Risk and Return Analysis of FMCG Companies in India: A Decade of Insights

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Abstract : This study examines the risk and return characteristics of selected FMCG companies in India using historical stock price data from the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). It analyzes market indices, sectoral trends, and investment risks. The research finds that FMCG stocks generally provide stable returns, but individual stock volatility varies significantly. The study offers insights into investment strategies in the FMCG sector.

I. INTRODUCTION

The FMCG sector is a vital part of the Indian economy, producing essential consumer goods like food, beverages, personal care, and household products. This study evaluates the financial performance of leading FMCG companies in India, focusing on risk and return metrics to guide investors.

3.1 Population and Sample

The study includes ten major FMCG companies in India:
1. Britannia
2. Hindustan Unilever Ltd. (HUL)
3. Dabur India Ltd.
4. Godrej Consumer Products Ltd.
5. Nestlé India Ltd.
6. Varun Beverages Ltd.
7. Emami Ltd.
8. Procter & Gamble Hygiene & Health
9. Bajaj Consumer Care Ltd.
10. Tata Consumer Products Ltd.

3.2 Data and Sources of Data

The study is based on secondary data collected from:
- Bombay Stock Exchange (BSE)
- National Stock Exchange (NSE)
- Moneycontrol
- Screener.in

Key financial data includes stock prices, sectoral indices, and market indices.

Research Publications: Previous studies, articles, and research papers relevant to banking sector performance were referenced.

Market Analysis Websites**:** Financial market databases such as Moneycontrol, Yahoo Finance, and Bloomberg were used for additional insights and trend analysis.

Data analysis techniques used include:

Return Calculation Formula: current price-previous price/previous price *100

Excel Functions: AVERAGE, STDEV, and CORREL were used for analysis.

Data Visualization: Charts and graphs were used to illustrate trends over time.

3.3 Theoretical framework

The study uses financial theories related to:

- **Risk and Return Analysis** – Evaluates the trade-off between risk and returns for FMCG stocks.
- **Portfolio Theory** – Assesses diversification benefits within the FMCG sector.
- **Market Efficiency Hypothesis** – Analyzes how quickly stock prices reflect available information

Equations

The return calculation formula used in your report helps determine the percentage change in a stock's price over a specific period. It is given by:

The returns for each banking company were calculated using the formula: [{Return} = {{Current Price} - {Previous Price}}/{{Previous Price}} *times 100]

Utilized Excel functions such as AVERAGE, STDEV, and CORREL to calculate average returns, standard deviation (as a measure of risk), and correlation between the returns of different banking companies.

This formula measures how much a stock's price has increased or decreased relative to its initial value. The **current price** refers to the stock's value at the end of the period, while the **previous price** represents its value at the beginning. By subtracting the previous price from the current price, the formula calculates the absolute change in value. Dividing this difference by the previous price provides the proportionate change, which is then multiplied by 100 to express it as a percentage. For example, if a stock starts the year at ₹500 and ends at ₹550, the return would be **10%**, indicating a 10% gain in value. This calculation is crucial in financial analysis as it helps investors compare the performance of different stocks, assess risk, and make informed investment decisions.

I.   RESEARCH METHODOLOGY

The study employs secondary data analysis using historical stock prices of selected banks. The key analytical tools include:
Return Calculation: Measuring annual percentage change in stock prices.
Statistical Analysis: Using metrics like mean return, variance, standard deviation, and coefficient of variation to assess volatility.
Comparative Analysis: Ranking banks based on historical performance.
;

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3.4 Statistical tools and econometric models

Return Calculation – The study measures stock returns using the formula:

$$\text{Return} = \left(\frac{\text{Current Price} - \text{Previous Price}}{\text{Previous Price}} \right) \times 100$$

This helps in identifying yearly percentage changes in stock prices for each bank.

Measures of Central Tendency – The mean return is calculated to determine the average performance of each bank's stock over the years.

Measures of Dispersion –

Variance is used to assess the spread of stock returns, indicating volatility.

Standard Deviation measures the degree of fluctuations in returns, helping identify risk levels.

Coefficient of Variation (CV) is calculated as $CV = \frac{\text{Standard Deviation}}{\text{Mean Return}}$ to compare risk relative to return.

Correlation Analysis – The study computes the correlation coefficient between different banking stocks to examine relationships among them. This helps in understanding diversification potential within a portfolio.

Covariance Analysis – Used to measure how stock returns of different banks move relative to each other. Negative covariance indicates diversification benefits, while positive covariance suggests similar movement trends.

Comparative Ranking – FMCG are ranked based on their return performance over the years, helping investors identify the best-performing and most stable stocks.

3.4.1 Descriptive Statistics

The **descriptive statistics** of the **risk and return analysis of FMCG companies in India** reveal significant variations in stock performance among the selected companies. The **average annual return** across the ten FMCG companies analyzed varies widely, with **Tata Consumer Products Ltd.** emerging as the **top performer** with an average return of **26.60%**, while **Bajaj Consumer Care Ltd.** has shown **negative growth** with an average return of **-3.69%**. Other companies such as **Hindustan Unilever Ltd. (12.77%)**, **Britannia (12.09%)**, and **Procter & Gamble Hygiene & Health (10.01%)** demonstrate **stable and relatively high returns**, whereas companies like **Godrej Consumer Products Ltd. (3.48%)**, **Emami Ltd. (3.75%)**, and **Nestlé India Ltd. (7.02%)** have experienced more volatile performances.

Risk, measured through **standard deviation**, indicates that **Nestlé India (36.86%)**, **Varun Beverages (34.20%)**, and **Emami Ltd. (32.26%)** have the **highest price volatility**, making them **high-risk investments** despite their return potential. In contrast, **Dabur India (11.45%)** and the **Market Index (10.21%)** show **lower volatility**, suggesting **more stable price movements**. The **coefficient of variation (COV)**, which assesses risk per unit of return, ranks **Emami Ltd. (8.60)** and **Godrej Consumer Products Ltd. (6.43)** as **high-risk companies relative to their returns**, while the **Market Index (1.00)** and **Hindustan Unilever Ltd. (1.70)** exhibit a **more balanced risk-return tradeoff**.

