Migration Letters

Volume: 21, No: S11 (2024), pp. 1304-1318 ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

The Interplay Of Working Capital Management And Corporate Governance In Determining Firm Performance

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Abstract

Considering the unpredictable economic conditions in Pakistan, it is essential to implement efficient working capital management practices to maintain financial stability and ensure long-term sustainability. This study investigates the effect of working capital management on firm performance in non-financial listed firms in Pakistan, with corporate governance practices as a moderating variable. The research used a data set of Pakistani non-financial firms from 2017-22. However, the nature of data is panel and secondary data. The proxy used for working capital management is the cash conversion cycle. Besides these, control variables such as current ratio and firm size are also used. The results conclude that good working capital management has a statistically significant impact on financial performance. Furthermore, corporate governance measures such as the board's size and the addition of independent directors have a role in moderating this relationship. The results provide significant knowledge for scholars, professionals, and decision-makers, emphasizing the significance of strong corporate governance standards in enhancing firm performance and guaranteeing long-term viability.

Keywords: Working Capital Management, Firm Performance, Corporate Governance

Introduction

Businesses are the primary engines of economic activity and wealth creation in modern societies. They pursue various objectives, including sustainability, growth, and profitability (Freeman, 1984). By efficiently managing resources, providing products and services, and meeting customer needs and preferences, businesses generate economic value (Kotler & Armstrong, 2018). In today's global economy, firms face intense competitive pressures to operate more efficiently, quickly, and affordably, making adaptability crucial for their survival and growth (Taouab & Issor, 2019). Continuous performance is essential for business expansion and success.

Firm performance (FP) is a multifaceted concept, encompassing financial performance, market share, customer satisfaction, and shareholder value (Hitt et al., 2017). It indicates how effectively a business is achieving its strategic goals. According to Peterson et al. (2003), FP reflects an organization's ability to utilize resources efficiently to produce

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services that align with its objectives and appeal to its target audience. Efficiency and efficacy are critical factors influencing performance (Siminica, 2008). Financial metrics such as return on assets (ROA), return on equity (ROE), and net profit margin are commonly used to assess performance, alongside non-financial aspects like innovation, sustainability, and corporate social responsibility (CSR) (Brigham & Ehrhardt, 2017).

To thrive in today's competitive and dynamic environment, businesses must implement efficient management practices, including working capital management (WCM). WCM involves managing a company's short-term assets and liabilities to maintain liquidity and operational efficiency (Lambert, 2007). It balances current assets (cash, inventory, and accounts receivable) with current liabilities (short-term loans and accounts payable). Effective WCM is crucial for daily operations and overall financial stability, impacting a company's performance by ensuring liquidity and profitability (Rahman & Nasr, 2007). Numerous studies have examined the relationship between WCM and FP, highlighting its importance in maintaining a firm's liquidity, profitability, and operational efficiency (Deloof, 2003). Effective WCM can enhance a firm's performance by improving the cash conversion cycle, accounts receivable, accounts payable, and inventory management (Yazdanfar & Ohman, 2014). Managers strive to maintain an optimal balance between current assets and short-term obligations to maximize profitability and avoid financial distress.

Corporate governance (CG) plays a significant role in WCM, ensuring the effective use of resources and protecting stakeholders' interests (Shleifer & Vishny, 1997). CG encompasses ethical standards, responsible structures, and transparent decision-making processes (Bebchuk & Hamdani, 2009). Strong CG can enhance WCM processes, reduce agency conflicts, and increase investor trust, firm goodwill, shareholder wealth, and investment prospects. It is essential to consider CG when examining the impact of WCM on profitability (Talonpoika et al., 2016).

Despite extensive research on WCM and CG's individual effects on FP, there is a gap in the literature regarding CG's moderating role in this relationship, particularly in Pakistan's non-financial sector. This study investigates whether CG practices influence the relationship between WCM and FP in Pakistani non-financial firms, aiming to provide valuable insights for practitioners and policymakers in Pakistan's corporate sector.

