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RESEARCH PAPER

Impact of Corporate Governance on Working Capital of Cement Companies of Pakistan

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ABSTRACT

This research investigates the influence of corporate governance on working capital management within the cement industry of Pakistan. The sample included 13 cement companies listed on the Pakistan Stock Exchange. Data from year 2019 to 2023 is used in this study. This study employs quantitative analysis to examine the relationship between corporate governance variables, such as board size, internal audit team size, CEO duality and external audit quality. Elements of Working Capital Management (WCM) include accounts payable turnover, inventory turnover, and accounts receivable turnover. The results of the study revealed that audit quality and internal audit team size are the key elements of Corporate Governance (CG) affecting receivable turnover period. The result revealed more staffed internal audit team leads to lower receivable turnover in days. While higher external audit quality also leads to lower receivable turnover days. Similarly, internal audit team size is significant in effecting inventory turnover in the cement industry of Pakistan. More staffed internal audit lead in crucial in identifying weakness in the inventory management leading to lower inventory turnover period.

KEYWORDS Audit Committee Independence, Audit Quality, Corporate Governance, Internal Audit Team Size, Working Capital

Introduction

Efficiently managing working capital (WC) is fundamental for the majority of firms (Gill & Biger, 2013). Working capital management is overseeing current assets and current liabilities. Components of WC include payables, inventory, receivables and the efficient utilization of cash for daily operations. Optimizing working capital aids in reducing working capital needs, consequently boosting firms' free cash flow (Ganesan, 2007). Effective handling of WC is essential for a firm's survival (Ghosh & Maji, 2004). Inadequate WCM policies can be a result of deficient corporate governance that can adversely affect shareholders' wealth. Strong corporate governance acts as a safeguard for the firm's resource management.

Having an abundance of cash in corporate accounts might not be advantageous for the firm (Gill & Biger, 2013). Accumulation of unnecessary cash could occur due to inadequate corporate governance. The formulation of policies concerning cash management, accounts receivable, inventory procurement and upkeep, accounts payable, and all other organizational policies falls under the purview of the board of directors and the CEO. Consequently, the board size and CEO duality significantly influence the organization and can result elevated cash reserves, increased volume of accounts receivable, heightened accounts payable and accelerated cash conversion cycle. Inadequate policies pertaining to accounts payable, accounts receivable, and inventory management adversely affect the cash conversion cycle. The decision to maintain large cash reserves may indicate management's risk aversion, potentially leading to agency problems, as the BoDs and the CEO might keep balances that do not optimize shareholders' wealth (Gill & Shah, 2012). By skillfully handling working capital, shareholders can optimize the returns on their invested funds. Ineffective

corporate governance can detrimentally impact cash management, as well as processes related to accounts payable, accounts receivable, cash conversion and inventory (Harford et al., 2008).

Free cash flows of a business can be increased if working capital is managed well (Ip et. al., 2010). This is crucial as efficient utilization of working capital is vital for the sustained presence of any organization, particularly as companies in developed and developing nations strive to warrant sufficient cash flow to meet their funds need (Agyei & Yeboah, 2011). Many scholars have emphasized that CG significantly influences Working Capital Management (WCM) outcomes (Goel et. al., 2015). Over the past decade, CG has garnered substantial attention due to reforms aimed at addressing various financial crises. Lau and Block (2012) discovered that balance of cash constitutes a crucial segment of working capital and aids businesses in maintaining liquidity. Scholars argue that maintaining adequate liquidity supports organizational operations smoothly, and it's the responsibility of senior management and the BoDs to establish policies ensuring this liquidity. Consequently, the board plays a pivotal part in determining working capital strategies. Suboptimal decisions concerning working capital can negatively affect cash flow and that lead to agency conflicts (Khan & Haque, 2017). Optimal WCM influences liquidity, profitability, and enhances firm value (Bagchi & Khamrui, 2012). Working Capital Management (WCM) embodies the balance between risk and return. The viability of a company heavily relies on its capacity to efficiently and effectively manage its working capital. WCM encompasses the process of converting investments in inventory and accounts receivable into cash, which can then be used to cover operating expenses. Hence, WCM is pivotal to a company's day-to-day business operations and serves to enhance its profitability.

