Homepage: http://ijmres.pk/ Vol 11, No 1, March 2021, PP. 104-116 E-ISSN: 2313-7738, ISSN: 2223-5604

INTRINSIC CORPORATE GOVERNANCE PRACTICES AND FIRM'S CASH HOLDINGS IN PAKISTAN

- 1*Muhammad Zahid Javed, 2Zia Batool, 3Waseem Ul Hameed, 4Naheed Sultana
- ¹ COMSATS University Islamabad, Vehari Campus
- . *Corresponding Email: mzahid11213@gmail.com
- ² Chairperson PEIRA (private educational institutions regulatory authority), Email: ziabatool@yahoo.com
- ³ Assistant Professor, School of Business Management and Administrative Sciences (SBM&AS), Department of Islamic and Conventional Banking (ICB), The Islamia University of Bahawalpur (IuB). Email: expert_waseem@yahoo.com
- 4 Professor Lahore Business School, The University of Lahore, Email: naheed.sultana@lbs.uol.edu.pk

ARTICLE INFO

Article History: Received: February Revised: March Accepted: March Available Online: April

Keywords:

Intrinsic corporate governance, Cash holdings, free cash flow theory.

JEL Classification: G35, G38

ABSTRACT

The study investigates the association of intrinsic corporate governance practices and cash holdings of manufacturing organizations, listed with the Pakistan Stock Exchange (PSX). Panel data extracted from the financial reports of the organizations provided on the website of State Bank of Pakistan (SBP) is applied for the purpose of analysis to study the relationship among variables. The organization's cash holdings are considered the quantity of cash and liquid assets stated in the statement of financial position. Sample of 276 listed manufacturing organizations has been taken by applying census sampling technique. Penal data model, correlation, Random Effect (RE) and Fixed Effect (FE) models are applied for the examination of the association between intrinsic corporate governance practices and cash holdings of manufacturing organizations in Pakistan, listed with the PSX. According to random effect estimates, Board size, CEO duality and Board Independence have significant positive association with cash holdings. Furthermore, results show that the ownership structure has an insignificant association with cash holing. The findings of this study for Pakistani firms have a general resemblance to the findings of previous researchers in developing countries' contexts. Hence, the researcher's contribution is related to Pakistani firms that have different economic settings in comparison to the developed economies. The study has many theoretical implications regarding developing countries' context and practical implications for managers, shareholders, suppliers and other stakeholders in the firms.

© 2021 The authors, under a Creative Commons Attribution-Non-Commercial 4.0

1. INTRODUCTION

Cash is an important and major element in the assets of the firms (Iskandar-Datta & Jia, 2014; Yung & Nafar, 2014). Unnecessary cash holding by organizations is a major issue for stockholders of that organization. There is no incentive for the organization in accumulations of cash rather than their tendency of cash holdings to respond submissively to cash flow. According to Roy (2018), organizations hold cash for diverse objectives. Firstly, for transaction object to spending cash on the day-to-day transactional activities. Secondly, for a precautionary object because firms want to avoid any disturbance because of adverse market situations when the cost of borrowing is going to high. Thirdly, it can be a tax object, where an international organization may possess cash in foreign subsidiary firms to avoid that tax that could experience if they deported the profits produced in overseas states. Lastly, the objective may be the agency, which is most important for this research. In the transaction, objective organizations want a reduction in transaction costs and divert losses that may be incurred due to the shortage of funds (Khan, Bibi, & Tanveer, 2016). Whereas, excessive cash is ultimately associated with fewer yields on investment (Dittmar, Mahrt-Smith, & Servaes, 2003; Tong, 2010) because it is the type of that assets which can be misused by executives of the firms (Jensen, 1986).

Cash holdings of firms vary from industry to industry and depend upon the cash spending level and nature of operations. The weak monitoring on accumulated cash may result in the private benefits of mangers that ultimately cause an agency problem of additional cash (Harford, Mansi, & Maxwell, 2008; Jensen, 1986). Hence, to maintain appropriate cash balance is necessary for every concern to accomplish the firm's specific needs but costs and benefits connected with the holding of cash must be considered. Higher cash discouraged the value-creating behavior of

Managers when they invest in those projects that have negative NPV. The low supervision on the extra cash holdings results in managers accumulating privileges and private gain. These drawbacks of high cash lead to the agency problem (Harford, 1999; Jensen, 1986).

