

# IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY – A SPECIAL FOCUS ON NIFTY FMCG INDEXED COMPANIES

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## ABSTRACT

The FMCG sector in India is an exciting and significant contributor to the economy, characterized by intense competition, rapid turnover, and low margins. Working capital management (WCM) is managing liquidity, controlling costs, and improving efficiencies, with direct implications on the profitability of FMCG companies. The rationale of the study is to assess the effects of WCM on profitability within prominent Nifty-indexed FMCG companies, including Hindustan Unilever Ltd. (HUL), Godrej Consumer Products Ltd. (GCPL), Tata Consumer Products Ltd. (TCPL), Britannia Industries Ltd. (BIL), and ITC Ltd. (ITCL). The study seeks to examine the impact of WCM on profitability using Days Inventory Outstanding (DIO), Days Sales Outstanding (DSO), Days Payables Outstanding (DPO), and Operating Cash Flow Margin (OCF) margin, with Net Operating Profit After Tax (NOPAT) as the primary measure of profitability and Earnings Before interest and Tax (EBIT) margin as a control variable to account for operational performance. The application of ANOVA in the study helps to compare the operational efficiency, WCM, and profitability among selected firms, and regression analysis was used to examine the effect of WCM on profitability. The outcomes brought to the light the substantial differences in WCM among companies and had varied implications for profitability. The outcomes point to the critical role of maintaining adequate working capital to optimize financial performance so as to make a vibrant and dynamic FMCG industry.

**Keywords:** Working Capital Management, Profitability, FMCG, Nifty FMCG Index.

## 1 INTRODUCTION

WCM is an essential component of financial management that seeks to balance a firm's liquidity and profitability. An efficient WCM provides companies with the necessary funding to run their operations effectively. It is crucial in the Fast-Moving Consumer Goods (FMCG) industry, where firms experience quick inventory turnover, slim margins, and intense competition. FMCG firms rely on maintaining optimal levels of inventory, receivables, and payables to operate their businesses smoothly while protecting profitability. When working capital decisions go awry, it can lead to issues with liquidity, increase financing costs, or cause the company to miss out on growth opportunities, all of which can impact profitability.

The present study on the topic entitled "Impact of Working Capital Management on Profitability – A Special Focus on Nifty FMCG Indexed Companies" is a modest attempt to study the implications of WC components on the profitability of Nifty FMCG Indexed top FMCG companies. The research seeks to analyze net operating profit after tax and determine whether companies with better working capital are more profitable. The study also aims to provide guidelines to companies on how to manage WC effectively, enabling them to stay competitive, enhance operational performance, and maintain financial sustainability in an industry with intense competition and an ever-evolving FMCG industry.

## 2 REVIEW OF LITERATURE

Several studies have found a substantial relationship between WCM and profitability in the FMCG sector. According to Deloof (2003), a shorter cash conversion cycle leads to greater profitability due to the efficient management of receivables, inventories, and payables. Bagchi et al. (2012) examined the WCM of Indian fast-moving consumer goods (FMCG) companies, which pointed out that inventory days, accounts payable, and accounts receivable have a considerable implication on profitability measures, including return on investment (ROI) and return on total assets (ROTA). Kalsie and Arora (2016) further highlight that firms with negative cash conversion cycles (achieved through quicker sales and delayed payables) are more profitable, despite having lower liquidity ratios. The research study conducted by Agarwal (2022) reaffirms that optimizing WCM supports profitability, returns to shareholders, and long-term sustainability. This study indicates that WCM practices can significantly improve profitability in the FMCG sector and mould it into a promising one in the economy.

## 3 OBJECTIVES OF THE STUDY

Specifically, the objectives of the study are:

- to compare the WCM practices of select Nifty FMCG companies.
- to compare the operational efficiency of select Nifty FMCG companies.
- to compare the profitability performance of select Nifty FMCG companies, and
- to assess the impact of WCM on profitability in select Nifty FMCG companies.

## 4 HYPOTHESES OF THE STUDY

The Hypotheses formulated in light of the objectives of the study are:

**H<sub>01</sub>:** There is no significant variation in WCM practices among the select Nifty FMCG companies.

**H<sub>02</sub>:** There is no significant variation in operational efficiency among the select Nifty FMCG companies.

**H<sub>03</sub>:** There is no significant variation in profitability performance among the select Nifty FMCG companies.

**H<sub>04</sub>:** WCM has no significant impact on profitability in select Nifty FMCG companies.

## 5 RESEARCH METHODOLOGY

This section deals with the data, sample frame, and methods of the analysis used in the study.

### 5.1 Research Design

An analytical research design has been adopted in the study to assess the correlation between WCM and profitability in select Nifty FMCG companies, with the aim of providing meaningful insights.

### 5.2 Data Collection

The study relies on secondary data sourced from annual reports of select FMCG companies, financial statements, and data from the National Stock Exchange (NSE) website.

