

The Effect of Working Capital Management on the Profitability of the Top Ten Retail Firms Listed in the Bombay Stock Exchange (BSE)

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Abstract

<https://doi.org/10.34047/MMR.2026.13107>

This study tries to explore the impact of working capital management on the top 10 retail companies listed on the Bombay Stock Exchange (BSE). The five-year period of data including both dependent and independent variables. The firm size, sales growth, debt-to-current ratio, and current ratio are the control variables, while working capital management approximations are used to establish the ROI, average collection period, average payment period, inventory conversion time, and cash conversion cycle. Data is analysed using correlation analysis, descriptive statistics, and ordinary square least regression analysis to determine the impact of these factors on profitability. According to correlation studies, ROA and ROE have positive correlations with CR but negative correlations with APP, ICP, DR, and CR. In a similar vein, ROA and ROE have negative correlations with APP, CCC, DR, and CR. The study offers some very useful advice to people in charge of managing the retail sector's management.

Keywords: Working capital Management, Profitability, Retail sector, BSE

1. Introduction

Working capital management is the most important and challenging task for financial managers since they are among the decision-makers who improve the financial position of firms. Although this might be challenging for managers, it is essential since a company must make sure that its operations are efficient and well-organized. The development and profitability of a corporation are negatively impacted if its current assets are insufficient in relation to its current obligations. Working capital policies are therefore crucial to corporate finance since they have a direct impact on the success of the company.

The sum of money, or money equivalent, needed to fund a business's activities is known as working capital. The balance sheet of the company's current assets and current liabilities are subtracted to determine working capital. Cash, accounts receivable, and inventory are examples of current assets. Accounts payable, taxes, salaries, and interest due are examples of current obligations.

There are two types of working capital. An accountant's definition of working capital is net working capital, which is current assets minus current liabilities. Working capital is defined as the total amount of a company's investment in current assets, or net working capital, according to the second perspective, which is the financial one. (UDEH, 2016)

Working capital management makes ensuring that several components—such as debtors, cash balance, inventories, payables, etc.—are properly balanced. Achieving equilibrium involves reducing the amount of working capital needed and optimizing earnings. (Naskar, 2017)

By making the most use of current assets and obligations, working capital management ensures a business operates efficiently. Keeping track of the company's assets and obligations is the fundamental objective of working capital management, which enables the maintenance of sufficient cash flow and the achievement of short-term

business objectives. By guaranteeing liquidity, it aids in both the management of anticipated and unforeseen costs and the assessment of the firm's efficiency.

Making the available capital as lucrative as feasible is corporate finance's ultimate objective. On the liabilities side of the balance sheet, the provided funds are shown as equity or borrowings; on the assets side, they are shown as investments or current assets. A word from corporate finance, "working capital," is frequently used to refer to short-term balances. (Nuhiu, 2017)

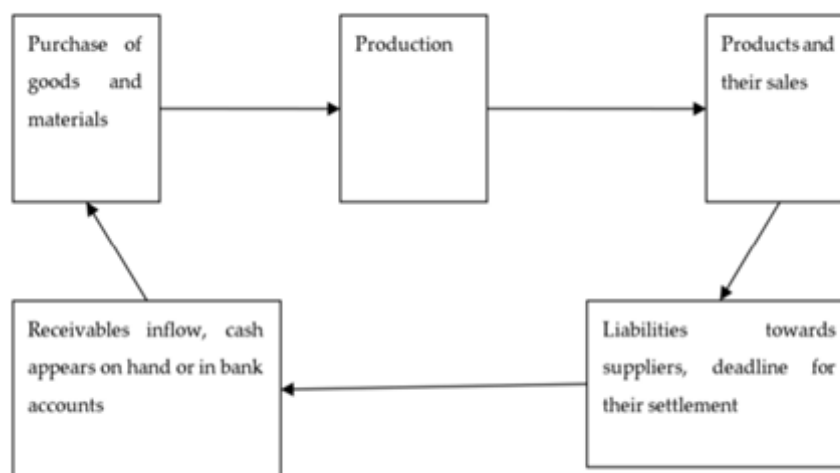
One of the most crucial and significant aspects of an organization's short-term financial concerns is working capital management. In companies of all sizes, profitability is highly dependent on the effective management of working capital. It is unclear, nevertheless, which kind of business—large or small—is more susceptible to efficient working capital

management. There's a good chance that working capital management will affect a large company's profitability more than it does a small one.