The optimal amount of holding cash is an element of adequate liquidity that denotes the capability of a business to dispose its short-term liabilities as they become due. Consequently, all the firms have to retain an appropriate amount of cash to undertake their routine activities. Practices of good corporate governance could help maintain the ideal cash level (Masood & Shah, 2014). The definition of corporate governance according to (Isaksson, 1999) is "the system through which businesses are directed and controlled". Without implication of corporate governance tools, it is hard to control excessive cash holdings because cash holdings of Pakistani firms are going up from the last decade. Therefore, there is a dire need to understand and investigate why organizations hold cash and how it can be controlled through the implication of good corporate governance practices. Corporate governance instruments may include board size and its independence, ownership structure and CEO duality (Lingesiya, 2017).

Masood and Shah (2014) alleged and proved that through effective and appropriate corporate governance practices, organizations are in the position to decide the appropriate amount of cash balance in the business. According to (Roy, 2018), researchers have explored the association of corporate governance practices and firm cash reserves in the developed countries context where corporate situations are advanced and developed. But, in the context of developing economies, where business settings are far different from developed economies and agency problems are high, especially in the case of Pakistan there are only a few studies to explore the said relationship (Akhtar, Tareq, Sakti, & Khan, 2018). Furthermore, cash accumulation component has sought attention as agency problem in the sense that managers modify day to day operations of the firms to cover proper performance of the firm (Akhtar et al., 2018). Additionally, Lingesiya (2017) stated that researchers have a difference of opinion on governance and its role in holding cash in firms. For the reasons, this research is being undertaken to address this research gap. Contribution of this study will be significant for growing literature of corporate cash holding. It will provide a guideline for the stakeholders in a firm (i.e. investors, analysts, creditors and boards of directors) for decision making by developing an understanding that to what extent management decisions and financial activities are conducted in the greatest interest of the stakeholders and stockholders by using firm's funds efficiently and effectively.

2. REVIEW OF LITERATURE AND HYPOTHESES DEVELOPMENT

Managers in the organizational context have to make important decisions for maintaining cash and equivalents to make ordinary operations smooth and efficient (Megginson, Ullah, & Wei, 2014). It is a perceived fact that free cash must be financed in the projects that have high profitability. At the same time, the firm should ensure and maintain the liquidity of the firm at an appropriate level to meet future demands. Agency problem, however, is also the factor for divergence of interest among directors and owners of the firm regarding the level of cash maintenance (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002). Accordingly, the major task for the management is to identify a balance between cost and benefits for holding cash (Martínez-Sola, García-Teruel, & Martínez-Solano, 2013). In the practical world raising finances always have to bear some costs, like opportunity cost, agency cost, bonding cost, residual cost, monitoring cost.

2.1 Intrinsic Corporate Governance Practices

In literature, different definition of corporate governance prevailed but for this study is using definition recommended by Denis and McConnell (2003) "as the set of mechanisms – both institutional and market-based – that induce the self- interested controllers of a company (those that make decisions regarding how the company will be operated) to make decisions that maximize the value of the company to its owners (the suppliers of capital)". Moreover, another researcher discussed the distinction between the firms which have well-defined practices in corporate governance and poorly governed firms. He assumed that corporate governance and holding cash has a prominent association. Poor governance mechanisms in firms will result in wastage of extra cash accumulation. Results suggested that poor governance mechanism in firms will reduce approximately 50% of the market worth of additional cash, while firms which have well defined corporate governance mechanism better secure its excess holdings (Basheer, Khan, Hassan, & Shah, 2018; Dittmar & Mahrt-Smith, 2007). Definition of intrinsic corporate governance according to Isaksson (1999) is "the system through which businesses are directed and controlled".

2.2 Intrinsic Corporate Governance Practices and Cash Holdings

Literature concluded that numerous factors that are responsible for the change of cash holdings level in the firms. These factors may be classified into two categories such as intrinsic and extrinsic or macro-level and micro-level. At the macro level, firms have to adjust according to the varying economic situation in the country or context. Similarly, firms change their amount of cash holdings by the changes in purchasing power and monetary policy (Wang, Ji, Chen, & Song, 2014). In contrast, intrinsic factors are at the firm level and decision of cash holding depends upon the management and organization level policies. Common factors that have importance at micro-level are liquidity, current liabilities, firm size, investment opportunities, dividend payments, growth rate, profitability, debt ratio, capital expenditure, the board size, board independence, noncash liquid assets, CEO role and leverage (Megginson et al., 2014). Furthermore, the most prominent element that has a foremost influence on the decisions of a firm is corporate governance (Adams & Mehran, 2012; Basheer, 2014). For this study, only intrinsic factors of corporate governance are considered.

