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Impact of Working Capital on Corporate Performance: Evidence from India

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ABSTRACT

The subject of this study is to empirically investigate the relationship between working capital and firm performance in India. **The purpose of the study** is to test the impact of optimal working capital on a firm's market value and profitability. **Methodology:** The Generalised Method of Movement is employed to study the impact of working capital on a firm's performance, measured as Return on Capital Employed and Enterprise Value to Sales. **The results** indicate a U-shape relationship between RoCE and the working capital component. On the contrary, the inventory turnover ratio has an inverted U-shape relationship with the market value of the firm. **This study concludes** that tight inventory management adds value at the initial stage, but strict inventory control erodes market value. **The findings** of the study support the optimum level of inventories to increase the firm's performance, both in accounting terms and market value.
Keywords: GMM Method; working capital; nonlinear relationship; Enterprise value to sales

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INTRODUCTION

Efficient Working Capital Management (WCM) is vital for seamless business operations. A significant portion of a company's assets, such as inventories and account receivables, lies in current assets [1]. Accounts payable serves as a key financing source. Effective WCM yields competitive advantages. There are two perspectives on working capital management. On one hand, boosting inventory to meet demand, adopting a liberal credit policy to enhance sales, and timely supplier payments for discounts enhance profitability — known as a conservative WCM approach [2]. Conversely, excessive stock mitigates disruptions, ensures timely supply, cuts transportation costs, and stabilizes raw material prices [3]. However, surplus working capital inflates financing costs, bankruptcy risks [4], and underwhelming returns on investment [5].

Conversely, the aggressive working capital policy aims to minimize inventories and enforce a strict credit policy for shareholder value. Just-In-Time (JIT) theory redirects excess stock investment for higher returns [6]. A stricter credit policy can reduce bad debt and boost profits [7]. Large firms manage working capital better than small ones due to skilled managers and advanced methods [8]. However, tight policies may halt production if delivery is delayed [9], causing sales loss and competitor takeover. A strict credit approach might hinder new customer acquisition due to info gaps [10] and ignore trade credit's sales benefits [1]. Low working capital hurts profitability.

Working capital is a two-edged sword, offering costs and benefits, with an optimal level for max gains. Literature usually explores linear links between working capital and profit [11–15], but [9, 16] found nonlinearity. N. Altaf and F.A. Shah [1] revealed a U-shaped link via quadratic equations, while [17] identified shifting optima based on operations and leverage.

However, [18, 19] explored working capital's influence on market value. But only a few studies attempted to investigate the nonlinear relationship between working capital and firm's market value. To capture the non-linear relation, we used Enterprise Value to Sales (EV/S) ratio as firm's performance metric and studied its nonlinear link with the working capital components. On the other side, [20, 21] found economic shifts affect working capital and profit. Downturns elevate working capital through higher inventory, delayed receivables, and reduced payables [22]. Hence, economy's state matters for optimal working capital and profitability. In this study, GDP growth rate

is added to capture the impact of economy's state on firm performance.

The prior research demonstrates a mixed association between working capital and company performance. Furthermore, working capital policies are vulnerable to regular adjustments, with the potential for reversible choices over time [23, 24]. As a result, the purpose of this research aims to examine the link between WCM and firm performance to provide valuable information for different stakeholders. It specifically assists investors in identifying the finest firm for investment. Policymakers may develop working capital policies based on the company's prior performance and industry trends. Scholars may be fascinated by the long-term success or failure of the firm's working capital policy.

In this context, earlier studies employed accounting indicators as a proxy for business performance while ignoring the market reaction to the firm's working capital strategy. Therefore, the purpose of this research is to assess the influence of working capital policy on the financial performance of the business, proxied by RoCE, as well as the market performance of the firm, proxied by EV/S.

This study comprises five sections. The current one is the first. The second section reviews previous literature on working capital management. The third section covers data and methods. Part four presents' findings, and section five offers recommendations and conclusions.