The majority of Pakistani companies have significant amount of cash tied up in their working capital (Qamar, 2014). Many studies, such as Shin and Soenen (1998), emphasize the importance of shortening the cash conversion cycle to create shareholder value. Companies may adopt aggressive or conservative working capital management policies based on their preferences and circumstances. Aggressive policies may lead to reduced inventory and trade credit, potentially limiting revenue growth, while conservative approaches could improve profitability but increase working capital investment. Balancing these factors is critical, as maintaining optimal inventory levels can mitigate disruptions and reduce costs associated with product shortages and procurement. As the cement industry in Pakistan often keeps excessive working capital which can hinder its profitability. One way to tackle the issue is through better governance. Hence, this study is focused on studying the impact of CG on WCM in cement industry of Pakistan.

Theoretical Background

When probing into research on corporate governance, the significance of agency theory cannot be ignored. The bulk of researches into agency theory lie within the domain of corporate governance (Yusoff & Alhaji, 2012). Yusoff and Alhaji (2012) highlighted CG as a passage through which both the BoDs and senior executives function as overseers, tasked with mitigating conflicts intrinsic in key relationships. Within this context, the senior most executives of an organization serve as agents, while the owner is considered as the principal, with the BoDs acting as the supervisory tool (Haslindar et. al., 2011). Directors undertake the oversight of governance responsibilities in the board, on behalf of shareholders by overseeing the decision-making procedures and activities of management. The principal goal of the board of directors is to optimize shareholder value. Nonetheless, this objective creates uncertainty due to informational asymmetry (Deegan, 2012). Managers possess the capability to pursue personal objectives by taking advantage of inside information, thereby gaining a strategic advantage over owners of the business. Consequently, the supervisory framework has been devised to safeguard the benefits of shareholders. Nevertheless, achieving equilibrium in this proves challenging, as ensuring that mediators act in the

shareholders' utmost interest often involves difficult trade-offs for managers. Consequently, the existence of agency costs arises, necessitating vigilant oversight by owners to prevent unwise actions. Agency theory suggests that managers may engage in risk-taking behaviors that benefit them personally but are not necessarily in the best interest of shareholders. In the context of working capital management, this could mean managers holding excessive levels of working capital to reduce personal risk or pursuing risky investments that increase short-term profits but endanger the long-term stability of the company.

Literature Review

Defining Working Capital

Working capital represents the day-to-day operational cash flow of a business, which is the difference between a company's assets that are cash or easily convertible into cash, known as current assets, and the financial obligations the organization will imminently need to fulfill, termed as short-term debt. Effective WCM involves strategically deploying current assets and liabilities to optimize short-term liquidity. Working capital comprises of accounts payable, inventory and accounts receivable (Knauer & Wohrmann, 2013). Adequate working capital represents the sufficient backing of receivables and net account payable (Deloof, 2003). The ratio between accounts receivable and payable sometimes undergoes changes within cash management practices (Bendavid et. al., 2017).

Corporate Governance and Inventory Management

Corporate governance is widely acknowledged by practitioners as a crucial component of working capital management, primarily due to its part in shaping development of policy. Scholars have outlined the progression of CG, noting a transition in the relationship between ownership structure and management, resulting in variations in the country dynamics (Mulili & Wong, 2011).

The stakeholder theory advocates for the active involvement of the board and CEO in the company's best interests (Mulini and Wong, 2011). Kajananthan (2012) described multiple aspects of CG practices, including leadership styles such as Audit Committee (AC), CEO tenure, CEO duality and board structure. It is imperative not to underestimate the significance of the CEO, BS, and AC in upholding and managing the appropriate working capital of an organization (Gill & Shah, 2012).