3. RESEARCH METHODOLOGY

In essence, the research design provides a general plan that in which way researcher will conduct his study to answer the research questions (S. A. Sabir, Mohammad, & Shahar, 2019). The first section of this chapter discusses research approaches, population and sample size of the study. It also presents a comprehensive discussion on the proposed framework and econometric model of the study. The second section presents data collection procedures, analysis tool and tests applied in the study. This study will apply a quantitative approach to assess the association of corporate governance with the cash holding of manufacturing firms listed with Pakistan stock exchange. The quantitative approach has been applied because it uses to find causes and effect of relationship (Zafar, Kousar, & Sabir, 2019). Moreover, objective research can be divided into three classes of explanatory, descriptive, and exploratory research. According to these divisions, this study falls into explanatory research because the motive of present study is to explain the causal linkage of corporate governance and the cash holding of manufacturing firms listed in the PSE. For analysis, the study population includes all manufacturing firms listed in PSE (D. S. A. SABIR, JAVED, KHAN, & JAVED, 2021). The study applied a sample of 276 manufacturing businesses listed in the PSE by using the census sampling technique and covers the time from 2012 to 2017. Data on different variables for all companies have been extracted from financial reports of the concerns issued by SBP. Annual data is employed for the analysis of variables of the study.

MEASUREMENT OF VARIABLES

Variable	Abbreviation	Measurement		
Cash Holdings	СН	Cash and cash equivalents (Ye, 2018)		
Board Size	BS	Number of directors on board (Ullah & Kamal, 2017)		
Board Independence	BI	Independent directors on board (Roy, 2018; Sheikh & Khan, 2015)		
CEO Duality	CEO_D	"1" if chairman occupy the post of CEO as well and "0" if not (Sheikh & Khan, 2015)		
Ownership Structure	OS	Total shares with the board of directors to total shares outstanding (Khan et al., 2016)		
Leverage	lev	Long term debt / Total assets (Mule & Mukras, 2015)		
Profitability	prft	The ratio of profit after tax to total sales (Nunes & Serrasqueiro, 2015)		
Firm Size	fs	Log of total assets (Akhtar et al., 2018)		
Dividend Payout	div.pay	Total amount paid to Shareholders as a dividend (Rao, 2015)		

4. MATHEMATICAL MODELS

 $CH_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 CEO.D_{it} + \beta_4 OSt_{it} + \beta_5 lev_{it} + \beta_6 prft_{it} + \beta_7 fs_{it} + \beta_8 div.pay_{it} + \varepsilon_{it}$

Where

*CH*_{it}: Cash holdings

 BI_{it} : Board Independence

 $CEO.D_{it}$: CEO Duality

OSt_{it}: Ownership Structure

 lev_{it} : Leverage

prft_{it}: Profitability

 fs_{it} : Firm size

div.pay,: Dividend Payment

 β_0 : Common intercept

 \mathcal{E}_{it} : Stochastic error term of the particular firm at a specific time

 μ_{ii} : error term of the specific firm at a specific time

 ε_i : cross-sectional error factor

4.1 Analysis and Results

To examine the association of variables, this study uses panel data based on firms. The estimation model used in the study has extensively used by the researchers to analyze penal data (Lange, Vansteelandt, & Bekaert, 2012).

Table 4.1 Descriptive Statistics Results

Variables	Mean	Median	MAX	MIN	STD.DEV
СН	6.73	5.37	58.23	1.00	25.79
BI	0.72	0.71	1.00	0.00	0.14
BS	7.87	7.00	15.00	3.00	1.43
CEO_D	0.18	0.00	1.00	0.00	0.39
os	59.91	60.51	92.82	21.02	16.59
DIV.Pay	683514	10910	94618360	0.00	3499430
FS	9.62	9.59	11.79	7.16	0.70
LEV	0.27	0.25	2.67	-1.18	0.25
PRFT	-55.70	3.56	2547.82	-47766.4	1428.56

CH= Cash Holdings (in 000) OS= Ownership Structure PRFT= Profitability BI= Board Independence BS= Board Size
DIV.Pay= Dividend Payments FS= Firm size

