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A Comparative Analysis of Selective FMCG Companies in Indian Stock Market Using CAPM

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Abstract: **Return and risk are two important characteristics of every investment. Investment in the equity is very volatile and investors feel it is a very risky market. The fast moving consumer goods stocks are considered as the safe best because they hardly get influenced by the market movement. But, there are instances fast moving consumer goods stock price also has fallen down even though their financial performance is satisfactory. The present study is an attempt to find out the best buy opportunity in FMCG stocks in Indian stock market. The study aims to identify the most promising FMCG stocks available for long-term investors, an comparative analysis of the selected FMCG stocks and to find the relation between FMCG stock price and FMCG index. The study adopted technical analysis to derive the conclusions. The study mainly depends on secondary data collected from the data base of National stock exchange for the period of 5 years starting from September 2015 to August 2020 (monthly basis). The scope of the study has been limited to the select of 5 FMCG stocks - Britannia, Hindustan Unilever Limited (HUL) and Indian Tobacco Company (ITC), Nestle India and Marico. The study uses descriptive and exploratory research method. The data collected was analysed with the help of return, beta, alpha, standard deviation and variance and CAPM model. The study found that the Nestle India and Britannia stocks have performed well compared to Marico and HUL whereas ITC performing negatively during the study period. It is suggestable for the investors to invest more in the stocks of Nestle India, HUL Ltd, Britannia and Marico as the stocks of these companies are under-priced which is an indication of profitability of stocks.**

Keywords: CAPM, FMCG Index, HUL, ITC, Marico, Britannia, Nestle India.

1. INTRODUCTION

Fast-moving consumer goods (FMCG) sector in India is the 4th largest sector covering household and personal care accounting to 50 % of FMCG sales in India. Key growth drivers of this sector are:

- Growing awareness
- easier access
- changing lifestyles

The urban segment is the largest contributor to the overall revenue generated by the FMCG sector in India. However, in the last few years, the FMCG market has grown at a faster pace in rural India compared to urban India. Semi-urban and rural segments are growing at a rapid pace and FMCG products account for 50 per cent of the total rural spending.

The retail market in India is estimated to reach US$ 1.1 trillion by 2020 from US$ 840 billion in 2017, with modern trade expected to grow at 20-25 % per annum, which is likely to boost revenue of FMCG companies. Revenue of FMCG sector reached Rs 3.4 lakh crore (US$ 52.75 billion) in FY18 and is estimated to reach US$ 103.7 billion in 2020. The market is expected to grow at 9-10 % in 2020.

Rise in rural consumption is driving the FMCG market and it contributes around 36 % to the overall FMCG spending. FMCG urban segment witnessed growth rate of 8 %, whereas, rural segment grew at 5 % in the quarter ended September 2019.

The Indian economy is surging ahead by leaps and bounds, keeping pace with rapid urbanization, increased literacy levels, and rising per capita income. The big firms are growing bigger and small-time companies are catching up as well. Personal care, and soft drinks are the two biggest categories in FMCG and they account for 35 of the top 100 brands. FMCG industry provides a wide range of consumables. FMCG sector in India has a strong and competitive MNCs presence across the entire value chain as a result of this, investment in FMCG industry is also increasing, specifically in India. Many FMCG players have increased their investments in modern retail. There is also greater acceptance from the consumer. The top ten Indian players alone are estimated to make an investment of $30 billion, while the rate of growth of FMCG modern retail is expected to rise from a current six per cent to 25 per cent by 2018.

Rising affluence and an increasing shift towards packaged and branded goods is one of the main reasons for its growing affinity. Modern retail in FMCG is estimated to account for one-fourth of the total FMCG sector, which is relatively large, given the high concentration of this sector in urban areas.

There is a huge growth potential for all the FMCG companies as the per capita consumption of almost all products in the country is amongst the lowest in the world. The demand could be increased further if these companies can change the consumer's mindset and offer new generation products. Earlier, Indian consumers were using non-branded apparel, but today, clothes of different brands are available and the same consumers are willing to pay more for branded quality clothes. It is the quality, promotion and innovation of products, which can drive many sectors.