### 5.3 Sample selection

The present study is confined to the companies listed on the NSE FMCG index. The study uses purposive sampling to select five prominent Nifty-indexed FMCG companies for analysis.

The parameters for the Selection of the Sample are:

- The selected companies have significant market capitalization and hold substantial weight in the Nifty FMCG Index, establishing them as market leaders in the FMCG sector.
- Companies listed before 2014-15 to ensure a complete 10-year dataset.

- A diverse range of sectors, including packaged foods, beverages, and personal care, to cover all sub-sectors within the FMCG industry.
- Selection is based on companies' cumulative weight in the Nifty FMCG index (69.33 per cent).

Table 1: Leading FMCG Companies in the Nifty FMCG Index

Sl. No	Company's Name	Industry	Date of NSE Listing	Iconic products	Weight (percent)
1.	ITC Ltd.	Diversified FMCG	23-Aug-1995	Aashirvaad, Sunfeast, Bingo, Classmate	34.5
2.	Hindustan Unilever Ltd.	Diversified FMCG	06-Jul-1995	Surf Excel, Dove, Lux, Lipton	19.31
3.	Britannia Industries Ltd.	Packaged Foods	05-Nov-1998	Good day, Marie Gold, Bourbon, Milk Bikis	5.79
4.	Tata Consumer Products Ltd.	Tea & Coffee	18-Nov-1998	Tata Tea, Tata Salt, Tetley, Tata Sampann	5.59
5.	Godrej Consumer Products Ltd.	Personal Care	20-Jun-2001	Cinthol, Good Knight, Godrej No.1, Ezee	4.14
Total Weightage					69.33

Source: NSE Website

#### 5.4 Period of Study

The study spans ten financial years, from 2014-15 to 2023-24, ensuring sufficient data coverage to observe trends and patterns in WCM practices and profitability outcomes.

#### 5.5 Model Specification

The model specification for analyzing the impact of WCM on profitability is as follows:

$$\text{NOPAT} = \beta_0 + (\beta_1 \times \text{DIO}) + (\beta_2 \times \text{DSO}) + (\beta_3 \times \text{DPO}) + (\beta_4 \times \text{EBIT Margin}) + (\beta_5 \times \text{OCF Margin}) + \epsilon$$

#### 5.6 Selection of Variables

##### ✦ Dependent Variable:

- Net Operating Profit After Tax (NOPAT): The earnings derived solely from operational performance, post-tax.

##### ✦ Independent Variables:

- Days Inventory Outstanding (DIO): The average number of days it takes to sell inventory.
- Days Sales Outstanding (DSO): The average number of days it takes to collect receivables.
- Days Payables Outstanding (DPO): The average number of days it takes to pay suppliers.
- Operating Cash Flow (OCF) Margin: This metric indicates the cash generated from core operations.

##### ✦ Control Variable:

- EBIT Margin: Captures operational performance beyond WCM factors.

#### 5.7 Tools and Techniques for Analysis

The study employs various statistical methods, including bar and line charts for data visualization, as well as ANOVA (analysis of variance) to compare WCM practices, operational efficiency, and profitability across companies. Additionally, multiple regression analysis is used to examine the influence of WCM components on profitability.

#### 5.8 Limitations of the study

- The study focuses on five leading FMCG companies, which may not fully represent smaller firms or other sectors.

- Dependence on secondary data may lead to potential inaccuracies or variations in reporting.
- The model excludes external influences such as inflation, economic fluctuations, and regulatory changes, which may impact profitability.

## 6 RESULTS AND DISCUSSION

The results and discussion cover the following

- 6.1 Comparison of WCM practices,
- 6.2 Comparison of Operational Efficiency,
- 6.3 Comparison of Profitability, and
- 6.4 Analysis of the Impact of WCM on Profitability.

### 6.1 WORKING CAPITAL PRACTICES OF SELECT NIFTY FMCG COMPANIES

The key components for analyzing and assessing working capital practices of the select FMCG companies selected for the study are:

- 6.1.1 Inventory Management
- 6.1.2 Receivables Management
- 6.1.3 Payables Management
- 6.1.4 Cash Management

#### 6.1.1 Inventory Management of Select Nifty FMCG Companies

Days Inventory Outstanding (DIO) serves as a proxy measure for inventory management, reflecting the average time inventory takes to be sold in a business cycle. A rising DIO signifies increased inefficiency or slower sales, while a lower DIO may signal risks of overstocking and/or potential missed sales. Table 2 presents the DIO of selected FMCG companies in India from 2014–15 to 2023–24, depicting the yearly fluctuations in the ratio for GCPL, TCPL, BIL, HUL, and ITCL.