Review of the Literature and Development of Hypotheses

Firm Performance and Working Capital Management

The effectiveness of a company's operations relies on maintaining appropriate working capital (WC). Good WC is essential because it represents a significant portion of a company's total assets and demands considerable managerial attention (Baker, 1991). Research shows a positive association between WC and firm performance (FP) (Altaf, 2020; Sharma et al., 2020; Gill et al., 2010). FP is measured by financial indicators such as return on equity or assets, reflecting how well a company utilizes resources to meet its objectives (Bhatt, 2017).

Companies that neglect WC management often face failure and bankruptcy (Harris, 2005). Effective WC management is crucial to avoid financial issues and maintain solvency (Padachi & Howorth, 2014). Efficient WC management can lead to higher returns on assets and equity by reducing the days inventory and accounts receivable are outstanding.

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However, some studies report a negative relationship between WC and FP (Fernández-López et al., 2020; Akgün et al., 2020; Banos et al., 2014).

WC management includes managing the average collection period, average payment period, inventory conversion period, and cash conversion cycle (CCC) (Brigham & Ehrhardt, 2013). The CCC, defined as the time between purchasing raw materials and receiving payment for goods, is a key measure of operational efficiency (Hager, 1976). Studies show mixed results on the relationship between CCC and FP, with some finding that a shorter CCC improves FP, while others suggest a longer CCC is beneficial (Enqvist et al., 2014; Gill et al., 2010).

In Pakistan, studies have shown a generally negative relationship between WC and FP, particularly in the textile and cement industries (Saghir et al., 2011; Zubair & Muhammad, 2013; Iqbal & Zhuquan, 2015). Based on this discussion, the current analysis hypothesizes a negative relationship between WC management and FP in Pakistan.

H1 = Working capital management negatively affects financial performance.

Firm Performance and Corporate Governance

In recent decades, corporate governance (CG) has become a significant mechanism, driven by the global financial crisis, privatization growth, and the rise of financial institutions. Effective CG enhances shareholder trust, reduces fraud risk, and improves brand perception, thereby boosting corporate performance (OECD, 2004). Keasey and Wright (1993) describe CG as a framework for monitoring, regulating, and controlling firms to achieve organizational goals. According to Gillan (2006), CG mechanisms are categorized as internal (boards, managers, shareholders, employees, suppliers, customers) and external (community, social and political environment, laws, and regulations).

Agency theory highlights conflicts between shareholders and corporate management (Jensen & Meckling, 1976). Milton et al. (1991) identify corporate debt policy as a key CG instrument to mitigate these conflicts, as debt financing can reduce free cash flow and increase liquidation risk (Morellec et al., 2012).

The impact of CG on firm performance (FP) is debated. Some argue that CEO duality, firm size, board independence, and ownership structure positively affect FP, while others find the opposite. For instance, board size (BS) has been negatively correlated with FP (Mashayekhi & Bazaz, 2008; Yermack, 1996), while other studies report positive correlations (Abor & Biekpe, 2007; Kiel & Nicholson, 2003). Independent board members (IndepDir) have also shown mixed effects on FP (Ali, 2015; Agrawal & Knoeber, 1996; Alim et al., 2021).

Research indicates a significant association between CG and FP (Khan et al., 2018). In Pakistan, effective CG structures, including audit committees and board size, positively influence FP (Qureshi & Rehman, 2017). Various factors, such as legal frameworks, ownership structures, and cultural norms, impact the success of CG in Pakistan.

H2 = **CG** and **FP** have a positive relationship.

Moderating Effect of Corporate Governance

Corporate governance (CG) practices, principles, and standards significantly impact firm performance, ensuring the fair distribution of cash flows to stakeholders (Black et al., 2006). Data show an inverse relationship between market value and CG procedures and

between CG features and company performance. Board size (BS) and independent directors (IndepDir) are key CG components. Liu (2006) emphasized the board's critical role in CG and its influence on management strategy, with board size positively impacting performance metrics and debt ratios (Coleman & Biekpe, 2006). The board of directors (BOD) is the top decision-making body, with BS positively affecting capital structure and financial decisions (Bokpin & Arko, 2009; Cheng, 2008). However, Lee (2009) found a negative association between BS and firm performance, and large boards do not benefit manufacturing companies or improve working capital management (Gill & Biger, 2013). Independent directors bring extensive expertise and positively influence CG practices, with firms employing independent external directors performing better in the market (Peasnell & Pope et al., 2005) and showing a positive relationship with firm performance (Dunn, 2004). Recruiting outside directors enhances financial performance (Bokpin & Arko, 2009). Despite these insights, the moderating effects of CG on the relationship between working capital management (WCM) and firm performance have not been explored, though CG is known to enhance firm performance. Based on this, the following null hypothesis has been developed.

