

# Comparative Analysis of Indian FMCG Industries on Inventory Turnover Ratio and Sustainable Practices

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**Abstract-** The present work shows a comparative analysis of distinguished Fast Moving Consumer Goods (FMCG) industries of India. A detail study is done to determine inventories tied up by the industries on the basis of inventory turnover ratio. The top performing FMCG industries are compared and useful insights are drawn from it. It has been found that Britannia Industries has maintained highest inventory turnover ratio since last many years. The paper also investigates the sustainable practices implemented by the FMCG industries.

**Keywords**—FMCG, Inventory Turnover Ratio, Industry, Sustainable Practices

## 1. INTRODUCTION

Business success or failure depends upon on the best practices adopted by industries to manage their inventories. Inventory is referred as stock keeping unit irrespective of state in which it is maintained. It could be in the form of raw material or supplies or in the form of work in process or maintained in form of parts or components or finished goods [1]. Other way of defining inventory as kept as ideal resource [2]. When the stock has been maintained for sale, production needs or for operational purposes for smooth supply chains is also termed as inventory [3].

The most common categorisation of inventories is on basis of revenue as ABC categorisation. The other categorisation is done on the basis of speed at which inventories are to be replenished, which is known as FSN classification, where F signifies fast moving, S signifies slow moving and N denotes non moving inventories [1].

The other important classification of inventory is done on basis of vitality as VED, where V represents Vital, E denotes as Essential and D signifies as Desirable. Another important classification is SDE (Scarce, Difficult and Easy to Procure). Another inventory classification based on categorising inventories based on their cost per unit as HML where H stands High, M stands for Medium and L stands for Low price inventory [4]. The products that fall under FMCG are classified as households, beverages, toiletries, health care, and foods.

The maximum sales contribution come from laundry, dish cleaning, washing and electronic appliances, that all

comes under household's category. Toiletries which contain creams, shampoo, soaps, deodorants, perfumes, creams, toothpaste are another major contributor referred as self-care or Personal hygiene. Household items and Personal hygiene items contributes nearly 50% of the total FMCG sales.

Next major FMCG segment is health care that has share of around 32% sales. This category includes drugs, dietary supplements, sanitizers, masks, and products use for hygiene. Beverages and the food category cover the remaining share of FMCG market. The products that comes within this segment are cold drinks, packed foods, mineral water [5].

As per the annual report of IBEF the FMCG sustained growth between 7-9 %. The major Indian FMCG industries are Dabur India, Colgate Palmolive, Hindustan Unilever, Varun Beverages, ITC, Britannia, Nestle, Tata Consumer Products, Godrej Consumer Products [6]. The companies are selected for this study include Hindustan Unilever Limited, ITC Limited, Nestlé India, Britannia Industries, and Dabur India. These companies are chosen because they hold a significant position in terms of market capitalization and revenue within the Indian FMCG sector. They also have a strong and established market presence, along with the availability of consistent and reliable secondary data. Moreover, these firms publish detailed information in their annual reports, which supports a comprehensive and dependable analysis for the study.

## 2. LITERATURE REVIEW ON FMCG

In literature inventory termed as fast moving was first used in the book of Peterson and Silver, 1979. Afterward, fast moving also referred as fast moving consumer goods. With experiencing changes, liking, preferences and behaviour of customers, FMCG segment progressed to serve their needs accordingly. Industries of FMCG put a lot of emphasis on the product quality, packaging along with keeping the prices are competitive [7]. FMCG products are also getting popular and consumed even in the India's not economically sound people[8]. The huge growth in this high demand consumer goods has been recorded in the markets [9] and [10].

The Table 2.1 presents the literature review on inventory and FMCG.

**Table 2.1:** Literature Review on FMCG

Authors	Year	Study	Findings
Peterson and Silver [11]	1975	Fast moving items	Any item considered fast moving having demand during lead time ten or more than it.
Buffa and Sarin; Silver et al.; Krajewski et al. [2]	1987; 2016; 2019	Describe inventory as per their outlook	According their opinion define inventory.
Patil, P. [9]	2016	Indian FMCG sector	Highlights on the growth, and prospects.
Jayanthi, R. [10]	2017	India FMCG evolution	History and progress of FMCG
Kumar, A.[8]	2020	Behaviour pattern of not economically sound consumers	Good growth recorded in FMCG even at not economically sound consumer segment.
Pai, G.H.[7]	2024	Examines brand image and impact	Influence on FMCG buyers of brand image.

### 3. METHODOLOGY

In this paper the methodology used is quantitative. To do the comparative analysis between FMCG industries on inventory replenishes times. The performance measure for inventory used as Inventory Turnover Ratio. It is calculated as calculating cost of goods sold to on hand inventory.