#### Formula:

$$\text{DIO} = \left( \frac{\text{Average Inventory}}{\text{Cost of Goods Sold (COGS)}} \right) \times 365$$

Table 2: Days Inventory Outstanding of Select Nifty FMCG Companies

Year	GCPL	TCPL	BIL	HUL	ITCL
2014-15	61.14	114.01	22.76	43.69	78
2015-16	62.12	127.45	21.71	41.45	82.4
2016-17	64.72	122.88	26.45	38.04	75.8
2017-18	66.49	104.72	30.12	38.48	100.8
2018-19	67.94	106.9	30.12	37.02	101.4
2019-20	73.83	74.22	29.55	39.25	104.2
2020-21	66.92	75.17	32.41	38.06	101.8
2021-22	62.91	81.13	39.49	40.57	91
2022-23	53.23	75.81	36.08	36.97	85.14
2023-24	48	71.42	32.61	37.44	98.19

Source: Annual reports of select FMCG companies.

Table 3: ANOVA Analysis of Inventory Management (DIO)

Source	SS	Df	MS	F	p-value
Between Year	686.60	9	76.29	0.50	0.87
Between Company	35298.65	4	8824.66	57.33	0.00
Due to Errors	5541.57	36	153.93		
Total	41526.82	49			

Source: Table 2

The data given in Table 2 demonstrates differing trends in Days Inventory Outstanding (DIO) across selected FMCG companies, with GCPL and HUL exhibiting relatively stable DIO. At the same time, TCPL and ITCL display variations, including a decline from previous years. According to Table 3, the ANOVA reveals a significant difference among the companies ( $F = 57.33$ ,  $P = 0.00$ ), indicating that inventory management practices differ substantially among firms. However, the year-to-year differences are not significant ( $F = 0.50$ ,  $\text{Sig} = 0.87$ ), suggesting it is a firm-based practice that affects DIO performance rather than a time-based factor.

### 6.1.2 Receivables Management of Select Nifty FMCG Companies

Days Sales Outstanding (DSO) serves as a proxy for receivables management. It suggests the average duration required to convert sales into cash. A high DSO signals poor receivables management and, consequently, slower cash flow, whereas a low DSO indicates a robust cash collection process and rapid turnover of receivables.

#### Formula:

$$\text{DSO} = \left( \frac{\text{Accounts Receivable}}{\text{Net Credit Sales}} \right) \times 365$$

Table 4 displays the DSO of select FMCG companies in India from 2014-15 to 2023-24, illustrating the annual variations in the ratio across GCPL, TCPL, BIL, HUL, and ITCL.

Table 4: Days Sales Outstanding of Select Nifty FMCG Companies

Year	GCPL	TCPL	BIL	HUL	ITCL
2014-15	11.09	13.60	3.13	8.95	14.2
2015-16	15.16	13.28	4	9.82	12.06
2016-17	17.7	13.67	4.96	10.57	12.92
2017-18	15.9	13.77	7.01	10.83	18.95
2018-19	19.76	17.45	10.21	13.56	24.23
2019-20	22.42	16.15	10	12.88	22.61
2020-21	16.45	14.71	6.64	10.8	15.85
2021-22	15.64	12.54	6.27	12.91	12.48
2022-23	15.94	13.53	6.36	14.56	11.23
2023-24	17.93	15.34	7.16	16.53	14.8

Source: Annual reports of select FMCG companies

Table 5: ANOVA Analysis of Receivables Management

Source	SS	Df	MS	F	p-value
Between Year	237.68	9	26.41	6.56	0.00
Between Company	668.93	4	167.23	41.54	0.00
Due to Errors	144.93	36	4.03		
Total	1051.54	49			

Source: Table 4

As shown in Table 4, there is a considerable variation in Days Sales Outstanding (DSO) among the selected FMCG companies, which include HUL and GCPL, whose DSO, or the measured time for cash realization from customers, has been gradually increasing. In comparison, BIL has maintained a lower and more stable DSO. The ANOVA analysis revealed in Table 5 states that there is a variation in the means both through the companies ( $F = 41.54$ ,  $\text{Sig} = 0.00$ ) and across the years ( $F = 6.56$ ,  $\text{Sig} = 0.00$ ), which indicates that there are differences in the management of receivables between the companies and over time.

### 6.1.3 Payables Management of Select Nifty FMCG Companies

Days payables outstanding (DPO) serves as a proxy for payables management, indicating the average duration for a business to remit payments to vendors. If a company has a low DPO, it implies a relatively faster payment to suppliers, which may foster stronger supplier relationships. On the other hand, a high DPO could mean that a business pays its suppliers more slowly, allowing it to improve cash management and liquidity. Table 6 outlines the annual performance of select FMCG companies based on DPO from 2014 to 2024.

