

Reconnoitering Financial Governance of Professionally Managed and Family Owned Businesses – A Study of Selected Companies Listed under NSE ESG Index*

Abstract

Business organisations across the globe has espoused the fact that for the survival and growth it is imperative that ‘*mother earth*’ needs to be preserved. Regulatory structure and other compliance requirements have made it mandatory for the companies to have Integrated Report providing details pertaining to the initiatives or activities undertaken under the six capitals, i.e., Manufactured capital, Natural capital, Social & Relationship capital, Human capital, Intellectual capital and Financial capital.

In India as per SEBI’s requirements, companies are required to provide Business Responsibility & Sustainability Report, i.e., principle wise performance disclosure encompassing nine crucial principles that lays due emphasis on environmental, social and governance dimensions.

In light of the aforesaid facts and embracing the empirical research approach, this article makes an academic and research endeavour to reconnoitre financial governance of selected professional managed and family-owned companies listed under NSE ESG Index.

The rationale underlying considering NSE ESG index companies for the research study is that majority of stakeholders have proclivity towards ESG compliant corporate houses and society also consider those companies as along with their business objectives also give due emphasis to the betterment, upliftment and preservation of the resources of the society.

To comprehend the financial governance scenario of professionally managed and family owned companies, Piotroski Score have been applied that is whether magnitude of promoters holding ex. Further, this article also delves into stock performance of both professionally management and family owned companies with the assistance of beta value.

Keywords: ESG; Piotroski Score; Beta Value

JEL Classification Code: G3 (Corporate Finance and Governance)

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Views expressed in the Article are the sole expression of the Author and may not express the views of the Institute.

Full-length Paper

Introduction

ESG stands for environmental, social and governance and have occupied prominent place in strategic management of the corporate sector whether in the form of caring for environment by laying thrust on crucial environmental issues like climate change, air and water pollution, deforestation etc.; undertaking of corporate social responsibility related activities; embracing diversity, equity and inclusion (DEI) in case of human capital; strengthening governance through board composition; audit committee structure; executive compensation; whistle blower schemes etc. Moreover, investors opt for responsible investing, i.e., they have proclivity towards the financial instruments issued by such companies who espouses ESG approach.

The elements covered under “E”, “S” and “G” are as under:

i) E- Environmental Factors

- a) Energy consumption and efficiency.
- b) Carbon footprint, including Green House Gases (GHG) emission.
- c) Waste management.
- d) Air and water pollution.
- e) Biodiversity loss.
- f) Deforestation.
- g) Natural resource depletion.

ii) S-Social Factors

- a) Fair pay for employees, including a living wage.
- b) Diversity, Equity and Inclusion (DEI) programmes.
- c) Employee experience and engagement.
- d) Workplace health and safety.
- e) Data protection and privacy policies.
- f) Fair treatment of customers and suppliers.
- g) Customer satisfaction levels.
- h) Community relations including the organisation’s connection to and impact on the local communities it operates.

- i) Funding of projects or institutions that help poor and underserved communities.
- j) Support for human rights and labour standards.

iii) Governance

- a) Company leadership and management.
- b) Board compensation including its diversity and structure.
- c) Executive compensation policies.
- d) Financial transparency and business integrity.
- e) Regulatory compliance and risk management initiatives.
- f) Ethical business practices.
- g) Rules on corruption, bribery, conflicts of interest, and political donations and lobbying.
- h) Whistle blower programmes.

Literature Review

Rao Vigneswara KT, H.S. Parameshwar H.S., Ajay Bhima Kotha and Aradhyula Yadav Aditya (2018) in their research study has elucidated that there is a significant positive relationship between promoter shareholding and value of the firms they considered for the research study.

Khatwani Ritesh, Raghuram Gopala, Mishra Mahima and Mistry Janki (2023) conducted a research study on the implications of change in promoter shareholding for small-cap companies, wherein it was observed that one-year returns had no relationship with a change in promoter shareholding, however two-year returns revealed a negative relationship with a change in promoter shareholding.

