S M A R T J o u r n a l o f B u s i n e s s M a n a g e m e n t S t u d i e s
(A Professional, Refereed, International and Indexed Journal)
www.smartjournalbms.org

DOI : 10.34293/2321-2012.2026.0001.4

OPTIMAL LEVEL OF WORKING CAPITAL MANAGEMENT IN INDIAN FMCG MANUFACTURING SECTOR : POST - GST ERA

Karanam Kavitha*
Assistant Professor, Faculty of Management and Commerce,
Ramaiah University of Applied Science, Bengaluru, 560054
karanam.kavitha@gmail.com

and

Chandra Sen Mazumdar
Associate Professor, Faculty of Management and Commerce,
Ramaiah University of Applied Science, Bengaluru, 560054
chandrasen.ms.mc@msruas.ac.in

Abstract

Goods and Services Tax (GST) has impacted the changing dimensions of the working capital components, in the Fast-Moving Consumer Goods (FMCG) sector, in India. This study was envisioned, to assess the changes in different components of working capital, which is vital to obtain optimum returns. This study opted for an exploratory research study, with quantitative data collected from 63 FMCG manufacturing firms, listed on the BSE, spanning 10 years from 2012 to 2021. Pooled OLS regression, ANOVA, Descriptive statistics, Correlation, and student's t-test were employed, to analyse the impact of the introduction of GST (Dummy variable; '0' for Pre-GST and '1' for Post-GST) on working capital and profitability. The results revealed that current assets and liabilities did change after the introduction of GST. The study showed that a small decrease, even a negative Cash Conversion Cycle (CCC), would lead to a rise in profitability for the company, during the post-GST period. Firm size and leverage did exert significant impact on cash and inventory management, thus affecting the overall working capital and Cash Conversion Cycle of FMCG companies. Hence it was concluded that GST did exert substantial influence on working capital and profitability, affecting all business operations. The introduction of GST has enhanced the profitability positions of large firms, enjoying an edge on investment in current assets. Hence there is a need for well-organized and effective working capital management policies and practices, to improve profitability and liquidity positions.

Keywords: *Goods and Services Tax, Optimal Working Capital Management, Cash Conversion Cycle, FMCG Manufacturing Firms, Pre-GST and Post-GST Period.*

JEL Code : H2, H20, H21 and H25

Paper Received : *16.04.2025* ***Revised :*** *18.08.2025* ***Accepted :*** *15.09.2025*

*** Corresponding Author**

1. Introduction

A firm must maintain an optimal level of working capital, to ensure smooth operations and enhance profitability. Working Capital Management (WCM) addresses the daily cash needs of firms and it varies according to the specific nature of each business. Care must be taken to avoid two critical extremes: excessive working capital and inadequate working capital. Striking the right balance is crucial, as excessive working capital can weaken a firm's profitability whereas inadequate working capital poses a risk to its solvency. To maximize business performance, WCM embraces a short-term financial decision-making process, with the focus on achieving the optimal level of working capital, to increase both profitability and liquidity.

Optimal working capital is indispensable for an organization, to enhance its value. To boost the optimal working capital position, the business adopts a liberal trade credit policy and better inventory management, which leads to higher sales. Better inventory diminishes the risk of stock-out. Trade credit can boost sales, by enabling customers to evaluate product quality before making a payment, as observed by **Long, Malitz, and Ravid (1993) and Deloof and Jegers (1996).** However, the downside of offering trade credit and maintaining an optimal level of inventories is a challenge as the cash is tied up in working capital.

A key indicator of working capital management is the 'Cash Conversion Cycle (CCC)', which measures the time gap between the spending on raw materials and the recovery of cash through the sales of finished products. Longer time to recover cash implies a greater investment in working capital assets. While some studies, such as those by **Shin and Soenen in 1998**, suggest that a longer CCC might surge profitability due to higher sales, the general consensus in the literature indicates that a shorter CCC is more advantageous, for improving a firm's profitability and liquidity.