#### Formula:

$$\text{DPO} = \left( \frac{\text{Average Accounts Payable}}{\text{Purchases}} \right) \times 365$$

Table 6: Days Payable Outstanding of Select Nifty FMCG Companies

Year	(In Days)				
	GCPL	TCPL	BIL	HUL	ITCL
2014-15	145.57	26.74	46.74	131.01	48.22
2015-16	128.83	32.15	49.98	129.11	53.86
2016-17	156.43	46.86	43.96	135.44	57.39
2017-18	214.25	49.34	47.74	146.2	71.42
2018-19	225.91	41.95	54.16	142.67	69.92
2019-20	215.4	38.05	55.2	146.66	70.38
2020-21	145.33	55.42	50.68	130.53	64.64
2021-22	82.64	92.85	49.11	124.62	57.03
2022-23	69.1	97.58	48.54	106.53	53.2
2023-24	80.69	110.2	54.7	122.5	55.81

Source: Computed from Annual reports of Select FMCG companies

Table 7: ANOVA Analysis of Payables Management

Source	SS	Df	MS	F	p-value
Between Year	6641.17	9	737.91	0.78	0.63
Between Company	83419.98	4	20855.00	22.15	0.00
Due to Errors	33895.70	36	941.55		
Total	123956.86	49			

Source: Table 6

From the data in Table 6, the overall trend in Days Payable Outstanding (DPO) for the chosen FMCG companies reveals significant variation among companies, with GCPL showing exceptionally high DPO values. At the same time, TCPL and BIL are more moderate and stable in their values. The ANOVA analysis reveals statistically significant differences between the firms ( $F = 22.15$ ,  $p < 0.001$ ), indicating that there are differences in supplier payment policies among the firms. However, with respect to the year, the variation was not significant ( $F = 0.78$ ,  $P = 0.63$ ), indicating that payables management practices remained constant from year to year, with company-specific policies influencing the differences more than external factors.

#### 6.1.4 Cash Management of Select Nifty FMCG Companies

Operating Cash Flow (OCF) is a vital metric for cash management that computes a company's ability to convert sales into cash. A high OCF margin indicates strong liquidity and effective cash flow management with less dependence on short-term funding. This also reflects proficient cash management practices. Table 8 presents the annual operating performance of specified FMCG companies, using OCF Margin, from 2014 to 2024.

**Formula:**

$$\text{OCF Margin} = \left( \frac{\text{Operating Cash Flow}}{\text{Revenue}} \right) \times 100$$

Table 8: Operating Cash Flow Margin of Select Nifty FMCG Companies

(Percentage)					
Year	GCPL	TCPL	BIL	HUL	ITCL
2014-15	16.86	1.79	7.09	9.52	18.63
2015-16	10.11	4.40	10.84	11.57	17.94
2016-17	23.48	16.97	4.68	14.39	18.18
2017-18	23.50	6.34	12.74	16.91	28.78
2018-19	19.47	2.93	10.72	15.09	25.98
2019-20	17.16	13.29	15.34	18.96	29.80
2020-21	22.40	15.02	14.68	19.67	23.87
2021-22	14.10	14.76	9.16	17.71	25.06
2022-23	26.25	12.12	15.98	16.45	25.78
2023-24	22.05	14.75	14.01	24.85	23.21

Source: Annual reports of select FMCG companies

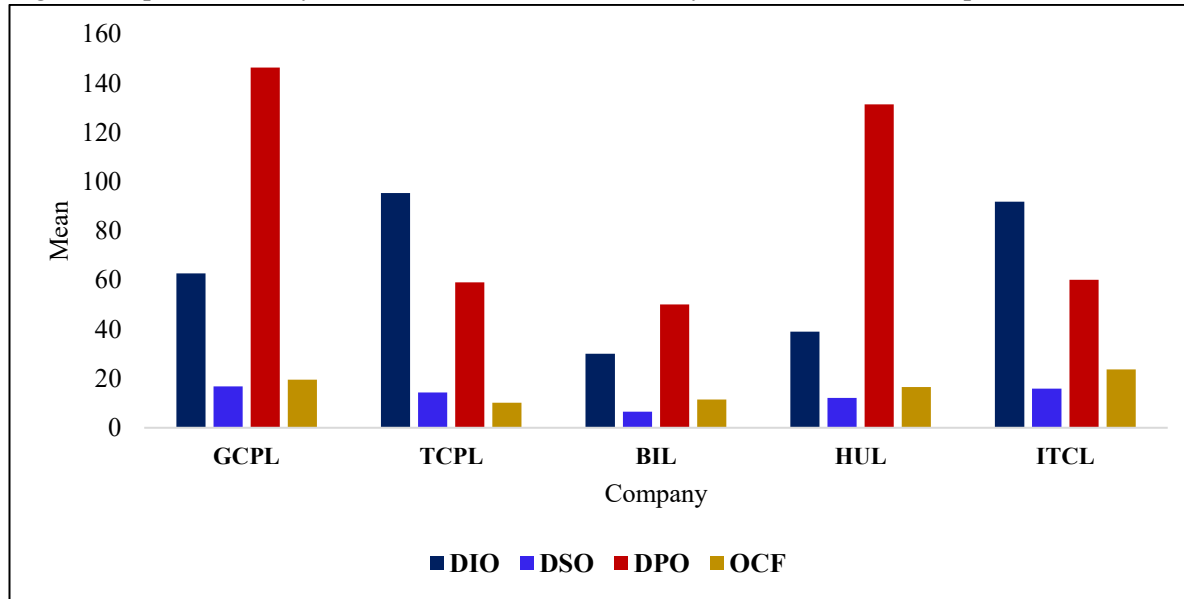
Table 9: ANOVA Analysis of Cash Management

