

# Impact of Corporate Governance on the Cash Holding of the Firms: An Empirical Study of Indian Manufacturing Sector

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## Abstract

The paper empirically examines the impact of corporate governance on the cash holding of the firms. The components of corporate governance are measured by board size, board meeting, audit committee members, director's remuneration and non executive directors and the cash holding is measured with the log of average cash and size is taken as control variable for the control effect on the dependent variables. Moreover, correlation and panel regression model were employed to examine the relationship between the corporate governance and cash holding. Empirical data was collected from 96 firms over the period of 2004-05 to 2013-14. The results show that directors' remuneration and the number of audit committee members positively influence the cash holding and the board size also positively influences the cash holding whereas, the non executive directors and the board meetings do not play any role in enhancing the cash holding.

**Keywords:** Corporate Governance, Cash Holding, India, Manufacturing Sector, Board Size

## Introduction

Corporate governance involves the systems, principles and processes which help in the governance of the company. It also helps in giving the guidelines to the company and also to provide direction and control to the company which helps in the achievement of company objectives. The corporate governance is also helpful for stakeholders. The stakeholders involve the board of directors, management, society, employees and shareholders. Good corporate governance principles include the fairness principles, transparency principles, accountability

principle and responsibility principles respectively. Also corporate governance helps in the essential disclosures and decisions which help in enhancing the company value and the performance (Thomson and Bureau, 2009).

The cash holding is an important financial decision for a growing business. Some companies hold more cash whereas, some companies hold less cash. This varies from company to company. How much cash to hold is a very difficult decision for the financial manager in an organization. Cash is necessary for all the business activities. A good cash management decision is required for running the business (Das, S., 2014). Strong principles of corporate governance help in increasing the opportunities for growth and operating cash flow (Tsai, 2012).

## Literature Review

Anjum and Malik (2013) investigated the relationship between the determinants of corporate liquidity and the cash holding by taking the sample of 395 non financial companies in Pakistan. The study found that with increasing size of the firm, the cash balance is also increased. Also the net working capital was positively and significantly associated with the cash holding. Basheer, M.F. (2014) studied on the corporate governance and cash holding by taking the sample of the manufacturing firms in Pakistan. The result of the study suggested that cash flow is positively associated with the cash holding whereas the liquidity, leverage and bank borrowing variability of cash flow were negatively associated with the cash holding.

Paskelian, Bell & Neguyen (2010) examined the relationship between corporate governance and the cash

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holding by taking the sample of Chinese and Indian firms. The result showed that the Chinese firms have high government ownership and their cash holding is more than Indian firms where businesses are generally occupied by family ownership. Isshaq *et al* (2009) carried out a study in Ghana for the relationship of corporate governance, ownership structure, cash holding and the firm value. The study found that the board size had significant positive relation to the share price and additional unit of cash holding had no significant association with the share price. Gill and Biger (2013) investigated the association between the corporate governance and the working capital management for a comprehensive sample of 180 American manufacturing firms between 2009 and 2011. The study found that the cash management was positively associated with the CEO tenure, board size and the audit committee. Hannan and Asghar (2013) collected the sample of 22 non financial companies from Pakistan to investigate whether the corporate governance impacts corporate cash holding. The author found that the non executive members and leverage were negatively related to the cash holding.

Achchuthan and Kajananthan (2013) examined the association between the corporate governance and working capital management of manufacturing firms in Sri Lanka. The study found that board leadership was significantly associated with the current ratio whereas the other components were not significantly associated with the working capital management. Another study on the relationship between the corporate governance and the working capital management was done by the Chaudhry & Ahmad (2015). Data was collected from the 168 manufacturing firms from 2010-2013. Feasible generalized least square model was performed to determine the association between the corporate governance and working capital management. The study found that by increasing the board size, constituting the board committees, audit committee members and outside directors, the overall working capital can be enhanced.

Kamau & Basweti (2013) took a sample of forty two companies which are listed in the NSE (Nairobi Securities Exchange) for a period from 2006-2012 and found that board size and CEO tenure were positively associated with the working capital management. Gill, Biger & Obradovich (2015) used the data of 189 American

manufacturing firms which were listed in the New York Stock Exchange for the period from 2009-2013. The result suggested that presence of the independent directors in the board shortens the inventory period and cash conversion cycle of the firms. Zhou (2014) collected the data of 467 manufacturing companies from 2007-2009. Regression model was used for the relationship between the financial crisis effect, excess cash holding and corporate investment. The result suggested that excess cash holding may be beneficial for the firm in time of financial crisis, provided the firm knows the real motive behind excessive cash holding. Najjar (2015) examined the effect of governance mechanism on the cash holding by taking the sample of small and medium enterprise for the period of 2000-2009. The study found that CEO (chief executive officer) compensation positively impacts the cash holding.