REVIEW OF LITERATURE

Earlier research categorizes working capital into conservative, aggressive, and optimal policies. Prior literature strongly links working capital with firm profitability [15]. A. K. Sharma, S. Kumar and O. O. Akinlo [7, 11] advocated for an extended CCC time to take advantage of strong sales and profit growth. A. A. Moussa [19] discovered a positive association between working capital and company performance, especially evaluated using Return on Assets (RoA) and Q. Tobin's, A. Raheman and M. Nasr [5] discovered that inventories and accounts receivable had a positive association with company performance, but M. Deloof and A.M.A. Eljelly [2, 25] discovered a positive link between firm profitability and account payables. R. Kieschnick et al. [4] investigated the link between working capital and shareholder wealth in US corporations and found that credit sales offered more value to the investor than inventory investment. Furthermore, they discovered that for the typical business, a dollar invested in net operational working capital underperforms a dollar kept in cash.

A.M.A. Eljelly, I. Lazaridis and D. Tryfonidis, T. Ren et al [25–27] discovered evidence in favour of aggressive working capital. P. Juan García-Teruel and P. Martínez-Solano [3] discovered that Small and Medium Enterprise (SME) managers in Spain may gain value by reducing inventory investment and collecting accounts receivable quickly. C.C. Chang [28] studied the association between CCC and company performance from 1994 to 2011, utilising 31,612 firms from 46 countries. He used pooled ordinary least squares regression to discover a negative association between CCC and corporate profitability. In the Indian context, S. Bhatia and A. Srivastava [12] discovered the negative relationship between profitability and working capital. He contended that adopting a stringent credit policy would restrict the deployment of cash in working capital due to the cheap cost of financial borrowings and inventory upkeep. This may greatly assist the corporation in pocketing profit by reducing working capital expenditures. S.G. Mun and S.C.S. Jang [29] investigated the working capital and profitability of restaurant businesses in the United States. They used the Generalized Method of Moments model (GMM) and found working capital had a detrimental impact on the firm's performance. J. Enqvist et al. [20] found that, regardless of the economic condition, the accounts payable period is not strongly connected with a firm's performance. P. Juan García-Teruel and P. Martínez-Solano [3] discovered a negative association between ROA and accounts receivable for MSME enterprises in Spain. I. Soukhakian et al. [30] discovered in Iran that the CCC is adversely associated with return on assets. Using a panel data model, K. Akoto [31] discovered a negative link between profitability and working capital in Ghana. S. Bhatia and A. Srivastava [12] discovered a negative association between company profitability and debtors' collection period in an Indian environment using a sample of publicly listed firms. This study output supports the firm's cautious working capital to boost its profitability.

Few researchers, however, tried to identify a non-linear link between company performance and working capital policy (WCP) by considering the cost and benefit of working capital policy. Notably, using the GMM model, S. Baños-Caballero et al. [9] discovered an inverted

U-shaped link between WCP and performance in the UK. Because there is a nonlinear link between working capital and business profitability, N. Altaf and F.A. Shah [1] advocate optimal working capital to Indian firms for improved performance. M. Singhania and P. Mehta [16] investigated the influence of working capital management on profitability in Asian countries using the two-step generalised technique of moments and discovered a non-linear link between firm profitability and WCM for 11 Asia Pacific nations. A.K. Panda and S. Nanda [32] discovered a convex link between working capital and profitability in the chemical, construction, and consumer goods sectors from an Indian viewpoint. The machinery, metal, and textile sectors, on the other hand, exhibited an inverted U-shape connection between working capital and profitability for Indian enterprises. L. Rey-Ares et al. [33] used dynamic panel data techniques to support the optimal level of inventory and accounts receivable for higher profitability in 377 Spanish fish canning firms. They discovered a convex link between Spanish fish canning firms' working capital and profitability. V. Tauringana and G. Adjapong Afrifa [34] discovered that inventory and CCC had little effect on profitability.

There is conflicting empirical evidence about the ideal link between working capital components and profitability. A.K. Panda and S. Nanda [32] discovered, for example, that the optimal amount of working capital varies by industry. The convex link between inventory and profitability of Spanish fish canning enterprises was discovered by [33]. On the other hand, for Ghanaian SMEs [35] and Spanish fish canning enterprises [33], an inverse U-shaped association between the receivables collection period and corporate profitability was found. T. Ren et al. [27] discovered a negative association between CCC and profitability for non-state-owned enterprises in China.