Source	SS	Df	MS	F	p-value
Between Year	497.11	9	55.24	4.17	0.00
Between Company	1252	4	313.00	23.62	0.00
Due to Errors	477.04	36	13.25		
Total	2226.16	49			

Source: Table 8

According to Table 8, the trend of Operating Cash Flow (OCF) Margin among selected FMCG companies shows differences. ITCL and GCPL have a higher OCF Margin, while TCPL has more variation. According to Table 9, the ANOVA results point to statistical significance for year-wise ( $F = 4.17$ ,  $\text{Sig} = 0.00$ ) and company-wise ( $F = 23.62$ ,  $\text{Sig} = 0.00$ ), which shows that year and company cash flow management strategies are different, likely due to changing operational efficiencies, cost controls, and market conditions.

Fig 1: Comparative Analysis of WCM Metrics across Nifty-Indexed FMCG Companies



Source: Compiled from Tables s 2,4,6 and 8

In Figure 1, the average values of essential components of working capital management (WCM) are depicted as DIO, DPO, and DSO, along with the OCF margin of selected Nifty-indexed FMCG companies (BIL, GCPL, HUL, ITCL, TCPL). The DPO of HUL and GCPL is the highest, allowing for better terms to be negotiated with suppliers. DIO is highest for ITCL and TCPL, indicating a period with higher inventory levels. DSO is relatively low for all companies, suggesting efficient collection of receivables. OCF is on par with other metrics but comparatively lower than those presented, indicating the difficulty of converting operations into cash.

### Results of Hypothesis Tested

**H<sub>01</sub>: There is no significant variation in working capital management practices among the selected Nifty FMCG companies.**

Here's a more precise table for the hypothesis validation of the working capital management practices:

Table 10: ANOVA Summary of WCM Components

Component	p-value	Is it Significant?
Inventory	0.001	Yes
Receivables	0.002	Yes
Payables	0.035	Yes
Cash	0.008	Yes

Source: Compiled from Tables 3,5,7 and 9

**Hence, H<sub>01</sub> was Rejected.**

As per Table 10, the p-values for all components are less than 0.05. It can be concluded that there is a substantial difference in the WCM practices of the selected Nifty FMCG companies.

## 6.2 OPERATIONAL PERFORMANCE OF SELECT NIFTY FMCG COMPANIES

Earnings Before Interest and Taxes (EBIT) Margin is a yardstick of operational performance. It measures the relationship between operating profit and net sales, signifying the company's success in managing expenses and maximizing profits. The higher the EBIT margin, the better the operating performance, which reflects improved cost management and control over WCM.

**Formula:**

$$\text{EBIT Margin} = \left( \frac{\text{EBIT}}{\text{Revenue}} \times 100 \right)$$

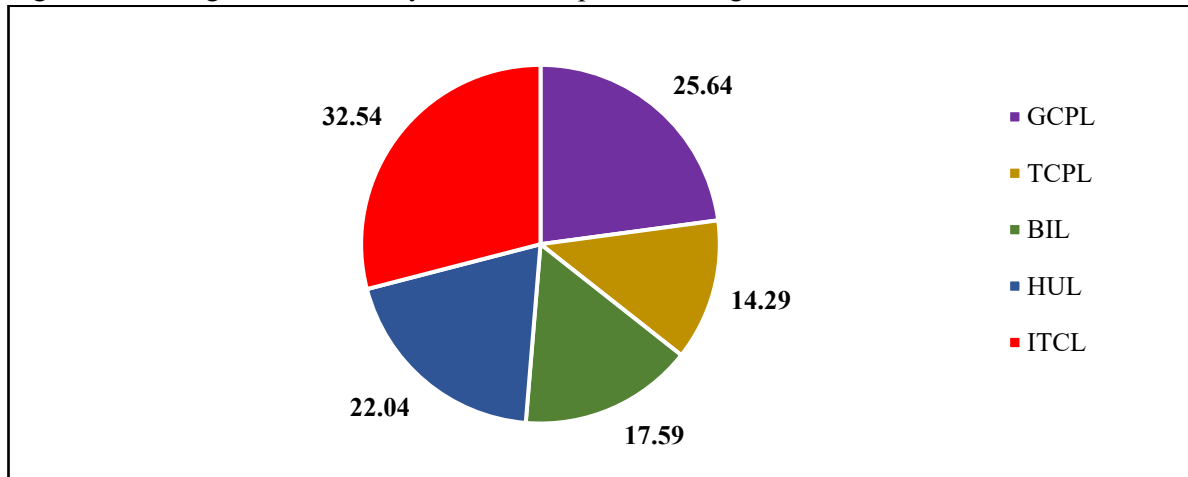
- EBIT is calculated by subtracting operating costs from revenue.