Inventory is the company's raw materials, inventory, and work in process used in the finished product (Muller, 2011). Improving inventory management is closely linked to improving financial results, so companies need to maintain adequate inventory levels. Hence, the production schedule determines the appropriate inventory level. Inventory is a component of a company's current assets, but if a company takes too long to convert inventory into sales, it can be costly to maintain (Shin et. al., 2016). Organizations have different types of inventory because they have different kinds of requirements. Kim and Chung (1990) also state that due to the lack of value in the manufacturing process, retailers may label their inventory as a finished product. The manufacturer's inventory may consist of raw materials and finished products that can be manufactured and shipped (Berk & Gurler, 2016). An organization with well-planned inventories has a good reputation, responds to fluctuations in supply and demand of raw materials, and enables flexibility in the production process (Feng et al., 2014). Optimal inventory levels are an advantage of economic order quantities. This results in balancing the cost of ordering goods and cost of maintaining inventory (Chen et. al., 2014). An organization's inventory policies can vary for a variety of reasons. Some organizations may hold inventory to bind more capital, while others may hold only a small amount of inventory to avoid capital binding. Corporate governance plays a vital role in inventory management by establishing frameworks and practices that ensure transparency, accountability, and efficiency in handling a company's inventory. Effective corporate governance structures facilitate clear allocation of

responsibilities and oversight mechanisms, helping to prevent inventory mismanagement, fraud, and waste. Boards of directors and senior management are tasked with setting inventory management policies and strategies aligned with the company's overall objectives and risk appetite. Additionally, strong corporate governance promotes proper internal controls and reporting systems, enabling timely and accurate monitoring of inventory levels, turnover rates, and valuation methods. By promoting integrity and ethical behavior throughout the organization, corporate governance contributes to optimizing inventory utilization, minimizing holding costs, and enhancing overall operational performance.

Corporate Governance and Receivables Management

Accounts receivable is described as the process that occurs when a customer undertakes transaction with credit. Talonpoika et al. (2016) claimed that there is a debt because the manufacturer sells the goods to the organization with credit. The organization seeks customers because they generate revenue and enhance cash liquidity, enabling the procurement of goods and meeting other persistent needs. Companies create space for liquid funds through credit negotiations (Kaiser & Young, 2009). Some vendors offer discounts to customers for early payments (Kaiser & Young, 2009). On the contrary, buyers may postpone payments for goods and services to mitigate short-term working capital limitations. It is essential to consolidate the amount of long-term debt repayable within a year under this debt classification (Kahl et. al., 2015). The management of short-term credit demands thorough attention, particularly when a company faces significant financial challenges and is obligated to distribute large dividends to shareholders (Konig & Pothier, 2016).

CG plays a central role in account receivable management by establishing principles and practices that promote transparency, accountability, and efficiency in handling a company's receivables. Effective corporate governance structure ensures that responsibilities for managing accounts receivable are clearly defined and delegated appropriately within the organization. Boards of directors and senior management are responsible for setting policies and guidelines that govern credit extension, invoicing procedures, and collection practices, all of which impact the management of receivables. Moreover, strong corporate governance adopts the implementation of strong internal controls and reporting mechanisms to monitor receivables aging, credit risk exposure, and bad debt provisions accurately. By promoting ethical conduct and integrity across the organization, corporate governance contributes to optimizing cash flow, reducing bad debt losses, and enhancing overall financial performance.

Corporate Governance and Payables Management

Payables management includes the strategic handling of a company's outstanding obligations to suppliers and vendors. It involves the efficient management of accounts payable processes, including invoice receipt, validation, approval, and timely payment. Effective payables management is essential for maintaining strong supplier relationships, optimizing cash flow, and minimizing financial risks such as late payment penalties or supply chain disruptions. Key aspects of payables management include establishing clear payment terms, negotiating favorable terms with suppliers, implementing robust systems for invoice processing and approval, and closely: monitoring payment deadlines to avoid unnecessary costs. Additionally, effective payables management involves balancing the need to conserve cash with the importance of honoring financial commitments to suppliers in a timely manner, ultimately contributing to the overall financial health and stability of the organization.