Maintaining and supplying the company with enough liquidity is a crucial component of WCM as it guarantees that the business can pay its short-term debts on time and cover its running costs.

According to (Shin, 1998) effective WCM refers to a balanced position between liquidity and profitability. They argue, “Decisions that tend to maximize profitability tend not to maximize the chances of adequate liquidity. Conversely, focusing almost entirely on liquidity will tend to reduce the potential profitability of the company” Accordingly, the decision on how much working capital should be maintained involves a trade-off between profitability and liquidity. (Vries)

Figure -1
Five stages of working capital



- The raw materials required for production are purchased by businesses. Inventory is created from cash. Payment under credit terms, on the other hand, entails existing responsibilities to suppliers.
- The manufacturing process begins, which creates an obligation towards employees.
- The effects of production start to show up. When selling, a margin is used, which boosts current assets while allowing for possible inflows.

- Liabilities have payment dates that are about to expire. If supplier receivables are not yet collected, the company looks for additional sources of funding, such as bank loans. Liabilities are repaid if cash is received earlier, which is the same as the reduction in current assets and liabilities.
- Customers' receivables are received. The funds collected can be used to pay off debts.

Working capital:

The gap between a company's current assets and current liabilities is known as working capital. It displays the amount of money that a company has accessible for regular business operations, giving an indication of its short-term financial stability. Current liabilities include debts like accounts payable and short-term loans, whereas current assets include of cash, inventory, and accounts receivable. Working capital is essentially the money that moves around a business to support its short-term and operational demands. It is essential for making sure a corporation can maintain continuing operations, control inventory levels, and fulfill short-term commitments. Being able to pay short-term commitments with cash on hand is a sign of a positive working capital, which is defined as current assets surpassing current liabilities. On the other hand, a negative working capital might indicate impending financial difficulties. Effective working capital management is essential to a company's seamless operation and its capacity to take advantage of opportunities and overcome short-term obstacles.

Working capital is the amount of money that is needed to cover expenses related to purchasing manufacturing inputs and receiving payment in cash for goods that are sold. This cycle's term is comprised of the cycles for converting liabilities, receivables, and inventory.

Below is the list of Profitability Ratios along with formulae used in this paper.

Table 1

No.	Metric	Formula
1	Return on Assets (ROA)	Net Income / Average Total Assets
2	Average Collection Period (ACP)	(Accounts Receivable / Net Sales) $\times$ 365
3	Inventory Conversion Period (ICP)	(Inventory / Cost of Sales) $\times$ 365
4	Average Payment Period (APP)	(Accounts Payable / Cost of Sales) $\times$ 365
5	Cash Conversion Cycle (CCC)	ACP + ICP – APP
6	Debt Ratio	Total Debt / Total Assets
7	Current Ratio	Current Assets / Current Liabilities
8	Return on Equity (ROE)	Net Income / Shareholders' Equity
9	Sales Growth	(Sales CY – Sales PY) / Sales PY $\times$ 100

(Naskar, 2017) in their study sought to examine the effect of working capital management on profitability of companies listed in BSE. The study used sample of 53 for a period between 2011-2015. Pearson correlation and the multivariate regression analysis was used to analyse the

Retail Sector:

Indian retail has become one of the world's most dynamic and fast-paced industries. This sector is undergoing significant changes and growth due to shifting demographics and rising urban dwellers' standards of living. The Indian retail industry is at a turning point when the expansion of organized retail and the rise in Indian consumer spending will is considered. Over the previous few years, the Indian retailing business has grown astronomically and emerging from the shadows of unorganized retailing to organized retailing making a substantial contribution to the expansion of the retail industry in India.

Profitability:

A business's capacity to turn a profit is referred to as profitability. After deducting all costs directly related to revenue production, such as those incurred in creating a product, and other costs related to carrying out company operations, a business's profit is the remaining revenue. You may do research on profitability in a lot of different ways. The focus of this session will be profitability ratios, which are a gauge of a company's capacity to generate income relative to the amount of costs it faces. Now let's examine a few of the initial analytical strategies. Profitability is also referred to financial performance of the business. Accounting Ratios that measure profitability are referred to as Profitability Ratios. We express these ratios in 'Percentage'.