The Gross Working Capital, in the form of excessive current assets, has an adverse effect on a firm's profitability while a low investment in current assets leads to a lower level of liquidity and stock outs, subsequently posing a challenge to maintaining smooth business operations **(Van Horne and Wachowicz, 2004)**. The traditional concept of working capital, denoted as Net Working Capital, is the distinction between current assets and current liabilities. In other words, working capital management is a challenge to managing and controlling investment in current assets and liabilities, to exploit profitability and maintain an appropriate liquidity position in the business. Liquidity and profitability are two important aspects of corporate finance **(Vataliya, 2009)**. A firm should balance its profitability and liquidity objectives, with flexible working capital strategies. One objective should not be at the cost of another objective. If a firm cares about liquidity, it can survive for a longer period. If a firm cares about profitability, it does not have to face the problem of insolvency or bankruptcy. In other words, profitability and liquidity have to be balanced for the survival of the business.

The Goods and Services Tax (GST), which subsumed the majority of indirect tax, is a vital economic reform that changed the landscape of the indirect tax structure in India. The impact of GST is noteworthy on all trade activities, including stock transfers between the two branches of a company and the distribution of samples. The company can claim Input Tax Credit (ITC) on the tax paid only when the company finally sells the goods, which could take months and during this period, cash deficiency will negatively affect the organization.

The present tax regime subsumes all the major indirect taxes (Excise/CST/ Octroi/Entry taxes), that have relieved companies from having multiple storage places and hence a single, strategized and centralized supply chain management and logistics are adequate to strengthen the overall working capital management. The current indirect taxation (GST) structure allows the organization to have fewer/minimal storage/warehouse points, leading to better supply chain management and efficient working capital management.

The introduction of GST has brought about changes in business operations, leading to short and long-term implications, that are visible on a day-to-day basis. Business entities in India face new issues and challenges, with the introduction of the GST. A significant change can be observed in working capital requirements and the need for a change in working capital policy, to enhance profitability and liquidity.

2. Literature Review

Maintaining an effective working capital position is crucial for a firm's financial well-being, as it involves the strategic control of current assets and current liabilities to ensure smooth operations. By optimizing working capital, a business can significantly enhance its capacity to maximize returns on its assets while minimizing the costs associated with its liabilities. Over the past two decades, research on the association between working capital and a firm's profitability has expanded significantly but the findings, across various studies, remain inconsistent, often presenting a complex and ambiguous picture. Notably, several scholarly investigations, including the work of **Deloof (2003),** have highlighted inverse association between effective working capital and a firm's profitability, suggesting that poor management in this area can detrimentally affect a firm's financial performance.

Previous studies have shown a statistically significant relationship between profitability and the cash conversion cycle (**Lazaridis and Tryfonidis 2006, A K Sharma, 2010).** However, **Gill et al. (2010)** found no relationship between the Accounts Payable Period and Profitability. **Mathuva (2010),** found negative association between ACP and Profitability, suggesting that by delayed payments to creditors a firm can increase profitability. At the same time, he observed positive association between inventory conversion and profitability, indicating that high stock levels will reduce the cost of likely disturbances in production activities, thus leading to high profits.

Bhaskar Bagchi et al. (2012) demonstrated that size (log of sales) did not make any difference in predicting profitability of FMCG firms. The size, measured as a log of sales of the firm, is a moderating variable to find the association between working capital and profitability. **Kaddumi (2012)** reported negative correlation between CCC and profitability. This observation is statistically significant and indicates that a condensed CCC could harm profitability.

Pestonji et al. (2019) explored the effect of the working capital outlay and financing policies of 68 companies, in the production sector, listed on the stock exchange of Thailand, for the period between 2012 to 2016. The author established vital and positive relationship between working capital investment policy and profitability and also significant relationship with financing policy. In other words, the firm, which followed a conservative working capital policy, would enhance profitability.

Chaklader et al. (2013) reported that profitability reflects a firm's working capital policy. **Nobanee (2014)** examined the Cash Conversion Cycle (CCC), which is a measure

of working capital management, to determine the difficulty of financing inventory, receivables and payables. The study concluded that a reduced CCC increased the firm's profitability.