Kaushik Rishabh (2023) opined that in companies wherein promoters have high stakes then it is a harbinger of company's future prospects. As it is expected that founders of a company must possess robust understanding of its operations, business model, and long-term vision so high involvement of promoters in the business is an indication of their calibre to create business value over a period of time.

Research Questions / Hypothesis

1. Whether there is a significant difference or not in the financial governance of high promoters holding as well as low promoters holding companies listed under the NSE ESG 100 Index considered for the research study with reference to their Piotroski scores?
2. Whether the stocks of the companies having high and low promoters holding ?

Methodology and Data Collection

1. **Chi-square test:** This non-parametric test assist in finding out that whether there is a significant difference exists or not in the financial governance of the companies considered for the research study in view of the Piotroski scores of those companies.
2. **Beta value:** Beta values will assist in ascertaining the relationship between the stock's return and the market index returns. Based on the values of beta, i.e., $B=+1.0$, $B=+0.5$, $B=+2.0$ and negative beta, it will be inferred whether the stocks of the companies selected for beta computation have high or low volatility.

With reference to data collection, secondary data from authentic sources have been considered for conducting the analysis.

Findings

Gauging Performance of ESG Index Companies

Having discussed about the concept of ESG and what ESG investing involves, it creates paramount academic and research interest to reconnoitre the performance of ESG compliant companies to decipher whether their financial performance is an insinuation of espousing the factors stated under 'E', 'S' and 'G' broadly.

In this regard, Piotroski Score have been applied to measure the financial performance of five companies affiliated to different sectors of Indian economy on random basis. Since Piotroski Score measures the financial performance of a company on nine criteria covered under the following categories: Profitability; Leverage, Liquidity and Source of Funds and Operating Efficiency, which broadly addresses the elements of ESG in the sense that factors of ESG can be applied efficiently by a company only when it performs prodigiously in all the nine criteria clubbed under the aforesaid three broad categories of Piotroski Score.

The nine criteria covered under the Profitability; Leverage, Liquidity and Sources of Funds and Operating Efficiency and their relevance are as under:

i) Profitability

| <i>S.No.</i> | <i>Criteria</i> | <i>Piotroski Score</i> |
|--------------|---|------------------------|
| 1 | Net Income | 1 |
| 2 | Positive Return on Assets in Current Year | 1 |

| | | |
|---|---|---|
| 3 | Cash flow from operations being greater than net income (quality of earnings) | 1 |
|---|---|---|

ii) Leverage, Liquidity and Source of Funds

| <i>S.No.</i> | <i>Criteria</i> | <i>Piotroski Score</i> |
|--------------|---|------------------------|
| 1 | Lower amount of long-term debt in the current period compared to the previous year (decreased leverage) | 1 |
| 2 | Higher current ratio in current year, compared to the previous year (more liquidity) | 1 |
| 3 | No new shares issued (lack of dilution of equity) | 1 |

iii) Operating Efficiency

| <i>S.No.</i> | <i>Criteria</i> | <i>Piotroski Score</i> |
|--------------|---|------------------------|
| 1 | A higher gross margin compared to the previous year | 1 |
| 2 | A higher asset turnover compared to the previous year | 1 |

To comprehend the impact of high and low promoters holding on the Piotroski score of NSE ESG 100 Index companies considered for the research study, Chi-Square Test have been applied. The list of the selected companies having high promoters holding along with their Piotroski scores is provided in table 1.

Table 1
Companies with High Promoters Holding and Piotroski Score

| ESG Index Companies | Piotroski Score | Promoters Holding (%) |
|----------------------------|------------------------|------------------------------|
| SIEMENS | 7 | 75 |
| HAVELLS | 6 | 59.5 |
| GODREJCP | 5 | 63.2 |

| | | |
|------------|---|------|
| ACC | 4 | 56.7 |
| HINDUNILVR | 7 | 61.9 |
| HCLTECH | 7 | 60.8 |
| CHOLAFIN | 3 | 51.5 |
| SBIN | 6 | 57.5 |
| DLF | 7 | 75 |
| PIDILITIND | 6 | 69.9 |
| BAJFINANCE | 3 | 55.9 |
| BHARTIARTL | 7 | 55 |
| MARUTI | 7 | 56.5 |
| IRCTC | 7 | 62.4 |
| RELIANCE | 6 | 50.4 |
| TCS | 6 | 72.3 |
| ASIANPAINT | 7 | 52.6 |
| TORNTPHARM | 6 | 71.3 |
| DIVISLAB | 7 | 51.9 |
| NESTLEIND | 7 | 62.8 |
| MOTHERSON | 7 | 64.8 |
| BRITANNIA | 7 | 50.6 |
| HCLTECH | 7 | 60.8 |
| POWERGRID | 7 | 51.3 |
| SUNPHARMA | 8 | 54.5 |
| ATGL | 6 | 74.8 |

