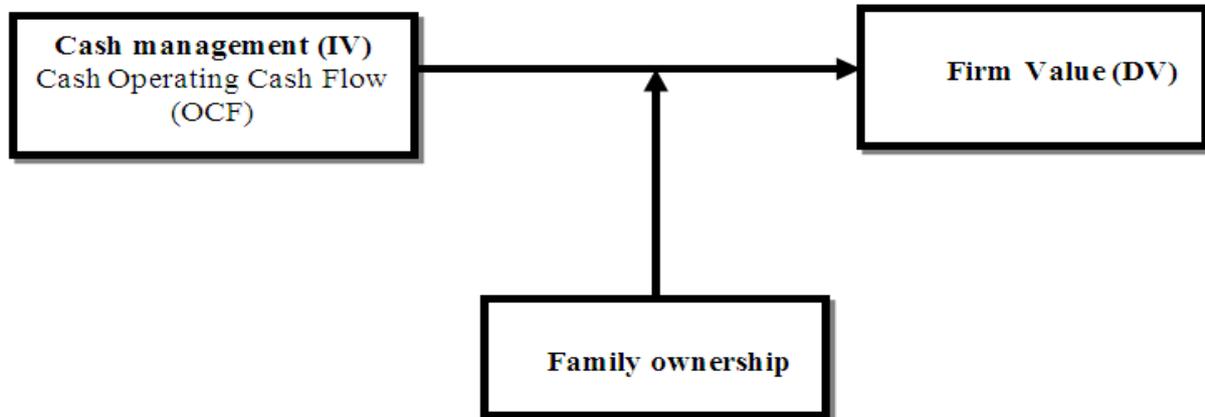
FS = Firm size

LEV = Leverage

M/B = Market-To-Book ratio

CF = Cash flow ratio (CF)

Research Framework



Data Analysis

The dataset contains panel data. Panel data better detects the predictive possessions that cannot be detected in a pure time series or in a pure cross-sectional analysis (Ciftci et al., 2019). It is consistent with previous studies (Tariq & Abbas, 2013).

Results of the Analysis

Table 2. Descriptive Statistics

	BI	BS	CD	CA	CF	FOW	FSIZ	IO	LEV	MBD	OCF	ROA	TQ
Mean	0.099124	7.595315	0.209463	0.113174	0.955623	0.710152	15.17627	0.12703	6.255866	1.150336	2.286785	2.205111	4.601198
Median	0.111111	7	0	0.002928	0.006815	1	15.14911	0.047423	0.080065	0.100219	2.366413	0.033438	0.196933
Maximum	0.857143	15	1	50.30082	96.98811	1	19.72891	3.940888	2212.5	244.634	2.79745	650.8469	547.332
Minimum	0	3	0	-6.49627	-4.96011	0	8.839711	0	0	-521.849	0.094048	-17.3183	0
Std. Dev.	0.109162	1.488385	0.407019	1.939745	6.266992	0.453796	1.699389	0.214625	63.65289	17.72121	0.271757	26.30927	29.11236
Skewness	1.828006	1.333823	1.427965	18.27096	9.509352	-0.92641	-0.1868	4.649442	24.30497	-14.2188	-1.47937	18.07643	12.85841
Kurtosis	9.420314	7.110223	3.039085	385.1507	107.1911	1.858229	3.115645	53.69625	732.2863	428.1791	8.085181	362.8883	193.932

The description of the variable stated that board independence has a mean value of 0.099. This means that about 10 % firm has independent directors in it. Board size shows that the average member in total board composition is 7. Firm size is measured by the EPS, which means that the selected firm has an average EPS of 15. In our descriptive statistics, 71% firms have family ownership. Institutional ownership in total shareholding with means value is about 12%. ROA has 2.20, which means that ROA is 2 times on the assets.