Tauringana (2015) established that Small, and Medium Enterprises (SMEs) should prioritize working capital management, with the focus on accounts receivables and accounts payables, to improve profitability. **Sadiq (2017)** asserted that firms have failed in business and slipped into bankruptcy due to inefficient Working Capital Management. Many business failures are the consequence of inefficient planning and financial control. **Elbadry (2018)** studied the impact of working capital management on SMEs' profitability and capital structure.

Thumma et al. (2020) established that the sample's annual average returns differed significantly during the pre and post-GST periods. In this study, several statistically significant models were developed. In other words, the majority of MSMEs were negatively influenced by the NSE index, during the post-GST period.

Many studies are not available on working capital management, during the post-GST period. Previous studies have analyzed profitability and working capital, without considering indirect taxes. Previous studies on GST covered broad areas of GST and its effect on consumers, traders, etc. This has led us to exploratory, quantitative research on the impact of working capital management on the profitability of FMCG companies. Hence this study explores the changes in working capital components, that necessitated the importance of working capital management for better financial management decisions. In other words, this study proposed to determine the changes in the working capital management, during pre and post-GST implementation.

3. Statement of the Problem

In 2017, the Government introduced GST as a new tax reform, to mitigate the cascading effect of indirect tax on consumers and suppliers, in supply chain management. Under the GST regime, FMCG products were subjected to lower tax rates (12-18%) compared to the previous tax system, where the same products incurred taxes at a rate of 22-25%. These reduced GST rates have contributed to a rise in the profitability of FMCG companies. Anti-profiteering laws and other stringent enforcement of GST procedures, have shown a mixed effect on the profitability of FMCG companies.

4. Need for the Study

The introduction of GST has also affected the transfer of stock or inventory between branches of the same company, as well as cash receivables and payables, consequently impacting the overall working capital position of the firm. This study proposes to explore and establish the relationship between working capital, profitability and liquidity, in the context of GST.

5. Objectives of the Study

The present study explored the relationship between working capital and the profitability of FMCG companies, after the introduction of GST. To establish the research question, the following objectives were formulated.

- To assess the current asset position in the post-GST period
- To assess the effect of GST on working capital and the profitability of the firm
- To assess the relationship of firm size with the profitability of FMCG companies

6. Hypotheses of the Study

Goods and Services Tax, a noteworthy reform, has changed the day-to-day activities of the business. The time gap between the payment of GST and its recovery in the form of Input Tax Credit (ITC), is the significant time that ties up the working capital of the business. This study was designed to assess the impact of GST, by testing the following hypotheses:

H_{a1}: There is significant change in Current Assets after the implementation of the GST

H_{a2}: There is change in the Net Trade Cycle after the implementation of GST

H_{a3}: GST exerts significant impact on the Working Capital Management of FMCG sector

7. Research Methodology

7.1 Sample Selection

The current study explored the relationship between working capital and profitability, prior to and following the implementation of the Goods and Services Tax (GST). Employing a purposive sampling technique, the research analysed the financial statements of 63 FMCG companies, listed on the Bombay Stock Exchange, over a ten-year period, from 2012 to 2021.

7.2 Sources of Data

Secondary data of 63 FMCG listed companies, spanning 10 years from 2012 to 2021, were collected from the Capitaline Database.

7.3 Period of study

A cross-sectional time series panel dataset of 630 firm-year data was used in the study. Major indirect tax reforms, in the form of GST, were introduced in 2017 and they affected the Indian economy in a big way. The study examined the effect of GST on FMCG sector before it was affected by COVID pandemic, which had influenced the FMCG market. Data were classified as pre-GST (2012 to 2017) and post-GST (2018 to 2021) period, for enabling a detailed analysis.

