OPEN ACCESS Freely available online

ISSN: 2472-114X
International Journal of Accounting Research

Research Article

# Impact of Working Capital on Profitability in Indian Retail Industry

**Harsha Sachdev***

*Department of Business Education, Amity University, Noida, India*

## ABSTRACT

The decision on financing, the decision on dividends, the decision on investment and the decision on liquidity are a company's four main financial management. Working capital management is seen as a major decision in the form of short-term investment decisions and liquidity.

This analysis is sought out to explore the relation between the management of working capital and profitability and to evaluate their impacts on each other and examining their effect on each other. Factors of working capital are the current ratio, the quick ratio, the turnover ratio of the debtor and the turnover ratio of the inventory.

**Keywords:** Working capital management; Profitability; Turnover ratio; Investment

## INTRODUCTION

Working capital refers to the amount or quantity of funds needed for the financial activities of a firm to control its operating expenses. The interaction between liquidity and profitability determines the feasibility of handling working capital. The company's high liquidity risk leads to an increased profitability working capital management is a matter of concern as it managing all working capital issues and trying to align costs and returns. Working capital management's goal is to increase the gains arising from a decline in the risk that short-term debts might not be fulfilled [1].

### Objectives of the study

- To identify the impact of working capital on the profitability of the firm in the retail industry of India.
- To analyse the relationship between working capital ratios and company productivity in India's retail industry.
- To review data relating to the allocation of working capital and profitability of Indian retail companies.
- To infer the relationship between the allocation of working capital and productivity in the Indian retail industry statistically.

### Statement of the problem

Management of a firm's working capital is essential for the following reasons.

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Management of a firm's working capital is essential for the following reasons.

- The optimal amount of the capital is spent in current assets of the company.
- A company's working capital strategy will have a bigger impact on the profitability of the company.

This research was therefore conducted to determine the impact of working capital and to check whether such an investment has increased or reduced over a period of time. Upon determining the need for current assets, the finance manager's important task is to find the best source of capital to support the different current assets of the company that help increase earnings [2].

### Scope of the study

This study focuses only on Indian retail companies. The study covers 14 selected retail firms that are listed on India's national stock exchange. The effect of working capital management on Indian retail industry profitability is analyzed using the 7-year annual reports spanning the period 2013 to 2019.

### Variables and operational definition

A proxy for the company's profitability and an independent working capital variable proxy are need for testing regression

**Correspondence to:** Harsha Sachdev, Department of Business Education, Amity University, Noida, India; E-mail: harsha.sachdev13@gmail.com

**Received:** 13-Apr-2020, Manuscript No. IJAR-24-3869; **Editor assigned:** 16-Apr-2020, PreQC No. IJAR-24-3869 (PQ); **Reviewed:** 30-Apr-2020, QC No. IJAR-24-3869; **Revised:** 01-Jul-2024, Manuscript No. IJAR-24-3869 (R); **Published:** 29-Jul-2024, DOI: 10.35248/2472-114X. 24.12.403

**Citation:** Sachdev H (2024) Impact of Working Capital on Profitability in Indian Retail Industry. Int J Account Res. 12:403.

model to analyse the effect of these on each other. The dependent variable for the analysis is the Return on total Assets (ROA) that was measured as an income after tax percentage of the firm's total assets which shows the company's profitability metric. Debtor turnover ratio and inventory turnover ratio are chosen to indicate the company's turnover and business activities and quick ratio and current ratio are independent variables chosen to highlight the company's liquidity status [3].

# MATERIALS AND METHODS

## Data collection method

Data collection mode is using secondary data which is collected for this study from ACE equity (stores corporate database) and various articles and research papers referred from Directory of Open Access Journals (DOAJ), Scopus and Research Gate. E-views and microsoft excel are used for analysis and interpretation of data collected. The period of study is 2013-2019, i.e., for 7 years.

## Sampling size

The sampling of companies has been done on the basis of market capitalization listed in BSE and 14 of them are chosen in this study for analysis. The research period is considered for seven years, that is between 2013-2019.

## Statistical design

The study makes use of both the descriptive and quantitative analysis of the statistical tools. The descriptive analysis shows the mean mean, mode, normal, minimum and maximum data values. To evaluate the relationship between working capital management variables (CR, DTR, ITR, QR) and business profitability (ROA) for the sample under study, a statistical correlation analysis used. To check the impact of such relationship between working capital and profitability, the quantitative analysis using multiple regression is done [4].

## Limitations of the study

- The work is limited to one area only which is India's retail industry.
- Among the numerous retail companies listed on the BSE report, only a few selected retail industry companies are involved.
- The study is done using secondary data.