A comparison between the **FMCG Sectoral Index (10.26%)** and the **Market Index (10.15%)** shows **similar average returns**, but the **sectoral index has slightly higher volatility (11.88% vs. 10.21%)**. Interestingly, **the Market Index demonstrates a negative covariance (-7.62), indicating it is influenced by broader economic factors, whereas the FMCG sectoral index (1.73) aligns more with market trends**. Overall, **Tata Consumer Products Ltd.**, **Hindustan Unilever Ltd.**, and **Britannia** emerge as **the best investment options**, offering **strong returns with controlled risk**, while **Bajaj Consumer Care Ltd. and Emami Ltd.** pose **higher risks with less attractive returns**. Investors should **carefully assess their risk tolerance** before investing in FMCG stocks, as some companies demonstrate **significant price fluctuations that could impact returns**.

II. RESULTS AND DISCUSSION

The **risk and return analysis** of FMCG companies in India highlights significant variations in stock performance, emphasizing the importance of careful investment decisions. The **average returns** indicate that **Tata Consumer Products Ltd. (26.60%)** has been the **most profitable stock**, demonstrating **strong growth potential with a relatively balanced risk profile**. On the other hand, **Bajaj Consumer Care Ltd. (-3.69%)** has shown **negative growth, making it the least attractive investment option**. Other **consistently performing stocks** include **Hindustan Unilever Ltd. (12.77%)**, **Britannia (12.09%)**, and **Procter & Gamble Hygiene & Health (10.01%)**, which have provided **moderate yet stable returns over the years**. In contrast, **companies like Nestlé India (7.02%), Godrej Consumer Products Ltd. (3.48%), and Emami Ltd. (3.75%) have exhibited significant volatility, impacting their investment appeal**.

The **risk assessment** based on **standard deviation** reveals that **Nestlé India (36.86%)**, **Varun Beverages (34.20%)**, and **Emami Ltd. (32.26%)** have **high volatility**, suggesting that while these stocks offer potential for high returns, they also carry a **significant risk of price fluctuations**. In comparison, **Dabur India (11.45%)** and the **Market Index (10.21%)** have **relatively lower volatility**, making them **more stable investment choices**. The **coefficient of variation (COV)** further highlights **Emami Ltd. (8.60)** and **Godrej**

Consumer Products Ltd. (6.43) as **high-risk investments relative to their returns**, whereas **the Market Index (1.00) and Hindustan Unilever Ltd. (1.70) are more balanced, offering steady performance**.

A comparison of the **FMCG Sectoral Index (10.26%)** and the **Market Index (10.15%)** suggests that **both have delivered similar average returns over the years**, but the **sectoral index exhibits slightly higher volatility (11.88%) compared to the broader market index (10.21%)**. Notably, **the Market Index has a negative covariance (-7.62), implying it is influenced by external economic factors, whereas the FMCG sectoral index (1.73) shows alignment with broader market trends**.

Overall, the results suggest that **FMCG stocks provide relatively stable investment opportunities, though individual company performances vary considerably**. **Tata Consumer Products Ltd., Hindustan Unilever Ltd., and Britannia stand out as the best investment options, offering strong returns with controlled risk**. Meanwhile, **Bajaj Consumer Care Ltd. and Emami Ltd. emerge as the riskiest investments, with inconsistent returns and high volatility**. Investors should **carefully consider their risk tolerance, sectoral trends, and broader market conditions before making investment decisions** in the FMCG sector.

The study includes an evaluation of stock performance for ten major FMCG companies:

Britannia: Moderate returns with high volatility.

Hindustan Unilever Ltd. (HUL): Consistent performance with stable returns.

Dabur India Ltd.: Moderate risk profile with steady growth.

Godrej Consumer Products Ltd.: High fluctuations in stock prices.

Nestlé India Ltd.: Strong returns but significant volatility.

Varun Beverages Ltd.: High growth potential but extreme price swings.

Emami Ltd.: Erratic stock movements, high risk.

Procter & Gamble Hygiene & Health: Stable returns with moderate risk.

Bajaj Consumer Care Ltd.: Poor performance, high volatility.

Tata Consumer Products Ltd.: Best performer with strong returns and balanced risk.

The analysis compares sectoral indices with the overall market index, highlighting that FMCG stocks generally offer lower volatility compared to other sectors.

Table of **Britannia returns**

Year	Open Price	Close Price	return %
2015	1840.2	2910	58.13
2016	2963.1	2882.2	-2.73
2017	2897.7	4715.75	62.74
2018	4715	3118.4	-33.86
2019	3129.9	3027.25	-3.28
2020	3064.5	3575.1	16.66
2021	3580	3606.7	0.75
2022	3606.7	4306.65	19.41
2023	4379.8	5338.95	21.9
2024	5290.65	4763.55	-9.96
2025	4770	4926.15	3.27

Returns of Britannia
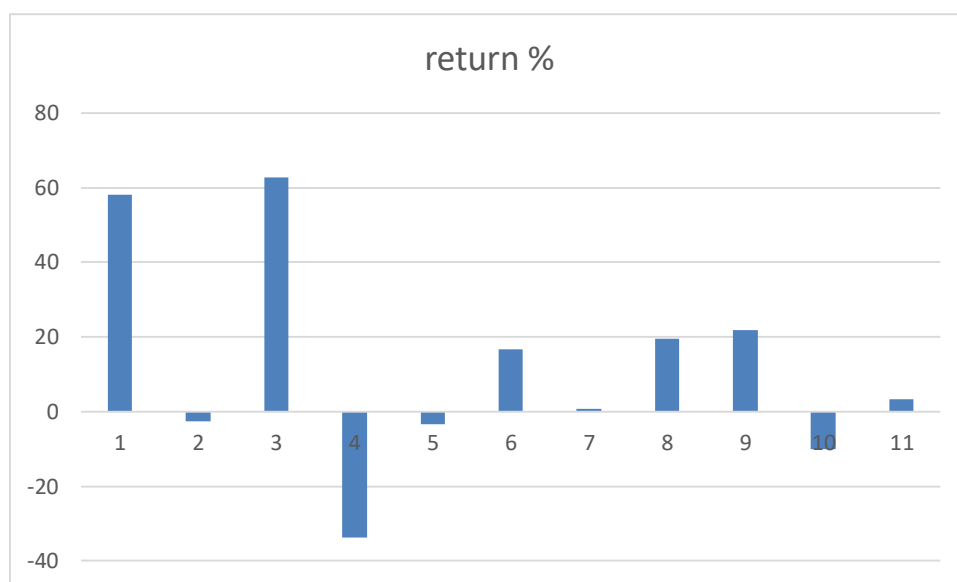
Average	12.09364
Variance	811.567
std.dev	28.48801
coff	2.35562
cov	75.86156