7.4 Tools used for Study

The analysis sought to identify the optimum level of working capital, significantly affecting profitability, during the pre-GST and post-GST periods. Statistical analysis, including descriptive statistics, correlation, ANOVA and regression analysis, was conducted, using SPSS 25. Further, the influence of GST timeline on working capital was explored through the application of the t-test, utilizing the dummy variable '0' for 'the Pre-GST period', covering 2012 to 2017, and '1' for 'the Post-GST Period', spanning 2018 to 2021. This study included dependent variable, ROA, independent variable, Cash Conversion Cycle (CCC) and moderating variables such as SIZE of the firm (log of sales), Current Ratio (CR), GROWTH of the firm (current year sales-base year sales/base year sales *100), and LEVERAGE (debt-equity ratio).

8. Data Analysis

This section presents a detailed analysis of time series panel data, pooled from the financial statements of the 63 FMCG companies. The statistical analysis of 630 firm-year panel data was presented under two timelines: the pre-GST period, starting from 2012 to 2017, and the post-GST period, ranging from 2018 to 2021. Working capital management is imperative for the dynamic financial decisions of the organization. An optimal level of working capital and suitable policy should exist for the smooth operations of the organization. A detailed analysis of data is presented in the following subsections.

8.1 Current Asset Position in the Post-GST Period

Table 1 displays a low degree of positive correlation between CCC and ROA, which

indicates that CCC did not significantly predict profitability during the pre-GST period. Current Ratio, Growth, Size, and Leverage have shown significant negative correlation with profitability.

A negative Current Ratio (CR) indicates that the firm maintains less investment in current assets and depends more on current liabilities for day-to-day operations, leading to increased profitability. A negative leverage (debt-equity) ratio indicates that employing more internal funds and less dependence on external funds, will increase the profitability of FMCG companies. A low debt-equity ratio indicates that the company is following a conservative financing policy, indicating that the company depends less on borrowed funds. **Table 2** shows contradicting results for the post-GST period. CCC turned negative and non-significant, indicating that the shorter the time to convert sales and stock into cash, better the profits. The CCC recorded a low degree of varied relationship with other moderating variables, implying that the firm's efficiency in working capital management for the post-GST period, reflected an increase in profitability.

The t-test was used to compare the means of the two groups, i.e, before and after the introduction of GST in India. The test was conducted by employing dummy variable '0' for 'Pre-GST Period', spanning from 2012 to 2017 and '1' for 'Post-GST Period, from 2018 to 2021. An independent t-test was employed to test the hypothesis and determine the effect of GST on Current Assets in the pre and post-GST periods. The mean value of current assets, as per **Table 9,** for the pre-GST period was 1106 and for the post-GST period, it was 1629, with p-value being less than 0.05, indicating that FMCG companies increased their current asset position during the post-GST period, to manage working capital requirements, as GST would affect their stock movement, credit sales and cash position.

Hence the alternate hypothesis (H_{a1}) was accepted because the optimal level of Current Assets (Gross Working Capital) enhanced the profitability of FMCG companies, in the post-GST period. The results revealed that FMCG companies require an effective working capital policy to manage their stock, receivables and deferral payables, which would increase the profitability and liquidity. This was observed with the general theory of the application of GST on stock when transferred from one branch to another of the same company. Until the last branch sells stock, the firm will not be able to realize the Input Tax Credit (ITC). During this process, cash and stock are locked for some time, thus affecting the working capital management.

8.2 Effect of GST on Working Capital and Profitability of the Firm

The reduction in GST rates for FMCG products enabled companies to increase profits and bring the necessary policy changes to share the excess profits with prospective consumers. Reduced GST rates on FMCG products caused prices to fall, benefiting the large consumer base.

According to ANOVA statistics, shown in **Table 3,** F value of 2.21 (p=0.05), indicated less evidence to prove the existence of a difference between the means of the variables was significant for the pre-GST period. **Table 4** shows the F value to be 22.28 ($p<0.00$), which indicated greater evidence that there was difference in the group means of the variables, for the post-GST period. In other words, during the post-GST period, the variables independently predicted ROA. The results were statistically significant, at the 1% level, in the post-GST period. The F value at 22.28, was significant at 0.000, indicating that the independent variable, i.e., cash conversion cycle, significantly affected the dependent variable, i.e, Return on Asset

(ROA) in the post-GST period.