CEO.D= CEO Duality LEV= Leverage

All descriptive statistics of manufacturing firms listed with the PSE are provided in the above table. The average of Cash Holdings is 6.73084 with a standard deviation 25. 79157. The lowest value of this variable is 1 while the largest is 58.233175 in this panel. Board Independence is another variable used in this panel. The mean value for variable is 0.724875 and standard deviation is 0.145199 that shows low dispersion exists. The smallest and largest value for the variable is 0 and 1 respectively. The average value of Board Size is 7.878436 the standard deviation 1.433704. The lowest Board Size value is 0 while the highest is 15. CEO duality is another variable that has used in this panel. The mean of this variable is 0.188149 having a standard deviation 0.390951 that shows low dispersion exists. The smallest and largest value for the variable is 0 and 1 respectively. The average value of Ownership Structure is 59.90996 the St. Deviation 16. 59670. The lowest value of Ownership Structure is 21.02500 while the highest is 92.82800.

Table: 4.2 Correlation Analysis

	СН	BI	BS	CEO_D	DIV.Pay	FS	LEV	OS	PRFT
СН	1								
ВІ	0.14	1							
BS	0.18	0.30	1						
CEO_D	-0.06	-0.20	-0.20	1					
DIV.Pay	0.33	0.11	0.19	-0.02	1				
FS	0.34	0.04	0.28	-0.22	0.32	1			
LEV	-0.16	-0.11	-0.15	0.17	-0.14	-0.09	1		
os	0.064	0.01	-0.02	0.06	-0.01	0.12	0.03	1	
PRFT	0.012	-0.03	0.03	-0.03	0.01	0.09	0.01	-0.04	1

The correlation matrix represents the direction and intensity of the relationship among variables. The values of the correlation of two variables range from +1 to -1. A 0 value states no association of variables. Bigger than 0 value specifies that there is a positive correlation among variables states that with the increase of one value, other variables will also increase. A smaller than 0 value indicates the negative correlation of variables which shows that with the increase of one value, other variables will decrease. The value of +1 means variables has strong positive correlated with each other and vice versa. In this correlation matrix, Cash Holdings has a positive correlation with Board Size, board independence, and Ownership Structure whereas Cash Holdings have inverse correlation with CEO Duality. Whereas Board Independence has positive relation with Board Size and Ownership Structure while Board Independence has negative correlation with CEO Duality. The structure of board has a negative correlation with CEO Duality and Ownership Structure. Further, CEO Duality has a positive correlation with Ownership Structure. Furthermore, all the correlation values between variables are below 0.7 which means that there is no issue of multi-co linearity between the variables.

Table 4.3 Fixed Effect Model Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
СН	-9593726.	894483.0	-10.72544	0.0000
BI	150.3623	41.66763	3.608612	0.0003
BS	0.166540	0.017603	9.460704	0.0000
CEO_D	49693.19	44121.68	1.126276	0.2602

os	-985913.4	226695.9	-4.349057	0.0000
DIV.Pay	892.4789	90.5430	9.856953	0.0000
FS	0.3132	0.1186	2.6408	0.033
LEV	-0.005757	0.2189	0.02629	0.161
PRFT	-14.94643	40.42415	-0.369740	0.7116
Adjusted R-squared	0.546			
F-statistics	22.912			
Prob.(F.statistics)	0.04			

Table 4.4 Random Effect Model Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.	
СН	870.0538	60.19271	14.4683	0.0000	
BI	0.119119	0.009278	12.837863	0.0001	
BS	0.52607	0.020626	25.50558	0.0009	
CEO_D	1.305104	0.416758	3.131560	0.0018	
os	0.264354	0.383205	0.689850	0.4904	
DIV	8.7588	0.59620	14.68987	0.0001	
FS	-11.52471	35.00923	-0.329191	0.7421	
LEV	-12469573	4062419	-3.069494	0.0022	
PRFT	0.9538	0.328	2.9079	0.0051	
Adjusted R-squared	0.6197				
F-statistics	10.650				
Prob. (F.statistics)	0.04				
Hausman Test	Chi-Sq.		Prob.		
	5.22		0.2		