Source: Trendlyne

The list of the selected companies having low promoters holding along with their Piotroski scores is provided in table 2.

Table 2
Companies with Non Promoters Holding and Piotroski Score

| ESG INDEX COMPANIES | PIOTROSKI SCORE | NON-PROMOTERS HOLDING |
|----------------------------|------------------------|------------------------------|
| EICHERMOTORS | 6 | 50.8 |
| M&M | 6 | 80.6 |
| INDUSINDBK | 6 | 83.5 |
| AXISBANK | 6 | 91.8 |
| HDFCBANK | 4 | 74.4 |
| ICICIGI | 4 | 52 |
| HEROMOTOCO | 6 | 65.2 |
| ICICIBANK | 6 | 100 |
| TATAMOTORS | 3 | 53.6 |
| TATAPOWER | 7 | 53.1 |
| HDFC | 4 | 74.4 |
| HINDALCO | 7 | 65.4 |
| TATACONSUM | 6 | 65.6 |
| DRREDDY | 7 | 73.3 |
| CIPLA | 8 | 66.4 |
| PIIND | 7 | 53.9 |
| JSWSTEEL | 8 | 54.6 |

Source: Trendlyne

The selected companies with high and low to medium Piotroski Scores is provided in table 3.

Table 3
Chi-square Test -Promoters Holding and Piotroski Score

| <i>Promoters Holding</i> | <i>High Piotroski Score</i> | <i>Low to Medium Piotroski Score</i> | <i>Total</i> |
|-------------------------------|-----------------------------|--------------------------------------|--------------|
| High Promoters Holding | 15 | 11 | 26 |
| Low Promoters Holding | 6 | 11 | 17 |
| Total | 21 | 22 | 43 |

Null Hypothesis (H0): *There is no association between magnitude of Promoters Holdings (High or Low) on the Piotroski Score (High or Low to Medium) of the selected NSE ESG 100 Index companies.*

Alternative Hypothesis (H1): *There exists an association between magnitude of Promoters Holdings (High or Low) on the Piotroski Score (High or Low to Medium) of the selected NSE ESG 100 Index companies.*

| <i>Observed value (O)</i> | <i>Expected value (E)</i> | $(O - E)^2$ | $(O - E)^2 / E$ |
|--|---------------------------|-------------|-----------------|
| 15 | 13 | 4 | 0.31 |
| 6 | 8 | 4 | 0.5 |
| 11 | 13 | 4 | 0.31 |
| 11 | 9 | 4 | 0.44 |
| | | | |
| $\Sigma[(O - E)^2 / E]=$ | | | 1.56 |

$$\chi^2 = \Sigma[(O - E)^2 / E] = 1.56$$

$$\text{Degrees of freedom: } v = (r - 1)(C - 1) = (2 - 1)(2 - 1) = 1$$

$$v = 1, \chi^2_{0.05} = 3.84$$

Decision: *The calculated value of χ^2 , i.e. 1.56 is smaller than the table value of χ^2 that is 3.84, the null hypothesis is accepted or fail to reject the null hypothesis. Hence there is no association between magnitude of Promoters Holdings (High or Low) on the Piotroski Score (High or Low and Medium) of the selected NSE ESG 100 Index companies.*

Now it is of paramount academic and research interests to ascertain the magnitude of volatility of stocks of the companies having high and low promoters holdings considered for the research study. The volatility of the stock is determined through Beta which is the slope of the characteristic regression line. Beta describes the relationship between the stock's return and market index return.