Table 11: Operating Income (EBIT) Margin of Select Nifty FMCG Companies

Year	GCPL	TCPL	BIL	HUL	ITCL
2014-15	17.10	10.13	9.13	15.04	24.79
2015-16	18.69	10.30	12.98	15.25	25.40
2016-17	21.32	11.21	13	15.63	24.49
2017-18	23.81	14.75	14	19.63	32.58
2018-19	25.66	12.34	14.81	21.55	35.25
2019-20	25.24	12.15	15	22.7	35.07
2020-21	25.45	11.26	17.91	22.78	29.02
2021-22	24.13	12.45	14.64	22.78	28.85
2022-23	23.50	13.93	16.61	21.66	31.73
2023-24	25.64	14.29	17.59	22.04	32.54

Source: Annual reports of select FMCG companies

Fig 2: EBIT Margin of Select Nifty FMCG Companies During 2023-24



Source: Table 11

Table 11 and Figure 2 present the annual operating performance of selected FMCG companies based on EBIT Margin for the period from 2014 to 2024.

Table 12: ANOVA Analysis of Operational Efficiency

Source	SS	Df	MS	F	p-value
Between Year	308.74	9	34.31	11.58	0.00
Between Company	1978.67	4	494.67	167.04	0.00
Due to Errors	106.61	36	2.96		
Total	2394.02	49			

Source: Table 11

## Results of Hypothesis Tested

**H<sub>02</sub>: There is no significant variation in operational efficiency among the selected Nifty FMCG companies.**

As noted from the findings in Table 11 and Fig. 2, the Operating Income (EBIT) Margins of the selected FMCG firms are all progressing positively, with the majority (ITCL and GCPL) also at higher margins, while TCPL's margin is growing at a slower rate than the others. The ANOVA from Table 12 indicates that variances across years ( $F = 11.58$ ,  $Sig = 0.00$ ) and variances between firms ( $F = 167.04$ ,  $Sig = 0.00$ ) demonstrate statistical significance. This suggests that operational efficiency is influenced by both overall time influences (e.g., market conditions, cost controls) and firm-specific influences and strategies (e.g., pricing power, product mix, operational scale).

**Hence, H<sub>02</sub> was Rejected.**

## 6.3 PROFITABILITY MANAGEMENT OF SELECT NIFTY FMCG COMPANIES

NOPAT Margin measures a company's ability to generate post-tax operating profit from revenue, independent of financing decisions. A higher margin reflects greater operational efficiency and effective tax management. It allows for standardized profitability comparisons across firms, making it particularly useful in evaluating core performance within the FMCG sector.

$$\text{NOPAT Margin} = \left( \frac{\text{EBIT} \times (1 - \text{Tax Rate})}{\text{Revenue}} \right) \times 100$$

Where:

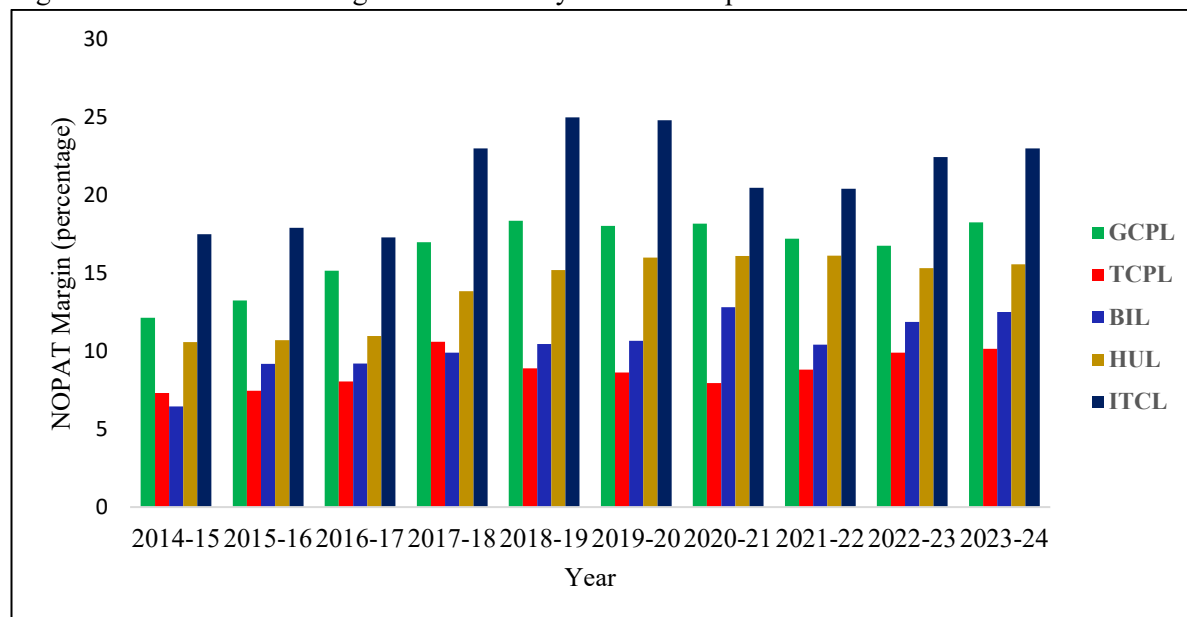
- EBIT = Earnings Before Interest and Taxes (Operating Income)
- Tax Rate = Applied 30 per cent rate of tax as prescribed by CBDT.