Prior research confirms working capital's diverse impact on business performance. Optimal working capital management adds value and boosts profitability [36]. However, companies with higher earnings pay suppliers promptly and extend consumer credit; unprofitable firms delay payments and reduce credit sales [37]. J. Enqvist et al. [20] discovered that the importance of WCP varies depending on the time of the economic cycle, industry, and nation in which it operates. As a result, the natural influence of WCP on profitability is dynamic, necessitating constant study on the subject.

This study establishes and assesses the following hypotheses drawn from literature:

1. Working capital lacks substantial influence on company performance, measured via RoCE and Enterprise Value to Sales.
2. Firm-specific factors (size, asset turnover, short-term liquidity, long-term financial leverage) have no notable impact on company performance.
3. Macroeconomic conditions do not affect firm performance.

DATA AND METHODOLOGY

The sample firms were chosen from the BSE 100 index (2009–2019), excluding 18 banks/financial institutions and 11 firms excluded due to data constraints. Ultimately, 71 firms with 710 yearly data comprised the sample. Firm-specific indicators were obtained from trendlyne.com and cross-verified 30% with respective firm's annual reports. GDP growth rate data was from Reserve Bank of India.

The sample is a balanced short panel dataset (71 firms, 10 years), suitable for panel data models like OLS, FEM, and REM [38]. Yet, OLS ignores time, while FEM/REM don't address delayed dependent variables. Hence, to handle endogeneity, a generalized method of moments (GMM) is employed.

Working capital variables with quadratic forms were used by [1, 9] to highlight the nonlinear relationship between working capital and profitability. Accordingly, the following equations were used to tests the hypotheses in this study:

$$ROCE_{it} = \beta_0 + \sum_{i=1}^{4} \beta_i \gamma_{it} + \beta_5 \delta_{it} + \beta_6 \delta_{it}^2 + \beta_7 GDPGR_t + \varepsilon_{it}, \quad (1)$$

$$EV / S_{it} = \beta_0 + \sum_{i=1}^{4} \beta_i \gamma_{it} + \beta_5 \delta_{it} + \beta_6 \delta_{it}^2 + \beta_7 GDPGR_t + \varepsilon_{it}, \quad (2)$$

where $ROCE_{it}$ refers to the Return on Capital Employed for the firm i at t time. EV / S_{it} stand s the Enterprise Value to sales of the firm i at time t; β_0 is the intercept of the model. β_1 to β_7 indicate the coefficients of the respective explanatory variables. γ_{it} refers to the selected firm-specific variables namely, current ratio (CR), Debt- Equity Ratio (DER), size of the firm, Assets turnover Ratio (S/TA). δ_{it} represents the components of working capital, i.e., Debtors Turnover Days (DTD), Inventory Turnover Days (ITD), Creditors Turnover

Days (CTD), and Cash Conversion Cycle (CCC). Gross Domestic Product Growth Rate (GDPGR) refers to the GDP growth rate of India at time t. ε_{it} is the error term off model.

RELATIONSHIP BETWEEN FIRM PERFORMANCE AND WORKING CAPITAL COMPONENTS

Return on Capital Employed (RoCE)

Previous research used ROE to gauge working capital's effect on firm profitability [14]. However, ROE omits borrowed capital; hence, [7] replaced it with return on assets and [11] noted excessive fixed or working capital investment may affect ROA. Moreover, developing nations rely heavily on current assets and trade credit [1]. Thus, RoCE is preferred over ROE and ROA to fully assess profitability generated by the firm from the capital invested in.

Enterprise Value to Sales (EV/S)

EV/S ratio gauges a firm's market value against annual sales. It combines stock and debt market values, minus cash, and investments. Given India's inactive debt market, we used the book value of debt, as market value doesn't affect financial liability on debt. Rising EV/S multiples signify investor's willingness to pay a premium price, while falling ones suggest insufficient value relative to sales of the firm.

Inventory Turnover Days (ITD)

Inventory decisions are complex due to costs and benefits associated with them. Hence, crafting an inventory strategy requires caution to balance the costs and benefits. The inventory turnover ratio shows sales speed. Fewer days imply faster sales, while more days indicate tied-up investments in working capital. Conservative management backs substantial investment in stocks to have smooth production and to meet the demand timely, but this comes with storage costs rising. Hence, the advantage of investment in stock gets countered by costs.