Corporate governance plays a crucial role in accounts payable management by establishing principles and standards that ensure transparency, accountability, and efficiency in handling a company's payables. Effective corporate governance policies define the responsibilities and oversight mechanisms related to accounts payable within the

organization, ensuring that processes are in place to accurately record and manage liabilities. Boards of directors and senior management are tasked with setting policies and procedures that govern vendor relationships, invoice processing, and payment authorization, all of which impact the management of accounts payable. Furthermore, effective corporate governance ensures the implementation of internal controls and reporting systems to monitor payment terms compliance, cash flow forecasting, and vendor risk management. By promoting ethical behavior and integrity throughout the organization, corporate governance contributes to optimizing cash flow, minimizing late payment penalties, and enhancing overall financial stability.

H1: Corporate governance practices affects accounts receivable turnover

H1a: Board size affects accounts receivable turnover

H1b: Duality in the role of CEO affects accounts receivable turnover

H1c: Audit quality affects accounts receivable turnover

H1d: Internal audit team size affects accounts receivable turnover

H2: Corporate governance practices affects accounts payable turnover

H2a: Board size affects accounts payable turnover

H2b: Duality in the role of CEO affects accounts payable turnover

H2c: Audit quality affects accounts payable turnover

H2d: Internal audit team size affects accounts payable turnover

H3: Corporate governance practices affects inventory turnover

H3a: Board size affects inventory turnover

H3b: Duality in the role of CEO affects inventory turnover

H3c: Audit quality affects inventory turnover

H3d: Internal audit team size affects inventory turnover

Conceptual Framework

Figure 1 presents a conceptual model that describes basic aspects of CG practice and its effect on working capital:

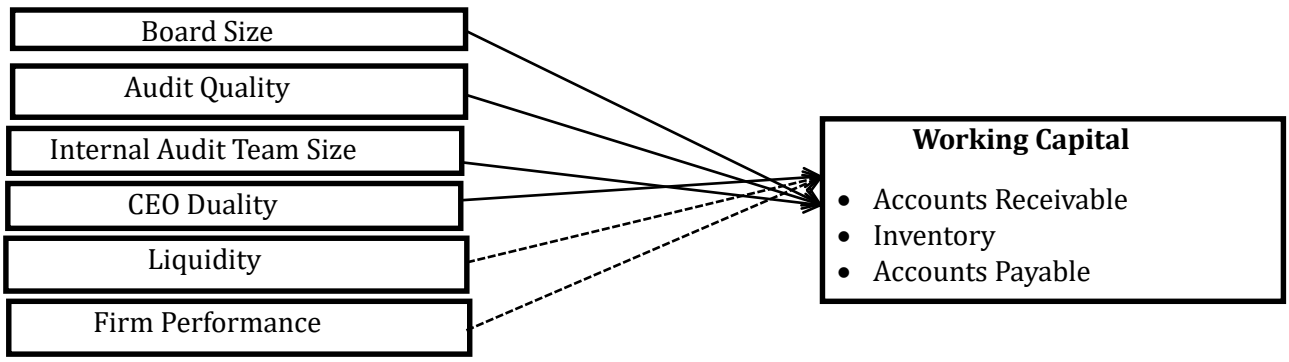

Figure 1: Conceptual Model/Theoretical Framework

Material and Methods

Data is secondary, extracted from the Companies official website. Data include 5 years of financial statement of cement companies (2019-2023). There are total 16 cement companies in cement industry of Pakistan. However 13 companies data is extracted from annual reports available on official websites. Remaining 3 cement companies are no more operational. A purposive sampling technique has been used in the study. Total 13 companies have been selected after analyzing from total cement companies of Pakistan. Data is gathered for the period of 2019-2023. Companies' annual reports have been analyzed for data collection which is publicly available on companies' official website. Independent variable of this study includes size of board, CEO Dual responsibility, liquidity (measured through current ratio), profitability, and internal audit team size and audit quality. Table 1 represents the measurement of all variables used in the study.