FMCG products are sold quickly at relatively low cost. Though the absolute profit made on FMCG products is relatively small, they generally sell in large quantities, so the cumulative profit on such products can be large. Growth is also likely to come from consumer 'upgrading' in the matured product categories. To match the customers expected to shift to processed and packaged food, India needs around US$ 28 billion of investment in the food-processing industry. Automatic investment approval (including foreign technology agreements within specified norms), up to 100 per cent foreign equity or 100 per cent for NRI and Overseas Corporate Bodies (OCBs) investment, is allowed for most of the food processing sector.

FMCG stocks are now catching eye of investors for investing as best option in stock market. These stocks are now catching the eye of investors. Analysts and market experts are recommending to ‘buy’ select FMCG stocks, a move which is not just being considered as a safe ploy but also as a defensive strategy to counter a volatile and uncertain market. The trend is visible on the bourses where leading FMCG counters have outperformed the overall market during the last few sessions. Market analysts who earlier stayed away from FMCG stocks are now taking a fresh look at these rising scrips. Though, some reservations about the FMCG sector still persists, the analysts have accepted the “safe” nature of these stocks. Fall in commodity prices (from crude, vegetable fat and food articles) is the main reason behind the outperforming FMCG sector. It is an optimistic about the FMCG sector. Though the markets (at current level) have already discounted the positive impact of the fall in the raw material costs, and it is safe to invest when the prices of the FMCG scrips fall. However, not all are convinced. Now-a-days, smaller players are eating into the business of big MNC players in the FMCG sector. Biggies are therefore losing their market share. There is some momentary activity in FMCG stocks, which is a part of the defensive strategy adopted by the traders to restrict the downslide. But this trend will not prevail for a long time.

2. RESEARCH METHODOLOGY

❖ PROBLEM STATEMENT:

“A Comparative Analysis of Selective FMCG Companies in Indian Stock Market using CAPM”

❖ OBJECTIVE:

1. To evaluate the performance of selected FMCG companies.
2. To make a comparative analysis of the 5 selected FMCG companies stocks.
3. To find the correlation between the FMCG companies stock and the NIFTY FMCG Index.

❖ RESEARCH DESIGN:

In this research we have used Descriptive Research Design to bring out solution for our research problem and to obtain the information about the current status of the Indian Stock Market. We have used Exploratory Research Design as we are trying to observe and measure the performance of selected FMCG companies using CAPM model.

❖ SCOPE OF STUDY:

The scope of a study explains the extent to which the research area will be explored in the work and specifies the parameters within the study will be operating.

Scope of study is to see the performance of the selected stocks in line with the Indian stock market. Therefore, we used CAPM approach to study a comparative analysis of top five FMCG companies in Indian Stock Market. We took top five FMCG companies i.e. HUL, ITC Ltd, Nestle India, Marico Ltd and Britannia. We have collected data from the secondary source that is website of National Stock Exchange.

❖ SAMPLE SIZE:

In this research we have used the data of top 5 FMCG companies namely HUL, ITC Ltd, Nestle India, Marico Ltd and Britannia selected based on market capitalization.

❖ DATA COLLECTION METHOD:

In this research we have used the secondary data which has been collected from the website of National Stock Exchange and investing.com for a time span of 5 years starting from September 2015 to August 2020 (monthly basis).

❖ DATA ANALYSIS TOOLS:

In this Research Method we have used:

- Correlation
- CAPM (Beta and Alpha)
- Expected Return
- Standard deviation
- Variance

As an analysis technique to analyse the data and reach to a solution with the help of Microsoft Excel as an analytical tool.

