Aayushi International Interdisciplinary Research Journal (AIIRJ)

VOL- XIII	ISSUE- III	MARCH	2026	PEER REVIEW e-JOURNAL	IMPACT FACTOR 8.589	ISSN 2349-638x

A Comparative Study of Cost of Capital and Its Influence on Business Growth: An Empirical Examination of Selected FMCG Companies (Nestlé India & Britannia Industries

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Abstract

This study examines the relationship between cost of capital and business growth with reference to Nestlé India and Britannia Industries. The main objective is to understand how the cost of capital influences profitability and financial performance. The study is based on secondary data collected from annual reports for the period of five years (2021–2025). Tools such as WACC, ratio analysis (ROA, ROE, NPM), growth analysis, and correlation are used for analysis.The findings show that Nestlé India has a higher cost of capital due to its strong dependence on equity, but it also generates higher returns and profitability. Britannia Industries, on the other hand, maintains a balanced capital structure with a lower cost of capital and stable performance. The correlation results indicate a strong positive relationship between cost of capital and profitability for both companies.The study concludes that cost of capital has a significant impact on business growth. However, in the FMCG sector, strong brand value and operational efficiency help companies maintain high profitability even with a higher cost of capital.

Keywords: *Cost of Capital, WACC, Profitability, ROE, FMCG Sector, Nestlé India, Britannia Industries, Financial Performance, Business Growth, Capital Structure*

Introduction

The cost of capital is a fundamental concept in corporate finance, representing the minimum rate of return a company must earn to satisfy its investors and sustain its market value. It plays a crucial role in shaping investment decisions, determining capital structure, and influencing overall financial performance. A lower cost of capital enables firms to undertake profitable investment opportunities, while a higher cost may limit growth and reduce profitability.

In the Fast-Moving Consumer Goods (FMCG) sector, companies operate in a highly competitive environment where efficiency, strong brand value, and effective financial management are essential for sustained success. Leading companies such as Nestlé India and Britannia Industries have consistently demonstrated strong market performance, diversified product portfolios, and stable financial structures, making them suitable for comparative financial analysis.

This study aims to examine the impact of cost of capital on profitability and business growth by comparing Nestlé India and Britannia Industries. The analysis provides insights into how financial structure and cost of capital influence firm performance, thereby contributing to a better understanding of corporate financial decision-making in the FMCG sector.

Review of Literature

Several studies have examined the relationship between cost of capital and profitability. Sharma (2022) found that cost of capital significantly influences profitability and investment decisions in Indian companies. Gupta and Mehta (2023) emphasized that WACC is a crucial determinant of corporate growth and financial performance. Rao (2021) observed that FMCG companies generally maintain a lower cost of capital due to stable demand and strong cash flows. Iyer (2024) highlighted a strong positive relationship between capital structure and return on equity, indicating the importance of financial planning.

These studies collectively suggest that cost of capital plays a critical role in determining profitability and growth, thereby supporting the relevance of the present research.

Research GAP

The existing literature mainly studies cost of capital, profitability, and growth separately rather than in an integrated manner. Very few studies provide a direct comparative analysis between Nestlé India Ltd and Britannia Industries Ltd. Most research is industry-based and lacks company-specific insights. Traditional theories assume that higher cost of capital reduces profitability, but this relationship is not empirically tested in the FMCG sector. There is limited use of recent data, especially post-2020 financial analysis. Previous studies also ignore practical issues like distorted ratios due to low debt and differences in financial reporting periods. The unique characteristics of FMCG companies, such as strong brand power and high margins, are not adequately explored. There is also a lack of studies linking WACC directly with revenue and profit growth. Existing research is more theoretical and less focused on real-world investor implications. Therefore, this study fills the gap by providing a comprehensive, data-driven comparison of cost of capital and its impact on business growth.

Objectives of The Study

1. To analyze the cost of capital of Nestlé India and Britannia Industries.
2. To examine the impact of cost of capital on profitability.
3. To study the relationship between cost of capital and business growth.
4. To understand whether differences in financial strategies lead to variations in performance and growth outcomes.

Hypothesis

(H0) :There is no significant relationship between cost of capital and profitability

Statement of The Problem

Although FMCG companies generally exhibit stable growth and profitability, they differ significantly in terms of capital structure, financing decisions, and cost of capital. These differences may influence their ability to generate profits and expand operations. The problem addressed in this study is to determine whether variations in the cost of capital between Nestlé India and Britannia Industries have a significant impact on their profitability and business growth. The study attempts to bridge this gap by providing a comparative financial analysis.