Table 1
Measurement of Variables

Variable Type	Variable Name	Symbol	Measurement
Dependent Variable	Account receivable	AR	Measured through receivable turnover in days. The formula is given as follows: $\frac{Receivables}{Credit\ Sales}\ x\ 365$
	Inventory	INV	Calculated through inventory turnover in days. The formula is given as follows: $\frac{Inventory}{CGS}\ x\ 365$
	Account Payable	AP	Measured through receivable turnover in days. The formula is given as follows: $\frac{Payables}{Credit\ Purchases}\ x\ 365$
Independent Variables	CEO duality	CEO_Dual	"0" if chairperson and CEO is same. Otherwise "1".
	Board size	BS	The number of the board of directors
	Audit quality	AQ	Measured through quality of external auditor. Dummy variable is used with value "1" if any of big 4 firm is an auditor, otherwise value is "0".
	Internal Audit Team Size	IATS	Number of members in internal audit team.
Control Variables	Liquidity	CR	Measured through current ratio.
	Firm Performance	FP	Measured through return on equity.

Econometric Models

The econometric models tested in the study are shown below:

$$\boldsymbol{AR_{it} = \alpha + \beta_1(BS)_{it} + \beta_2(AQ)_{it} + \beta_3(CEO\_DUAL)_{it} + \beta_4(IATS)_{it} + \beta_5(CR)_{it} + \beta_6(ROE)_{it} + \varepsilon_{it}} \textbf{.....(i)}$$

$$\boldsymbol{INV_{it} = \alpha + \beta_1(BS)_{it} + \beta_2(AQ)_{it} + \beta_3(CEO\_DUAL)_{it} + \beta_4(IATS)_{it} + \beta_5(CR)_{it} + \beta_6(ROE)_{it} + \varepsilon_{it}} \textbf{.....(ii)}$$

$$AP_{it} = \alpha + \beta_1(BS)_{it} + \beta_2(AQ)_{it} + \beta_3(CEO\_DUAL)_{it} + \beta_4(IATS)_{it} + \beta_5(CR)_{it} + \beta_6(ROE)_{it} + \varepsilon_{it} \text{.....(iii)}$$

Results and Discussion

Table 2
Descriptive Statistics

	AP	AR	INV	BS	AQ	CEO_DUAL	CR	IATS	ROE
Mean	77.37	61.49	136.43	7.47	0.64	0.03	1.13	3.47	12.70
Median	36.12	7.52	113.78	7.00	1.00	0.00	1.01	3.00	12.74
Maximum	498.54	983.57	435.30	10.00	1.00	1.00	3.21	6.00	128.44
Minimum	2.92	0.00	11.58	7.00	0.00	0.00	0.13	3.00	-129.78
Std. Dev.	103.86	173.52	104.12	0.74	0.48	0.17	0.64	0.88	37.02
Skewness	2.22	3.79	1.14	1.85	0.60	5.66	1.20	1.76	-0.67
Kurtosis	7.88	17.24	3.44	6.59	1.36	33.03	4.97	4.89	8.18