According to **Table 6**, the regression coefficients revealed positive association between CCC and ROA, but it was not significant during the pre-GST period. Adjusted R^2 at 0.01 indicated that the model failed to predict the profitability in the pre-GST period (**Table 5**). The regression model was appropriate for the post-GST period, predicting the profitability, with 30% accuracy (**Table 7**). In other words, the regression model was the best fit for the post-GST period, rather than for the pre-GST period. **Table 8** demonstrates that CCC was negatively associated with ROA, indicating that shorter or negative CCC increased profitability and the results concurred with the study conducted by **Kaddumi (2012).** CCC showed statistically significant results, with a p-value of 0.097.

The Net Trade Cycle (NTC) was treated as a proxy for working capital and it was represented as the Cash Conversion Cycle (CCC). The Net Trade Cycle is calculated by adding the average inventory and average receivables and subtracting the average payables. The t-test statistic results, displayed in **Table 10,** revealed that the calculated t value was greater than the t critical tail and slightly less than the two-tailed test value and hence the null hypothesis was rejected and H_{a2} was accepted because the Net Trade Cycle changed after the implementation of GST. An increase in average payables was observed while there was a decrease in inventory levels and debtors receivables, bringing the Net Trade Cycle to a lower or negative value. A lower inventory turnover, observed in the post-GST period, is an indication that the firm should sell its stock quickly to realize the cash from operations, which is vital for managing the working capital.

Net Working Capital is another variable, used in observing changes in the working capital. The Net Working Capital is calculated as the difference between Current Assets and Current Liabilities. The test results, showing a p-value of 0.02, was significant at the 5% level, in the one-tailed test. The average Net Working Capital, during the post-GST period, was 559.38, as mentioned in **Table 10**. A higher mean indicates that FMCG companies should invest more in current assets. It is observed that the Net Working Capital reflected the changes similar to those of Net Trade Cycle after the implementation of GST.

Table 11 shows descriptive statistics of the data, representing Indian FMCG companies, for the pre- and post-GST periods. The results revealed a small increase in the average profitability of the firm, in the post-GST period, from 14.08% to 14.43%. The average Cash Conversion Cycle dropped from 29.49 days to -3.02 days, indicating that companies would prefer to delay their payments to creditors and realize cash through quick turnover of inventory into sales. Similar results were observed by **Karanam et.al (2024).** A reduced Current Ratio is an indication of an extended payment period, with less dependence on current assets. An ideal Current Ratio of 2.57, during the post-GST period, is an indication of efficient working capital management in the post-GST period. A decreased growth rate, in the post-GST period, indicates challenges faced by the business in selling and distributing products during the post-GST period, as the prices of goods were reduced to meet the requirements of anti-profiteering laws. Further, the results revealed that a leveraged firm has a better chance of increasing profit, during the post-GST period.

8.3 Relationship of firm size with the profitability of FMCG companies

The negative correlation between size and

ROA, at -0.073 (**Table 1**), indicates that if the firm size reduces, there is a possibility of increased profitability during the pre-GST period. In other words, a smaller firm can make more profits. Further, firm size was positively correlated with ROA (**Table 2**), which was significant at 1% level of significance and demonstrated that larger firms can make higher profits, during the post-GST period.

The negative association (**Table 6**) with firm size, in the pre-GST period, implies that by reducing the size of the firm, there is a possibility of increasing profitability. Small firms experienced greater chance of enhancing profitability, as proved in the pre-GST period. But the firm size reported significant positive association with profitability (**Table 8**), indicating that larger firms could enjoy better opportunities to enhance profitability, during the post-GST period, which contradicts the results shown during the pre-GST period. Similar observation was made by **Ambadapudi et.al. (2024),** as larger firms reported the advantage of borrowing funds from external sources, assuring efficient and effective working capital management, during the post-GST period. In short, the firm size will play an important role, in predicting the profitability of FMCG companies, in the post-GST period. The Durbin-Watson test results of 1.970 and 2.05 further confirmed the absence of autocorrelation in the dataset. Variance Inflation Factor (VIF) was less than 1.5, indicating the absence of multicollinearity among the independent variables.