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{On Hand Inventory}}$$

The data is gathered through referring to annual industry reports and published news magazines and papers. The higher the Inventory turnover ratio, the more better it is considered. It is just reflects the sound management of inventories [12].

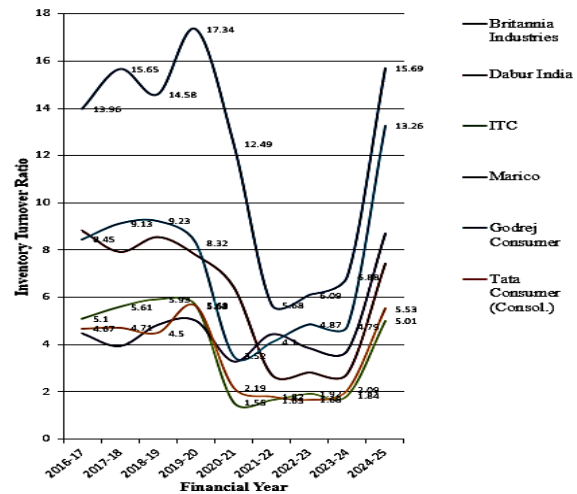
FMCG inventory turnover ratios are computed of top performing FMCG industries from the year 2016-17 to 2024-25 [13-18]. The table 3.1 shows the year wise inventory turnover ratio of different FMCG industries.

**Table 3.1:** Inventory Turnover Ratio of FMCG Industries

Year	Britannia Industries	Dabur India	ITC	Marico	Godrej Consumer	Tata Consumer (Consol.)
2016-17	13.96	8.83	5.1	4.48	8.45	4.67
2017-18	15.65	7.93	5.61	3.94	9.13	4.71
2018-19	14.58	8.56	5.93	4.84	9.23	4.5
2019-20	17.34	7.8	5.68	5.02	8.32	5.63
2020-21	12.49	6.45	1.55	3.29	3.52	2.19
2021-22	5.68	2.74	1.65	4.44	4.1	1.82
2022-23	6.09	2.83	1.92	3.85	4.87	1.68
2023-24	6.88	2.78	1.84	3.75	4.79	2.09
2024-25	15.69	7.44	5.01	8.71	13.26	5.53

The Figure 3.1 shows the comparative graphs plotted for the different FMCG industries inventory turnover ratios.

**Year wise Inventory Turnover Ratio (Times)**



**Figure 2.1:** FMCG industries Inventory Turnover Ratio

The Fig. 2.1 shows the observed trends by considering important real-world factors affecting inventory performance. It highlights how the COVID-19 period disrupted supply chains, leading to challenges in production and distribution. The analysis also highlights the recovery phase after the pandemic, where changing customer demand influenced inventory decisions. In addition, it explains the increase in inventory levels during uncertain periods, as companies maintained higher stock to manage risks related to supply and demand fluctuations.

### 4. SUSTAINABILITY PRACTICES OF FMCG INDUSTRIES

The sustainable practices generally implemented in FMCG companies are reduction in usage of plastics, using circular packing, recycling of plastic wastes by Hindustan Unilever Limited [19-20]. The other important sustainable practices are recycling of solid wastes, water and using green buildings by ITC [21-22]. The decrease in use of plastics and achieving plastics neutrality by Nestle India [23-24]. With Extended Producer Responsibility (EPR) commitments, adhering to environmental responsibility, promoting renewable energy and advocating the use of circular economy by Dabur India Limited [25].

### 5. CONCLUSIONS

The study shows the pre pandemic (2016-17 to 2019-20) the inventory turnover ratio of all FMCG industries were highest. But, post pandemic inventory turnover ratios depicts a sharp decline (2020-21 to 2023-24). However, in 2024-25, again there is a rise in inventory turnover ratio is recorded. Britannia Industries remain the top performing FMCG industry since 2016-17 to till date, followed by the Godrej Consumer, Marico, Dabur India, Tata Consumer and ITC. The best sustainable practices are followed by HUL and ITC holds top position followed

by the Dabur and Nestle India. The ranks are awarded on the score obtained by the applicability of Plastics recycling and packaging, EPR compliance, usage of Renewable Energy and sustainable water use.

The study also presents ways to improve inventory management, such as better planning and control of stock levels. The section also highlights how sustainability can be incorporated into supply chain decisions through responsible sourcing and waste reduction. In addition, it offers useful suggestions for FMCG firms to balance operational efficiency with environmental considerations. Future studies can incorporate advanced statistical techniques such as trend analysis, CAGR, and standard deviation to gain deeper insights into performance variability over time. Additionally, correlation and regression analysis between inventory turnover and sustainability scores can help establish stronger relationships and causal linkages.

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