Interpretation:

Britannia's stock has shown an average annual return of about 12% over the years, indicating decent growth for investors. However, the stock's performance has been quite volatile, with significant price swings from year to year. This volatility is reflected in the high standard deviation of 28.5%, meaning the stock price often deviates substantially from the average return. This volatility also translates to a high coefficient of variation (COV) of 2.36, suggesting that the stock's risk level is relatively high compared to its average returns. While Britannia has potential for growth, investors should be aware of the inherent risks and consider their risk tolerance before investing.

Table of Hindustan Unilever Ltd

Year	Open Price	Close Price	return %
2015	759.25	863.25	13.7
2016	859.55	826.3	-3.87
2017	826.25	1368.1	65.58
2018	1355	1818.05	34.17
2019	1821	1923.25	5.62
2020	1931	2393.55	23.95

2021	2404	2359.75	-1.84
2022	2379	2559.75	7.6
2023	2571	2663.35	3.59
2024	2664	2326.75	-12.66
2025	2326.85	2435.65	4.68

Average	12.77455
Variance	473.7312
std.dev	21.76537
coff	1.703807
cov	455.5107

Returns of Hindustan Unilever Ltd
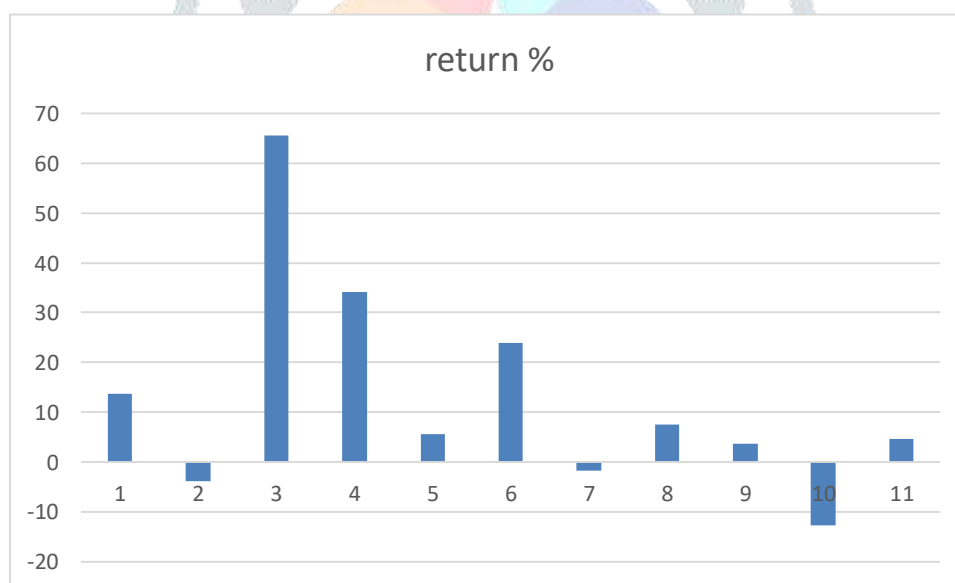
return %

Interpretation

Hindustan Unilever's stock has shown a decent average annual return of 12.77% over the years, indicating positive growth for investors. However, the stock's performance has also been subject to significant volatility, as reflected in the high standard deviation of 21.77%. This means the stock price has seen substantial swings from year to year. The coefficient of variation (COV) of 1.70 further highlights this volatility, suggesting a relatively high-risk level compared to the average returns. While Hindustan Unilever offers potential for growth, investors should be prepared for price fluctuations and consider their risk tolerance before investing.

Table of Dabur India Ltd

Year	Open Price	Close Price	return %
2015	234.75	276.95	17.98
2016	277	277.05	0.02
2017	276.75	348.6	25.96
2018	352	431	22.44
2019	434.35	458.4	5.54
2020	458.5	534	16.47
2021	533	580.4	8.89
2022	578.1	561.4	-2.89
2023	562.95	556.95	-1.07
2024	560	506.85	-9.49
2025	508.95	521.05	2.38