H3: CG moderates the relationship between WCM and FM.

Theoretical Review

Theories about WCM and FP

The trade-off theory posits that a company should maintain a certain level of working capital (WC) to balance profitability and liquidity, with lower WC levels potentially causing liquidity issues that harm performance and higher WC levels potentially reducing profitability due to the opportunity cost of retaining extra cash or inventory (Deloof, 2003; Shin & Soenen, 1998). The pecking order theory, introduced by Myers and Majluf (1984), emphasizes asymmetric knowledge, assuming that managers act in shareholders' best interests and possess more knowledge about the company's future goals than other managers. This theory suggests that businesses should prioritize using internal resources to pay their WC over seeking equity or debt, allowing them to maintain higher WC levels and positively impact performance due to cheaper financing costs, as supported by Lazaridis and Tryfonidis (2006) and Eljelly (2004). The free cash flow theory posits that businesses with surplus cash flows may face agency issues, as managers might spend money on nonessential ventures or waste resources for personal gain. Effective WC management (WCM) can help businesses reduce free cash flows and thus resolve agency problems (Afza & Nazir, 2007; Raheman & Nasr, 2007). Overall, research indicates that effective WCM can enhance firm performance (FP). The optimal amount of WC depends on the industry, size, and future prospects of the company, requiring businesses to carefully balance the tradeoffs between profitability and liquidity to maximize performance.

Corporate Governance and Firm Performance Theories

The theory of agency posits that a principal-agent problem arises from the separation of ownership and control within a corporation, where owners (principals) delegate decision-making authority to managers (agents) who may not always act in the best interests of the owners. To mitigate agency costs and align the interests of management and shareholders, effective corporate governance (CG) mechanisms are essential. Fama and Jensen (1983) and Yermack (1996) suggest that executive pay, board independence, and CEO duality

positively impact firm performance (FP). Conversely, stewardship theory asserts that managers act as stewards of the company, aiming to create value for all stakeholders. Effective CG practices foster trust and collaboration within the company, aligning managers' interests with those of other stakeholders. According to Donaldson and Davis (1991), companies with robust CG frameworks perform better in the long term and are more likely to engage in socially responsible behavior. These theories collectively illustrate the complex relationship between CG and FP, concluding that effective CG can balance the interests of both managers and stakeholders while attracting external resources and promoting an environment of trust and collaboration within the company.

Conceptual Framework

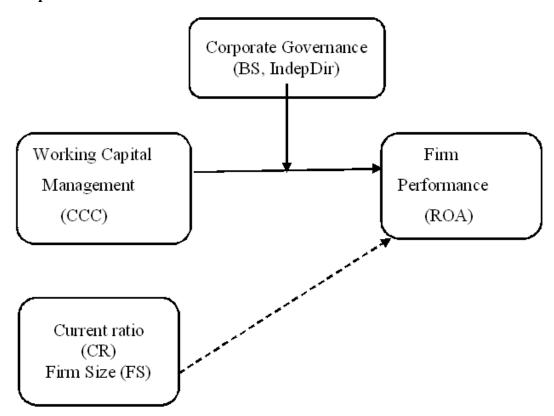


Figure 1: Conceptual Framework

Research Methodology

Population and Sample Size of the Study

This study examine the relationship between WCM and FP as well as the moderating impact of CG on this relationship. The population of the study consist of all companies listed on the PSX that are not financial. For analysis, a sample period of 6 years from 2017 to 2022 is used. Nature of data is secondary and panel. The study sample consists of 285 firms from the non-financial firms listed on PSX.