Debtors Turnover Days (DTD)

Debtor turnover days indicate cash collection speed, efficient recovery matters more than sales growth. Falling sales days with expanding debtor days signal poor credit management. Liberal credit may boost sales, profits, but extends credit-to-cash gap. This leads to cash shortage, harming operations [9]. Liberal policy correlates with higher bad debt from riskier customers [39]. Shorter collection means stronger debt recovery or market clout, pressuring timely payments. Conversely, abundant credit can boost sales as an incentive and grants time to the customers to assess goods and aid in tackling the competition and market share [1].

Creditors Turnover Days (CTD)

Creditors Turnover Day (CTD) represents days to settle a credit purchase. Longer repayment boosts profits by lowering transaction costs, enabling goods inspection, utilizing cash to extend the credit sales, maintaining inventory, and gaining liquidity from creditors [12, 15].

On the contrary, elongating creditor repayment duration may harm liquidity, increase borrowing costs, tamper with creditworthiness, and eventually decrease profits [2, 7].

Cash Conversion Cycle (CCC)

The Cash Conversion Cycle (CCC) describes the time taken to convert cash into inventory and then back into cash [25]. Despite its high prices, trade credit is a prominent financing alternative in the developing market. Several studies have shown that the CCC has influence on a company's performance [25, 26, 40]. These findings endorsed an active working capital strategy, stressing benefits of reduced trade credit, improved debt collection, and lower working capital expenses.

Contrarily, A.K. Sharma, S. Kumar [7] propose conservative working capital management for higher profits. Deloof M. [2] asserts longer CCC boosts earnings via more credit sales, streamlined production, and timely payment discounts. A. Bhunia and A. Das, B. Chaklader [41, 42] all found evidence supporting this viewpoint. These results, in contrast to earlier results, support the costs and advantages of working capital.

Current Ratio (CR)

The current ratio captures the short-term liquidity of a company. A higher ratio commits more assets for short-term needs, which comes with opportunity cost. On the other hand, low deployment in current assets affects short-term liquidity and overall profit.

The company that can earn more cash sales and get credit from its suppliers may manage its short-term liquidity without putting more money in current assets. R.M. Yunos et al. [43] underlines the need of effective

management of current assets and current liabilities to generate a profit while maintaining short-term liquidity.

Debt Equity Ratio (DER)

The debt-equity ratio indicates the proportion of a company's financing that comes from debt compared to equity. A ratio of more than one suggests greater reliance on debt for funding. In this case, if gain from debt fund exceeds its cost, equity holder profits more. However, over reliance on debt financing damages profitability when firm fails to meet its debt obligation. As a result, we anticipate that business performance will be favourably or adversely related to the debt-equity ratio.

Size

The size of the firm is proxied with the logarithm of the revenues. Companies with bigger market share, more resources and economies of scale used to outsell their smaller competitors. As a result, large firms often make big profits. J. Lee [44] gives empirical evidence in support of the idea that a company's size contributes to its performance.

Sale/Total Assets

Sales to total assets is a measure of a company's efficiency in generating revenue from its resources. The company's bottom line will gain more in the long run when the assets are effectively utilised. As a result, we estimate that the sales to assets ratio will boost the company's performance.

GDP Growth Rate

The rate of growth in gross domestic product is a widely used indicator for assessing economic health. Increasing GDP growth rates indicate a broad trend of rising consumer demand because of robust economic progress. Alternatively, if the GDP growth rate falls, we may expect weak economic activity in the country and, as a result, low sales for the firm. An increase in GDP has a positive impact on a company's financial metrics and a more optimistic outlook for its stock price [11]. As a result, a positive link between business success and GDP growth is expected.

Based on the theoretical concepts discussed, the expected empirical relationship between firm performance and explanatory variables is presented in *Table 1*.