## Research Gaps

Nowadays successful businesses are those which rapidly change their technology according to the changing global business environment. In global business environment, the concept of corporate governance is important for competitive advantage. The system of structuring, operating and controlling a company by which long term objectives are achieved, is called corporate governance (Das, 2009). In the study of literature there are many studies found in the literature in the context of corporate governance. But very few studies were found in the literature which shows the impact of corporate governance on the cash holding.

## Research Objectives and Hypothesis

The main objective of the paper is to examine the impact of corporate governance on the cash holding on the Indian manufacturing sector. This paper also shows the correlation matrix which helps in finding out the association between the corporate governance and cash holding. For achievement of the constructed objectives the following hypotheses have been developed.

H1: There is a significant association between the board size and the cash holding.

H2: There is a significant association between the non executive directors and cash holding.

H3: There is a significant association between the board meeting and the cash holding.

H4: There is a significant association between the audit committee members and cash holding.

H5: There is a significant association between the director remuneration and cash holding.

## Research Methodology

The impact of the corporate governance on cash holding has been measured with the help of taking different independent, dependent and control variables.

### Sample Selection, Data Collection and Analysis

The paper is empirical in nature because this study shows the cause and effect relationship between the corporate governance and cash holding. Few studies have been found in literature which shows the impact of corporate governance on the cash holding. The data has been collected from the CMIE (center of monitoring India economy) database which is also called prowess database. The data of Indian manufacturing sector has been taken for the year ranging 2005–2014. Sample has been taken for 96 Indian manufacturing companies which are listed NSE (National stock exchange).

### Dependent Variables

Cash holding has been taken as the dependent variables. Cash holding means that the money vacant/reserve for spending rather than investing.

### Independent Variables

For measuring the corporate governance, the independent variables taken are: board size, non-executive directors, board meeting, and audit committee members and directors remuneration.

Board size (BSIZE) = Numbers of directors in board is called board size. One size that fits to all is not necessary. Board size is dependent upon the size of the firm and nature of work done in business.

Non executive directors (NED) = Non executive directors are also called the external directors, independent directors and outside directors. Non executive directors

are part of the board. It means that non executive directors are members of the board of directors but they are not involved in day to day management. Non executive directors are involved in planning the policy and making the policy (non executive directors meaning\*).

Audit committee members (ACM) = the members of the audit committee who monitor financial reporting and disclosures independently. The audit committee members also play the role of over sighting the financial policies and procedures.

Board meeting (BMEETING) = the meetings are held in board for specific period of time in which discussion about the policy, planning and other problems of the organization are discussed .

Directors remuneration (DR) = the remuneration received by the directors for their services is called directors remuneration (executive and non executive).

### Control Variables

SIZE = the size measured by the net sale is used as control impact.

### Model For Analysis

Following regression equation has been constructed for analysis purpose.

$$LACASH = \alpha_{it} + \beta_1 BSIZE + \beta_2 NED + \beta_3 BMEETING + \beta_4 ACM + \beta_5 DR + \beta_6 SIZE + \epsilon_{it}$$

Where, LACASH= log of average cash;  $\alpha_{it}$ = constant term; BSIZE= board size; NED= non executive directors; BMEETING= board meeting; ACM= audit committee members; DR= directors remuneration;  $\epsilon_{it}$ = error term.

## Empirical Analysis

### Descriptive Statistics and Correlation Analysis

Table 1 represents the descriptive statistics of the study which help in presenting the data. Descriptive statistics show mean, median, maximum, minimum and standard deviation respectively. The total observations are 817. The average of the board of directors (BSIZE) is 10.58 and the average of the non executive directors (NED) is 7.55 means that the non executive directors are more than 50% in board. The average of the board meeting

(BMEETING) is 6.21 means that the board of directors meetings more than six times in a year. The average of the audit committee members and directors remuneration is 3.95 and 9.60.

**Table 1: Descriptive Statistics**

<i>Variables</i>	<i>ACASH</i>	<i>BSIZE</i>	<i>NED</i>	<i>BMEETING</i>	<i>ACM</i>	<i>DR</i>	<i>SIZE</i>
Mean	761.24	10.58	7.55	6.21	3.95	9.60	16690.68
Median	142.685	10	8	6	4	5.44	3513.89
Maximum	44572.5	21	14	20	8	122.47	478455.1
Minimum	-7016.82	4	2	4	3	0	122.28
Std. Dev.	3066.12	2.78	2.24	2.17	1.003	13.12	48824.28
Observations	817	817	817	817	817	817	817

Table 2 provides the correlation matrix of the study which shows the relationship between the dependent and independent variables. Multicollinearity does not exist in the dependent and independent variables. Because multicollinearity exists when, the relationship between the two variables is more than 0.8. Here, the relationship between all variables is less than 0.8 (Kennedy, 1985). The correlation matrix shows that the all the corporate

governance components are positively associated with the cash holding (ACASH). Director's remuneration, board meeting, audit committee members and board size are positively associated with the cash holding (ACASH) at 1% significance level. Also the board size (BSIZE) is positively and significantly associated with the non executive directors (at 1% significance level).