4. Importance Of The Study

The study is important from multiple perspectives. For investors, it provides a better understanding of how efficiently companies manage their financial resources and generate returns. For management, the study offers insights into optimal capital structure decisions and cost minimization strategies. Academically, the research contributes to existing literature by focusing on the FMCG sector, which is known for its stability and consistent performance. Additionally, the study helps in understanding how financial decisions influence long-term growth and profitability in leading FMCG companies.

5.Important Terminologies

The cost of capital refers to the overall cost incurred by a company in raising funds through equity, debt, or other sources. The cost of equity is the return expected by equity shareholders, while the cost of debt represents the effective interest rate paid on borrowed funds after considering tax benefits. The weighted average cost of capital (WACC) is the combined cost of all sources of finance, weighted according to their proportion in the capital structure. Capital structure refers to the mix of debt and equity used by a company to finance its operations. Profitability ratios such as Return on Assets (ROA) and Return on Equity (ROE) measure the efficiency of a company in generating profits from its assets and shareholders' funds. Earnings Before Interest and Tax (EBIT) indicates operating performance, while Earnings Per Share (EPS) reflects profitability available to shareholders.

RESEARCH METHODOLOGY

The present study is based entirely on secondary data, which has been collected from reliable sources such as annual reports, financial statements, and official company disclosures. No primary data has been used in this research, as the focus is on financial analysis of published information.

The sampling technique adopted in the study involves purposive sampling and stratified sampling. Initially, companies were selected based on the availability and consistency of financial data. Subsequently, appropriate companies were chosen from the FMCG sector to ensure meaningful comparison.

The tools used for analysis include ratio analysis, comparative analysis, and statistical methods such as correlation and t-test. These tools help in evaluating the relationship between cost of capital and profitability and in testing the formulated hypotheses.

VARIABLES

The study considers cost of capital, specifically WACC, as the independent variable, as it influences financial decision-making and investment choices. Profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin are treated as dependent variables, as they are affected by changes in the cost of capital.

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Data Analysis (Structure)

The data analysis in this study involves a systematic approach. Initially, the cost of capital for both companies will be calculated by determining the cost of equity, cost of debt, and WACC. This will provide an understanding of the overall financing cost of each company.

Subsequently, profitability ratios such as ROA, ROE, and Net Profit Margin will be calculated using financial data. These ratios will help in assessing the efficiency of each company in generating profits.

Comparative analysis of WAAC

Year	Ke (N)	Ke (B)	Kd (N)	Kd (B)	WACC (N)	WACC (B)	ROA (N)	ROA (B)
2025	80.50	54.82	13.45	8.37	70.10	43.72	26.89	26.57
2024	117.72	59.02	**10.20**	5.41	**113.00**	45.80	37.37	24.87
2023	96.96	67.24	**9.50**	4.38	**94.00**	49.60	29.70	24.76
2022	97.21	66.72	**10.80**	4.58	**94.50**	47.90	26.62	22.89
2021	102.89	53.02	**12.10**	4.03	**100.20**	39.80	26.12	23.73

Comparative analysis Growth

Year	ROE (N)	ROE (B)	NPM (N)	NPM (B)	Rev Growth (N)	Rev Growth (B)	Profit Growth (N)	Profit Growth (B)
2025	80.50	54.82	16.40	12.14	**-17.44 %**	7.01 %	-15.70%	2.34 %
2024	117.71	59.02	16.12	12.70	**+27.50%***	3.51 %	31.20%	-2.68 %

VOL- XIII | ISSUE- III | MARCH | 2026 | PEER REVIEW e-JOURNAL | IMPACT FACTOR 8.589 | ISSN 2349-638x

2023	96.95	67.24	15.67	13.51	-21.60%	15.35%	25.40%	33.45%
2022	97.20	66.72	14.14	11.67	14.70%	8.28%	11.50%	-8.91%
2021	102.89	53.02	14.58	13.89	—	—	—	—

N-Nestlé India and B-Britannia Industries.

Cost of Equity (Ke) -Nestlé India has a very high cost of equity, ranging from 80.50% to 117.72%, while Britannia Industries shows comparatively lower values between 54.82% and 67.24%. For example, in 2024, Nestlé's Ke is 117.72%, whereas Britannia's is 59.02%. This difference mainly arises because Nestlé earns very high profits compared to its equity base, which increases the return expected by investors. In contrast, Britannia has a more balanced equity structure, leading to moderate returns and lower investor expectations. Therefore, Nestlé reflects a high-return, equity-driven model, while Britannia shows a more stable and balanced equity approach.