## Research gap

Although previous studies are undertaken to check the impact of working capital management on profitability; they do not pertain to the retail industry of India. Hence this study evaluates the relationship between working capital management and the profitability of the business in India's retail industry. Hence, this research tried to bridge the gap by investigating in to the same.

## Descriptive analysis

Descriptive analysis is done which illustrates the characteristics of the variables. It was apparent that various companies had employed different measures of working capital. The maximum and minimum Return on Assets (ROA) figures are 36.68 and negative-117.13. In Debtor Turnover Ratio (DTR), the mean is 400.34 and the maximum value being 12130 and the minimum value being 1.882. This variable shows the greatest variance. The table also presents the skewness and the kurtosis. From the outcome it is clear that there is a wide variation in the factors over the duration across the firms [5].

## Test of multi-collinearity

The multi-collinearity test helps to determine whether or not the independent variables are highly correlated. This test must be done before switching to the multiple regression model. If Variance Inflation Factor (VIF) is more than 10, it contributes to multi-collinearity problem *i.e.,* although the variables are independent to the profitability variable they are still related to each other. In Table 2, we see that the VIF of all the independent variables is below 10 and we have 4 independent variables within the suitable.

## Unit-root test

The data set is submitted to unit-root tests to analyse its stationary attributes of the variables (independent and dependent) after the multi-collinearity test. The augmented dicky fuller test is presented in the current study and the results.

Because the value of t-statistic is less that 10% level of significance and the probability being less than 0.05 we reject the null hypothesis. Hence we accept the alternative hypothesis which leads because that the data the data for ROA, CR, DTR, ITR, QR has no unit roots *i.e.,* the data is stationary at all levels [6].

## Introduction to industry/area of business

One of the main components of the Indian economy is the retail sector. The retail industry has emerged to be the fiercest and quick-paced markets, due to the participation of many newer players. India has seen a dramatic retail revolution as regards style and customer purchasing behavior. Such markets are all under one roof providing concerts, shopping and food.

Total expenditure on demand is expected to reach approximately US $5,600 billion by 2021 from US $1,824 billion in 2017. The retail sector saw a revolution as many new types of markets such as department stores, hypermarkets and supermarkets have made their way onto the market. India marks as one of the globe's fastest-growing retail markets. This industry is the largest contributor sector among all sectors to 12% of the country's GDP and providing employment to about 8% of the workforce. India places 16$^{th}$ as per the FDI confidence index.

# RESULTS

## Total size/annual turnover of the industry

In 2020, the retail industry crossed 15% Rs 76.87 lakh crore (US $950 billion) at CAGR and contemplated to arrive at Rs 98.87 lakh crore (US $1.1 trillion) by 2024. India is the fifth largest favored shopping destination worldwide. India ranks among the world's highest in terms of retail store supply per capita.

This sector is witnessing quick-paced growth with retail development taking place tier-II and tier-III cities and not only in major tier-I cities and metros. Factors that drives growth in the organized retail market of India are changing demographic profile, increasing disposable incomes, urbanization, healthy economic growth, changing consumer tastes and preferences [7].

The populace of India is bringing the shopping internet in a big way. Organized market penetration is expected to rise from an estimated 12% in 2020 to 20% by 2022. Around 2025, India is expected to become the globe's third-largest consumer economy, touching Rs 27.95 lakh crore.

Increasing participation of private and foreign players has sparked Indian retail industry. Large retail firms are drawn to the affordability of Indian markets to use it as a platform for sourcing. GAP, Walmart JC Penney and Tesco are global supermarkets who are boosting Indian importing by switching from third-party facilities to wholly owned or wholly controlled offices.

## Industry growth drivers

**Rising income levels:** With increases in income levels, the user sector is now being expanded to a greater number of households. The surge in buying power is further boosting retail sector growth coupled with increased instances of double income in most households.

Changes in consumer needs, perceptions and behavior: These days' consumers are willing to try new things that have driven investment on fitness, leisure and beauty products apart from food, clothes and food items. Current market success is related to consumer needs, perceptions and behaviour. Training, global visibility and rising income levels have helped the Indian middle class grow.

**Enhanced credit friendliness:** Personal credit has witnessed growth with the easy availability of credit and decreasing interest rates. The attitude of the Indian customers about credit has changed radically. The lending boom has led to an increase in spending on homes and consumer durables. Through approving and increasing the number of electronic data converter machines deployed at retail outlets, credit and debit cards would offer structured retail additional financial boost.

**Growing consciousness of Indian consumers:** As a result of the country's growing literacy, access to the west, satellite television, international media and newspapers, Indians are seeing a significant increase in consumer awareness over the years. As for the quality of the products/services, more and more customers are being cautious today (Table 1).