Accounts Payable period (AP) has a mean of 77.37, a median of 36.12, a maximum of 498.54, and a minimum of 2.92, with a standard deviation of 103.86. It has positive skewness (2.22) and positive kurtosis (7.88). Accounts Receivable period (AR) has an average of 61.49, a median of 7.52, a maximum of 983.57, and a minimum of 0. It has positive skewness (3.79) and positive kurtosis (17.24). Inventory turnover days (INV) have a mean of 136.43, a median of 113.78, a maximum of 435.30, and a minimum of 11.58, with a standard deviation of 104.12. It has positive skewness (1.14) and positive kurtosis (3.44). The Board Size (BS) has a mean value of 7.47. It has positive skewness (1.85) and positive kurtosis (6.59). The Audit Quality (AQ) has a mean of 1.36. It has positive skewness (0.60) and positive kurtosis (1.36). CEO Duality (CEO_DUAL) has a mean of 0.03. It has extreme positive skewness (5.66) and positive kurtosis (33.03). Current Ratio (CR) has a mean of 1.13. It has positive skewness (1.20) and positive kurtosis (4.97). Internal Audit Team Size (IATS) has a mean of 3.47. It has positive skewness (1.76) and positive kurtosis (4.89). Return on Equity (ROE) has a mean of 12.70, a median of 12.74, a maximum of 128.44, and a minimum of -129.78, with a standard deviation of 37.02. It has negative skewness (-0.67) and positive kurtosis (8.18).

Table 3
Correlation Matrix

	AR	*AP*	*INV*	*ROE*	*CR*	*BS*	*CEO_Dual*	*IATS*	*AQ*
AR	1.000								
AP	0.863	1.000							
INV	-0.092	0.021	1.000						
ROE	-0.120	-0.273	-0.298	1.000					
CR	0.173	0.096	-0.314	0.476	1.000				
BS	-0.022	-0.062	-0.067	0.113	-0.150	1.000			
CEO_Dual	-0.057	-0.093	-0.106	0.035	-0.062	-0.111	1.000		
IATS	-0.123	0.168	-0.222	0.086	0.153	0.233	-0.093	1.000	
AQ	-0.162	-0.279	-0.121	-0.197	-0.174	-0.277	0.230	-0.402	1.000

The correlation matrix indicates the strength and direction of the relationships between different variables. There exist a strong positive correlation between AR and AP (r = 0.863). There is weak negative correlation with INV and Accounts Receivable (r = -0.092). Accounts Receivable and ROE are negatively correlated with the correlation of -0.120. AR and CR have a correlation coefficient of 0.173. CEO Duality has negative correlation with Accounts Receivable (r = -0.057). IATS and AR has a negative correlation (r = -0.123). AR and AQ showed weak negative relationship (r = -0.162). AP has weak negative correlation with ROE (r = -0.273). AP and CR has a weak positive relationship (r = 0.096). Accounts payable and Board size are negatively correlated r = -0.062. AP and CEO_Dual are having negative relationship (r = -0.093). On the other hand, Accounts payable has a positive relationship with internal audit team size (r = 0.168). However, audit quality and accounts payable showed negative relationship (r = -0.279). Inventory days have a weak negative correlation with ROE (r = -0.298). Inventory showed moderately negative relationship with

CR (r = -0.314). Inventory days have a negative relationship with board size (r = -0.067). Similarly, CEO_Dual has negative association with inventory period (r = -0.106), IATS (r = -0.222) and AQ (r = -0.121).

Table 4
Regression Effects of CG on Account Receivable Period

Variables	**B**	***S.E***	***t-Stat***	***P-value***
Intercept	195.934	266.049	0.736	0.464
ROE	-1.448	0.635	-2.278	0.026
CR	87.461	37.476	2.334	0.023
BS	12.145	29.887	0.406	0.686
CEO_Dual	15.556	123.445	0.126	0.900
IATS	-51.448	25.297	-2.034	0.046
AQ	-93.630	48.046	-1.949	0.056
R Square	0.165			
Adjusted R Square	0.086			