Cost of Debt (Kd) -Nestlé's cost of debt ranges from 9.50% to 13.45%, whereas Britannia's is lower, between 4.38% and 8.37%. For instance, in 2025, Nestlé's Kd is 13.45%, compared to Britannia's 8.37%. The reason is that Nestlé uses very little debt, which makes its cost appear higher relative to the small amount borrowed. On the other hand, Britannia uses debt more efficiently and regularly, resulting in a lower and stable borrowing cost. This indicates that Britannia follows a better debt management strategy, while Nestlé is less dependent on debt financing.

WACC (Weighted Average Cost of Capital) -Nestlé's WACC is significantly higher, ranging from 70.10% to 113.00%, while Britannia's WACC is much lower, between 43.72% and 49.60%. For example, in 2024, Nestlé's WACC is 113.00%, compared to Britannia's 45.80%. This difference is mainly due to Nestlé's heavy reliance on equity and its very high cost of equity. Britannia, however, maintains a proper mix of debt and equity, which helps reduce its overall cost of capital. Despite the high WACC, Nestlé continues to perform strongly, which shows that its high cost is due to high investor expectations and strong profitability, not financial weakness. Hence, Nestlé follows an equity-dominated model, while Britannia follows a balanced financing model.

Return on Assets (ROA) -Nestlé consistently shows higher ROA, ranging from 26.62% to 37.37%, while Britannia's ROA ranges between 22.89% and 26.57%. For example, in 2024, Nestlé's ROA is 37.37%, whereas Britannia's is 24.87%. This indicates that Nestlé uses its assets more effectively to generate profit. The higher efficiency can be linked to strong brand value, better pricing power, and operational efficiency. Britannia also performs well but faces relatively higher cost pressures and competitive pricing. Therefore, Nestlé demonstrates better asset utilization, while Britannia shows stable but slightly lower efficiency.

Overall Comparative Insight -When all factors are considered together, Nestlé shows higher cost of equity, higher WACC, and higher profitability (ROA). In contrast, Britannia shows lower cost of debt, lower WACC, and moderate profitability. This highlights two different financial approaches: Nestlé focuses on high returns with strong investor expectations, while Britannia follows a balanced and cost-efficient structure.

The analysis clearly shows that a higher cost of capital does not necessarily reduce profitability in the FMCG sector. Nestlé India, despite having a high WACC (70%–113%), continues to generate strong returns, with ROA reaching up to 37.37%. This indicates that its high cost of capital is driven by strong performance and investor confidence rather than financial risk. On the other hand, Britannia maintains a lower WACC due to its balanced capital structure, but its returns are comparatively moderate.

In strong FMCG companies, profitability influences the cost of capital. A high WACC in companies like Nestlé reflects strength and high expectations, not weakness.

Return on Equity (ROE) Analysis-Nestlé has a much higher ROE (around 80% to 117%) compared to Britannia (53% to 67%). This means Nestlé earns more profit from shareholders' money. The reason is that Nestlé has high profits with a smaller equity base, while Britannia has stable profits with a larger equity base. Nestlé's ROE is very high in all years, showing strong performance. Britannia is also consistent but at a lower level.Nestlé gives higher returns, while Britannia gives stable and balanced returns.

Net Profit Margin (NPM) Analysis-Nestlé maintains higher profit margins (14% to 16%) than Britannia (11% to 14%). For example, Nestlé has 16.40% margin, while Britannia has 12.14%. This shows Nestlé has better pricing and cost control. Britannia also performs well but operates in a more competitive and price-sensitive market. Both companies show stable margins over time.Nestlé is more profitable, while Britannia is steady but slightly lower.

Revenue Growth Analysis -Nestlé's revenue growth is unstable, with both high increases and declines. One year shows high growth due to a longer reporting period, while later years show negative growth due to adjustment. Britannia shows more stable growth, usually between 3% and 15%, without big fluctuations. Nestlé growth looks uneven, while Britannia shows steady and predictable growth.

Profit Growth Analysis

Nestlé shows high but fluctuating profit growth, with both strong increases and declines. Britannia shows moderate and more stable profit growth, with smaller ups and downs. Nestlé's high growth comes from strong margins, but it also faces variation. Britannia grows at a balanced pace. Nestlé has high but unstable growth, while Britannia has stable and controlled growth.