data and the study revealed that all components of working capital namely Receivable days (RD), Payable days (PD), Inventory holding periods (ID), Current ratio (CR) and Quick ratio (QR) have strong impact on profitability. Cash conversion cycle (CCC) is negatively

related with the profitability. (Aggarwal, 2015) studied the effect of working capital management on the profitability of Indian firms based on extensive research. The data collected using a sample of 364 firms listed on Bombay stock exchange part of BSE 500 index. The study was done by taking five years data from April 2010 to March 2014. Different ratios related to working capital and profitability were used to reflect the importance of working capital management in companies' profitability. (Gaur, 2017) tried to examine the working capital management of Fast-Moving Consumer Goods (FMCG) companies in India and its impact on the profitability of these companies. The analysis is done on the selected 5 companies listed on Bombay Stock Exchange (BSE) in India for a period of 15 years during 2000-01 to 2013-14 using panel data regression. The study reveals that there is a positive relationship between working capital and profitability. However, the profitability of the companies is strongly affected by other factors like capital structure, growth, and size of the companies.

(Bhatia, 2015) tried to study the working capital practices of selected firms and found that there was scope of improvement in the inventory and receivable turnover for all the companies. Pearson correlation coefficient is calculated and analysed to find if there was a relationship between working capital ratios and profitability ratios. The results showed that profitability of the company is positively and significantly related to the current ratio and liquid ratios. The linear regression analysis confirmed that the profitability of the firm increased with increase in liquid assets. (Lamichhane, 2019) analysed the efficiency of working capital management (EWC) and its influence on profitability of manufacturing firms in Nepal for the year 2005 to 2018 using descriptive and causal comparative research design. Profitability on assets (PA) and profitability on sales (PS) are dependent variables and EWC related variables such as Net trading cycle (NTC), current ratio (CR) and debt to assets ratio (DR) are considered as explanatory variables. The study suggests that both profitability on assets and profitability on sales are inversely related with NTC which implies that lower NTC increases profitability of manufacturing firms in Nepal.

(Gołasz, 2020) analysed the impact of working capital management on business profitability by collecting data from Emerging Markets Information Service database (EMIS 2019) for a period of 9 years i.e., 2009 to 2018. The research methodology used in this paper is Days Sales of Inventory, Days Sales Outstanding, Days Payable Outstanding, Cash Conversion Cycle (in days), return on operating assets (ROA). In this paper, ROA has a statistically significant correlation with all types of working capital cycles. However, the direction of these relationships varies, which is consistent with the correlation analysis. (Phuong, 2020) did an empirical study in Vietnam on the Impact of working capital management on firm profitability. This study is extensive research with data collected from a sample of 5,295 firms (observations) listed on stock market in Vietnam from 2009 to 2019 for 10 years. The study showed that inventory turnover, average receivables (AR), average payment (AP), cash conversion cycle (CCC) had negative impacts on the firm profitability (FP) and the Generalized Least Squares (GLS) regression method. Regression results for model 2 have indicated that INV, AR, AP and CCC positively impact on FP. (Garg, 2015) analysed and studied the topic Relationship between working capital management and profitability in Johannesburg Stock exchange (JSE) listed retail sector companies. The data collected for a period of 10 years from 2004 to 2013. The study revealed that cash conversion cycle (CCC) has a negative influence on business profitability.

(Nuhiu, 2017) in their research elaborated the relationship between working capital management and company's performance. The study concluded that an integrated, cross-functional working capital management must be supported by a stringent and revolving planning and controlling process ranging from conceptual orientation to strategic and operational control, to a successful and sustainable instrument of cost and liquidity optimization for the management of a company. (Dey, 2018) in their research examined the effect of working capital on profitability of Indian firms by collecting a sample of 263 non-financial BSE 500 firms listed at Bombay Stock Exchange for the period

between 2000 to 2008 using OLS Multiple regression. The study revealed that inventory of number of days and number of days accounts payable are negatively correlated with a firm's profitability, whereas number of days accounts receivables and cash conversion period exhibit a positive relationship with corporate profitability. (Jamil, 2015) in their research tried to find the effect of working capital management efficiency on the operating performance of industrial companies listed in the Muscat Securities Exchange in Sultanate of Oman. It studied the explanatory non-experimental research design by taking 37 industrial companies listed in MSM for a period of 5 years from 2009-2013. The econometric models developed comprise two equations. The first model utilizes net operating profit (NOP) as performance indicator while the second model utilizes EBIT. The statistical overall result of the study is that the industrial companies in Oman support their NOP but not to EBIT and the food industry has managed the WC satisfactorily.