Measurement and Description of Variables

The independent variable is WCM, measured by the cash conversion cycle (CCC), and the dependent variable is FP, measured by return on assets (ROA). The moderating variable, CG is determined the number of independent directors and total board members on the

board, as well as control variables such FS and CR. The dependent and independent variables are defined as follows:

Return on Assets

According to Gitman (2009), ROA represents the return earned on the common stockholders' investment in the firm. Positive ROA is favored since It assesses management's effectiveness in producing a profit with the company's assets and should make the company's operations easier to raise money on the stock market because those marketplaces have a higher potential for returns on investments. Net Income/Total Assets is the measurement formula used in this study.

Working Capital Management

A common indicator for determining how well a company manages its WC is the CCC. It demonstrates how long it takes for a company to turn over the cash it has invested in accounts receivable and inventory before using that money to pay its bills. The following equation can be used to determine the CCC:

CCC = DIO + DSO - DPO

Where:

DIO = No. of days with an outstanding inventory

DSO = stands for Days Sales Outstanding

DPO = Days Payable Outstanding

DIO means in how much time company will sell its inventory, DSO means in how much time customers will pay, while DPO means in how much time company will pay to its suppliers.

Corporate Governance

CG are the rules, regulations, and processes that operate and control an organization. CG is important for FP because it guarantees that the interests of all stakeholders and shareholders to be considered while making any decision (Shleifer and Vishny, 1997). Our selection is divided into two categories based on prior research. Board structure i.e (the number of independent directors on board and the overall number of directors on the board) are used as proxies for CG (Tessema 2019).

Independent Board of Directors

A strong, independent board of directors is the foundation of sound CG. IndepDir without conflicts of interest serves as a check on management's actions, especially its financial reporting standards. They oversee and ensure that accounting decisions are made with shareholders' interests in mind (Yermack, 2015).

Size of Board

BS or the number of directors on a company's board, has drawn attention in CG studies. Academics and practitioners disagree on the efficacy of a larger or smaller BS in improving FP in companies.

Control Variables

Current Ratio

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According to Ang (1997), one of the profitability measures CR determines a company's ability to meet short-term obligations. The greater the CR, the less probable it is that the company will default on its short-term debt. The risks that the stockholders will take on are therefore lessening. The measurement formula used in this study was Current Assets/Current Liabilities.

Firm Size

The total assets or net worth of the business is a commonly used indicator of FS. Small and medium-sized businesses (SMEs) are those with less than 250 employees, a balance sheet total of up to €43 million, or an annual turnover of up to €50 million (European Commission, 2021). Similar to this, the International Accounting Standards Board (IASB) defines a small and medium-sized business (SME) as an organization that is not subject to public oversight and satisfies specific size requirements, such as having total assets of under \$20 million (IASB, 2015).

Table 1: Variables' Descriptions

| Nature of the Variable | Name of the Vari | Ab b | Definition | |
|------------------------|-----------------------|---------|---|--|
| Dependent | Return on Assets | RO A | Net Income/Total Assets | |
| Independent | Cash Conversion Cycle | CC C | CCC = DIO + DSO - DPO | |
| Moderating | Corporate Govern ance | CG | Number of independent board of directors Board Size | |
| Control | Current Ratio | CR | Current Assets/Current Liabilit ies | |
| | Firm Size | FS | Log of firm total assets | |

Analysis of Panel Data

The proposed hypotheses is investigated in this study using panel data. Due to the panel-based nature of the data. Panel data analysis is done in order to analyze the data. Habbash (2010) asserts that if any straight forward OLS assumption is violated, non-parametric testing will be preferred for efficient and objective findings.

Criteria for Panel Data Model Selection

Test for Lagrange Multipliers by Breusch and Pagan

This test is used as the criterion between pooled OLS and REM. If the results of this test would have a significant (p-value), then REM should be employed instead of Pooled OLS, according to Akbar et al. (2011).

Test Hausman

Asteriou and Hall (2007) state that Hausman should be utilized to determine whether of the REM model (1978) and the FEM model is the best. If the Hausman test result is significant (p-value), use FEM rather than REM.

Detection Tests

Analysis of Correlation

Correlation analysis will be used to determine the relationship between two variables. Its possible values range from -1 to +1. For significant positive and negative associations, values closer to +1 and closer to -1 are chosen, accordingly. (Basiruddin, 2011; Pornupatham, 2006).