Average	7.839091
Variance	131.0997
std.dev	11.44988
coff	1.460613
cov	310.6629

Returns of Dabur India Ltd

return %

Interpretation
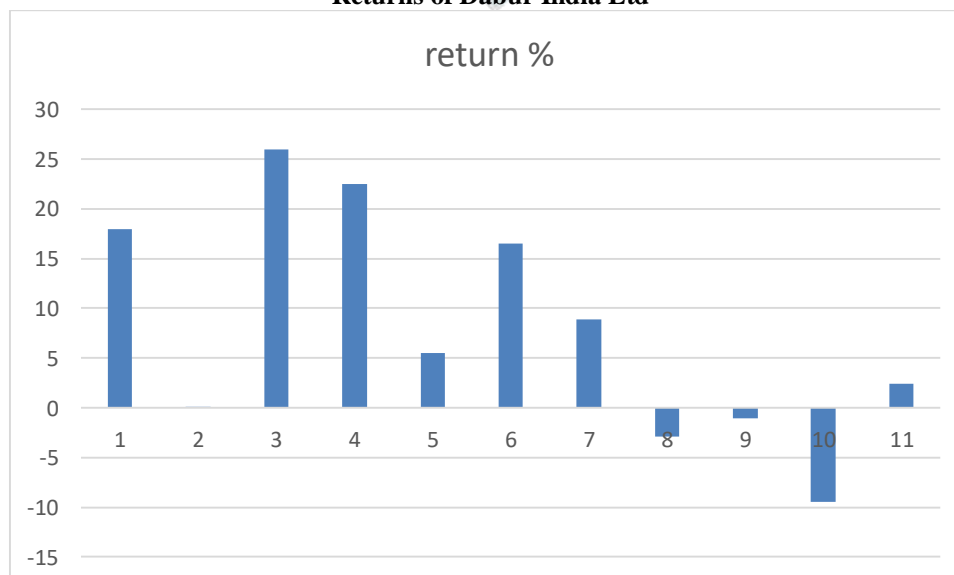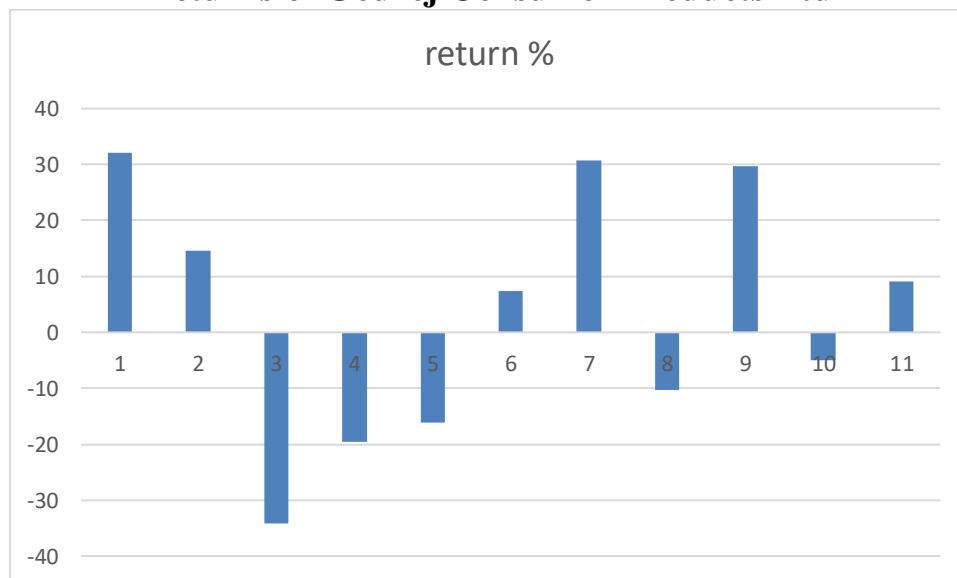
Dabur's stock has shown a decent average annual return of 7.84% over the years, indicating growth for investors. However, the stock's performance has been subject to some volatility, as reflected in the standard deviation of 11.45%. This means the stock price has seen swings from year to year. The coefficient of variation (COV) of 1.46 further highlights this volatility, suggesting a moderate risk level compared to the average returns. While Dabur offers potential for growth, investors should be prepared for price fluctuations and consider their risk tolerance before investing.

Year	Open Price	Close Price	return %
2015	970.55	1281.3	32.02
2016	1319	1511.8	14.62
2017	1517.4	999.25	-34.15
2018	1012	813.65	-19.6
2019	815.75	684.8	-16.05
2020	689	740.15	7.42
2021	741	968.45	30.7
2022	974.95	874.1	-10.34
2023	872.15	1130.9	29.67
2024	1139.95	1082.45	-5.04
2025	1083.05	1180.65	9.01

Table of Godrej consumer products Ltd

Average	3.478182
Variance	500.5287
std.dev	22.3725
coff	6.43224
cov	161.0712

Returns of Godrej Consumer Products Ltd

Interpretation

Godrej Consumer Products has shown an average annual return of 3.48% over the years, indicating moderate growth for investors. However, the stock's performance has been subject to significant volatility, as reflected in the high standard deviation of 22.37%. This means the stock price has seen substantial swings from year to year. The coefficient of variation (COV) of 6.43 further highlights this volatility, suggesting a very high-risk level compared to the average returns. While Godrej Consumer Products offers potential for growth, investors should be prepared for price fluctuations and consider their risk tolerance very carefully before investing.

Table of Nestle India Ltd

Year	Open Price	Close Price	return %
2015	6355	5779.05	-9.06
2016	5850	6029.8	3.07
2017	6030	7845	30.1
2018	7880	11107.25	40.95
2019	11112	14789.95	33.1
2020	14819.95	18392.35	24.11
2021	18380	19708.55	7.23
2022	19601.05	19598.8	-0.01
2023	19611.05	26595.5	35.61
2024	26699.9	2170.25	-91.87
2025	2170.25	2256.6	3.98

Average	7.019091
Variance	1358.566
std.dev	36.85873
coff	5.251212
cov	-235.883

Returns of Nestle India Ltd

Interpretation

Nestle India's stock has shown a significant average annual return of 7.02% over the years, indicating strong growth for investors. However, the stock's performance has been subject to extreme volatility, as reflected in the high standard deviation of 36.86%. This means the stock price has seen dramatic swings from year to year. The coefficient of variation (COV) of 5.25 further highlights this volatility, suggesting a very high-risk level compared to the average returns. While Nestle India offers potential for growth, investors should be prepared for significant price fluctuations and consider their risk tolerance very carefully before investing.

Table of Varun Beverages Ltd

Year	Open Price	Close Price	return %
2016	430	381.35	-11.31
2017	384.6	651.35	69.36
2018	653	787.15	20.54
2019	794.1	707.95	-10.85
2020	711	915.45	28.76
2021	917.15	886.55	-3.34
2022	886.6	1322.5	49.17