9. Findings of the study

It is evident from the present study that the implementation of GST has demonstrated a mixed effect on the working capital policy and profitability of FMCG companies in India. It is observed that the working capital management practices, during the post-GST period, has reduced the CCC and Current Ratio. A negative cash conversion cycle indicates that a small decrease in the cash conversion cycle leads to an increase in profitability. These results are further corroborated by earlier studies by **Deloof (2003)**, who concludes that there is a negative relationship between the cash conversion cycle and the profitability of the firm. A negative relationship is proved by **Samiloglu and Demirgunes (2008), Lazaridis and Tryfonidis (2006), Zariyawati et al. (2009), and Raheman and Nasr (2007),** concluding that the increase or decrease in the cash conversion period significantly affects the profitability of the firm. A shorter CCC is advisable for maintaining profitability.

10. Suggestions

An optimal level of working capital is required for smooth operations, enhanced profitability, and liquidity position of these FMCG manufacturing companies. The company should bring about changes in working capital policy, for better management of its current assets and liabilities. Since inventory transfers between branches of the company attract GST, until the last branch sells stock, the firm will not be able to realize cash in the form of Input Tax Credit. During this process, cash and stock are locked for some time, affecting working capital management requirements. The size of the FMCG Company will decide the working capital requirements. The FMCG sector, dealing with daily consumables, requires more investments in the current assets and the benefit of deferral payments to creditors.

11. Conclusion

Introduction of GST has enhanced the profitability positions of large firms, which enjoy an edge on investment in current assets. The study revealed positive correlation of CCC with ROA, during the pre-GST period, indicating that an increase in the cash conversion cycle would

increase the profitability, which contradicts the previous literature and theories of working capital. However, a negative correlation between CCC and ROA, during the post-GST period, indicates better management of current assets and liabilities, leading to efficient utilization of optimal working capital. The study concludes that the implementation of GST affects the working capital components and policies of a firm. Hence there is a need for efficient and effective working capital management practices to enhance profitability and liquidity positions.

12. Limitations of the study

The study focused on Indian FMCG companies, listed on the BSE, which allowed only a targeted analysis. It is important to note that any inconsistencies in the secondary data, could potentially influence the statistical results, highlighting the need for careful consideration in data accuracy.

13. Scope for further research

The authors propose conducting analogous research in various manufacturing sectors, including pharmaceuticals, durable and nondurable consumer goods, cement, and automotive industries. The focus would be on the impact of the COVID-19 pandemic and Goods and Services Tax (GST), on the fast-moving consumer goods (FMCG) sector.

14. References

Aggarwal, Agrim, and Rahul Chaudhary (2015). Effect of Working Capital Management on the Profitability of Indian Firms, *IOSR Journal of Business and Management 17*, 34–43. https://doi.org/10.9790/487X-17843543.

Ambadapudi, H. and Matai, R. (2024). Benefits of a collaborative liquidity management approach: a simulation study for the Indian auto value chain, *Journal of Modelling in Management*, *Vol. 19* No. 6, pp. 1795-1826. https://doi.org/10.1108/JM2-12-2023-0283

Bagchi, Bhaskar, Jayanta Chakrabarti, and Piyal Basu Roy (2012). Influence of Working Capital Management on Profitability: A Study on Indian FMCG Companies. *International Journal of Business and Management 7 (22)*. https://doi.org/10.5539/ijbm.v7n22p1.

Baños-Caballero, Sonia, Pedro J García-Teruel, Pedro Martínez-Solano, S Baños-Caballero, P J García-Teruel, and • P Martínez-Solano. (2012). How Does Working Capital Management Affect the Profitability of Spanish SMEs? *Source: Small Business Economics 39 (2):* 517–29. https://doi.org/10.1007/sl.