RESULTS AND DISCUSSION

The variables used for the research were originally evaluated using univariate statistics. The mean, standard deviation, skewness, kurtosis, minimum and maximum values for business performance, working capital indicators, and macroeconomic factor are reported in *Table 2*. The comparatively low standard deviation for the specified variable implies that the data is consistent. The positive skewness, on the other hand, suggests that the series has a lengthy right tail. This might be because WCP varies from industry to industry [13]. Further examination of Kurtosis showed that RoCE, EV/S, ITD, CCC, CR, and ATR were leptokurtic (peaked) as the Kurtosis vales exceeded three.

The correlation between the variables is shown in *Table 3*. RoCE, an accounting ratio-based performance measure, inversely relates to working capital elements, implying profit rise through reduced working capital. This contrasts market response as EVS positively relates to ITR and CCC, hinting investors favor high CCC and substantial inventory stocks.

Conversely, a notably strong positive correlation (0.938) between CCC and inventory turnover days implies significant inventory influence on working capital. A negligible negative link between CCC and creditors turnover days indicates larger enterprises can manage capital with less supplier reliance. Furthermore, the correlation coefficient between the independent variables chosen was less than 0.80. This demonstrates that multicollinearity is unlikely to be an issue [38]. Variance Inflation Factor (VIF) analysis confirmed this, with chosen variables having VIF below 1.491, well under the thresholds of 10. As a result, multicollinearity is unlikely to be an issue.

Table 4 presents the results of the two-step GMM model as per equation (1). The Saragan test yields an insignificant p-value, indicating no link between instrument variables and error term. Likewise, an insignificant p-value for second-order serial correlation dismisses such correlation. The U-shaped trend is confirmed by negative ITD and CCC coefficients, and positive coefficients for their squares. Also, CTD's negative coefficient, with positive but insignificant squared variables, implies shorter payable time boosts earnings and is consistent with the results of [3, 7, 26]. Quick payment to creditors helps to get cash discounts and improves credit scores. Large firms meet short-term obligations promptly due to ample resources

Table 1

Expected Relationship between Firm Performance and Explanatory Variables

Variable	Equations	Expected Relationship
Firm Performance		
RoCE	$\frac{Earnings\ Before\ Interest\ and\ Tax}{Equity\ Capital + Debt\ Fund}$	
EV/S	$\frac{Market\ value\ of\ Equity + Book\ Value\ of\ Debt - Cash}{Net\ Sales}$	
Working Capital Components		
DTD	$\frac{Accounts\ Receivables}{Sales} \times 365$	+/–
ITD	$\frac{Average\ Inventory}{Cost\ of\ Goods\ Sold} \times 365$	+/–
CTD	$\frac{Accounts\ Payables}{Cost\ of\ Sales} \times 365$	+/–
CCC	$CCC_{it} = ITD_{it} + DTD_{it} - CTD_{it}$	+/–
Firm Specific Variable		
CR	$\frac{Current\ Assets}{Current\ Liabilities}$	+/–
DER	$\frac{Long\ Term\ Debt}{Equity\ Sharholders\ Funds}$	+/–
SIZE	Log(sales)	+
ATR	$\frac{Sales}{Total\ Assets}$	+
Macroeconomic Variable		
GDP	GDP growth rate	+

Source: Compiled by the authors.

[45]. Negatively significant CR and DER coefficients confirm the impact on RoCE inversely, implying liquidity reduction and long-term debt trimming increase profitability. Conversely, positive correlation between the Assets Turnover Ratio (ATR) and GDP growth signals more turnover and rising economic activity enhance return on capital employed. Size positively influences profitability, albeit not statistically significant.

Table 5 presents two-step GMM estimate outcomes as per equation (2). Insignificant Sargan test p-value and second-order (D 2) serial correlation reveal lack of correlation between instruments and error term, and second-order serial correlation, respectively. One period lagged EV/S significantly impacts firm valuation. Absence of direct availability of CCC in the financial statement renders it insignificant for market value. Conversely, inventory turnover days, debt collection period, and creditors payment period affect market value, as these metrics are readily available for investors' access. Thus, readily accessible financial data influences share price. Whereas to get CCC needs extra efforts and eventually has the least impact on enterprise value. This indicates that how a business manages components of working capital has an impact on the firm's market value.