Analysis of Regression

According to Douglas Montgomery et al., (2012), it is a statistical technique and tool for evaluating the importance and nature of correlations between dependent and independent variables. The problem of total uncertainty is overcome, and regression aids in planning and decision-making. Ordinary Least Squares (OLS) is used to evaluate the cause-and-effect relationship between variables (Basiruddin, 2011).

Additionally, OLS should only be applied if the data satisfy all of its requirements, including normality, homoscedasticity, and serial correlation (Habbash, 2010). If these assumptions did not meet, the results of OLS will not be used (Gujarati, 2003; Hair et al., 2010). In order to provide results that are objective, the literature offers a number of diagnostic tests for looking into OLS's underlying assumptions. The skewness test is used to determine whether the data is normal or not, the Breush and Pagan Lagrangian Multiplier (LM) test is be used to identify serial correlation, the hettest is be used to determine whether the data is homoscedastic or theer is a problem of heteroskedasticity, and the Variance Inflation Factor (VIF) values is used to determine whether the data is multicollinear or not.

Models of the Study

The following regression model is analyzed for the relationship of WCM on FP and the moderating impact of CG on their relationship:

Model 1

```
ROAit= \beta 0 + \beta 1CCCit + \beta 2BSit +\beta 3IndepDirit + \beta 4FSit + \beta 5CRit + \epsilonit .....(1)
```

Model 2

```
ROAit = \beta 0 + \beta 1CCCit + \beta 2BSit + \beta 3CCCit*BSit + \beta 4FSit + \beta 5CRit + \epsilonit .....(2)
```

```
ROAit = \beta0 +\beta1CCCit + \beta2IndepDirit + \beta3CCCit*IndepDirit + \beta4FSit + \beta5CRit + \epsilonit .....(2)
```

Where:

Where ROA is Return on Assets

CCCit = Cash Conversion Cycle;

BSit = Board Size,

IndepDirit = Board independent Directors;

CRit = Current Ratio;

FSit = Firm Size

1 through 5: Independent variable coefficients

it: error term

The model looks at what is the impact of WCM on FP and how CG moderates the relationship between WCM and FP.

Results

Table 2: Descriptive Statistics

| Variables | Mean | Std. | Min | Max | Skew. | Kurt. |
|-----------|--------|---------|----------|----------|--------|---------|
| | | Dev. | | | | |
| ROA | 0.04 | 0.145 | -1.978 | 3.078 | 3.539 | 146.147 |
| CCC | 45.543 | 255.836 | - | 6202.689 | 16.653 | 399.548 |
| | | | 1145.875 | | | |
| BS | 8.039 | 1.535 | 5 | 18 | 1.755 | 6.871 |
| IndepDir | 0.238 | 0.129 | 0 | 1 | .641 | 4.335 |
| CR | 1.666 | 2.406 | .007 | 38.361 | 8.449 | 96.992 |
| FS | 6.917 | 0.755 | 4.634 | 9.103 | 016 | 3.147 |

Table 2 presents descriptive statistics of the variables. The average Return on Assets (ROA) indicates positive profitability for firms in the sample, reflecting good financial health among Pakistani firms. The minimum ROA shows significant losses for some firms, while the maximum indicates high profitability for others. The average Cash Conversion Cycle (CCC) of 45.543 days suggests variations in operational efficiencies, aligning with Deloof (2003), who found that effective cash management leads to better performance. The average board size (BS) of 8 members supports Adams and Mehran (2003), who suggest that larger boards enhance corporate governance. On average, 23.5% of the board consists of independent directors (IndepDir), with a low standard deviation of 0.12, indicating consistent levels of independence across companies and adherence to governance norms. Overall, these results provide a comprehensive picture of the sample's characteristics, offering valuable insights for scholars studying corporate finance, governance, and related subjects. The findings highlight diverse company practices, financial health, and governance practices consistent with existing research trends.