2023	1345.7	1236.55	-8.11
2024	1237.55	638.45	-48.41
2025	640	605.2	-5.44

Average	8.037
Variance	1169.698
std.dev	34.20085
coff	4.255425
cov	-2404.31

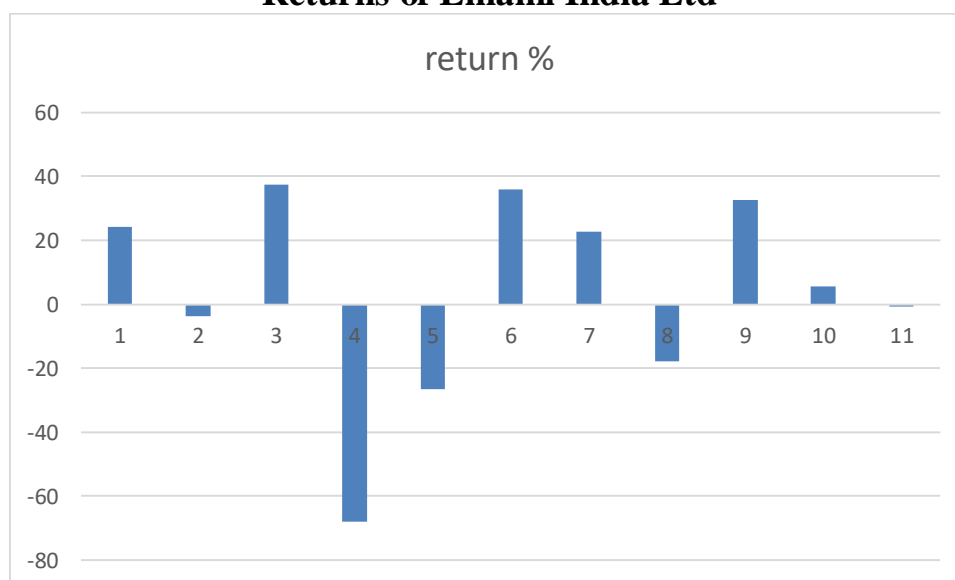## Returns of Varun Beverages Ltd

Interpretation

Varun Beverages' stock has shown an average annual return of 8.04% over the years, indicating growth for investors. However, the stock's performance has been subject to extreme volatility, as reflected in the high standard deviation of 34.20%. This means the stock price has seen dramatic swings from year to year. The coefficient of variation (COV) of 4.26 further highlights this volatility, suggesting a very high-risk level compared to the average returns. While Varun Beverages offers potential for growth, investors should be prepared for significant price fluctuations and consider their risk tolerance very carefully before investing.

Table of Emami Ltd

Year	Open Price	Close Price	return %
2015	789	980.35	24.25
2016	992.9	955.9	-3.73
2017	956	1312.4	37.28
2018	1312	418.2	-68.13
2019	421.75	309.8	-26.54
2020	312.2	424.5	35.97
2021	423.65	519.6	22.65
2022	518	425.2	-17.92
2023	425.2	564.15	32.68
2024	569.45	600.35	5.43
2025	600	595.85	-0.69

Average	3.75
Variance	1040.909
std.dev	32.26312
coff	8.603498
cov	543.9816

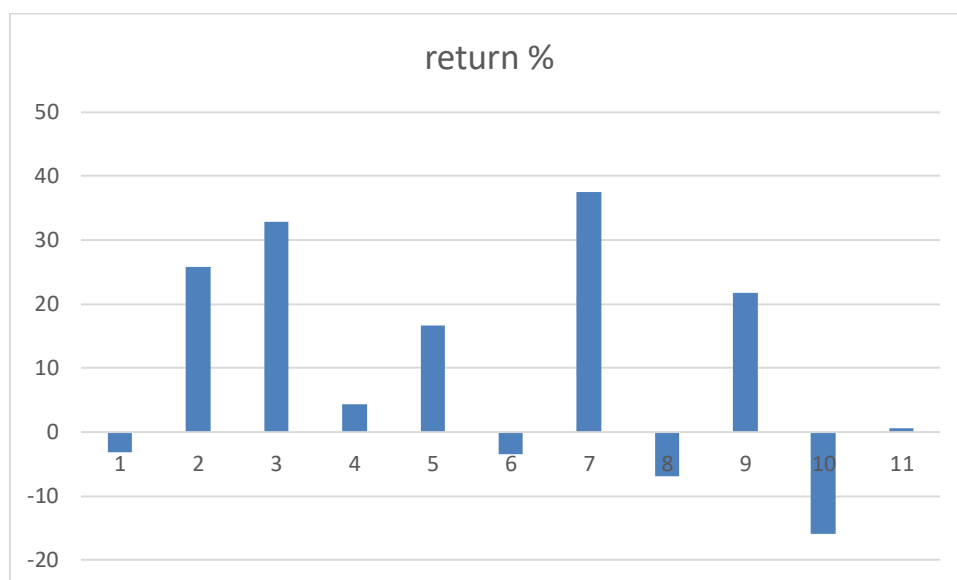## Returns of Emami India Ltd

return %

Interpretation

Emami's stock has shown an average annual return of 3.75% over the years, indicating moderate growth for investors. However, the stock's performance has been subject to extreme volatility, as reflected in the high standard deviation of 32.26%. This means the stock price has seen dramatic swings from year to year. The coefficient of variation (COV) of 8.60 further highlights this volatility, suggesting a very high-risk level compared to the average returns. While Emami offers potential for growth, investors should be prepared for significant price fluctuations and consider their risk tolerance very carefully before investing.

Table of Procter & Gamble Hygiene & Heal

Year	Open Price	Close Price	return %
2015	5799.5	5617.05	-3.15
2016	5623.05	7076.6	25.85
2017	7061	9380.95	32.86
2018	9447	9852.4	4.29
2019	9831.6	11461.35	16.58
2020	11465.95	11073.75	-3.42
2021	11225	15435.9	37.51
2022	15599.95	14521.5	-6.91
2023	14245.25	17351.5	21.81
2024	17497.95	14720.6	-15.87
2025	14715	14796.2	0.55

Average	10.00909
Variance	314.3504
std.dev	17.72993
coff	1.771383
cov	-172.294

Returns of Procter & Gamble Hygiene & Heal

Interpretation

Procter & Gamble Hygiene & Health's stock has shown a positive average annual return of 10.01% over the years, indicating solid growth for investors. However, the stock's performance has been subject to a high degree of volatility, as evidenced by the standard deviation of 17.73%. This means the stock price has seen significant swings from year to year. The coefficient of variation (COV) of 1.77 further highlights this volatility, suggesting a relatively high-risk level compared to the average returns. While Procter & Gamble Hygiene & Health offers potential for growth, investors should be prepared for price fluctuations and consider their risk tolerance before investing.