3. DATA ANALYSIS

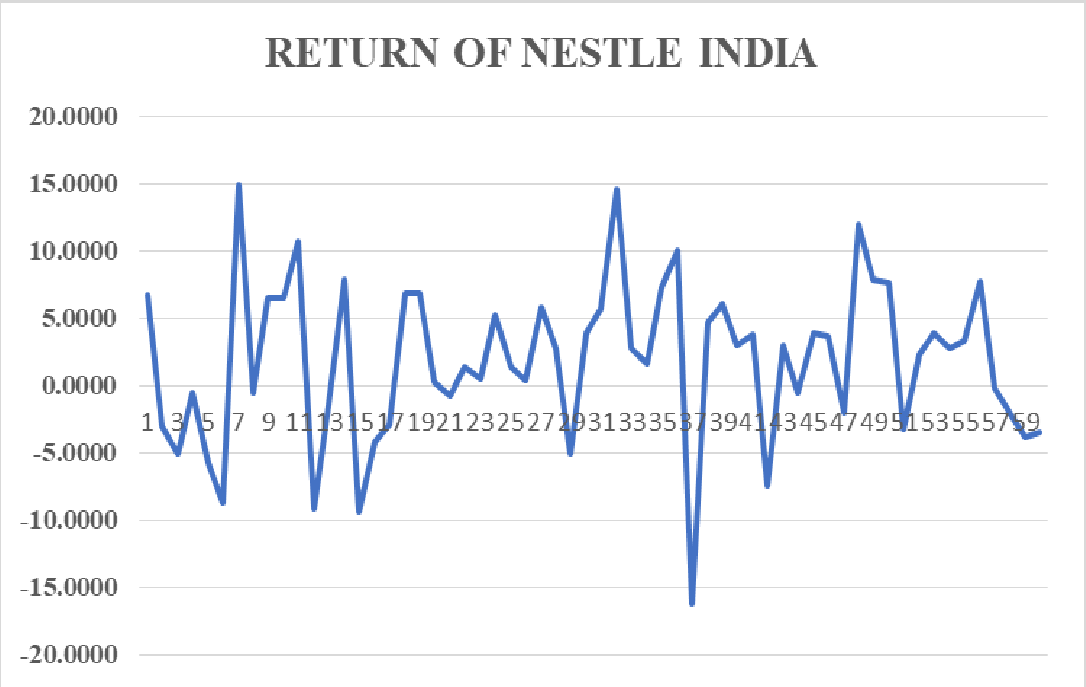


Figure 1: Return of Nestle India for last 5 Years (monthly basis)

NESTLE INDIA	
RETURN	1.831 %
STANDARD DEVIATION	6.022 %
VARIANCE	36.267 %
CAPM BETA	0.781 %
CAPM ALPHA	1.156 %
CORRELATION COEFFICIENT	0.528
RISK FREE RETURN	0.287 %
ESTIMATED RETURN (CAPM)	0.674 %
VALUE OF SECURITY	Under-priced security

Table 1: Statistical findings of the Nestle India stocks

Graph 1 and Table 1 clearly shows that during the last five years (September 2015 – August 2020) the returns of Nestle India and of NIFTY FMCG Index are highly volatile and dynamic. They are not following any trend or pattern, the returns are moving randomly which is a sign of stationarity of data and an efficient market that adjusts to all information available.

Overall return of the stocks of Nestle India is 1.831%, with standard deviation and variance 6.02% and 36.26% respectively which clearly indicates that the return of Nestle India stock is highly volatile in nature.

Correlation coefficient between Nestle India stock and NIFTY FMCG Index is 0.528 i.e. 52.8% which indicates that there is a significant positive relationship between Nestle India stock and NIFTY FMCG Index.

The alpha value for Nestle India is 1.156% which shows that, the Nestle India stock yield a good return against the risk level, whereas its beta is 0.781% which indicates that risk level associated with Nestle India stock is less than market risk, though investing in this stock would be risky but less volatile than market risk as 1% change in the market risk will lead to 0.781% change in Nestle India stock. The shares of Nestle India are under-priced thus it is an indication of investing more in this security as it is profitable.