Chosita Pestonji and Sareeya Wichitsathian (2019) The Impacts of Working Capital Policy on Firms' Performances: An Empirical Study on Thai Listed Companies in Production Sector. *Asia-Pacific Contemporary Finance and Development.* ISBN:978-1-78973-273-3 DOI: https://doi.org/10.1108/S1571-038620190000026003

Deloof, M. (2003). Does Working Capital Management Affect the Profitability of Belgian Firms? *Journal of Business Finance & Accounting, 30(3)* & (4), April/May 2003, 0306-686X

Elbadry, Ahmed. (2018) The Determinants of Working Capital Management in the Egyptian SMEs. *Accounting and Finance Research* 7 (2): 155. https://doi.org/10.5430/afr.v7n2p155.

Gill, Amarjit, Nahum Biger, and Neil Mathur (2010) The Relationship Between Working Capital Management And Profitability: Evidence From The United States. *Business and Economics Journal. Vol. 2010*. http://astonjournals.com/bej.

James Sunday, K. (2011). Effective Working Capital Management in Small and Medium Scale Enterprises (SMEs). *International*

Journal of Business and Management, *6*(9). https://doi.org/10.5539/ijbm.v6n9p271

Kaddumi, T. A., & Ramadan, I. Z. (2012) Profitability and Working Capital Management: The Jordanian Case. *International Journal of Economics and Finance*, *4*(4). https://doi.org/10.5539/ijef.v4n4p217

Karanam, K & Mazumdar, C.S. (2024) Effect of GST on WCM and Profitability of FMCG sector in India, *SMART Journal of Business Management Studies, 20(2),* pp. 23-31.

Khatun, R. (2013). Relationship of Working Capital Management with FMCG Sector Firm's Profitability. https://www.researchgate.net/publication/267871139

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny (1997), Legal Determinants of External Finance, *Journal of Finance, Vol. 52*, pp. 1131–50.

Mathuva, David M. (2010). The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms. *Research Journal of Business Management 4 (1)*: 1–11. https://doi.org/10.3923/rjbm.2010.1.11.

Nobanee, H., & al Hajjar, M. (2011) Optimizing Working Capital Management. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1528894

Sadiq, R. (2017) Impact of Working Capital Management on Small and Medium Enterprises Performance in Nigeria. https://doi.org/10.4172/2223-5833.1000285

Sharma, A. K., & Kumar, S. (2011). Effect of working capital management on firm profitability: Empirical evidence from India. *Global Business Review*, *12(1),* 159–173. https://doi.org/10.1177/097215091001200110

Tauringana, V., & AdjapongAfrifa, G. (2013). The relative importance of working capital management and its components to SMEs' profitability. *Journal of Small Business and Enterprise Development, 20(3),* 453–469. https://doi.org/10.1108/JSBED-12-2011-0029

Table 1: Karl Pearson's Correlation Analysis for the Pre-GST period (2012 to 2017)

		ROA	CCC	CR	Growth	Size	LEVERAGE
Karl Pearson's Correlation	ROA	1.00	0.04	-0.07	-0.08	-0.07	-0.10
	CCC	0.04	1.00	0.01	-0.002	0.01	0.00
	CR	-0.07*	0.01	1.00	-0.003	0.06	-0.04
	Growth	-0.08*	-0.002	-0.003	1.00	-0.008	-0.03
	Size	-0.07*	0.01	0.06	-0.008	1.00	0.006
	LEVERAGE	-0.10**	0.003	-0.04	-0.03	0.006	1.00

*p<0.1 ** p<0.05

Source: Statistical analysis in SPSS 25 version

Table-2: Karl Pearson's Correlation Analysis for the Post–GST period (2018 to 2021)

		ROA	CCC	CR	Growth	Size	LEVERAGE
Karl Pearson's Correlation	ROA	1.00	-0.001	-0.18	0.002	0.47	-0.08
	CCC	-0.001	1.00	-0.27	0.02	0.17	0.04
	CR	-0.18***	-0.27	1.00	-0.07	-0.40	-0.06
	Growth	0.002	0.02	-0.07	1.00	-0.005	-0.02
	Size	0.47***	0.17	-0.40	-0.005	1.00	0.37
	LEVERAGE	-0.08*	0.04	-0.06	-0.02	0.37	1.00