To assess the volatility of the stocks of the companies having high and low promoters holdings five companies with high promoters holdings and low promoters holdings each have been considered, i.e., total ten companies.

The companies taken into account for Beta calculation having high promoters' holdings are as under:

1. **Siemens India Limited**
2. **DLF Limited**
3. **ATGL**
4. **TCS**
5. **Torrent Pharmaceuticals Limited**

The companies considered for Beta calculation having low promoters holdings or professionally managed companies is provided in 6 to 10.

6. **Eicher Motors Limited**
7. **Mahindra & Mahindra Limited**
8. **ICICI Bank**
9. **Hero Motor Corporation**
10. **Tata Motors Limited**

The beta values of companies having high promoters and non-promoters holding along with the inferences is provided in table 4. Computation of beta values have been done in MS-Excel.

Table 4
Beta values of High and Low Promoters Holding Companies

| <i>S.No.</i> | <i>Companies</i> | <i>Beta Values</i> | <i>Inference</i> |
|--------------|---------------------------------|--------------------|---|
| 1. | Siemens Limited | 0.34 | Since beta value is less than 1, it indicates that the stock is less volatile in response to the market index return, as 1 percent change in the market index return causes 0.34% change in the stock return. |
| 2 | DLF Limited | 1.44 | The beta value is more than 1, indicating that it is a volatile stock. It implies that 1% change in the market index return causes 1.44% change in the stock return. |
| 3 | Adani Total Gas Limited (ATGL) | 1.95 | As the beta value is much higher than 1, i.e., 1.95, it may be inferred that it is a highly volatile stock. From the beta value, it implies that 1% change in the market index return resulted into 1.95% change in the stock return. |
| 4 | TCS Limited | 1.08 | The stock is quite volatile as the beta value is 1.08, thereby indicating that 1% change in the market index return causes 1.08% change in the stock return. |
| 5 | Torrent Pharmaceuticals Limited | 0.39 | It is a less volatile stock as evident from the beta value, i.e., 0.39. It means that 1% change in the market index return causes 0.39% change in the stock return. |
| 6 | Tata Motors Limited | 1.17 | A highly volatile stock as the beta value is more than 1, thereby indicating that 1% change in market index return results into 1.17% change in stock return. |

| | | | |
|----|-----------------------------|------|---|
| 7 | Mahindra & Mahindra Limited | 0.99 | The beta value of the stock is less than 1, a portend of relatively less volatile stock. |
| 8 | ICICI Bank | 0.84 | The stock is quite less volatile as the beta value is less than 1, meaning thereby that 1 percent change in market index return causes 0.84% percent change in the stock return. |
| 9 | Hero Motor Corporation | 0.87 | The stock has beta value of 0.87, implying that it is less volatile. In other words, it means that 1% change in market index return 0.87% change in the stock return. |
| 10 | Eicher Motors Limited | 2.05 | This stock is highly volatile as evident from its beta value which stood at 2.05. It can be inferred that 1% change in market index return causes 2.05% change in the stock return. |

Analysis and Discussion

From the aforesaid analysis of the performance of the companies with substantial and minority promoters holding, it may be inferred that financial governance wise as ascertained through Piotroski score both the categories of companies are on the same footing. It is heartening to note that in India both professionally managed and family owned enterprises are adhering to the best corporate governance practices. All the companies considered for the research study are on equal footing with reference to profitability; leverage, liquidity and source of funds and operating efficiency, the three parameters of Piotroski score.

On observing the beta values of the stocks, it may be inferred that both professionally managed companies as well as companies with high promoters holding have volatility in their stocks. However, it is important to note that Siemens India limited despite being a promoters holding company have registered a low volatility in its stock. On the contrary, Eicher Motors limited being a non-promoters holding company have exhibited a high volatility in its stock.

It is to be noted at this juncture that there are several yardsticks and approaches to determine the performance of a company on the financial governance criterion such as Alpha values, Altman Z-Score Model, Profits after Tax (PAT), Earnings before Interest and Tax (EBIT), DuPont Analysis, Karl Pearson's Correlation Coefficient to measure the

nature and extent of relationship between the stock market index return and stock return in a particular period, Market Adjusted Excess Return etc.