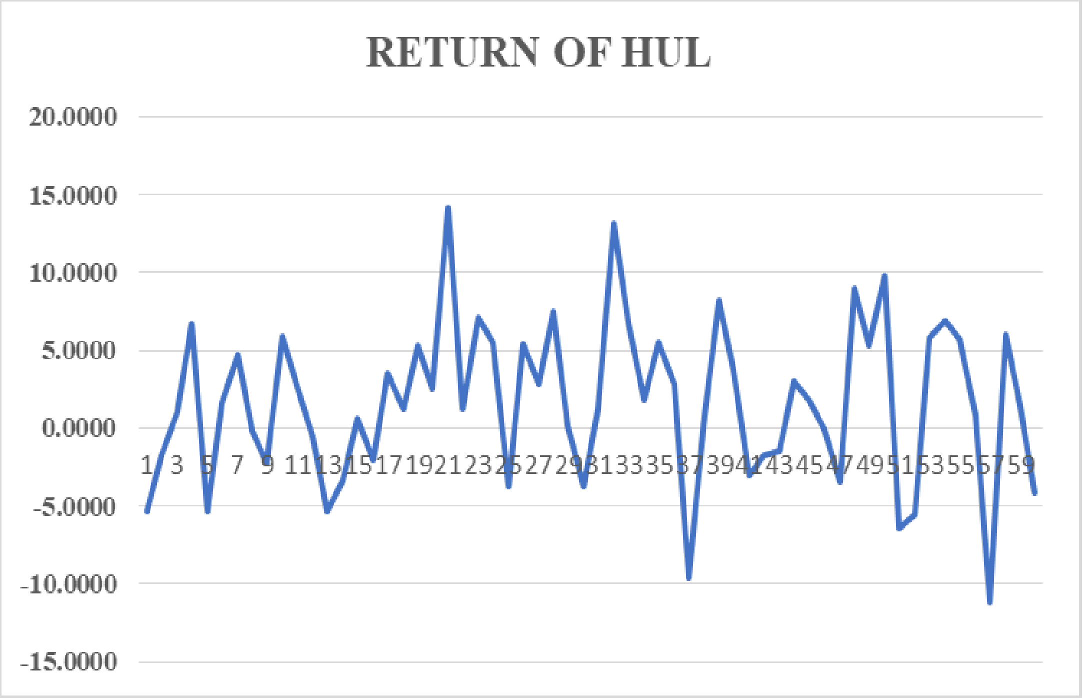


Figure 2: Return of HUL for last 5 Years (monthly basis)

HINDUSTAN UNILEVER LTD (HUL)	
RETURN	1.639 %
STANDARD DEVIATION	5.142 %
VARIANCE	26.443 %
CAPM BETA	0.692 %
CAPM ALPHA	1.009 %
CORRELATION COEFFICIENT	0.548
RISK FREE RETURN	0.287 %
ESTIMATED RETURN (CAPM)	0.630 %
VALUE OF SECURITY	Under-priced security

Table 2: Statistical findings of the HUL stocks

Graph 2 and Table 2 clearly shows that during the last five years (September 2015 – August 2020) the returns of HUL and of NIFTY FMCG Index are highly volatile and dynamic. They are not following any trend or pattern; the returns are moving randomly which is a sign of stationarity of data and an efficient market and adjusts to all information available.

Overall return of the HUL stocks is 1.639% with standard deviation and variance 5.14% and 26.44% respectively witch clearly indicates that high level of volatility of returns. Correlation coefficient between HUL and NIFTY FMCG Index is 0.548 i.e. 54.8% which indicates that there exists a significant positive relationship between HUL stock and NIFTY FMCG Index.

The alpha value for HUL is 1.009% which shows that, the HUL stocks are risk adjusted return, and generate returns at the same rate whereas the beta is 0.692% which indicates investing in this stock would be risky and less volatile than market risk as 1% change in market will lead to 0.692% change in the HUL stocks. The shares of HUL Ltd are under-priced thus it is an indication of investing more in this security as it is profitable.