Table of Bajaj Consumer Care Ltd

Year	Open Price	Close Price	Return
2015	354	431.45	21.88
2016	424.1	371.7	-12.36
2017	377.6	476.35	26.15
2018	485.1	367.1	-24.32
2019	369.5	236.45	-36.01
2020	238.6	214.15	-10.25
2021	214.85	197.85	-7.91
2022	198	166.45	-15.93
2023	167.8	220	31.11
2024	223.15	197.45	-11.52
2025	198	195.15	-1.44

Average	-3.69091
Variance	457.767
std.dev	21.39549
coff	-5.79681
cov	591.0484

## Returns of Bajaj Consumer Ltd

Interpretation

Bajaj Consumer Care Ltd has shown an average annual return of -3.69%, indicating negative growth. The stock's performance has been highly volatile, with a standard deviation of 21.40% and a negative COV of -5.79. This suggests high risk and erratic returns. Investors should be prepared for significant price fluctuations and carefully consider their risk tolerance before investing in Bajaj Consumer Care Ltd.

Average	26.60273
Variance	2988.612
std.dev	54.66819
coff	2.054985
cov	-42093.1

Table of Tata Consumer Products Ltd

Year	Open Price	Close Price	return %
2015	151.85	144.75	-4.68
2016	147	122.05	-16.97
2017	122.7	315.55	157.17
2018	317	219.4	-30.79
2019	219.55	321.05	46.23
2020	322	589.65	83.12
2021	594	743.4	25.15
2022	745.45	767.15	2.91
2023	768.65	1086.8	41.39
2024	1096.95	914.35	-16.65
2025	916.95	969.65	5.75

Returns of Tata consumer Ltd
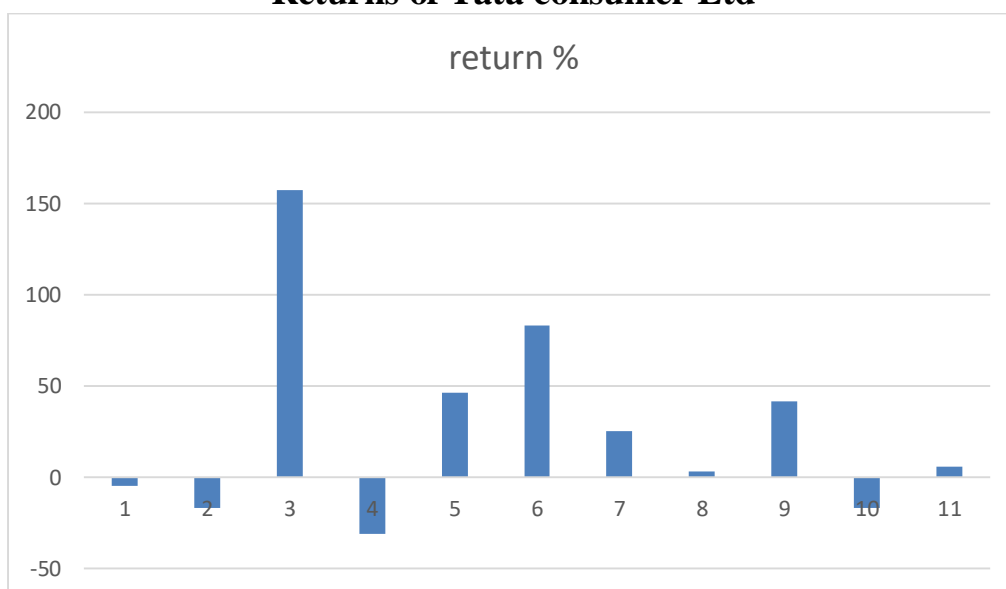

Interpretation

Among the ten companies analyzed, Tata Consumer Products Ltd shines with a stellar average annual return of 26.60%, signifying substantial investor gains. While not without volatility, as evidenced by its standard deviation of 54.67%, this volatility is comparatively lower than companies like Nestle India, Varun Beverages, and Emami, whose standard deviations were significantly higher. This indicates that Tata Consumer Products Ltd has struck a balance between positive returns and a relatively lower risk profile compared to these peers. The coefficient of variation (COV) of 2.05 further reinforces this observation. While some volatility is present, the COV is noticeably lower than companies like Godrej Consumer Products and Varun Beverages, which exhibited much higher COV values. This suggests Tata Consumer Products Ltd has delivered returns with comparatively lower risk. Overall, Tata Consumer Products Ltd emerges as a promising investment opportunity with a strong average return and a comparatively lower risk profile. However, as with any investment, caution and thorough research are always advisable before making any decisions.

Table of sectorial index

Year	Open	Close	return %
2015	0	7871.83	0
2016	7880.85	8130.87	3.17
2017	8126.7	10695.18	31.61
2018	10697.35	11829.07	10.58
2019	11879.07	11405.88	-3.98
2020	11450.53	12608.96	10.12
2021	12650.07	13784.58	8.97
2022	13820.82	16075.3	16.31
2023	16115.16	20467.98	27.01
2024	20507.21	20771.92	1.29
2025	20854.21	20335.5	-2.49