Table 3. Correlation Matrix

	BI	BS	CD	CA	CF	FOW	FSIZ	IO	LEV	MBD	OCF	ROA	TQ
BI	1	-4.35E-05	0.015065	0.033384	0.041505	0.023588	0.012315	-0.02678	-0.01116	-0.00239	-0.02012	0.03671	0.056242
BS	-4.35E-05	1	0.007993	-0.01597	0.062228	-0.02678	0.061088	0.039783	-0.01184	-0.05802	0.027185	-0.0248	-0.05162
CD	0.015065	0.007993	1	0.018678	0.04921	0.104925	-0.08037	-0.10692	0.041651	-0.03647	-0.00388	-0.00183	-0.03587
CA	0.033384	-0.01597	0.018678	1	-0.00688	0.044355	-0.13553	-0.00786	0.016294	0.007952	-0.03353	0.023908	0.58143
CF	0.041505	0.062228	0.04921	-0.00688	1	-0.04906	-0.00105	-0.01446	0.016731	0.016019	-0.02898	-0.00853	0.008447
FOW	0.023588	-0.02678	0.104925	0.044355	-0.04906	1	-0.14828	-0.0892	-0.01597	-0.03485	0.131126	0.03748	0.032059
FSIZ	0.012315	0.061088	-0.08037	-0.13553	-0.00105	-0.14828	1	0.109577	-0.09305	0.024559	-0.01026	-0.10626	-0.21428
IO	-0.02678	0.039783	-0.10692	-0.00786	-0.01446	-0.0892	0.109577	1	-0.02872	-0.00929	-0.06243	0.011292	0.005584
LEV	-0.01116	-0.01184	0.041651	0.016294	0.016731	-0.01597	-0.09305	-0.02872	1	-0.00497	-0.05353	0.002844	0.004133
MBD	-0.00239	-0.05802	-0.03647	0.007952	0.016019	-0.03485	0.024559	-0.00929	-0.00497	1	-0.01972	0.007445	0.022863
OCF	-0.02012	0.027185	-0.00388	-0.03353	-0.02898	0.131126	-0.01026	-0.06243	-0.05353	-0.01972	1	-0.0699	-0.06542
ROA	0.03671	-0.0248	-0.00183	0.023908	-0.00853	0.03748	-0.10626	0.011292	0.002844	0.007445	-0.0699	1	0.503495
TQ	0.056242	-0.05162	-0.03587	0.58143	0.008447	0.032059	-0.21428	0.005584	0.004133	0.022863	-0.06542	0.503495	1

In the correlation matrix all values are less than 0.80, which means that the variables are not correlated with each other and that the correlation problem is not present in the given data.

Testing of the Hypothesis

The given results are derived from the regression analysis.

Model Contains:

ROA Model

Tobin Q Model

Table 4

Dependent Variable: ROA				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	42.84282	7.552720	5.672502	0.0000
BI	8.828297	5.141978	1.716907	0.0861
BS	-0.269119	0.378768	-0.710510	0.0775
CA	0.063032	0.291819	0.215997	0.8290
CD	-0.719465	1.396143	-0.515324	0.6064
CF	-0.037066	0.089880	-0.412399	0.0801
FOW	1.900999	1.270076	1.496760	0.1346
FSIZ	-1.630613	0.340196	-4.793158	0.0000
IO	2.612867	2.650624	0.985756	0.0244
LEV	-0.003693	0.008858	-0.416890	0.6768
MBD	0.013044	0.031704	0.411429	0.6808
OCF	-7.091600	2.088184	-3.396062	0.0007

In this model Board independence has a positive and significant relationship with firm performance. This means that when there is independence increase in the total board composition then the firm can perform in effective way. Board size has a negative and significant relationship with firm performance. This means that when the number of the directors increase the total board composition, the firm bears a huge cost in the shape of the director's remunerations, which has burden on the firms. A small and effective board improves firm performance.

Cash management has a negative and significant relationship with the firm performance. This means that in an emerging economy some firms lack a proper department controlling the management of the cash. In that case some firms hold large amounts of the cash in the shape of current assets, which creates opportunity cost and decreases firm performance. Firm size has a negative and significant relationship with firm performance because in Pakistan there is an

emerging economy and firms faced problems related to tax handling and other issues. We can say that politics influences large firms. Institutional ownership has a significant and positive relationship with firm performance. This means that with the addition of institutional ownership in total shareholding of the firm, there is a mix of the many skills possessed by the institution like the advisory and management skills that can handle risk issues through risk evaluations and by making a diversifiable portfolio.

Table 5

Dependent Variable: TQ				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	57.23382	6.720287	8.516574	0.0000
BI	10.42285	4.575249	2.278096	0.0228
BS	-0.645144	0.337022	-1.914250	0.0557
CA	8.401284	0.259656	32.35543	0.0000
CD	-3.980670	1.242265	-3.204365	0.0014
CF	0.066052	0.079974	0.825918	0.4089
FOW	-0.111977	1.130093	-0.099087	0.9211
FSIZ	-2.506244	0.302701	-8.279608	0.0000
IO	2.613658	2.358482	1.108195	0.2679
LEV	-0.008370	0.007882	-1.061936	0.2884
MBD	0.028020	0.028210	0.993271	0.3207
OCF	-4.872672	1.858032	-2.622491	0.0088

In our research we used two different proxies of measuring firm performance ROA and Tobin Q. In this Tobin Q model, Board independence has a positive and significant relationship with firm performance, which means that when there is an independent increase in the total board composition, the firm can perform in an effective way. Board size has a negative and significant relationship with the firm performance, which means that when the number of the directors increase, the firm bears a huge cost in the shape of the director's remunerations which has a burden on the firms. A small and effective board increases the firm performance.

Cash management has positive and significant relationship with firm performance, which means that effective cash management can increase firm performance. However, there is contradiction in two measures of the firm performance that should be cleared by the family ownership as a moderator in the next analysis section. Firm size has a positive and significant relationship with firm performance because in Pakistan there is an emerging economy and firms faced huge problems related to tax handling and other issues. We can say that politics influence large firm. Institutional ownership has a significant and positive relationship with firm performance, which means that with the addition of the institutional ownership in total

shareholding of the firm, the many skills possessed by the institution can handle risk issues by risk evaluations and by making a diversifiable portfolio.