Correlational Analysis

Table 3: Correlational Analysis

| Variables | ROA | CCC | BS | IndepDir | CR | FS |
|-----------|--------|--------|-------|----------|--------|-------|
| ROA | 1.000 | | | | | |
| CCC | -0.020 | 1.000 | | | | |
| BS | 0.113 | 0.036 | 1.000 | | | |
| IndepDir | 0.035 | -0.086 | 0.047 | 1.000 | | |
| CR | 0.054 | 0.064 | 0.011 | 0.018 | 1.000 | |
| FS | 0.147 | -0.080 | 0.319 | 0.171 | -0.153 | 1.000 |

Table 3 presents the correlation analysis of key financial variables in the dataset. ROA shows a weak positive relationship with both board size (BS) and firm size (FS), suggesting that larger firms and those with more directors tend to be more profitable, consistent with Adams & Mehran (2003) and Cheng (2008). Conversely, the Cash Conversion Cycle (CCC) has a weak negative correlation with ROA, aligning with Deloof (2003), Iqbal & Zhuquan (2005), and Saghir et al. (2011), indicating that longer CCCs do not always lead to losses. BS and FS exhibit a modestly positive correlation, implying that larger firms tend to have larger boards. Independent directors (IndepDir) show weak positive correlations with ROA

and FS, and a slight negative correlation with CCC, supporting Thenmozhi & Sasidharan (2020) who found that more independent directors enhance financial performance (FP) and reduce agency conflicts. The current ratio (CR) shows a weak negative correlation with FS and weak positive correlations with ROA and CCC, indicating that larger firms generally have more liquidity, which is somewhat associated with profitability and operational efficiency. Overall, while some variables exhibit strong relationships, most correlations are weak, underscoring the need for tailored governance and management strategies to improve FP. Investigation of Ordinary Least Squares (OLS) assumptions revealed non-normal distribution of variables and issues of autocorrelation and heteroskedasticity, as detailed in Appendix 1. Given the panel nature of the data and the violation of OLS assumptions, different panel data estimation techniques were employed for model selection.

Regression Analysis

Table 4: Hausman Test

| | Coef. |
|-----------------------|--------|
| Chi-square test value | 15.468 |
| P-value | 0.009 |

Table 5 Breusch and Pagan Lagrangian multiplier test for random effects

| | Coef. | |
|-----------------------|--------|---|
| Chi-square test value | 455.62 | _ |
| Prob > chibar2 | 0.0000 | |

The results of diagnostic tests suggest that fixed effect model is appropriate. As p value is less than 0.05 for both hausman and LM test shown in table 4.3 and 4.4.

Table 6: Fixed Effect Model

| Coef. |
|-----------|
| -0.000034 |
| **-2.07 |
| 0.001 |
| 0.17 |
| -0.046 |
| -1.26 |
| 0.012 |
| ***4.93 |
| 0.1 |
| ***3.74 |
| -0.668 |
| ***-3.59 |
| 0.040 |
| 0.026 |
| 7.558 |
| -2793.705 |
| |

^{***} p<.01, ** p<.05, * p<.1

Table 4 presents the regression results, indicating that the model is statistically significant as shown by the F-test. The findings reveal that the Cash Conversion Cycle (CCC), Current Ratio (CR), and Firm Size (FS) significantly impact Return on Assets (ROA). Specifically, a longer CCC negatively affects ROA, highlighting that effective cash management is crucial for enhancing profitability, consistent with Akgün et al. (2020), Deloof (2003), and Fernández-López et al. (2020). Conversely, a higher CR positively impacts ROA, suggesting that firms with greater liquidity are more profitable, aligning with Petersen & Rajan (1997). Additionally, FS has a positive effect on ROA, indicating that larger firms benefit from economies of scale. However, Board Size (BS) and Independent Directors (IndepDir) do not significantly influence ROA, implying that these governance factors may not directly affect profitability, consistent with Bhagat & Black (2002). The model accounts for only 2.6% of the variance in ROA, suggesting that further research is needed to explore additional relevant factors.