(Afeef, 2011) determined the potential effect of working capital management on the profit performance of Small and Medium sized firms in Pakistan by using secondary data from 2003-2008. The study used regression model and findings from the analyses suggested that indicators of working capital management had a perceptible impact on profitability of firms under study. (Kalsie, 2016) analysed the impact of working capital management on Indian FMGC companies by using secondary data for 5 years from 2010-2015. The paper investigated the impact of negative working capital on relevant firms' profitability and the study discourages the lower level of liquidity maintained by the companies. (Sumathi, 2016) analysed five years data from 2011 to 2015 and suggested that company needs to have a correct balance between liquidity position and profits of the company. Various components for measuring the working capital used are Inventor turnover ratio, Payable days, Cash Conversion cycle and quick ratio on the net operating profitability position of Indian companies. It is suggested that computation of working capital should be done at optimum level.

(Sarwat, 2017) Analysed the impact of Working capital

management on profitability of a firm by taking a case of Pakistan Cement Sector. The study is based on secondary data collected from 2007 to 2011 for 5 years. The results revealed that Asset turnover ratio (ATO), Current Ratio and size of the firm have positive and significant affiliation with the return on asset. It also indicates there is a negative impact on profitability. (Yogendrarajah, 2011) analysed working capital management and its impact on financial performance of trading firms. The study period for the paper was five years i.e 2005-2009. The research methodology used in this paper is cash conversion cycle and regression analysis. The regression analysis result shows that high investment in inventories and receivables is associated with lower financial performance (ROA). For this analysis account receivable, account payable days and cash operating cycle has been used.

3. Objectives

The objective of this research is to measure the relationship and effect of working capital management and profitability of retail firms listed in BSE. The study can provide valuable insights into the financial performance and management efficiency of these companies.

4. Scope of the study

The study evaluates the financial statements of the companies selected for the study and evaluates the profitability ratios to understand overall financial health. Working capital management metrics examine the efficiency of the firms in managing their current assets and current liabilities, which can impact liquidity and operational performance. Correlation analysis between working capital management and profitability ratio determines the significant relationships between the two and if changes in working capital practices impact profitability. Comparison between these two parameters working capital and profitability can identify best practices, industry benchmarks, and potential areas for improvement. It will also assess how different firm within industry manage working capital in various economic conditions. The firms ability to adapt their working capital strategies to changing economic conditions is also implanted by the

firms. It will provide recommendations for improving working capital management practices based on the findings of the study and suggest strategies that could enhance profitability and overall financial performance.

It also discusses the implications of the study's findings for investors, shareholders, and other stakeholders in terms of financial decision-making, risk assessment, and investment strategies.

It will also identify areas for future research related to working capital management and profitability in the retail sector. It will also consider how the changes in technology, market dynamics, or regulatory environments may impact the relationships over time.

5. Methodology

The study is based on the secondary data. The data is collected from the top 10 companies listed in Bombay Stock exchange (BSE) during the period from 2016 to 2021. The data is collected from authenticated sources like annual reports of the companies, prowess IQ and data

from BSE website. In the study the variables used are:

Independent variable: Cash conversion cycle, Inventory conversion period, Average collection period, average payment period, Debt ratio, Firm size, Sales growth.

Dependent Variable are Return on assets and return on equity to measure profitability.

7. Hypothesis

H1 = There is significant relationship between current ratio and profitability of the companies.

H2 = There is significant relationship between Average collection period and profitability of the companies.

H3 = There is significant relationship between Inventory conversion period and profitability of the companies.

H4 = There is significant relationship between Average payment period and profitability of the companies.

H5 = There is significant relationship between debt ratio and profitability of the companies.

H6 = There is significant relationship between cash conversion cycle and profitability of the companies.

7. Descriptive Analysis:

Table -2

Variable	Mean	Median	SD	Minimum	Maximum
ROA	1.1376	0.895	0.70926	0.09	2.84
ROE	59.7298	44.605	51.6728	-24.19	200.6
ACP	45.2558	11.795	107.927	0	737.16
ICP	90.76158	5.70925	40.3705	30.15	222.41
APP	69.6354	7.89595	55.8328	7.19	254.56
CCC	74.7956	15.1031	106.795	-68.15	697.8
DR	0.986	0.2716	1.92047	0	10.12
CR	1.7604	0.12978	0.91767	0.6	3.67
Firm Size	5422.844	707.143	5000.25	490.71	21279.5
Sales Growth	722.5898	314.384	2223.03	-143.78	8683