**Table 1:** Key players in the industry and their market share.

| Retailer | Area (Million Sq.Ft.) | No. of stores | Average area per store (sq.ft) |
|---|---|---|---|
| Future Retail | 16.12 | 1,514 | 10,655 |
| Avenue Supermarts Ltd. | 5.92 | 175 | 33,523 |
| Trent Ltd | NA* | 268 | NA* |
| V-Mart | 1.76 | 216 | 8,364 |
| V2 Retail | 0.81 | 79 | 11,756 |
| Shoppers Stop | 4.35 | 296 | 14.534 |
| ABRL | NA* | 548 | NA* |
| ABFRL | 7.67 | 2,725 | 2,732 |
| Reliance Retail | 22.1 | 10,516 | 2,131 |
| Spencer Retail | 1.46 | 180 | 8,967 |

## Major investment in Indian retail sector

**Government initiatives:** The government of India plays a vital role in making the Indian retail industry the most enterprising for Indian Non-Residents (NRIS) and Indian Citizen (PIOS). Some of the major steps taken by the government are as follows.

Department of Industrial Policy and Promotion (DIPP) has eased the procurement conditions for retailers around the world to build shops in India, while IKEA is pushing for mandatory criteria to relax.

The union's ministry of finance provided relief to the software industry estimated at Rs 18,000 crores (US $3.25 billion) by implementing a multi-level Source Deduction Tax (TDS) system on distributors of one TDS scheme. This will be removed from the very first distributor one who orders a branded product directly from that manufacturer [8].

The federation welcomed the announced new FDI from the Indian government in the retail sector. In addition, the government has also opened up the aviation sector and developed 4 disinvestment PSUs (Table 2).

**Table 2:** Top 14 retail companies listed in BSE chosen for the study.

| Company name | Market cap |
|---|---|
| Avenue Supermarket | 93,150.85 |
| Future Retail | 19,272.14 |
| Aditya Birla F | 15,462.31 |
| Trent | 14,721.63 |
| Future Life | 8,096.54 |
| V-mart Retail | 3,362.83 |
| Shoppers Stop | 3,326.02 |
| Vaibhav Global | 2,734.84 |
| Kewal Kiran | 1,230.04 |
| Future Ent | 1,046.97 |
| V2 Retail | 430.18 |
| Cantabil Retail | 363.7 |
| Intrasoft Tech | 108.65 |
| Provogue | 20.77 |

# DISCUSSION

Paul and Mitra examined the relationship between business profitability and management of working capital of Indian steel industry. Data regression is used to check the impact and the results show that the impact of working capital management on profitability of the firms of Indian steel industry has been significant [9].

The study took into account independent variables which acted as a proxy for working capital variables such as current ratio, quick ratio, debtors turnover. Return on total assets is a proxy industry's profitability and serves as a dependent variable for establishing relationships between working capital management and steel industry profitability in India.

Nazir and Afza analyzed the performance for 204 Pakistani textile companies by analyzing the relationship between business profitability and management of working capital. Using the regression model, the study finds a negative relationship between the investment and funding strategies of working capital and the firm’s profitability factors [10].

Another study on the effect of relationship between business profitability and management of working capital for Hindalco, Singh and Pandey used regression analysis for a 17 year period. The study's regression analysis reveals that working capital to total assets ratio, receivables turnover ratio and liquid ratios significantly affect the Hindalco Industries Limited’s profitability.

A sample of 131 companies listed on the Athens Stock Exchange (ASE) was investigated for a period 2001-2004. The study showed statistically significant link between profitability and working capital. The cash conversion cycle and its components revealed that profitability calculated by gross operating profit, has statistical significance between them. Tryfonidis commented that by precisely managing the cash conversion cycle and bringing accounts receivable ratio to an optimum level, companies will be able to generate more income for their companies [11]. For a period of 3 years from 2005 to 2007, a study of 88 American companies traded on the New York stock exchange was chosen to assess the relationship between business profitability and management of working capital.

Gill, Biger and Mathur suggest that by accurately managing the cash conversion cycle and keeping accounts receivable to an optimum level, managers can generate profits for their businesses. The results showed that that there is significant relation between the cash conversion cycle and profitability determined by the gross operating profit [12].

The effect of Nigerian companies working capital policies on profitability was studied by Onwumere, Ibe and Ugbam. The study revealed that Nigerian firms' conservative financing policies have a small, non-significant impact on profitability while favorable investment working capital policies have a positive effect on productivity.

13 Saudi cement manufacturing companies listed on the Saudi stock exchange (Tadawul) were reviewed by Ahmad Aref Almazari in order to determine the relationship between the management of working capital and the profitability of the businesses. Saudi cement industry's current ratio is the most important liquidity element that impacts profitability according to the results [13].