Table 13: Net Operating Profit After Tax (NOPAT) Margin of Select Nifty FMCG Companies

Year	GCPL	TCPL	BIL	HUL	ITCL
2014-15	12.13	7.31	6.46	10.57	17.50
2015-16	13.25	7.45	9.18	10.70	17.90
2016-17	15.15	8.05	9.21	10.97	17.29
2017-18	16.98	10.61	9.90	13.84	23.00
2018-19	18.36	8.89	10.46	15.19	24.98
2019-20	18.04	8.63	10.66	16.00	24.80
2020-21	18.17	7.95	12.81	16.11	20.47
2021-22	17.22	8.81	10.41	16.13	20.42
2022-23	16.75	9.90	11.88	15.33	22.45
2023-24	18.26	10.15	12.50	15.57	23.00

Source: Annual reports of select FMCG companies

Fig 3: Trends in NOPAT Margin of Select Nifty FMCG Companies



Source: Table 13

Table 14: ANOVA Analysis of Profitability Management

Source	SS	Df	MS	F	p-value
Between Year	157.328	9	17.481	11.195	0.00
Between Company	980.031	4	245.008	156.911	0.00
Due to Errors	56.212	36	1.561		
Total	1193.571	49			

Source: Table 13

### Results of Hypothesis Tested

**H<sub>03</sub>: There is no significant variation in profitability performance among the selected Nifty FMCG companies.**

According to Table 13 and Figure 3, the Net Operating Profit After Tax (NOPAT) margin trends indicate that all selected FMCG companies recorded consistent growth over the examined decade. However, HUL and ITCL maintained significantly higher NOPAT margins compared to the others throughout the period. Furthermore, the ANOVA results in Table 14 indicate significant differences across years ( $F = 11.195$ ,  $p = .000$ ) as well as across companies ( $F = 156.911$ ,  $p = .000$ ). This demonstrates that NOPAT performance was influenced by both time-specific factors (such as cost efficiency, market growth, and macroeconomic conditions) and company-specific factors (including operational scale, market positioning, and strategic decisions).

**Hence, H<sub>03</sub> was Rejected.**

## 6.4 ANALYSIS OF THE IMPACT OF WCM ON THE PROFITABILITY OF SELECT NIFTY FMCG COMPANIES

The regression analysis is applied to examine the effects of WCM on NOPAT, with DIO, DSO, DPO, and OCF Margin as key components of working capital, and EBIT Margin treated as control variables. The outcomes of the analysis are presented in Table 15, which highlights the impact of WCM on the profitability of each selected Nifty-indexed FMCG Company.

## Results of Hypothesis Tested

### H<sub>04</sub>: WCM has no significant impact on profitability in select Nifty FMCG companies.

From Tables 15 and 16, it is concluded that for GCPL, TCPL, HUL, and ITCL, at least one of the working capital components such as inventory, receivables, or payables is significantly impacting profitability. Thus, the null hypothesis is **rejected** for these companies. However, for BIL, none of the components show a significant impact, so the null hypothesis is **not rejected**.