Table 2

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Skewness	Kurtosis	Min	Max
ROCE	710	23.20	17.30	2.42	8.73	−0.25	126.63
EV/S	710	3.58	2.74	1.57	3.81	0.2	19.3
DTD	710	43.77	34.21	0.93	0.39	1.52	193.09
ITD	710	62.27	109.43	7.27	61.16	0	1216.67
CTD	710	60.31	35.87	1.24	2.03	0.36	221.28
CCC	710	45.73	114.46	5.60	43.15	−186.33	1176.92
CR	710	1.66	0.96	2.01	5.94	0.3	7.5
DER	710	0.55	0.68	1.58	2.24	0	3.4
SIZE	710	9.76	1.43	0.30	−0.36	5.86	13.32
ATR	710	141.64	368.37	9.36	93.27	10.62	4720
GDP	710	5.01	4.50	−2.32	4.06	−7.97	8.26

Source: Compiled by the authors.

Table 3

Correlation between Selected Variables

Variable	ROCE	EVS	DTD	ITD	CTD	CCC	CR	DER	Size	ATR	GDP
ROCE	1										
EVS	.277*	1									
DTD	−.186*	0.012	1								
ITD	−.093*	.098*	.153*	1							
CTD	−.118*	−0.014	.358*	.204*	1						
CCC	−.108*	.102*	.333*	.938*	−0.012	1					
CR	.092*	.285*	.240*	0.072	−.250*	.219*	1				
DER	−.408*	−.231*	0.003	−0.028	.228*	−.097*	−.452*	1			
Size	−.252*	−.486*	−.173*	−.117*	−0.032	−.153*	−.237*	.370*	1		
ATR	0.025	.281*	0.044	−.080*	0.004	−0.064	−0.056	.131*	−.091*	1	
GDP	.081*	−0.007	0.007	−0.014	−0.007	−0.009	0.002	−0.001	−.085*	−0.001	1

Source: Compiled by the authors.

Note: * denote 5 per cent level of significant.

Moreover, both inventory turnover days and creditors' payment days exhibited positive coefficients, indicating that higher inventory and delayed creditor payments signal positively to investors. Conversely, the negative significance of CTD's coefficient suggests prompt debt collection is favorably perceived by Indian investors. Notably, squared ITD and DTR coefficients imply optimal values. Surpassing ideal inventory levels negatively impacts the market value, while stricter credit policies above the optimum level dampen firm value.

When utilizing DTD and CCC as proxies for working capital, the current ratio demonstrates an adverse significance. A negative current ratio implies investor favor for reduced current asset investment, relying on trade credit as funding. This perspective gains further support in model 3, where credit turnover days negatively relate to enterprise value. Insignificant debt-equity ratio

Table 4

Result of Two-step GMM (Dependent Variable ROCE)

Model	(1)		(2)		(3)		(4)	
Variable	Coeff	z-stat	Coeff	z-stat	Coeff	z-stat	Coeff	z-stat
ROCEt – 1	0.687	35.17*	0.704	34.36*	0.672	32.38*	0.7208	38.21*
ITD	–0.088	–5.21*						
ITD^2	4.6E-05	4.58*						
DTD			–0.050	–0.94				
DTD^2			–3.6E-04	–1.28				
CTD					–0.083	–2.29*		
CTD^2					1.12E-04	0.51		
CCC							–0.043	–4.46*
CCC^2							2E-05	3.81*
CR	–3.814	–9.12*	–3.547	–9.49*	–3.873	–8.99*	–3.319	–7.76*
DER	–1.445	–3.04*	–1.206	–2.02*	–1.819	–3.4*	–1.323	–2.48*
Size	0.517	1.18	1.283	2.47*	1.470	3.29*	0.708	1.36
ATR	0.002	2.96*	0.004	5.79*	0.004	4.02*	0.002	3.61*
GDP	0.157	9.47*	0.190	8.8*	0.186	8.43*	0.167	9.00*
Cons	11.543	2.76*	1.325	0.27	2.219	0.49	5.047	1.03
Sar –Chi^2	39.231	0.286#	41.039	0.223#	42.745	0.173#	40.415	0.243#
D 2 –Z Value	0.815	0.415#	0.879	0.380#	0.720	0.472#	0.833	0.405#

Source: Compiled by the authors.