## CONCLUSION

This research was conducted with the two important objectives of analyzing the relationship between working capital metrics on the profitability of listed Indian retail companies and their effect on profitability.

Descriptive analysis, correlation analysis and multi-regression followed by multi-collinearity analysis, unit-root test and normality testing was conducted to evaluate the relationship between independent working capital variables (current ratio, quick ratio, debtor turnover and inventory turnover ratio) and contingent productivity variable (return of assets).

The findings suggested a diverse output among retail industry in India with respect to profitability and measure in the management of working capital. From the analysis of the study it is concluded that the retail industry will pay full attention to all factors in the management of working capital.

Upon performing the study, the findings suggest a relationship exists between working capital and profitability.

A poor negative correlation persists between the profitability factors, the ROA and the working capital ratio DTR according to the correlation analysis. ROA and the working capital indicators CR, QR and ITR show a positive relationship.

The study of the regression was used to prove a significant impact on productivity. The results show that CR and DTR have a substantial impact on profitability whilst QR and ITR have no significant impact on ROA.

The company's ability to survive without disruption over a longer period of time will rely on how companies handle working capital management as a shortage of it can lead to a lack of liquidity which ultimately leads to loss of revenue, earnings and goodwill.

## RECOMMENDATION

Having a significant impact on the profitability of the retail firms in India, this research recommends for the retail companies in India that it should pay more attention on the liquidity ratio (*i.e.,* current ratio) and clearing its dues from debtors (debtor turnover ratio) with faster recovery.

The quick ratio and inventory turnover ratios don't show significant relationship with profit. As a result, the companies should increase its revenue by selling its products efficiently at a faster pace. Particularly, managers can implement strategies regarding the management of inventories and they could adopt new inventory management techniques like Just in Time (JIT). Companies should try to consider implementing effective working capital management policies to finance working capital needs and not to rely on traditional sources of finance such as borrowing from bank.

## FUTURE SCOPE OF STUDY

This study only considers the 7 year of data collection. This study only covers the 14 listed retail companies and covers more firms in India only. Hence, future studies could identify the real impact and relationship. Increasing the sample will result the accurate results.

Another suggestion is to study other variables including these of working capital and profitability to get accurate results.

## REFERENCES

1. Dong HP, Su JT. The relationship between working capital management and profitability: A Vietnam case. Int Res J Fin Econ. 2010;49(1):59-67.
2. Ahangar N. Is the relationship between working capital management and firm profitability non-linear in Indian SMEs. Small Enterp Res. 2021;28(1):23-35.
3. Makori DM, Jagongo A. Working capital management and firm profitability: Empirical evidence from manufacturing and construction firms listed on Nairobi securities exchange, Kenya. Int Accoun Tax. 2013;1(1):1-4.
4. Yuliani Y, Karim S, Umrie RH, Bakar SW, Robiyanto R. Moderating effect of business environment to working capital and profitability in Indonesia. Contad Adm. 2021;66(2):7.
5. Charitou MS, Elfani M, Lois P. The effect of working capital management on firm's profitability: Empirical evidence from an emerging market. J Bus Econ Res. 2016;14(3).
6. Tauringana V, Adjapong Afrifa G. The relative importance of working capital management and its components to SMEs' profitability. J Small Bus Enterp Dev. 2013;20(3):453-469.
7. Panda AK, Nanda S, Panda P. Working capital management, macroeconomic impacts and firm profitability: Evidence from Indian SMEs. Bus Perspect Res. 2021;9(1):144-158.
8. Pais MA, Gama PM. Working capital management and SMEs profitability: Portuguese evidence. Int J Manag Financ. 2015;11(3): 341-358.
9. Attari MA, Raza K. The optimal relationship of cash conversion cycle with firm size and profitability. Int J Acad Res Bus Soc Sci. 2012;2(4):189.

10. Louw E, Hall JH, Pradhan RP. The relationship between working capital management and profitability: Evidence from South African retail and construction firms. Global Bus Rev. 2022;23(2):313-333.

11. Ray S. Evaluating the impact of working capital management components on corporate profitability: Evidence from Indian manufacturing firms. Int J Econ Pract Theor. 2012;2(3):127-136.

12. Shan LH, Onn YT, Yee LS, Chuan SK. Working capital management effect on the performance of wholesale and property industry in Malaysia. J Econ Behav Stud. 2015;7(5):19-28.

13. Sharma AK, Kumar S. Effect of working capital management on firm profitability: Empirical evidence from India. India Q. 2010;66(2):133-149.