**Hence, H<sub>04</sub> was rejected for GCPL, TCPL, HUL, and ITCL and accepted for BIL**

Table 15: NOPAT Multiple Regression Results

Company	Variable	B (₹ crore)	Standard Error	$\beta$	t -Statistic	p-value	R <sup>2</sup>
GCPL	$\beta_0$ (Intercept)	272.90	170.72		1.60	0.19	0.994
	$\beta_1$ (DIO) (days)	-15.23	2.91	-0.39	-5.24	0.01*	
	$\beta_2$ (DSO) (days)	0.09	6.51	0.001	0.01	0.99	
	$\beta_3$ (DPO) (days)	-1.24	0.37	-0.25	-3.35	0.03*	
	$\beta_4$ (OCF Margin) (%)	-3.57	2.90	-0.06	-1.23	0.29	
	$\beta_5$ (EBIT Margin) (%)	83.52	6.42	0.89	13.01	0.00**	
TCPL	$\beta_0$ (Intercept)	615.08	428.47		1.44	0.22	0.976
	$\beta_1$ (DIO) (days)	-5.15	1.63	-0.41	-3.17	0.03*	
	$\beta_2$ (DSO) (days)	9.66	17.45	0.05	0.55	0.61	
	$\beta_3$ (DPO) (days)	7.01	1.40	0.75	5.01	0.01*	
	$\beta_4$ (OCF Margin) (%)	-2.28	5.12	-0.05	-0.45	0.68	
	$\beta_5$ (EBIT Margin) (%)	-13.60	19.58	-0.08	-0.70	0.53	
BIL	$\beta_0$ (Intercept)	-3254.86	1432.92		-2.27	0.09	0.927
	$\beta_1$ (DIO) (days)	37.25	17.86	0.42	2.09	0.11	
	$\beta_2$ (DSO) (days)	-83.61	48.20	-0.39	-1.74	0.16	
	$\beta_3$ (DPO) (days)	40.54	32.20	0.30	1.26	0.28	
	$\beta_4$ (OCF Margin) (%)	6.92	29.38	0.05	0.24	0.83	
	$\beta_5$ (EBIT Margin) (%)	120.94	48.72	0.64	2.48	0.07	
HUL	$\beta_0$ (Intercept)	3363.41	2010.53		1.67	0.17	0.997
	$\beta_1$ (DIO) (days)	60.00	35.88	0.06	1.67	0.17	
	$\beta_2$ (DSO) (days)	154.73	46.10	0.16	3.36	0.03*	
	$\beta_3$ (DPO) (days)	-80.16	5.26	-0.44	-15.23	0.00**	
	$\beta_4$ (OCF Margin) (%)	132.98	24.46	0.26	5.44	0.01*	
	$\beta_5$ (EBIT Margin) (%)	346.89	28.79	0.52	12.05	0.00**	
ITCL	$\beta_0$ (Intercept)	-2446.11	3775.24		-0.65	0.55	0.949
	$\beta_1$ (DIO) (days)	-10.45	62.08	-0.04	-0.17	0.88	
	$\beta_2$ (DSO) (days)	-522.25	147.14	-0.93	-3.55	0.02*	
	$\beta_3$ (DPO) (days)	-80.04	92.96	-0.26	-0.86	0.44	
	$\beta_4$ (OCF Margin) (%)	-258.19	185.23	-0.43	-1.39	0.24	
	$\beta_5$ (EBIT Margin) (%)	1136.29	213.47	1.82	5.32	0.01*	

Note : (i) B- Unstandardized Coefficients;  $\beta$ - Standardized Coefficients; (ii) \*P- value < 0.05 and \*\* P- value < 0.01.

Table 16: Hypothesis Validation on WCM Impact on Profitability

Company	Inventory (DIO)	Receivables (DSO)	Payables (DPO)	Cash (OCF)	Overall WCM Impact	H <sub>04</sub> Validation
GCPL	S	NS	S	NS	S	Rejected
TCPL	S	NS	S	NS	S	Rejected
BIL	NS	NS	NS	NS	NS	Accepted
HUL	NS	S	S	S	S	Rejected
ITCL	NS	S	NS	NS	S	Rejected

Source: Table 15

Note: S = Significant, NS = Not Significant

Table 16 is constructed to test the hypothesis that WCM has no significant impact on profitability while accounting for key components such as DIO, DSO, DPO, and OCF Margin, as shown in Table 15. Using standardized coefficients, GCPL and TCPL are most influenced by inventory and payables, HUL by receivables, payables, and cash flow, and ITCL predominantly by receivables, while BIL shows no significant WCM impact; unstandardized coefficients confirm these patterns in monetary terms, indicating where changes in working capital components would yield the greatest effect on NOPAT.

## 7 CONCLUSION

To conclude, HUL performs well in terms of cash flow and profitability Management. GCPL and TCPL can enhance efficiency by effectively managing payables and inventory but need to improve their DSO to achieve better cash collection and operational efficiency. ITCL shows a considerable impact from receivables management, but cash flow remains non-significant, indicating room for improvement in cash management strategies. BIL performs satisfactorily in terms of profitability but demonstrates a minimal impact from the working capital components on profitability, as its working capital practices require further assessment. Overall, while all companies have unique strengths and weaknesses, improvements in working capital management will enable profitability improvement, and working capital is a critical component for ensuring sustainable long-term success in the FMCG sector, especially for Nifty FMCG Index companies.

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