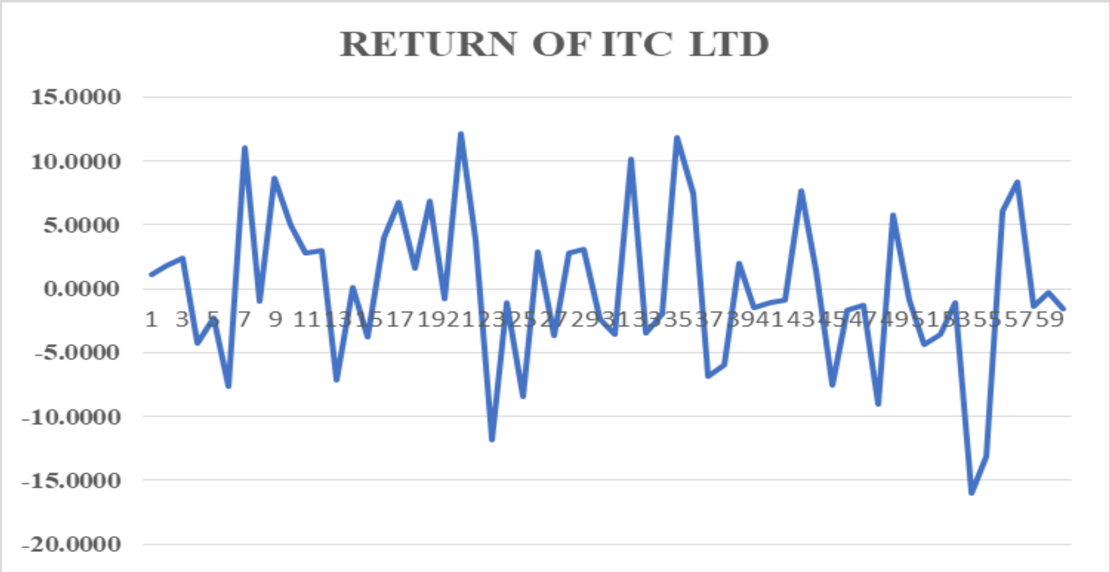


Figure 3: Return of ITC Ltd for last 5 Years (monthly basis)

ITC LTD	
RETURN	-0.018 %
STANDARD DEVIATION	6.050 %
VARIANCE	36.604 %
CAPM BETA	1.262 %
CAPM ALPHA	-0.931 %
CORRELATION COEFFICIENT	0.849
RISK FREE RETURN	0.287 %
ESTIMATED RETURN (CAPM)	0.921 %
VALUE OF SECURITY	Over-priced security

Table 3: Statistical findings of the ITC Ltd stocks

Graph 3 and Table 3 clearly shows that during the last five years (September 2015 – August 2020) the returns of ITC Ltd and of NIFTY FMCG Index are highly volatile and dynamic. They are not following any trend or pattern; the returns are moving randomly which is a sign of stationarity of data and an efficient market and adjusts to all information available.

Overall return of the ITC stock is -0.018% which is bad sign as it shows a negative return, also the standard deviation and variance is 6.05% and 36.60% respectively indicting high volatility in the returns. Correlation coefficient between ITC stock and NIFTY FMCG Index is 0.849 i.e. 84.9% which clearly shows that there exists a strong positive relationship between ITC stock and NIFTY FMCG Index.

The alpha value for ITC ltd is -0.931% which shows that, ITC stocks are not significantly risk adjusted, and cannot yield a good return, whereas the beta for this stock is 1.262% which indicates investing in this stock would be riskier and volatile compared to the market risk as 1% change in the market will lead 1.262% in the ITC stock. The shares of ITC are over-priced thus it is an indication of not investing more in this security as this are not profitable.