In this regression analysis, the dependent variable is the Account Receivable Period, and the independent variables are ROE (Return on Equity), CR (Current Ratio), BS (Board Size), CEO_Dual (CEO Duality), IATS (Internal Audit Team Size) and AQ (Audit Quality). In this case, the intercept is 195.934, but its p-value is 0.464. Th.e coefficient for ROE is -1.448. This means that for a one-unit increase in ROE, the Account Receivable Period decreases by 1.448 units. The t-statistic is -2.278, and the p-value is 0.026, indicating that ROE is statistically significant at the 0.05 level. The coefficient for CR is 87.461. This means that for a one-unit increase in the Current Ratio, the Account Receivable Period increases by 87.461 units. The t-statistic is 2.334, and the p-value is 0.023, indicating that CR is statistically significant at the 0.05 level. None of these variables (i.e. BS, CEO_Dual and AQ) have statistically significant effects on the Account Receivable Period, as their p-values are greater than 0.05. Their coefficients are 12.145, 15.556, and -93.630, respectively. R-Square is 0.165, meaning that approximately 16.5% of the variation in the Account Receivable Period is explained by the independent variables in the model. Overall, the regression model suggests that ROE, IATS and CR have statistically significant effects on the Account Receivable Period, while the other variables do not show significant effects.

Table 5
Regression Effects of CG on Accounts Payable Period

Variables	**B**	***S.E***	***t-Stat***	***P-value***
Intercept	207.930	151.069	1.376	0.174
ROE	-1.243	0.361	-3.444	0.001
CR	37.184	21.280	1.747	0.085
BS	-11.425	16.971	-0.673	0.503
CEO_Dual	5.352	70.095	0.076	0.939
IATS	6.975	14.364	0.486	0.629
AQ	-70.461	27.282	-2.583	0.012
R Square	0.249			
Adjusted R Square	0.177			

In this regression analysis, the dependent variable is the Accounts Payable Period, and the independent variables are ROE (Return on Equity), CR (Current Ratio), BS (Board Size), CEO_Dual (CEO Duality), IATS (Internal Audit Team Siza), and AQ (Asset Quality). The coefficient for ROE is -1.243. This means that for a one-unit increase in ROE, the Accounts Payable Period decreases by 1.243 units. The t-statistic is -3.444, and the p-value is 0.001, indicating that ROE is statistically significant at the 0.05 level. The coefficient for CR is 37.184. This means that for a one-unit increase in the Current Ratio, the Accounts Payable Period increases by 37.184 units. The t-statistic is 1.747, and the p-value is 0.085, indicating

that CR is marginally statistically significant at the 0.1 level. None of these variables (BS, CEO_Dual and IATS) appear to have statistically significant effects on the Accounts Payable Period, as their p-values are greater than 0.05. Their coefficients are -11.425, 5.352 and 6.975, respectively. In this case, R-Square is 0.249, meaning that approximately 24.9% of the variation in the Accounts Payable Period is explained by the independent variables in the model. Adjusted R-Square is 0.177 after considering the number of independent variables. Overall, the regression model suggests that ROE has a statistically significant negative effect on the Accounts Payable Period, indicating that higher ROE is associated with shorter payables periods. Additionally, the Current Ratio (CR) shows a marginal level of significance in its positive effect on the Accounts Payable Period. However, the other variables in the model do not appear to have statistically significant effects.

Table 6
Regression Effects of CG on Inventory Turnover Days

Variables	**B**	***S.E***	***t-Stat***	***P-value***
Intercept	528.262	150.470	3.511	0.001
ROE	-0.565	0.359	-1.573	0.121
CR	-41.631	21.195	-1.964	0.054
BS	-16.703	16.903	-0.988	0.327
CEO_Dual	-47.858	69.817	-0.685	0.496
IATS	-32.950	14.307	-2.303	0.025
AQ	-71.665	27.174	-2.637	0.011
R Square	0.25835789			
Adjusted R Square	0.18772531			