Table 7: Moderating Effect of BS and Indepdir

| Moderating Role of BS | | Moderating Role of In | Moderating Role of IndepDir | | |
|-----------------------|------------|-----------------------|-----------------------------|--|--|
| ROA | Coef. | ROA | Coef. | | |
| CCC | -0.0002718 | CCC | -0.000004 | | |
| | ***-3.07 | | -0.20 | | |
| Bsize | 0.0000209 | BIND | -0.04 | | |
| | 0.00 | | -1.11 | | |
| CCCBS | 0.000022 | CCCBIND | -0.0002953 | | |
| | ***2.74 | | *-1.70 | | |
| CR | 0.012 | CR | 0.012 | | |
| | ***5.07 | | ***4.95 | | |
| FS | 0.091 | FS | 0.104 | | |
| | ***3.68 | | ***3.88 | | |
| Constant | -0.607 | Constant | -0.689 | | |
| | ***-3.47 | | ***-3.76 | | |
| Mean dependent var | 0.040 | Mean dependent var | 0.145 | | |
| R-squared | 0.030 | R-squared | 1698 | | |
| F-test | 8.776 | F-test | 0.000 | | |

^{***} p<.01, ** p<.05, * p<.1

Table 7 explores the moderating effects of Board Size (BS) and Independent Directors (IndepDir) on the relationship between the Cash Conversion Cycle (CCC) and Return on Assets (ROA), providing new insights into corporate governance dynamics. The interaction term CCC*BS significantly moderates the CCC-ROA relationship, indicating that larger boards can alleviate the negative impact of a longer CCC on profitability. Similarly, CCC*IndepDir significantly moderates the CCC-ROA relationship, showing that greater board independence mitigates the adverse effects of extended CCC on profitability. This suggests that while independent boards might not effectively manage cash flow issues, they still play a critical role in governance. Despite these findings, the direct effects of BS and IndepDir on ROA are insignificant, implying that while board size and independence do not directly influence profitability, they enhance cash management practices, consistent with Adams & Mehran (2003) and Bhagat & Black (2002). Both models reinforce the significant positive impacts of Current Ratio (CR) and Firm Size (FS) on ROA,

emphasizing that better liquidity and larger firms enhance profitability. The constant term remains negative and significant in both models. In conclusion, these results highlight the complex role of corporate governance in operational efficiency and profitability, suggesting that while larger boards can mitigate the negative effects of a longer CCC, higher board independence may exacerbate them. This underscores the nuanced role of governance structures in financial performance, contingent on specific operational contexts. Additionally, endogeneity was checked using IV regression and 2SLS after the Fixed Effects model, revealing no endogeneity in the data.

Conclusion

This study investigates the relationship between working capital management (WCM) and financial performance (FP) in Pakistani listed non-financial firms, emphasizing the moderating role of corporate governance (CG). The findings confirm a positive link between WCM and FP, aligning with prior research that suggests effective WCM enhances profitability. Firms with shorter cash conversion cycles (CCC) and efficient management of receivables, payables, and inventories generally exhibit better financial performance, supporting the notion that optimal WCM reallocates resources for more productive uses (Deloof, 2003; Lazaridis & Tryfonidis, 2006). While corporate governance practices such as board size (BS) and independent directors (IndepDir) do not individually impact return on assets (ROA) significantly, they play a crucial moderating role in the WCM-FP relationship. These results align with existing literature indicating that robust CG frameworks can enhance the effectiveness of operational strategies, including WCM (Gill & Biger, 2013; Zald, 1969). Overall, the study highlights that efficient WCM, supported by strong CG, contributes significantly to improved financial performance.

Recommendation

Based on the study findings and existing literature the following recommendations are proposed: Firstly, firms should continuously optimize their WCM components, such as CCC. (Shin & Soenen, 1998; Garcia-Teruel & Martinez-Solano, 2007) reports that this can be done through regular monitoring, forecasting, and matching working capital policies with overall business strategy. Also, companies should strengthen their CG practices. This includes expanding the number of independent directors and ensuring BS is enough for effective supervision and strategic decisions.

Additionally, management should implement frequent training and development programs for management and board members on best practices in WCM and CG. Keeping them updated about the newest trends and techniques can increase their capacity to make good decisions that positively impact FP (Brown & Caylor, 2004; Hillman & Dalziel, 2003). By applying these guidelines, organizations can achieve greater financial stability, enhanced profitability, and long-term sustainability, demonstrating the vital roles of WCM and CG in strategic management.

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