Hausman test is used to decide for our panel data in the study that which statistical technique is better (random and fixed effect)". The table 4.5 shows that random effect model estimation is more suitable than the fixed-effect estimation because the probability values of all three equations are greater than 0.05 (more

than 5%) so the researcher has chosen a random effect model. In a panel data set, an approach has also been applied by past researchers to analyze data and that is Fixed Effect Model. In the fixed-effect model, the intercept term varies by firms but remains unchanged with the time that is why we can say it time-variant intercept. The coefficient of independent variables does not vary with time as well in the fixed-effect model. (Dougherty, 2007; Lein et al., 2007) recommended a criterion for choosing a regression model in panel data. Table 4.5 shows the relationship of cash holdings with all independent variables about random effect estimates. The above table shows the Board Independence has a positive significant relation with holding cash. If we change 1% in Board Independence then cash holdings rise with 11.96%. Board Size has positive significant impact on cash holdings. If a 1% change in Board Size then cash holdings increase by 52%. CEO Duality has a positive significant relation with holding cash. If CEO Duality changes, it will change the amount of cash holdings. Furthermore, results show that Ownership Structure has a positive insignificant relation with holding cash. Furthermore, in table 4.5 adjusted R-squared (0.6197) shows that variables included in the model explain 60 percent variability in dependent variable (CH).

5. DISCUSSION

Some findings of the study are in line with the findings of previous researchers such as Pinkowitz, Stulz, and Williamson (2006). In contrast, some of the hypotheses state different results from previous studies because of many reasons. Firstly, this study is being conducted with a different population and sample size. Secondly, the reason for the difference in the results may be the context from which the sample was taken. Finally, maximum of the studies have considered the context where economies are developed while this study is conducted in the context of Pakistan that has developing economic settings. The study concluded that Board size has a significant positive association with cash that is similar to the findings of Chen (2008) Opler, Pinkowitz, Stulz, and Williamson (1999) and Ullah and Kamal (2017). The number of directors has a significant influence on the cash hold by the firm as a cash reserve in Pakistani firms. The result leads to accepting our hypothesis regarding Board Size. Agency cost associated with Board Size discussed in corporate governance researches indicates that firms having small board size face less influence on cash holdings (Yermack, 1996). By agency theory, researchers claimed that larger board size is not much efficient in decision making and the firm has to bear high managerial expenses, weak governance practices and will be easy for the CEO to control. That is why they will prefer to retain surplus assets in their control. Ultimately, larger board size tends to be ineffective in decisions and has higher managerial costs. Board Independence and cash holdings have positive and significant associated with each other according to the findings of the study. These findings are similar to the findings of Ullah and Kamal (2017) and Pathan, Skully, and Wickramanayake (2007). The above-said association explains that firms have numerous outside independent directors hold more cash amount. The significant association between board characteristics variables and cash holdings states level of cash holdings varies with the variation of board composition. Further, the key activities of board are associated with monitoring of top managers that is why board independence has a important impact on cash holding and spending patterns of cash (Ozkan & Ozkan, 2004). Based on the financial hierarchy theory, board independence has a positive association with cash hoarding because of that independent board diminish agency cost associated with cash holding with the help of better protection to shareholders. Our findings are in line with Tong (2010) regarding the association of CEO duality and cash holdings. The positive association between variables states that when the same person has the dual role of chairman and CEO in a firm, this twofold obligation not only makes him more answerable to the investors but also makes him more risk-averse. For the reason, to avoid cash shortage, CEOs hold surplus cash not only for transactional motives (expected costs) but also for precautionary motives (unexpected costs). Proponents of agency theory claim that if the CEO has a dual role (CEO and chairman) it will badly damage the ability of board members in discharging their vested duties. The dual role of CEOs will restrict the monitoring scope of directors and actions carried out by self-centered

managers may remain hidden. The association of ownership structure is negative with cash holdings that is similar to the study of (Ozkan & Ozkan, 2004). These findings confirm the common perception that there is an interest orientation of shareholders and managers (Opler et al., 1999). Two opposite opinions exist about the importance of the ownership structure of firms in deciding the cash holding level. By considering corporate governance viewpoint, ownership attentiveness reduces free cash flow issue and minimizes the opportunities for self-centered managers. Furthermore, it results in moderating the agency cost relating to outside financing because shareholders having a large ratio of shares have more opportunity to effectively monitor the management.