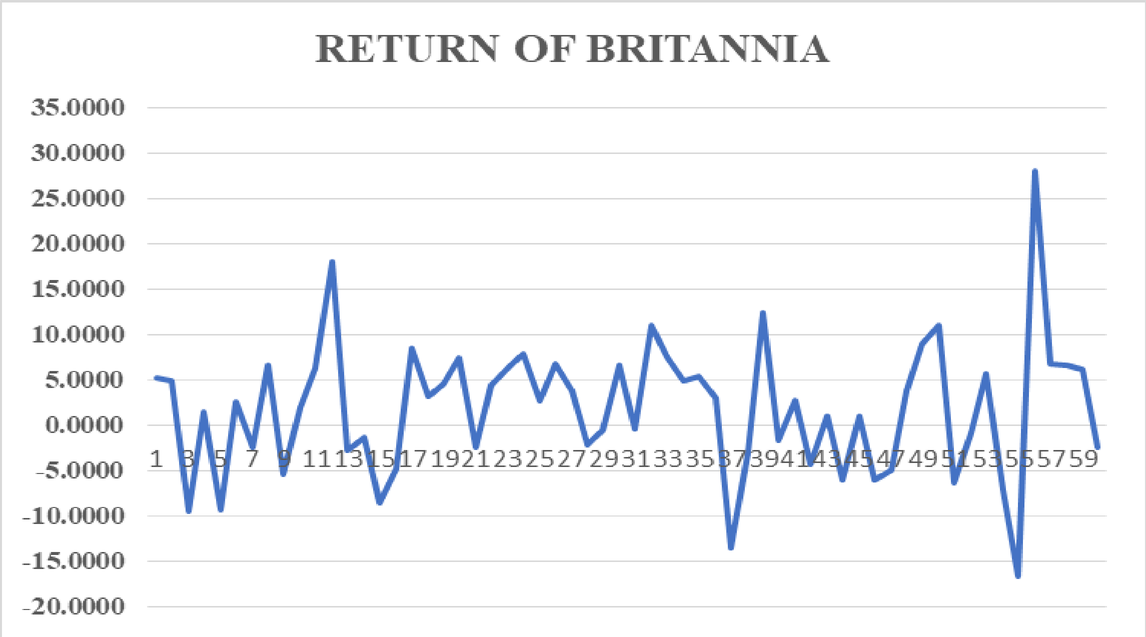


Figure 4: Return of Britannia for last 5 Years (monthly basis)

BRITANNIA	
RETURN	1.830 %
STANDARD DEVIATION	7.407 %
VARIANCE	54.866 %
CAPM BETA	0.954 %
CAPM ALPHA	1.070 %
CORRELATION COEFFICIENT	0.524
RISK FREE RETURN	0.287 %
ESTIMATED RETURN (CAPM)	0.760 %
VALUE OF SECURITY	Under-priced security

Table 4: Statistical findings of the Britannia stocks

Graph 4 and Table 4 clearly shows that during the last five years (September 2015 – August 2020) the returns of Britannia and of NIFTY FMCG Index are highly volatile and dynamic. They are not following any trend or pattern, the returns are moving randomly which is a sign of stationarity of data and an efficient market and adjusts to all information available.

Overall return of Britannia stock is 1.830% with standard deviation and variance 7.407% and 54.866% respectively which indicates high level of volatility of returns. Correlation coefficient between Britannia stock and NIFTY FMCG Index is 0.524 i.e. 52.4% which shows that there exist positive relationship between Britannia stock and NIFTY FMCG Index.

The alpha value for Britannia stock is 1.070% which is very good sign as it indicates that the stock returns are highly risk adjusted, whereas its beta value is 0.954%, which is also high indicating a risky and volatile stock returns. The shares of Britannia are under-priced thus it is an indication of investing more in this security as it is profitable.

Figure 5: Return of Marico Ltd for last 5 Years (monthly basis)

MARICO LTD	
RETURN	1.176 %
STANDARD DEVIATION	5.990 %
VARIANCE	35.886 %
CAPM BETA	0.629 %
CAPM ALPHA	0.577 %
CORRELATION COEFFICIENT	0.427
RISK FREE RETURN	0.287 %
ESTIMATED RETURN (CAPM)	0.598 %
VALUE OF SECURITY	Under-priced security

Table 5: Statistical findings of the Marico Ltd stocks

Graph 5 and Table 5 clearly shows that during the last five years (September 2015 – August 2020) the returns of Marico and of NIFTY FMCG Index are highly volatile and dynamic. They are not following any trend or pattern; the returns are moving randomly which is a sign of stationarity of data and an efficient market and adjusts to all information available.

Overall return of Marico stock is 1.176% with standard deviation and variance of 5.990% and 35.886% respectively which shows high level of volatility of return. Correlation coefficient between Marico stock and NIFTY FMCG Index is 0.427 i.e. 42.7% which indicates that there exist a moderate level of positive relationship between Marico stock and NIFTY FMCG Index.

The alpha value of Marico ltd is 0.577% which is a good sign, as it indicates that their stock generates a risk adjusted return and its beta value is 0.629%, indicating that risk level associated with this stock is less than the market risk and is less volatile. The shares of Marico are under-priced thus it is an indication of investing more in this security as it is profitable.