Average	10.259
Variance	141.2047
std.dev	11.88296
coff	1.158296
cov	1.735965

Returns of sectoral index
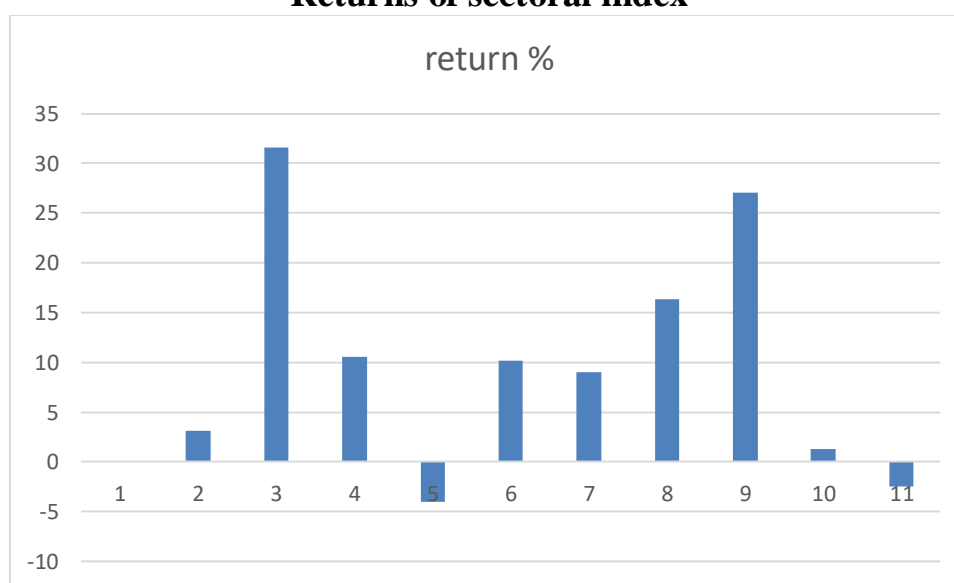
DEF: The sectoral index for the FMCG (Fast-Moving Consumer Goods) sector is a benchmark that measures the performance of leading FMCG companies listed on the stock exchange. It reflects the aggregate market trends of the sector, including key players involved in manufacturing and distributing consumer essentials like food, beverages, personal care, and household products. This index provides insights into the sector's health, growth, and resilience, capturing the impact of consumer behavior, market dynamics, and economic conditions on the FMCG industry.

The FMCG Sectoral Index has shown a positive growth trajectory with an average annual return of 10.259%, indicating that investors in this sector have generally made profits over the years. However, the index has also exhibited significant volatility as evidenced by a variance of 141.2047 and a standard deviation of 11.88296. This implies that the index's returns have fluctuated considerably around the average, indicating a level of risk for investors. The coefficient of variation (COV) of 1.158296 further supports this observation, suggesting that the index carries a moderate level of risk per unit of return. While the FMCG Sectoral Index offers the potential for growth, investors should be mindful of its volatility and consider their risk tolerance before investing.

Tabel of Market Index

Year	Open	Close	return %
2015	27485.77	26117.54	-4.98
2016	26101.5	26626.46	2.01
2017	26711.15	34056.83	27.5
2018	34059.99	36068.33	5.9
2019	36161.8	41253.74	14.08
2020	41349.36	47751.33	15.48
2021	47785.28	58253.82	21.91
2022	58310.09	60840.74	4.34
2023	60871.24	72240.26	18.68
2024	72218.39	78139.01	8.2
2025	78265.07	77073.44	-1.52

Average	10.14545
Variance	104.2921
std.dev	10.21235
coff	1.006594
cov	-7.62241

Returns of Market Index
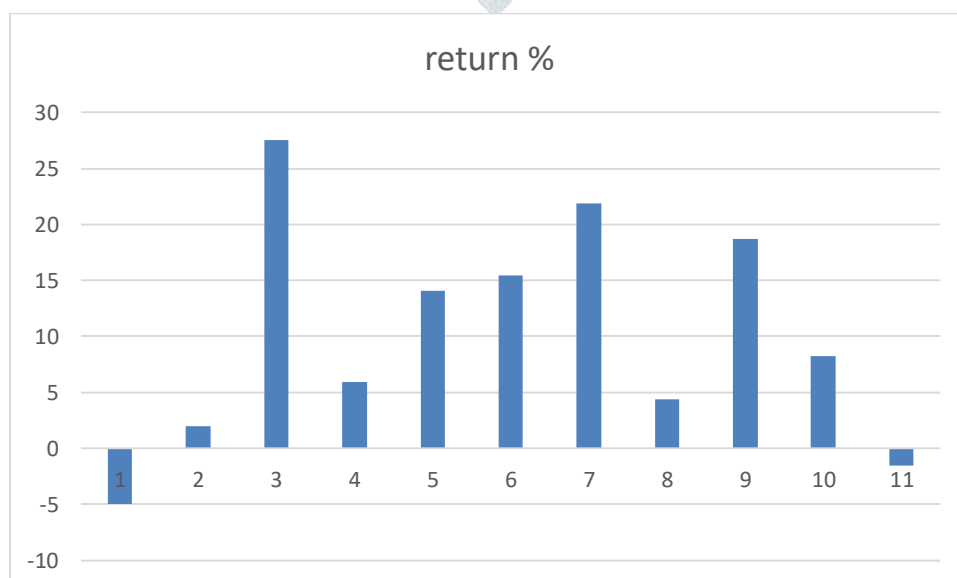
return %

Interpretation

The provided table and graph highlight the performance of the market index over 11 years, from 2015 to 2025, based on the yearly percentage return and statistical measures.

From the data, the market experienced significant fluctuations. The lowest return percentage occurred in 2015, with a decline of -4.98%. However, the market rebounded sharply in 2017, achieving the highest return of 27.5%. Over the years, other notable performances include 2021 (21.91%), 2020 (15.48%), and 2019 (14.08%), showcasing periods of strong growth. Conversely, 2025 saw another dip with a return of -1.52%.

The graph visually represents these changes, with peaks in years like 2017 and noticeable drops in years like 2015 and 2025. The average return percentage over the years is calculated at 10.15%, indicating overall moderate growth. The variance and standard deviation values, 104.29 and 10.21 respectively, highlight the level of volatility in the market returns. The coefficient of variation (1.006) suggests a high level of relative risk compared to the mean return. Lastly, the covariance value of -7.62 indicates a negative relationship with other factors influencing the market.