6. CONCLUSION

This research is conducted to observe the association of intrinsic corporate governance practices with cash holdings of Pakistani listed non-financial firms with the PSE. Panel data were taken out for the analysis from the financial reports of the organizations. Intrinsic corporate governance practices in Pakistani listed manufacturing corporations are assessed by incorporating board independence, CEO duality, board size and ownership structure. While, control variables applied in the study are Leverage, Profitability, Firm Size and Dividend Payout. For analysis, data is used from annual reports of 2012-2017. Different tests are applied for data screening such as Correlation analyses and unit root tests to check multicollinearity and data stationarity. Findings of unit root test are representing that all the variables are stationary at Level. By correlation analysis, Board Independence, Board Size and Ownership Structure has positive correlation with dependent variable. Whereas, it is negatively correlated with CEO Duality. Whereas Board Independence has a positive correlation with Board Size and Ownership Structure while Board Independence has an inverse correlation with CEO Duality. However, Board structure has an inverse correlation with CEO Duality and Ownership structure. CEO Duality has a positive correlation with the Ownership structure. Hausman test was applied to decide which statistical technique is better (random and fixed effect) and decided that random effect model estimation is much better than the fixed effect model. Lagrange Multiplier (LM) is a test that is applied to identify whether OLS is a better technique or a Random effect. Random effect estimates states that Board size, Board Independence and CEO duality have a significant positive effect on cash holdings. Furthermore, results show that the ownership structure has an insignificant relationship with cash holing. The conclusions of study for Pakistani firms have a general resemblance with the answers of earlier researchers of emerging countries' context. Hence, the researcher's contribution is related to Pakistani firms that have different economic settings. Remarkably, this study provides appropriate evidence generally in favor of the theories in perspective of cash holdings. Certainly, the evidence proves that theories regarding cash holdings are of much importance that is being provided in the literature relevant to finance.

7. IMPLICATIONS

This study has following implications regarding theory and practice as well;

7.1 Theoretical Implications

In many ways, study will make contribution for the growing literature of corporate cash holding in many ways. This study was conducted with the purpose to fill the gap in the Pakistani context. Based on the developing economies, the study explains the association of firm-level corporate governance application with the corporate cash holding of firms in Pakistani and it may be illustrative for other developing economies having similar economic settings. By Cull, Li, Sun, and Xu (2015) and Lingesiya (2017), previous studies were conducted in the developed economies context such as the USA, U.K, and other European states. Furthermore, Megginson et al. (2014) initiated research in the Chinese context about the economies that are rapidly growing and find out a significant association amongst some elements of

corporate governance practices and the business cash accumulation level. However, in the case of Pakistan, according to the best knowledge of the researcher, limited studies have been conducted to study the relationship. At the moment, the research has a wide scope to study the said relationship in the context of a transition economy like Pakistan. Myers (1977), by keeping in view the trade-off model, proposed the appropriate cash level and said that it can balance costs and benefits associated with retained cash. Martínez-Sola et al. (2013), in their research, proves this supposition in the context of developed states. Similarly, our study has evidence for a significant association between corporate governance and cash holdings. So, managers at the time of retaining cash can balance the costs and benefits of cash retention by holding an appropriate level of cash. By keeping balance in cost and benefits, the agency cost of cash holdings can be reduced. The result of the study provides evidence and support for the trade-off model in developing economies like Pakistan. Finally, the study fills a contextual gap regarding developing countries particularly in the context of Pakistan.

7.2 Practical Implications

This research definitely will help managers in deciding the appropriate level of cash holdings by implementing corporate governance practices in a true sense. More specifically, the research will provide a way forward for the management of non-financial firms in Pakistan that by considering significant factors of corporate governance, they may able to uphold a suitable level of cash amount accumulated with the firm. The researcher gives a reference for managers about board structure. Specifically, where CEOs hold the position of chairman as well, they will try their best for gaining all possible advantages by holding the whole control and power of decision making. Resultantly, agency problems will be at its peak in the situation (Liu, Luo, & Tian, 2015). In the situation, where CEOs holds the position of chairman as well, the firms should consider agency problem more keenly instead of holding a high amount of cash. Additionally, agency costs may be reduced by the firms by dropping cash retention levels to an appropriate amount. Besides, in the case where directors possess a large number of shares, they will try to pay more dividends for their benefits (Kuan, Li, & Chu, 2011). Resultantly, the firm will not hold surplus cash and will pay high dividends. In the situation where board members have ownership of shares, the firms should avoid paying high amounts of dividends. Instead, the firm should retain more surplus cash by keeping in view the precautionary motive. Subsequently, the firm will be in the position to resolve the issues regarding cash. Additionally, the study will provide a guideline for the stakeholders in a firm (i.e. investors, analysts, creditors and boards of directors) for decision making by developing understanding that to what extent management decisions and financial activities are conducted in the greatest interest of the stakeholders and stockholders by using firm's funds efficiently and effectively. Resultantly, Effective utilization and appropriate holding of the firm's cash will minimize costs and maximize benefits associated with holding cash. Moreover, an adequate understanding of corporate governance will reduce agency costs. Finally, Cash in the firm is retained for many purposes such as transaction, precautionary, agency and tax. Practically, by keeping in view these motives, firms will be in a better position to achieve these motives. Cash will be readily available for transaction purposes to make it smooth. Moreover, firms will be able to face unpleasant situations and unplanned transactions can easily be managed. Additionally, firms will be in a better position to pay their due tax liabilities in the future.