Source: Author's calculation using excel & SPSS

As per the table-1, mean value of firms return on assets is 113.76 percent of total assets with median value 89.5 percent and standard deviation value is 70.92 percent. It implies that estimation of productivity can fluctuate from intend to both sides by 113.76 percent. Its minimum value is 9 percent while maximum is 284 percent. Return on equity (ROE) is a key financial indicator that investors can use to assess management's efficiency in utilising

equity financing provided by shareholders. It compares the firm's net income to its equity. Mean value is 59.72 percent of total equity with median value of 44.605 percent and standard deviation value is 51.67 percent. Its minimum value is -24.19 percent while maximum is 200 percent.

Average Collection Period (ACP) is used to assess the

effectiveness of a collecting policy. For the sampled firms, the ACP average value is averaged to 45 days. The average of the Average Collection Period indicates that companies in the sample wait an average of 142.08 days to recover cash from credit sales. For the sampled firms, the minimum and maximum ACP values are 0 and 737.16 days, respectively.

The Inventory conversion period is use as proxy for inventory policy. The average inventory conversion duration is around 91 days. This suggests that it takes an average of 91 days for enterprises in the sample to sell inventory. The standard variation of inventory holding period is 40.37 days, as shown in the table above. The minimum and maximum inventory holding time frames for the sample enterprises are 30.15 and 222.41 days, respectively.

The average payment period is use as proxy for payment policy. The average value of accounts payable period is 70 days. For the sample firms, the standard deviation of account payable term is 56 days. The period spans are 7.19 days and 254.56 days, respectively.

Furthermore, the average cash conversion period is 74.79

days, with a standard deviation of 106.79 days. The minimal value of 68.15 days indicates that a company has a high inventory turnover or cash collection from credit sales before completing a single credit purchase payment. It means the average collecting period and/or inventory holding time frame are short, and/or the firm's ACP is high. The time for cash conversion, on the other hand, is 697.8 days, which is a very long time.

The table above also includes descriptive statistics for control variables that were employed in the research. The normal logarithm of sales is used as a control variable to examine the firm's size and its relationship with profitability. The standard deviation is 5000.25, and the mean value of log of sales is 5422.844. The maximum annual value of a company's log of sales is 21279.5, with a base of 490.71.

8. Correlation Analysis

Prior obtaining the regression result, it is critical to evaluate the correlation between the numerous variables included in the analysis. The Pearson's Correlation grid is used to illustrate the link between factors, such as working capital management and firm financial performance (profitability measure).

Table-3
Correlation Analysis

	ROA	ROE	ACP	ICP	APP	CCC	DR	CR	Firm Size	Sales Growth
ROA	1									
ROE	0.318	1								
ACP	-0.376	-0.279	1							
ICP	-0.465	0.148	0.313	1						
APP	-0.453	0.0002	0.380	0.845	1					
CCC	-0.376	-0.184	0.921	0.442	0.355	1				
DR	-0.289	-0.105	0.131	0.300	0.339	0.095	1			
CR	0.029	-0.258	-0.008	-0.398	-0.581	0.078	-0.165	1		
Firm Size	-0.107	0.202	0.047	0.121	0.291	-0.050	0.320	-0.201	1	
Sales Growth	-0.071	-0.400	-0.025	0.020	0.207	-0.151527	0.070	-0.342	0.150	1

Source: Author's calculation using excel & SPSS

The table above indicates that ROA is inversely proportional to ACP, ICP, CCC, and Current ratio. ROA and ACP have a negative relationship. In line with the idea

that the less time you have, the better. The longer people take to pay their debts, the more money is owed to them. accessible to replace supplies, resulting in increased sales,

resulting in an increase in profitability. The negative relation between ROA and ICP lends support to the theory that firms with low inventory levels are more efficient achieve a better degree of profitability.

The negative relationship between ROA and CCC is consistent with the viewpoint that the time lag between the expenditure for raw material purchases and the collection of sales of finished items can be excessive, and that reducing this time lag maximizes profitability.

Profitability and liquidity are inversely associated, but here it is evidenced the positive association between ROA and Current ratio. As a result, a decrease in current assets would result in a increase in company profit. As it has a larger proportion of short-term asset value relative to the value of its short-term liabilities, a company with a higher current ratio is more capable of meeting its obligations.