*p<0.1; ** p<0.05; ***p<0.01

Source: Statistical analysis in SPSS 25 version

Table 3: Analysis of Variance for the Pre-GST period (2012 to 2017)

		'Sum of Squares'	Df	'Mean Square'	F	Sig.
Model 1	Regression	1373	5	274	2.21	0.05
	Residual	45714	368	124		
	Total	47087	373			

Source: Statistical analysis in SPSS 25 version

Table 4: Analysis of Variance for the Post –GST period (2018 to 2021)

		'Sum of Squares'	Df	'Mean Square'	F	Sig.
Model 1	Regression	11918	5	2383	22.28	0.00
	Residual	26311	246	106		
	Total	38229	251			

Source: Statistical analysis in SPSS 25

Table 5: Model Summary for the Pre-GST period (2012 to 2017)

Model	R	R Square	Adj. R Square	SE	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.17	0.029	0.01	11.14	0.029	2.21	5	368	0.05	1.97

Source: Statistical analysis in SPSS 25 version

Table-6: Regression Coefficients for the Pre-GST period (2012 to 2017)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	15.01	0.66		22.52	0.00		
	CCC	0.01	0.00	0.04	0.85	0.39	1.00	1.00
	CR	-0.06	0.04	-0.06	-1.33	0.18	0.99	1.00
	Growth	-0.002	0.00	-0.08	-1.66	0.09	0.99	1.00
	Size	-0.02	0.01	-0.06	-1.34	0.17	0.99	1.00
	LEVERAGE	-0.01	0.00	-0.10	-2.05	0.04	0.99	1.00

Source: Statistical analysis in SPSS 25 version

Table 7: Model Summary for the Post–GST period (2018 to 2021)

Model	R	R Square	Adj. R Square	SE	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.56	0.31	0.29	10.341	0.31	22.28	5	246	0.00	2.05

Source: Statistical analysis in SPSS 25 version

Table 8: Regression Coefficients for the Post–GST period (2018 to 2021)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-8.03	2.88		-2.78	0.00		
	CCC	-0.01	0.00	-0.09	-1.66	0.09	0.921	1.08
	CR	0.09	0.33	0.01	0.28	0.77	0.783	1.27
	Growth	0.00	0.00	0.00	0.03	0.97	0.993	1.00
	Size	8.23	0.84	0.60	9.72	0.00	0.713	1.40
	LEVERAGE	-0.05	0.00	-0.31	-5.41	0.00	0.854	1.17

Source: Statistical analysis in SPSS 25 version

Table 9: T- test analysis of Current Assets during pre and post-GST period

Items	Current Asset Pre-GST	Current Assets Post-GST
Mean	1106.148	1629.278
Variance	7139111	11805870
Observations	378	252
Hypothesized Mean Difference	0	
Df	446	
t Stat	-2.04037	
P(T<=t) two-tail	0.041901	
t Critical two-tail	1.965297	

Source: Statistical analysis using MS Excel

Table 10: T-test analysis of change in Net Trade Cycle during Pre and Post-GST period

Items	NTC (CCC) Pre-GST	NTC (CCC) Post –GST
Mean	338.21	559.38
Variance	1248556.81	2373058.95
Observations	378	252
Hypothesized Mean Difference	0	
Df	423	
t Stat	-1.961	
P(T<=t) two-tail	0.050	
t Critical two-tail	1.965	

Source: Statistical analysis using MS Excel

Table 11: Descriptive Statistics for Pre-& Post-GST Period

Descriptive Statistics				
	Pre-GST Period		Post-GST Period	
	Mean	Std. Deviation	Mean	Std. Deviation
ROA	14.08	11.24	14.43	12.34
CCC	29.49	62.71	-3.02	17.60
CR	3.30	11.98	2.57	2.22
GROWTH	50.21	58.31	14.35	94.82
SIZE	5.19	34.35	2.91	0.91
LEVERAGE	373.18	80.01	403.85	84.51

Source: Statistical analysis using MS Excel