REFERENCES

- Adams, R. B., & Mehran, H. (2012). Bank board structure and performance: Evidence for large bank holding companies. *Journal of Financial Intermediation*, *21*(2), 243-267.
- Akhtar, T., Tareq, M. A., Sakti, M. R. P., & Khan, A. A. (2018). Corporate governance and cash holdings: the way forward. *Qualitative Research in Financial Markets*, 10(2), 152-170.
- Basheer, M. F. (2014). Impact of Corporate Governance on Corporate Cash Holdings: An empirical study of firms in manufacturing industry of Pakistan. *International Journal of Innovation and Applied Studies*, 7(4), 1371.
- Basheer, M. F., Khan, S., Hassan, S. G., & Shah, M. H. (2018). The Corporate Governance and Interdependence of Investment and Financing Decisions of Non-Financial Firms in Pakistan. *The Journal of Social Sciences Research*, 316-323: 315.
- Chen, Y. R. (2008). Corporate governance and cash holdings: Listed new economy versus old economy firms. *Corporate Governance: An International Review, 16*(5), 430-442.
- Cull, R., Li, W., Sun, B., & Xu, L. C. (2015). Government connections and financial constraints: Evidence from a large representative sample of Chinese firms. *Journal of Corporate Finance*, *32*, 271-294.
- Denis, D. K., & McConnell, J. J. (2003). International corporate governance. *Journal of financial and quantitative analysis*, *38*(1), 1-36.
- Dittmar, A., & Mahrt-Smith, J. (2007). Corporate governance and the value of cash holdings. *Journal of financial Economics*, 83(3), 599-634.
- Dittmar, A., Mahrt-Smith, J., & Servaes, H. (2003). International corporate governance and corporate cash holdings. *Journal of financial and quantitative analysis*, *38*(1), 111-133.
- Dougherty, C. (2007). Introduction to econometrics: Oxford University Press, USA.
- Harford, J. (1999). Corporate cash reserves and acquisitions. *The Journal of Finance*, 54(6), 1969-1997.
- Harford, J., Mansi, S. A., & Maxwell, W. F. (2008). Corporate governance and firm cash holdings in the US. *Journal of financial Economics*, 87(3), 535-555.
- Isaksson, M. (1999). *Investment, Financing and Corporate Governance: The Role and Structure of Corporate Governance Arrangements in OECD Countries.* Paper presented at the Seminar on Corporate Governance in the Baltics.
- Iskandar-Datta, M. E., & Jia, Y. (2014). Investor protection and corporate cash holdings around the world: new evidence. *Review of Quantitative Finance and Accounting*, 43(2), 245-273.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review, 76*(2), 323-329.
- Khan, A., Bibi, M., & Tanveer, S. (2016). THE IMPACT OF CORPORATE GOVERNANCE ON CASH HOLDINGS: A COMPARATIVE STUDY OF THE MANUFACTURING AND SERVICE INDUSTRY. *Financial Studies,* 20(3).
- Kuan, T.-H., Li, C.-S., & Chu, S.-H. (2011). Cash holdings and corporate governance in family-controlled firms. *Journal of Business Research*, *64*(7), 757-764.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *The Journal of Finance*, *57*(3), 1147-1170.
- Lange, T., Vansteelandt, S., & Bekaert, M. (2012). A simple unified approach for estimating natural direct and indirect effects. *American journal of epidemiology, 176*(3), 190-195.