Table 6

Dependent Variable: TQ				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	55.98452	10.36885	5.399297	0.0000
BI	10.21804	4.567319	2.237207	0.0254
BS	-0.632875	0.338810	-1.867932	0.0619
CA	0.497627	2.031750	0.244925	0.8065
CD	-3.745421	1.243007	-3.013195	0.0026
CF	0.060844	0.079818	0.762279	0.4460
FOW	0.079745	9.458927	0.008431	0.9933
FSIZ	-2.501702	0.302303	-8.275474	0.0000
IO	8.048232	19.82244	0.406016	0.6848
LEV	-0.008243	0.007892	-1.044550	0.2963
MBD	0.028269	0.028158	1.003925	0.3155
OCF	-4.459471	3.829848	-1.164399	0.2444
CA*FOW	7.534168	1.994864	3.776784	0.0002
CA*IO	4.754445	2.549044	1.865188	0.0623
OCF*FOW	-0.034713	4.163474	-0.008337	0.9933
OCF*IO	-2.475947	8.669375	-0.285597	0.7752
Dependent Variable: ROA				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	31.90842	11.68857	2.729881	0.0064
BI	8.807411	5.148635	1.710630	0.0873
BS	-0.283051	0.381933	-0.741100	0.4587
CA	-0.401964	2.290346	-0.175503	0.8607
CD	-0.561074	1.401213	-0.400420	0.6889
CF	-0.041062	0.089977	-0.456357	0.6482
FOW	17.00358	10.66283	1.594659	0.1109
FSIZ	-1.624448	0.340779	-4.766859	0.0000
IO	4.658777	22.34538	0.208489	0.8349
LEV	-0.004633	0.008896	-0.520829	0.6025
MBD	0.014748	0.031742	0.464625	0.6422
OCF	-2.198258	4.317301	-0.509174	0.6107
CA*FOW	0.155195	2.248765	0.069013	0.9450
CA*IO	2.862043	2.873480	0.996020	0.3194
OCF*FOW	-6.704176	4.693390	-1.428429	0.1533
OCF*IO	-0.884528	9.772790	-0.090509	0.9279

With the moderating factor of family ownership, the relationship between cash management and firm performance should be stronger when compared to the simple regression with a large co-efficient. Board independence has significance in low values but with the addition of family

ownership as moderator, their relation is stronger. This means that family ownership plays an important role in making a strong relationship. With the addition of the family ownership as a moderator, Cash management has a negative and significant relationship with firm performance. This means that in an emerging economy some firms do not have proper departmental control on the management of cash. In that case some firms hold large amounts of cash in the shape of current assets to create an opportunity cost. That's why there is a decrease in firm performance. However, in the Tobin Q model without moderation, it has a positive and significant relationship.

Conclusion and Recommendations

In models without moderation, Board independence has a positive and significant relationship with the firm performance. This means that when there is independence the firm can perform in an effective way. Board size has a negative and significant relationship with firm performance. This means that when number of directors increase the firm bears a huge cost in shape of the director's remunerations which has a burden on the firms. A small and effective board increases firm performance.

Cash management has a positive and significant relationship with firm performance. This means that effective cash management can increase firm performance. However, there is a contradiction in two measures of firm performance that should be cleared by family ownership as a moderator in the next analysis section. Firm size has a positive and significant relationship with firm performance because in Pakistan there is an emerging economy and firms faced problems related to tax handling and other issues. We can say that politics influenced large firms. Institutional ownership has a significant and positive relationship with firm performance. This means that with the addition of institutional ownership in total shareholding of the firm risk issues can be handled by skills relating to risk evaluations and making a diversifiable portfolio.

With the moderating factor of family ownership, the relationship between cash management and the firm performance should be stronger as compared to the simple regression with large co-efficient. Board independence has significance in low values but with the addition of family ownership as moderator, the relation is stronger. This means that family ownership plays an important role in making a strong relationship. With the addition of family ownership as a moderator, Cash management has a negative and significant relationship with the firm performance. This means that in an emerging economy some firms lack proper departmental control of the management of the cash. In that case some firms hold large amounts of cash in shape of current assets which create an opportunity cost. This is why there is a decrease in firm performance, while, in the Tobin Q model without moderation, there is a positive and significant relationship.



Limitation of the Study

This study provides a clear vision about how cash management affects firm performance in Pakistan. However, we face the following limitations in this study. Due to a lack of disclosure regarding some characteristics of the board like board knowledge and expertise, gender diversity, and the process of meeting and hiring of the directors, the data is incomplete.

Future Research Suggestion are Follows

Corporate governance affects firm performance in developed countries when compared with developing nations or emerging economies. Ownership structure's effect on managerial ownership and institutional ownership effects should be researched. How ownership concentration directly effects firm performance should be part of future research.

Further study should be conducted on other corporate governance and management structures. Moreover, future studies should be conducted on the factors that influence cash holding and the management of the cash.

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