In this research paper two approaches that is extent of promoters holding and Piotroski score and beta value of the stocks. Hence, it must not be inferred that companies that have displayed high volatility in their stocks are not performing well in financial governance, as other parameters to estimate the financial governance have not been considered.

Conclusion

Whether corporate houses are professionally managed or having high promoters holding, the boards of the companies should strive to espouse best corporate governance practices and enhance business value by embracing the tenets of 'ESG'. In other words, in order to increase the value of business in different ways like increasing profits, production, marketability of the goods produced, business expansions through organic or inorganic growth and so on and so forth, the board of the company should not lose focus on the elements covered under the 'Environmental', 'Social' and 'Governance' dimensions.

This research paper has delved into one facet of corporate governance i.e., financial governance but governance is a broad term and encompasses numerous components. Therefore, as mentioned, even if any company's financial governance does not appear to be optimistic as per the analysis conducted, it should not be surmised that the company is not making any endeavour or not ensuring adherence to the canons of corporate governance, as all the companies are mammoth in size, have large scale operations, employs work force of high calibre across all the hierarchies of the management and contribute significantly under the six capitals covered under Integrated Reporting, i.e., manufactured capital, natural capital, social & relationship capital, human capital, intellectual capital and financial capital. Hence in light of the above discussion, it may be opined that this research study is the 'tip of the iceberg' and more explorations will be conducted in near future.

Limitations and Scope for Future Research

- 1) *Limitations:* The limitations of the research study are as under:
 - i) The research study is based on the secondary data.
 - ii) All the companies listed under NSE ESG 100 Index have not been studied.
 - iii) Due to technical constraints the other parameters of measuring financial governance have not been covered in the research study.

- 2) *Scope for Future Research*: The scope for future research are as under:
- i) Sustainability of the companies covered under NSE ESG 100 Index may be studied through Altman Z-Score Model.
 - ii) The magnitude of risks of the companies covered under the aforesaid category may be explored through Hamada Equation.
 - iii) The governance of the companies may be gauged on BRSR (Business Responsibility and Sustainability Reporting) principles of SEBI, GRI Standards etc.
 - iv) Whitbeck Kisor Model which is a function of three financial variables, i.e., growth rate of earnings, dividend payment rate (D/E) and risk in the growth rate that is deviation in the growth rate of stock may be applied on the NSE ESG 100 index companies to assess their financial governance.

References

1. “Siemens Limited Shareholding Pattern, Accessed from <https://trendlyne.com/equity/share-holding/1237/SIEMENS/31-03-2022/siemens-ltd/>
2. “Havells India Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/525/HAVELLS/31-03-2022/havells-india-ltd/>
3. “Godrej Consumer Products Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/476/GODREJCP/31-03-2022/godrej-consumer-products-ltd/>
4. “ACC Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/22/ACC/31-03-2022/acc-ltd/>
5. “Hindustan Unilever Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/560/HINDUNILVR/latest/hindustan-unilever-ltd/>
6. “HCL Technologies Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/531/HCLTECH/latest/hcl-technologies-ltd/>
7. “DLF Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/337/DLF/latest/df-ltd/>
8. “Pidilite Industries Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/1037/PIDILITIND/latest/pidilite-industries-ltd/>

9. "Bajaj Finance Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/150/BAJFINANCE/latest/bajaj-finance-ltd/>
10. "Bharti Airtel Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/187/BHARTIARTL/latest/bharti-airtel-ltd/>
11. "Maruti Suzuki India Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/842/MARUTI/latest/maruti-suzuki-india-ltd/>
12. "Indian Railway Catering & Tourism Corporation Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/167028/IRCTC/latest/indian-railway-catering-tourism-corporation-ltd/>
13. "Cholamandalam Investment & Finance Company Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/262/CHOLAFIN/latest/cholamandalam-investment-finance-company-ltd/>
14. "Reliance Industries Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/1127/RELIANCE/latest/reliance-industries-ltd/>
15. "Tata Consultancy Services Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/1372/TCS/latest/tata-consultancy-services-ltd/>
16. "Asian Paints Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/117/ASIANPAINT/latest/asian-paints-ltd/>
17. "Torrent Pharmaceuticals Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/1409/TORNTPHARM/latest/torrent-pharmaceuticals-ltd/>
18. "Divi's Laboratories Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/336/DIVISLAB/latest/divi-s-laboratories-ltd/>
19. "Nestle India Limited Shareholding Pattern", Accessed from <https://trendlyne.com/equity/share-holding/930/NESTLEIND/latest/nestle-india-ltd/>