HYPOTHESIS TESTING

Research Design

This study examines the relationship between cost of capital and profitability. WACC (%) is taken as the independent variable, as it represents the overall cost of funds, while ROE (%) is the dependent variable because it shows returns to shareholders. The purpose is to understand how changes in cost of capital affect shareholder returns.

Karl Pearson Correlation

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{[n\sum X^2 - (\sum X)^2][n\sum Y^2 - (\sum Y)^2]}}$$

INDIA – CORRELATION (5 YEARS)

Year	X (WACC)	Y (ROE)	X²	Y²	XY
2025	70.10	80.50	4914.01	6480.25	5643.05
2024	113.00	117.71	12769.00	13855.64	13299.23
2023	94.00	96.95	8836.00	9409.30	9103.30
2022	94.50	97.20	8930.25	9447.84	9185.40
2021	100.20	102.89	10040.04	10586.33	10310.78
Total	**471.80**	**495.25**	**45489.30**	**49779.36**	**47541.76**

Here- $n = 5$

$$r = \frac{5(47541.76) - (471.80 \times 495.25)}{\sqrt{[5 \times 45489.30 - (471.80)^2][5 \times 49779.36 - (495.25)^2]}}$$

$$r = +0.995$$

Nestlé India – Correlation Result

- r = +0.995

This value shows a very strong positive relationship between WACC and ROE. It means that when WACC increases, ROE also increases in a very consistent manner. This happens because Nestlé mainly depends on equity, and higher returns lead to higher investor expectations, which increases the cost of capital. The result reflects strong profitability and efficient use of funds rather than financial risk. In Nestlé, cost of capital and profitability move closely together.

BRITANNIA INDUSTRIES – CORRELATION (5 YEARS)

Year	X (WACC)	Y (ROE)	X²	Y²	XY
2025	43.72	54.82	1911.44	3005.23	2395.73
2024	45.80	59.02	2097.64	3483.36	2702.12
2023	49.60	67.24	2460.16	4521.22	3335.10
2022	47.90	66.72	2294.41	4451.56	3195.89
2021	39.80	53.02	1584.04	2811.12	2109.40
Total	**226.82**	**300.82**	**10347.69**	**18272.49**	**13738.24**

$$r = \frac{5(13738.24) - (226.82 \times 300.82)}{\sqrt{[5 \times 10347.69 - (226.82)^2][5 \times 18272.49 - (300.82)^2]}}$$

$$r = +0.967$$

Correlation Result

- r = +0.967

This also shows a strong positive relationship, but slightly lower than Nestlé. It means WACC influences ROE, but not as tightly. This is because Britannia uses a mix of debt and equity, and its profits are also influenced by operational efficiency. As a result, changes in WACC do not affect ROE in a perfectly proportional way. In Britannia, profitability depends on both financial structure and operations.

5. Hypothesis Testing

H_0: There is no significant relationship between WACC and ROE

Level of Significance: 5% ,Degree of Freedom: 3 ,Critical Value (r): 0.878

H_0 (Null Hypothesis): There is no significant relationship between WACC and ROE

The **t-test for correlation coefficient** is used:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where: r = correlation coefficient , n = number of observations (5 years)

Degree of Freedom:$df = n - 2 = 5 - 2 = 3$

Level of Significance :α = 5% (0.05) , Critical t-value (df = 3) = 3.182

NESTLÉ INDIA -r = 0.995

Calculated t-value

$$t = \frac{0.995 \times \sqrt{3}}{\sqrt{1-(0.995)^2}}$$

$$t = \frac{0.995 \times 1.732}{\sqrt{0.009975}}$$

$$t = \frac{1.723}{0.0998} = 17.26$$

Calculated value = 17.26, Critical value = 3.182 ,Since **17.26 > 3.182**

Interpretation (Nestlé)

The calculated t-value is much higher than the critical value, which means the result is statistically significant. Therefore, the null hypothesis is rejected, and it is concluded that there is a very strong and significant relationship between WACC and ROE in Nestlé India.

Britannia Industries

r = 0.967

Calculated t-value= $t = \frac{0.967\times\sqrt{3}}{\sqrt{1-(0.967)^2}} = t = \frac{0.967\times1.732}{\sqrt{0.065}}$

$$t = \frac{1.675}{0.255} = 6.57$$

Calculated value = 6.57 ,Critical value = 3.182

Since **6.57 > 3.182**

Interpretation (Britannia)

The calculated t-value is greater than the critical value, indicating that the relationship between WACC and ROE is statistically significant. Hence, the null hypothesis is rejected for Britannia Industries as well.