ROA is negatively associated to APP, Debt Ratio, and

Firm Size, as shown in the table above. The fact that delayed payments to suppliers guarantees that the firm has some money to purchase additional merchandise for sale, but as seen in the above table thereby decreasing the sales levels as well as effecting profit, does not support the negative relationship between ROA and APP.

The negative correlation between ROA and Debt Ratio suggests that a lower the debt ratio is not good to an organization's ROA. As a result, a large debt ratio is beneficial to the firm. Furthermore, a positive relationship between business size and ROA shows that larger organisations make more money than smaller firms. As a result, this could be due to a larger firm's capacity to take advantage of sales economies.

7. Regression Analysis

Regression analysis is a collection of statistical approaches for estimating relationships between one or more independent variables and a dependent variable.

Table 4
Relationship between ROA and CR

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.03			
R Square	0.00			
Adjusted R Square	-0.02			
Standard Error	0.72			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	0.02	0.02	0.04
Residual	48	24.63	0.51	
Total	49	24.65		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.10	0.22	4.97	0.00
CR	0.02	0.11	0.20	0.84

The CR and ROA have a positive relationship, as shown in the Regression table above. The P value in the table above exceeds the 0.05 level of significance. As a result,

the null hypothesis will be accepted. As a result, CR and CR have a considerable positive relationship.

Table 5
Relationship between ROA and ACP

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.38			
R Square	0.14			
Adjusted R Square	0.12			
Standard Error	0.66			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	3.48	3.48	7.90
Residual	48	21.17	0.44	
Total	49	24.65		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.25	0.10	12.25	0.00
ACP	0.00	0.00	-2.81	0.01

The regression table above indicates that ACP and ROA have a negative relationship. The P value is less than the 0.05 level of significance. As a result, the null hypothesis

will be rejected and the alternative hypothesis will be accepted. As a result, ACP and ROA have a significant relationship.

Table 6
Relationship between ROA and ICP

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.46			
R Square	0.22			
Adjusted R Square	0.20			
Standard Error	0.63			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	5.32	5.32	13.22
Residual	48	19.33	0.40	
Total	49	24.65		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.88	0.22	8.44	0.00
ICP	-0.01	0.00	-3.64	0.00

The table above indicates that ICP and ROA have a negative relationship. The P value is less than the 0.05 level of significance. As a result, the null hypothesis will

be rejected and the alternative hypothesis will be accepted. As a result, there is no link between ICP and ROA.

Table 7
Relationship between ROA and APP

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.45			
R Square	0.21			
Adjusted R Square	0.19			
Standard Error	0.64			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	5.07	5.07	12.42
Residual	48	19.58	0.41	
Total	49	24.65		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.54	0.15	10.59	0.00
APP	-0.01	0.00	-3.52	0.00

The table above indicates that APP and ROA have a negative relationship. The APP coefficient value is negative, and the P value is below than the 0.05

significance level. As a result, the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, APP and ROA have a negative relationship.

Table 8
Relationship between ROA and DR

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.29			
R Square	0.08			
Adjusted R Square	0.06			
Standard Error	0.69			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	2.06	2.06	4.38
Residual	48	22.59	0.47	
Total	49	24.65		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.24	0.11	11.37	0.00
DR	-0.11	0.05	-2.09	0.04

The debt ratio and return on investment (ROI) have a negative relationship, as seen in the table above. Debt ratio has a P value that is less than the 0.05 significance

level. As a result, the null hypothesis is rejected, and the alternative hypothesis is accepted. Therefore, the debt-to-profitability ratio is negative.

Table 8
Relationship between ROA and CCC

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.38			
R Square	0.14			
Adjusted R Square	0.12			
Standard Error	0.66			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	3.49	3.49	7.91
Residual	48	21.16	0.44	
Total	49	24.65		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.32	0.12	11.51	0.00
CCC	0.00	0.00	-2.81	0.01

CCC and ROA have a negative relationship, as shown in the table above. The P value is less than the 0.05 significance level. As a result, the null hypothesis is rejected, and the alternative hypothesis is accepted.

Therefore, there is a link between CCC and ROA. CCC has a negative coefficient, which means that the lower the CCC, the higher the ROA.