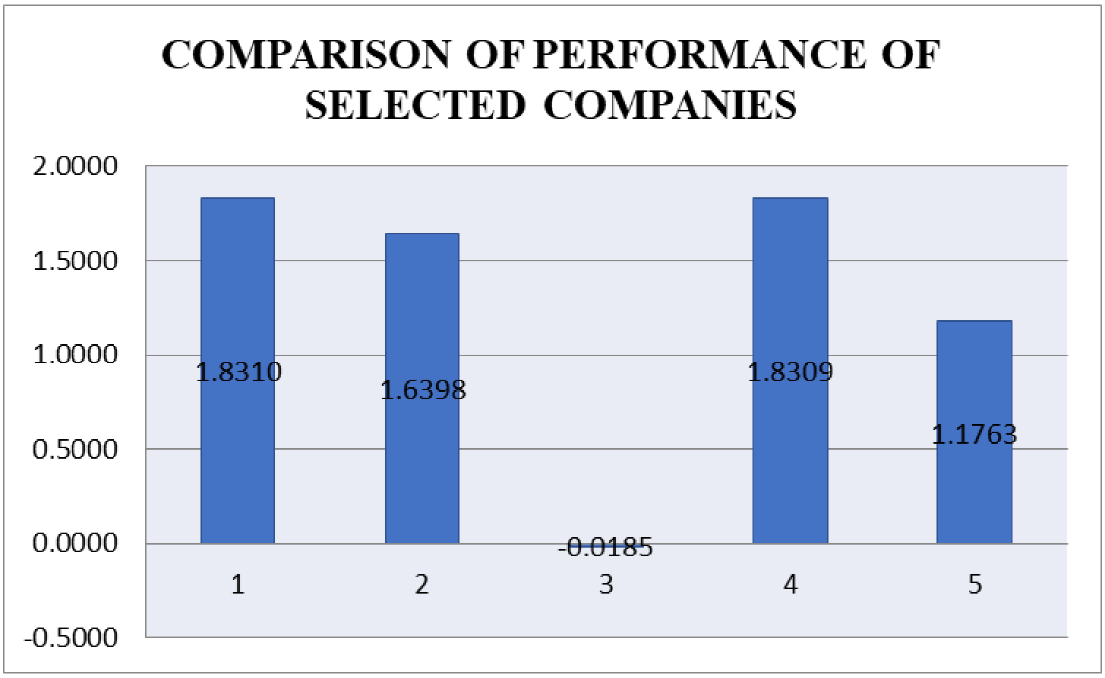
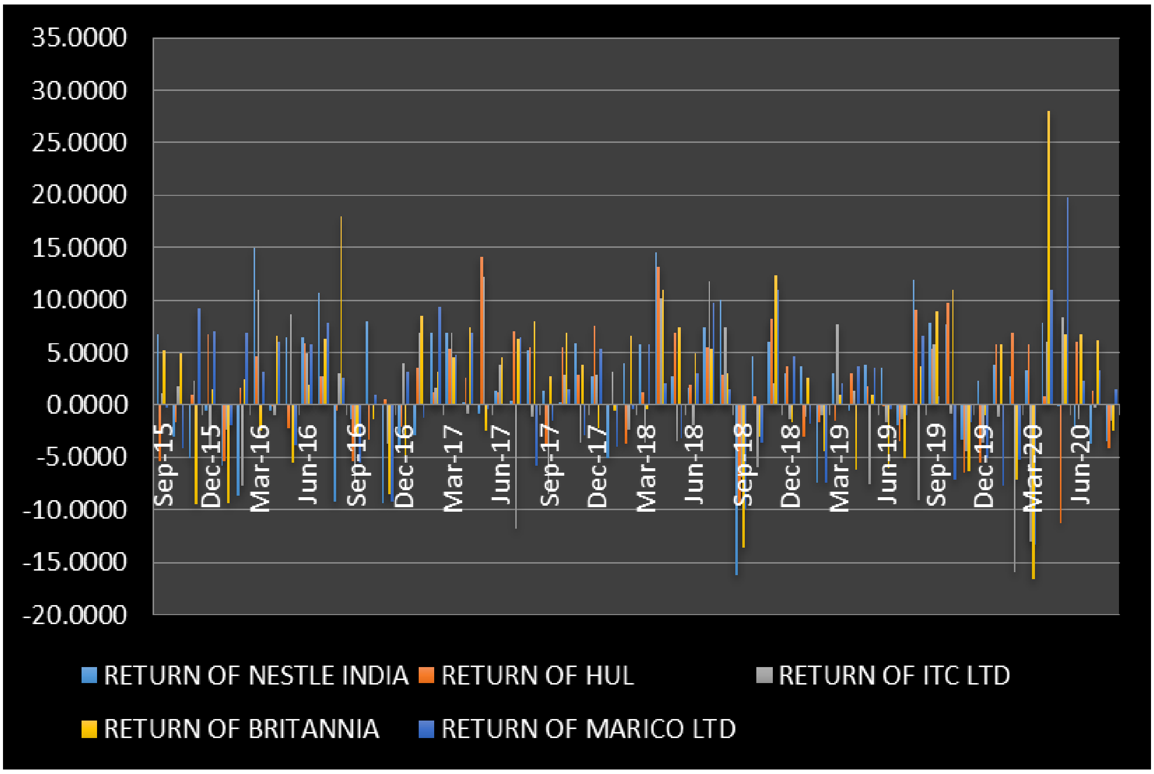