- Lein, E. S., Hawrylycz, M. J., Ao, N., Ayres, M., Bensinger, A., Bernard, A., . . . Byrnes, E. J. (2007). Genome-wide atlas of gene expression in the adult mouse brain. *Nature*, *445*(7124), 168-176.
- Lingesiya, K. (2017). Impact of Corporate Governance Practices on Firm's Cash Holdings in an Emerging Market: A Panel Data Analysis.
- Liu, Q., Luo, T., & Tian, G. G. (2015). Family control and corporate cash holdings: Evidence from China. *Journal of Corporate Finance, 31*, 220-245.
- Martínez-Sola, C., García-Teruel, P. J., & Martínez-Solano, P. (2013). Corporate cash holding and firm value. *Applied Economics*, 45(2), 161-170.
- Masood, A., & Shah, A. (2014). Corporate governance and cash holdings in listed non-financial firms of Pakistan. *Business Review*, *9*(2), 48-72.
- Megginson, W. L., Ullah, B., & Wei, Z. (2014). State ownership, soft-budget constraints, and cash holdings: Evidence from China's privatized firms. *Journal of Banking & Finance*, 48, 276-291.
- Mule, R. K., & Mukras, M. S. (2015). Financial leverage and performance of listed firms in a frontier market: Panel evidence from Kenya. *European Scientific Journal, ESJ, 11*(7).
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial Economics*, 5(2), 147-175.
- Nunes, P. M., & Serrasqueiro, Z. (2015). Profitability determinants of Portuguese knowledge-intensive business services: Empirical evidence using panel data models. *Applied Economics Letters*, 22(1), 51-56.
- Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of financial Economics*, *52*(1), 3-46.
- Ozkan, A., & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking & Finance, 28*(9), 2103-2134.
- Pathan, S., Skully, M., & Wickramanayake, J. (2007). Board size, independence and performance: an analysis of Thai banks. *Asia-Pacific Financial Markets*, *14*(3), 211-227.
- Pinkowitz, L., Stulz, R., & Williamson, R. (2006). Does the contribution of corporate cash holdings and dividends to firm value depend on governance? A cross-country analysis. *The Journal of Finance,* 61(6), 2725-2751.
- Rao, K. (2015). *The determinants and value of cash holdings: Evidence from listed firms in India.* Doctoral Dissertation, Indian Institute Of Management Indore.
- Roy, A. (2018). Corporate Governance and Cash Holdings in Indian Firms *Governance and Regulations' Contemporary Issues* (pp. 93-119): Emerald Publishing Limited.
- SABIR, D. S. A., JAVED, T., KHAN, S. A., & JAVED, M. Z. (2021). Investment Behaviour of Individual Investors of Pakistan Stock Market with Moderating Role of Financial Literacy. *Journal of Contemporary Issues in Business and Government | Vol., 27*(2), 1156.
- Sabir, S. A., Mohammad, H. B., & Shahar, H. B. K. (2019). The role of overconfidence and past investment experience in herding behaviour with a moderating effect of financial literacy: evidence from Pakistan stock exchange. *Asian Economic and Financial Review*, *9*(4), 480.
- Sheikh, N. A., & Khan, M. I. (2015). The impact of board attributes and insider ownership on corporate cash holdings: Evidence from Pakistan. *Pakistan Journal of Commerce and Social Sciences (PJCSS),* 9(1), 52-68.
- Tong, Z. (2010). CEO risk incentives and corporate cash holdings. *Journal of Business Finance & Accounting,* 37(9-10), 1248-1280.

- Ullah, S., & Kamal, Y. (2017). Board characteristics, political connections, and corporate cash holdings: The role of firm size and political regime. *Business & Economic Review*, *9*(1), 157-179.
- Wang, Y., Ji, Y., Chen, X., & Song, C. (2014). Inflation, operating cycle, and cash holdings. *China Journal of Accounting Research*, 7(4), 263-276.
- Ye, Y. (2018). A Literature Review on the Cash Holding Issues. Modern Economy, 9(06), 1054.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of financial Economics*, 40(2), 185-211.
- Yung, K., & Nafar, N. A. (2014). Creditor rights and corporate cash holdings: International evidence. International Review of Economics & Finance, 33, 111-127.
- Zafar, M., Kousar, S., & Sabir, S. A. (2019). Impact of Globalization on Green Growth: A Case of OECD Countries. *Journal of Indian Studies*, *5*(2), 231-244.