The calculated t-values for both companies are significantly higher than the critical value at a 5% level of significance. This clearly indicates that the correlation between WACC and ROE is not due to chance but is statistically meaningful. Nestlé shows a stronger relationship compared to Britannia, as reflected in its higher t-value.

Decision Table

Company	Calculated r	Critical r	Decision
Nestlé	0.995	0.878	Reject H_0
Britannia	0.967	0.878	Reject H_0

Since the calculated values for both companies are higher than the critical value, the null hypothesis is rejected. This confirms that there is a significant relationship between WACC and ROE. Nestlé shows a stronger relationship, indicating that profitability is highly linked to cost of capital. Britannia also shows a strong relationship, but with slightly more stability due to its balanced structure.Cost of capital plays an important role in profitability, but in strong FMCG companies, higher cost often reflects higher returns and investor confidence, not financial weakness.

Findings

1. The study reveals that Nestlé India has a significantly higher Cost of Equity (80%–117%) compared to Britannia (53%–67%), indicating strong investor expectations and premium market positioning.

2. It is observed that Cost of Debt (Kd) in Nestlé appears abnormally high in earlier years due to very low debt levels, whereas Britannia maintains a stable and realistic debt cost (4%–8%), reflecting better debt management.
3. The analysis shows that WACC of Nestlé (70%–113%) is much higher than Britannia (39%–49%), primarily because Nestlé relies heavily on equity financing.
4. Return on Assets (ROA) indicates that Nestlé (26%–37%) is slightly more efficient than Britannia (23%–26%) in utilizing its assets for generating profits.
5. Return on Equity (ROE) is extremely high for Nestlé (80%–117%) compared to Britannia (53%–67%), showing that Nestlé generates superior shareholder returns.
6. Net Profit Margin (NPM) analysis reveals that Nestlé (14%–16%) has consistently higher margins than Britannia (11%–14%), indicating stronger pricing power and cost efficiency.
7. Revenue growth trends show that Nestlé experiences higher fluctuations due to reporting adjustments, while Britannia demonstrates steady and moderate growth.
8. Profit growth in Nestlé is relatively more consistent, whereas Britannia shows fluctuations due to cost pressures and market competition.
9. Correlation analysis indicates a very strong relationship ($R = 0.998$) in Nestlé, meaning cost of capital, profitability, and efficiency are highly interdependent.
10. Britannia also shows a strong relationship ($R = 0.972$), but comparatively lower than Nestlé, indicating a more balanced and less sensitive financial structure.
11. Differences in financial strategies clearly lead to differences in performance and growth. Nestlé's equity-based strategy results in higher profitability but more fluctuations, while Britannia's balanced approach provides stable and consistent performance. This shows that financial structure plays an important role in determining business outcomes.

Suggestions

1. Nestlé India should consider optimizing its capital structure by introducing moderate debt to reduce its high WACC and improve cost efficiency.
2. Britannia Industries can enhance shareholder returns by strategically increasing equity efficiency while maintaining its balanced financial approach.
3. Both companies should focus on cost control mechanisms to maintain or improve profit margins in a competitive FMCG environment.
4. Nestlé should ensure stability in revenue growth reporting, avoiding large fluctuations due to accounting adjustments for better financial analysis.
5. Britannia should work on improving operational efficiency (ROA) to match or exceed Nestlé's performance.
6. Both companies should adopt advanced financial planning and forecasting tools to manage cost of capital effectively.
7. Investors should consider that high WACC in FMCG does not necessarily indicate risk, but may reflect strong profitability and market confidence.
8. Companies should maintain an optimal balance between debt and equity to achieve sustainable growth.
9. Further research can include more FMCG companies to generalize findings across the sector.
10. Firms should align their financial strategies with long-term growth objectives rather than short-term profitability.

Conclusion

This study shows that both Nestlé India and Britannia Industries perform well, but they follow different financial strategies. Nestlé relies more on equity, which leads to a higher cost of capital, but it still earns very high returns and uses its resources efficiently. Britannia, on the other hand, follows a balanced approach with moderate cost of capital and stable performance. The results confirm that cost of capital does affect profitability and growth. However, in strong FMCG companies, factors like brand value, efficiency, and market position play an equally important role. A high cost of capital does not always reduce profitability; it can also indicate strong performance and high investor confidence.

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