Figure 6: Comparison of the Performance of selected FMCG companies for last 5 Years

- It can be seen from the Graph 6 that both Nestle India as well as Britannia has performed well almost similar during the last 5 years i.e. 1.8310% and 1.8309% respectively gaining more returns, facing the usual small drop which is common result for all the companies. HUL, 1.6398% though second after Nestle India and Britannia, shows a significant up and down.
- Marico comes third though it performed better than ITC, i.e. 1.1763% but it was not able to beat the performance of Nestle and Britannia. Thus, it can be said that on an overall Nestle and Britannia stands in a good position followed by HUL and Marico, leaving ITC behind.
- ITC has shown a drastic bad sign as its return are falling drastically start from the year 2017 till 2020 i.e. -0.0185%.



Overall findings:

- It is found through the comparative analysis of the stock performance on NSE taking 5 companies namely Nestle India, HUL, ITC Ltd, Britannia and Marico Ltd that the stocks are moving in lined with the new information's coming in the market and are adjusting to it efficiently.
- Nestle India and Britannia stocks have performed well compared to Marico and HUL.
- ITC Ltd a well-known company has shown performing negatively in the market since last 5 years having a negative return along with a high-risk level.
- though Britannia is outperforming along with Nestle India but the degree of variation found in its stock returns is too high.
- Performance of all the selected FMCG companies' stock is better than the NIFTY FMCG Index.
- It is suggestable for the investors to invest more in the stocks of Nestle India, HUL Ltd, Britannia and Marico as the stocks of these companies are under-priced which is an indication of profitability of stocks.
- Form the overall analysis of all statistical measures taken into consideration we can say that Britannia stocks are performing well in means of preferable returns with a given risk level during the last 5 years (September 2015 - August 2020)

4. SUMMARY

The topic of study is "A Comparative Analysis of Selective FMCG Companies in Indian Stock Market Using CAPM". We have selected top 5 FMCG companies such as HUL, ITC, Nestle, Marico, and Britannia. The objectives behind report is to evaluate the performance of selected FMCG companies; to make a comparative analysis of the 5 selected FMCG companies' stocks; to find the correlation between the FMCG companies stock and the NIFTY FMCG Index. To arrive at a decision of invest in the share which offer maximum return with minimum risk beta, Expected Return, Variance, Standard Deviation, Correlation Coefficient, CAPM Beta and CAPM Alpha are used the statistical tool for right decision regarding investment. Fast-moving consumer goods (FMCG) sector in India is the 4^{th} largest sector covering household and personal care accounting to 50 % of FMCG sales in India. The CAPM is a model that provides a framework to determine the required rate of return on an asset and indicates the relationship between return and risk of the asset.

5. CONCLUSION

Performance of all the selected FMCG companies stock is better than the NIFTY FMCG Index. From the overall analysis of all statistical measures taken into consideration we can say that Nestle India and Britannia stocks are performing well in means of preferable returns with a given risk level during the last 5 years. While taking decision, the investor should take relevant information. The analysis like fundamental and technical are very important to take better decision of buying and selling of shares.

To conclude, investing in the stock market is very risky. Short-term investment in the equity may be unfavourable but long-term investment will always favourable. So, investor has to prefer the long-term investment like equity stocks. Equity stocks are considered as risky securities but they give a very good return.

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