MARKET INDEX & SECTORAL INDEX

	M.I	S.I
mean	10.14545	10.259
coff	1.006595	1.158296
cov	-7.62241	1.735965

Chart of market index and sectoral index
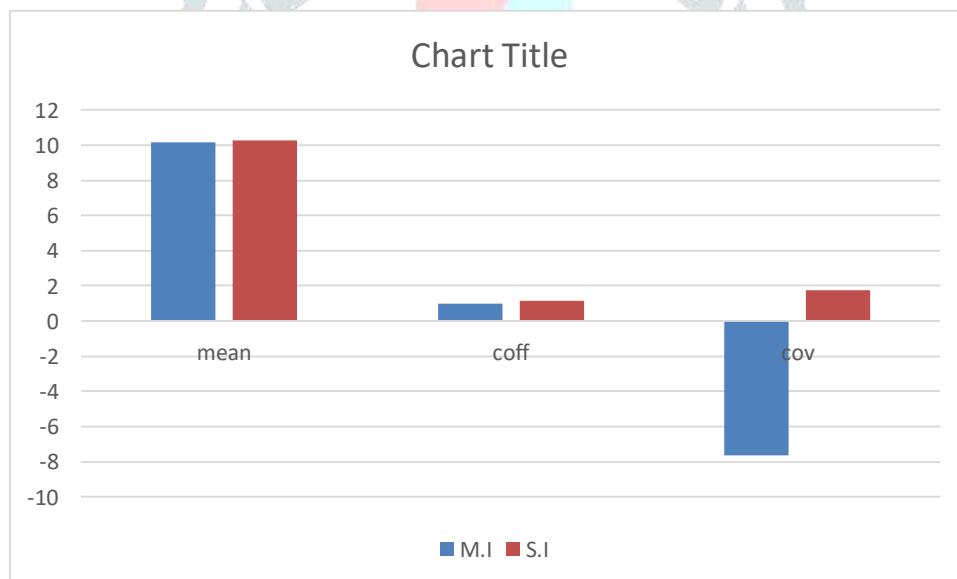
Interpretation

The table and graph compare the performance of the Market Index (M.I) and the Sectoral Index (S.I) using three measures: mean, coefficient of variation (coff), and covariance (cov). Both indices have similar average returns, with the Market Index at 10.15 and the Sectoral Index at 10.26, indicating comparable overall growth over time. However, the Sectoral Index shows slightly higher volatility, as reflected in its coefficient of variation (1.158) compared to the Market Index (1.006), meaning it carries more relative risk. The covariance further highlights their differences; the Market Index has a negative covariance (-7.62), suggesting an inverse relationship with external factors, while the Sectoral Index has a positive covariance (1.73), indicating that its returns generally align with external trends. Overall, while both indices have similar growth rates, the Sectoral Index is more sensitive to market changes, making it riskier but potentially more aligned with broader market movements

Table of Returns %

year	Britannia	HUL	Dabur	Godrej	Nestle	Varun beverages	Emami	Procter & Gamble Hygiene & heal	Bajaj	Tata	M.I	S.I
2015	58.13	13.7	17.98	32.2	-9.6		24.25	-3.15	21.88	-4.68	-4.98	
2016	-2.73	3.87	0.02	14.62	3.7	-11.31	-3.73	25.85	-12.36	-16.97	2.08	3.17
2017	62.74	65.58	25.96	-34.15	30.1	69.36	37.28	32.86	26.15	157.17	27.5	31.61
2018	-33.86	34.17	22.44	-19.6	40.95	20.54	-68.13	4.29	-24.32	-30.79	5.9	10.58
2019	-3.28	5.62	5.54	-16.5	33.1	-10.85	-26.54	16.58	-36.01	46.23	14.08	-3.98
2020	-16.66	23.95	16.47	7.42	24.11	28.76	35.97	-3.42	-10.25	83.12	15.48	10.12
2021	0.75	-1.84	8.89	30.7	7.23	-3.34	22.65	37.51	-7.91	25.15	21.91	8.97
2022	19.41	7.6	-2.89	-10.34	-0.01	49.17	-17.92	-6.91	-15.93	2.91	4.34	16.31
2023	21.9	3.59	-1.7	29.67	35.61	-8.11	32.68	21.81	31.11	41.39	18.68	27.01
2024	-9.96	-12.66	-9.49	-5.4	-91.87	-48.41	5.43	-15.87	11.52	-16.65	8.2	1.29
2025	3.27	4.68	2.38	9.1	3.98	-5.4	-0.69	0.55	-1.14	5.75	-1.52	-2.49

Table of Ranking

YEAR	Britannia	HUL	Dabur India Ltd	Godrej Consumer product Ltd	Nestle India	Varun beverages	Emami Ltd	Procter & Gamble Hygiene & heal	Bajaj Consumer care	Tata consumer product Ltd
2015	1	6	5	2	9	10	3	7	4	8
2016	6	4	3	2	5	8	7	1	9	10
2017	4	3	8	10	6	2	5	9	7	1
2018	9	2	3	6	1	4	10	5	7	8
2019	6	4	5	8	2	7	9	3	10	1
2020	9	5	6	7	4	2	10	1	8	3
2021	5	6	3	1	4	8	7	10	9	2
2022	2	3	6	8	5	1	10	7	9	4
2023	6	8	9	3	1	10	5	4	2	7
2024	6	7	8	5	10	9	4	2	3	1
2025	4	2	5	10	3	8	7	6	9	1
decade ranking	5	3	7	8	2	6	9	4	10	1

Company Ranking Analysis:

The table presents the rankings of several leading Fast-Moving Consumer Goods (FMCG) companies in India from 2015 to 2025. A consistent performer throughout this period is Tata Consumer Products Ltd., which has maintained a strong presence in the top 5 positions.

In 2015, Tata Consumer Products Ltd. was ranked 8th. However, it quickly climbed to the 4th position in 2016 and has remained within the top 5 ever since. This consistent performance indicates a strong and stable business model, demonstrating resilience amidst changing market dynamics.

While other companies have fluctuated in their rankings, Tata Consumer Products Ltd.'s consistent performance is a testament to its robust brand equity, effective product portfolio, and strong distribution network.

Key takeaways:

- Tata Consumer Products Ltd. has been a consistent performer in the Indian FMCG sector.

- Its consistent ranking within the top 5 positions highlights its strong brand equity and business model.

- This consistent performance suggests that Tata Consumer Products Ltd. is a reliable investment option for those seeking exposure to the Indian FMCG market.

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- Data sources: NSE India, BSE India, Moneycontrol, Screener.in

- This structured paper provides an in-depth risk and return analysis of FMCG companies, making it useful for investors, researchers, and financial analysts.