ROE and its Independent Variables

Table 10
Relationship between ROE and CR

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.26			
R Square	0.07			
Adjusted R Square	0.05			
Standard Error	50.45			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	8681.38	8681.38	3.41
Residual	48	122152.69	2544.85	
Total	49	130834.08		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	85.26	15.56	5.48	0.00
CR	-14.50	7.85	-1.85	0.07

The above Regression table illustrates that CR and ROE have a negative relationship. The P value in the table above is more than the 0.05 significance level. As a result,

we'll go with the null hypothesis. Therefore, CR and ROE have a negative significant relationship.

Table 11
Relationship between ROE and ACP

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.28			
R Square	0.08			
Adjusted R Square	0.06			
Standard Error	50.14			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	10182.58	10182.58	4.05
Residual	48	120651.50	2513.57	
Total	49	130834.08		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	65.77	7.70	8.54	0.00
ACP	-0.13	0.07	-2.01	0.05

The above Regression table illustrates that ACP and ROE have a negative relationship. The P value in the table above refers to a significance level of 0.05. As a result,

we'll go with the null hypothesis. Therefore, ACP and ROE have a negative significant relationship.

Table 12
Relationship between ROE and ICP

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.15			
R Square	0.02			
Adjusted R Square	0.00			
Standard Error	51.63			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	2862.43	2862.43	1.07
Residual	48	127971.65	2666.08	
Total	49	130834.08		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	42.55	18.12	2.35	0.02
ICP	0.19	0.18	1.04	0.31

The above Regression table indicates that ICP and ROE have a positive relationship. The P value in the table above is less than the 0.05 significance level. As a result, the null

hypothesis will be rejected, and the alternative hypothesis will be accepted. Therefore, there is a considerable positive relationship between ICP and ROE.

Table 13
Relationship between ROE and APP

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.00			
R Square	0.00			
Adjusted R Square	-0.02			
Standard Error	52.21			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	0.01	0.01	0.00
Residual	48	130834.07	2725.71	
Total	49	130834.08		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	59.71	11.88	5.03	0.00
APP	0.00	0.13	0.00	1.00

The above Regression table indicates that APP and ROE have a positive relationship. The P value in the table above is more than the 0.05 significance level. As a result, we'll

go with the null hypothesis. Therefore, there is a considerable positive relationship between APP and ROE.

Table 14
Relationship between ROE and DR

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.10			
R Square	0.01			
Adjusted R Square	-0.01			
Standard Error	51.92			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	1430.29	1430.29	0.53
Residual	48	129403.79	2695.91	
Total	49	130834.08		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	62.50	8.27	7.56	0.00
DR	-2.81	3.86	-0.73	0.47

The above Regression table illustrates that DR and ROE have a negative relationship. The P value in the table above is more than the 0.05 significance level. As a result,

we'll go with the null hypothesis. Therefore, DR and ROE have a negative significant relationship.

Table 15
Relationship between ROE and CCC

SUMMARY OUTPUT				
<i>Regression Statistics</i>				
Multiple R	0.18			
R Square	0.03			
Adjusted R Square	0.01			
Standard Error	51.32			
Observations	50.00			
ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	4427.07	4427.07	1.68
Residual	48	126407.01	2633.48	
Total	49	130834.08		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	66.39	8.89	7.47	0.00
CCC	-0.09	0.07	-1.30	0.20

8. Limitations and Future Scope

- The research is based on secondary information and restricted to a single industry i.e., India's retail business. So, a future study can be done by taking other sectors/ other industries.
- The sample of only 10 topmost companies listed in BSE is selected for the study. So, a future study can be done by taking all the companies of a particular sector or listed in BSE.
- Due to the nature of the sector, sample size is limited (oligopolistic). Sample size can be increased.

9. Conclusion

An organization's activities depend on its working capital, which has to be handled well. Working capital management includes managing money and inventories as well as accounts receivable and accounts payable. An organization cannot run effectively without proper working capital monitoring and balancing. Lack of working capital can lead to cash flow problems, decreased sales, and decreased output. The results of this study indicate that keeping an appropriate level of working capital is crucial for all businesses, not just the retail sector. The results show a substantial correlation between working capital management and profitability. The correlation study shows that ROA has a negative connection with ACP, ICP, APP, CCC, and DR. In a

similar vein, ROA and CR get along well. There is a negative correlation between CCC and ROA, which suggests that higher CCC lowers profitability and vice versa. Regression analysis was used to assess if there was a substantial impact on profitability. The results show that ROA has a negative association with APP, CCC, DR, and a good relationship with CR.

Declaration of conflicting Interest: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article'.

Funding Acknowledgement: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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