**Table 2: Correlation Analysis of all the Variables**

<i>Observations</i>	<i>BSIZE</i>	<i>NED</i>	<i>BMEETING</i>	<i>ACM</i>	<i>SIZE</i>	<i>DR</i>	<i>LACASH</i>
BSIZE	1						
NED	0.717*	1					
BMEETING	0.166*	0.067***	1				
ACM	0.190*	0.286*	-0.03191	1			
SIZE	0.264*	0.056	0.331*	-0.059***	1		
DR	0.217*	0.172*	-0.107*	-0.04196	0.11*	1	
LACASH	0.259*	0.174*	0.253*	0.10*	0.338*	0.074**	1

**Note:** \*, \*\* and \*\*\* represents Significance at 1 percent, 5 percent and 10 percent respectively.

### Regression Analysis

OLS regression model has been used for the analysis of the corporate governance and cash holding. The data is panel in nature consisting both time series data and cross-sectional data that is why fixed effect model and random effect model have been used. According to Hausman (1978) specification test, if hausman  $X^2$  value is significant then the fixed effect model is used for analysis and if the hausman  $X^2$  result is insignificant then the random effect model is preferred for analysis.

Table 3 OLS regression model result shows that, the dependent variable is cash holding. The independent variables are board size, board meeting, non executive directors, audit committee members and directors remuneration. The hausman  $X^2$  value shows significant result, and then the fixed effect model has been preferred in the study. The model has good explanatory power. As the value of Adjusted  $R^2$  is 0.653 which means that independent variables explain the dependent variable more than 65%.

The result of analysis reveals that the director remuneration is positively and significantly associated with the cash holding (at 1% significance level). It means that, if the directors are given more remuneration then this may result in increased cash holding. Audit committee members are significantly and positively associated with the cash holding (at 5% significance level). If the members of audit committee are increased then the cash

holding also increases. The non executive directors and the board meeting do not play any role in enhancing the cash holding. By increasing the number of external directors or non executive directors, the cash holding is not increased. The board size is also positively associated with the cash holding. Thus, hypothesis H4 and H5 has been accepted but other hypothesis are rejected.

**Table 3: Regression Analysis**

Variable	FIXED EFFECT MODEL	
	Coefficient	t-Statistic
C	1.819	9.982
BSIZE	0.013	0.607
BMEETING	-0.004	-0.409
NED	-0.018	-0.744
ACM	0.056	1.98**
DR	0.01	3.835*
SIZE	0.00	3.094*
Adjusted R <sup>2</sup>	0.653	
F – statistics	17.60*	
Hausman test	15.87**	

Variable	RANDOM EFFECT MODEL	
	Coefficient	t-Statistic
C	1.607	9.228
BSIZE	0.024	1.28
BMEETING	0.006	0.553
NED	-0.014	-0.675
ACM	0.058	2.182**
DR	0.008	3.439*
SIZE	0.00	4.682*

**Note:** \*, \*\* and \*\*\* represents Significance at 1 percent, 5 percent and 10 percent respectively.

## Summary and Conclusion

This research paper is an attempt to evaluate the impact of corporate governance (board size, board meeting, audit committee members, non executive directors and director's remuneration) on the cash holding (log of average cash). The correlation matrix and regression model have been applied in the study. The findings suggest that board size positively but not significantly impact the cash holding. In this study directors remuneration and audit committee is found to have a significant positive association with the cash holding. This study contradicts the findings of

Gill and Biger (2013). They found that the number of audit committee members is insignificantly associated with the cash holding. In an earlier study by Basheer (2014), it was found that ratio of non executive directors was positively associated with the cash holding whereas; this study finds that non executives directors negatively impact the cash holding. The study sheds new brightness for the financial managers and the policymakers as it may be helpful in improving the corporate governance which helps in management of cash holding. A good corporate governance structure is helpful in cash management which in turn, will improve organizational efficiency.

## Future Direction of the Research

The study has taken the sample of Indian manufacturing firms only. Thus, the research may extend to other sectors as well as the same study may be conducted in other countries. Moreover, Different independent variables such as CEO duality, board composition etc. can be used in further studies. This study is focusing on the impact of corporate governance on the cash holding. So the future research can be extended to other dependent variables.

## Policy Implication

The study is showing the impact of the corporate governance on the cash holding. Cash is the backbone of the organization. Cash management is a fruitful activity for every organization. This study thus helps the various organizations for management of the cash holding. This study has taken the sample of the manufacturing firms in India so it is more important for manufacturing sector in India. This study will provide future research directions for the researchers in the area.

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