Note: * and ** denote 1per cent and 5 per cent level of significant, respectively. # Denote the p-value. $ROCE_{t-1}$ is the return on capital employed with one time lagged. Sar is the Sargan test for overidentifying restrictions distributed asymptotically under the null hypothesis of validity of instruments. D_2 refer to the serial correlation of second order using the residuals of first difference. The dependent variable is RoCE.

suggests minor leverage influence on value, indicating established enterprises handle debt well even during downturns. Debt composition lacks impact on market value. Conversely, a notable positive coefficient for size signifies larger size elevates market value. Favorable correlation of the Assets Turnover Ratio (ATR) with enterprise value affirms effective asset utilization for shareholder wealth creation [46]. Macroeconomic factors, like GDP growth rate, wield significant influence on Indian market value. Heightened GDP growth attracts global equity investors, driving greater investment, ultimately elevating market value.

CONCLUSION

This study examined the impact of working capital management on business performance using a dataset encompassing 71 firms over the period from 2009 to 2019. Results indicate a U-shaped relationship between working capital and firm performance, as gauged by RoCE. Thus, early-stage profit enhancement is probable through reduced initial working capital expenditure. However, surpassing the optimal threshold leads to negative performance effects. Conversely, the inverted U-shaped association between EV/S and ITD demonstrates initial inventory growth attracts

Table 5

Result of Two-step GMM (Dependent Variable EV/S)

Model	(1)		(2)		(3)		(4)	
Variable	Coeff	z-stat	Coeff	z-stat	Coeff	z-stat	Coeff	z-stat
EV/S –1	0.3108	17.58*	0.2920	16.71*	2.49E-01	13.51*	0.3097	18.27*
ITD	0.0077	4.31*						
ITD^2	–1.63E-06	–1.71**						
DTD			–0.0349	–5.44*				
DTD^2			0.0002	6.46*				
CTD					0.016	3.22*		
CTD^2					–4.55E-05	–1.58		
CCC							0.0020	1.23
CCC^2							1.52E-06	1.7**
CR	–0.0672	–1.56	–0.0911	–2.51**	–0.0211	–0.47	–0.1053	–2.54**
DER	0.0516	0.76	–0.1047	–1.13	0.0567	0.95	0.0832	1.32
Size	0.3995	4.8*	0.5307	4.11*	0.4660	4.82*	0.3061	3.14*
ATR	0.0013	40.75*	0.0015	33.87*	0.0014	36.42*	0.0014	43.09*
GDP	0.0259	6.43*	0.0228	5.89*	0.0195	4.67*	0.0256	6.59*
Cons	–2.39	–2.92*	–2.0031	–1.52	–3.1284	–3.19*	–1.0794	–1.16
Sar -Chi^2	41.013	0.224#	43.553	0.152#	42.801	0.171#	41.583	0.206#
D 2 -Z Value	–0.775	0.439#	–0.808	0.419#	–0.567	0.571#	–0.611	0.541#

Source: Compiled by the authors.

Note: * and ** denote 1per cent and 5 per cent level of significant, respectively. # Denote the p-value.

investors, reflecting early-stage capacity expansion. Yet, crossing the optimal threshold and excessive inventory hints at sales inefficiency, prompting investor disinterest. In essence, adopting a conservative working capital approach initially boosts firm market value, but subsequent decline follows post-optimal levels of working capital.

Our research carries practical implications as follows: Firstly, it recommends maintaining an optimal inventory quantity to optimize both accounting profit and market value. Secondly, it reveals that readily accessible data from financial reports like DTD, CTD, etc., significantly influences market value compared to not readily available information like CCC. Therefore, our study proposes that accounting regulatory bodies advise companies to incorporate essential data, otherwise not directly available like CCC, in their financial reports alongside other ratios. However, investors should scrutinize financial statements for concealed insights such as CCC, necessitating cautious analysis.

Two limitations are notable in this research. Firstly, the study solely focused on large corporations, overlooking potential operational disparities with medium or small enterprises. Secondly, industry categorization was omitted, limiting the depth of the working capital analysis. Therefore, future exploration incorporating industry and size categories holds promise for more comprehensive insights and academic exploration.

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