20. “Samvardhana Motherson International Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/878/MOTHERSON/latest/samvardhana-motherson-international-ltd/>
21. “Britannia Industries Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/220/BRITANNIA/latest/britannia-industries-ltd/>
22. “Power Grid Corporation of India Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/1057/POWERGRID/latest/power-grid-corporation-of-india-ltd/>
23. “Sun Pharmaceuticals Industries Limited Shareholding Pattern”, Accessed from <https://trendlyne.com/equity/share-holding/1316/SUNPHARMA/latest/sun-pharmaceutical-industries-ltd/>
24. Kaushik Rishabh (2023). “Promoter Holding: What is it? And how does it impact your investments”, Insider by Finology, Accessed at <https://insider.finology.in/behavioral-finance/promoter-holding>
25. Khatwani Ritesh, Raghuram Gopala, Mishra Mahima and Mistry Janki (2023). “Impact of Change in Promoters’ Shareholding Pattern on the Performance of Small-Cap-Value Equity Stocks in the National Stock Exchange of India”, Journal of Risk and Financial Management, Accessed from https://mdpi-res.com/d_attachment/jrfm/jrfm-16-00032/article_deploy/jrfm-16-00032-v2.pdf?version=1674053233
26. “ESG Investing and Analysis”, Accessed from <https://www.cfainstitute.org/en/research/esg-investing>
27. “Lowest Piotroski Score in BSE 500”, Accessed from https://trendlyne.com/stock-screeners/fundamentals/PITROSKI_F/piotroski-score/lowest/index/BSE500/bse-500/
28. “Highest Piotroski Score in BSE 500”, Accessed from https://trendlyne.com/stock-screeners/fundamentals/PITROSKI_F/piotroski-score/highest/index/BSE500/bse-500/
29. “Historical Stock Prices of Siemens Limited”, Accessed from <https://finance.yahoo.com/quote/SIEMENS.NS/history/>
30. “Historical Stock Prices of DLF Limited”, Accessed from <https://finance.yahoo.com/quote/DLF.NS/history/>
31. Rao Vigneswara KT, H.S. Parameshwar, Ajay Bhima Kotha and Aradhyula Yadav Aditya (2018). “The Impact of Promoter Shareholding on Firm Value and Financial Performance: Empirical Evidence from Listed Firms in India”, Pacific Business

- Review International, Vol 11, Issue 5, Accessed from http://www.pbr.co.in/2018/2018_month/Nov/9.pdf
32. “Historical Stock Prices of Adani Total Gas Limited”, Accessed from <https://finance.yahoo.com/quote/ATGL.NS/history/>
 33. “Historical Stock Prices of Tata Consultancy Services Limited”, Accessed from <https://finance.yahoo.com/quote/TCS.NS/history/>
 34. “Historical Stock Prices of Torrent Pharmaceuticals Limited”, Accessed from <https://finance.yahoo.com/quote/TORNTPHARM.BO/history/>
 35. “Historical Stock Prices of Tata Motors Limited”, Accessed from <https://finance.yahoo.com/quote/TATAMOTORS.NS/history/>
 36. “Historical Stock Prices of Mahindra & Mahindra Limited”, Accessed from <https://finance.yahoo.com/quote/M&M.NS/history/>
 37. “Historical Stock Prices of ICICI Bank”, Accessed from <https://finance.yahoo.com/quote/ICICIBANK.NS/history/>
 38. “Historical Stock Prices of Hero MotorCorp Limited”, Accessed from <https://finance.yahoo.com/quote/HEROMOTOCO.NS/history/>
 39. “Historical Stock Prices of Eicher Motors Limited”, Accessed from <https://finance.yahoo.com/quote/EICHERMOT.NS/history/>

To access the working of beta values of the companies considered for the Research study :