In this regression analysis, the dependent variable is Inventory Turnover Days, and the independent variables are ROE (Return on Equity), CR (Current Ratio), BS (Board Size), CEO_Dual (CEO Duality), IATS (Internal Audit Team Size) and AQ (Audit Quality). The coefficient for ROE is -0.565. This means that for a one-unit increase in ROE, the Inventory Turnover Days decrease by 0.565 units. The t-statistic is -1.573, and the p-value is 0.121, indicating that ROE is not statistically significant at the 0.05 level. The coefficient for CR is -41.631. This means that for a one-unit increase in the Current Ratio, the Inventory Turnover Days decrease by 41.631 units. The t-statistic is -1.964, and the p-value is 0.054, indicating that CR is marginally statistically significant at the 0.05 level. Neither BS nor CEO_Dual appears to have statistically significant effects on Inventory Turnover Days, as their p-values are greater than 0.05. The coefficients for IATS and AQ are -32.950 and -71.665, respectively. This means that for a one-unit increase in IATS or AQ, the Inventory Turnover Days decrease by 32.950 units and 71.665 units, respectively. Both IATS and AQ are statistically significant at the 0.05 level, as their p-values are 0.025 and 0.011, respectively.

Conclusion

In this study, a comprehensive analysis of various variables is conducted to understand the influence of CG on the management of working capital in cement companies in Pakistan. The independent variables included board size, audit quality, CEO duality and internal audit team size which are examined for their impact on working capital. The dependent variables encompassed critical components of working capital.The findings of this study revealed some notable insights. It was found that internal audit team size and audit quality are key determinants of receivable turnover period. It can be determined that a well-staffed internal audit team can help identify inefficiencies or weaknesses in the accounts receivable process. If the receivable turnover in days is high, a larger internal audit team may be able to uncover areas for improvement, such as outdated procedures, inadequate credit policies, or ineffective collection strategies. Hence, a well-staffed internal audit team is crucial for receivables management. Similarly, external audit quality is found as a significant variable that effect decreasing receivable period. It can be said a high-quality

external audit can help identify weaknesses in a company's internal controls over accounts receivable. By strengthening these controls, companies can improve the efficiency of their receivable management processes, potentially leading to a reduction in the receivable turnover in days.This research also revealed that significant element of corporate governance that effect account payables turnover in days is audit quality. Audit a quality effect the payable period negatively that determines companies that go through high-quality external audits pay their debts much earlier. This implies that a detailed external audit can recognize deficiencies in a company's internal controls over accounts payable. Strengthening these controls can lead to more efficient accounts payable processes, potentially resulting in a shorter accounts payable period.

Another area of working capital explored by this research is the significant elements of corporate governance that effects inventory turnover period. It is found that internal audit team size and audit quality significantly affect inventory turnover days. Internal audit team size negatively affect inventory days that mean higher size internal audit team leads to lesser inventory turnover in days. It can be said a larger internal audit team may be able to assess and enhance the effectiveness of controls related to inventory management. Strong internal controls can help optimize inventory levels, minimize holding costs, and ensure accurate tracking of inventory movements, ultimately leading to improved inventory turnover in days. Similarly, external audit quality affect inventory days negatively that mean higher quality audit leads to lower inventory turnover in days. This can be because high-quality external audits may result in recommendations for process improvements in inventory management. By implementing these recommendations, companies can potentially streamline their inventory management processes, leading to improved efficiency and inventory turnover in days.

Recommendations

These findings highlight the importance of corporate governance practices in influencing key financial and operational aspects of cement companies in Pakistan, contributing to a more comprehensive understanding of the relationship between governance and working capital management in this sector. By understanding the significant influence of corporate governance on working capital efficiency, policymakers can implement regulations and guidelines aimed at promoting transparency and accountability within cement companies. Moreover, investors, including institutional investors and shareholders, can gain through the insights provided by the study to evaluate the governance practices of cement companies more effectively. By incorporating governance considerations into their investment decision-making processes, investors can encourage companies to adopt best practices in working capital management, ultimately enhancing shareholder value. Furthermore, corporate managers within the cement industry can use the findings of the study to assess their governance structures and identify opportunities for improvement in working capital management.

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