



## LEVERAGE ANALYSIS OF DOMESTIC APPLIANCES MANUFACTURING COMPANIES IN INDIA

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### **Abstract**

Domestic appliances are used to carry out chores around the house including cleaning and cooking. We depend on household appliances on a regular basis for activities like cooking, washing, exercising, purifying etc. Large appliances that are often located in bedrooms, bathrooms, hallways, and kitchens make up many residential appliances. Cooking, food preservation, and cleaning are all basic housekeeping tasks that are aided by the kitchen's appliances. By using the appropriate household items, any home's décor may look stylish.

A refrigerator and air conditioner are now commonly utilized because of the hot climate. This will offer some kind of cooling and refreshing. The usage of refrigerators allows for the long-term preservation of produce and other goods. The major appliances found in every home are refrigerators, mixer/grinders, gas stoves, pressure cookers, TVs, air conditioners, music players, home theatres, digital players, ceiling fans, air purifiers, personal computers, vacuum cleaners, ironing boards, water purifiers, and water heaters. Domestic appliances have become more user-friendly as a result of technological developments and inventions, enabling the quickest completion of household duties.

Home appliances industry in India recorded a tremendous growth in recent years. This triggers an interest in studying the performance of the sector. Financial Performance analysis of companies operating in a sector is an important aspect to be done while studying the performance of the sector. The liquidity, profitability and leverage happen to be the most prominent aspects of Financial Performance analysis and are measured by almost all the companies analyzing their Financial Performance.

## **Introduction**

Domestic appliances are used to carry out chores around the house including cleaning and cooking. We depend on household appliances on a regular basis for activities like cooking, washing, exercising, purifying, etc. Large appliances that are often located in bedrooms, bathrooms, hallways, and kitchens make up the majority of residential appliances. Cooking, food preservation, and cleaning are all basic housekeeping tasks that are aided by the kitchen's appliances. By using the appropriate household items, any home's décor may look stylish. Anywhere has a fairly appealing and presentable atmosphere as a result.

A refrigerator and air conditioner are now commonly utilized because of the hot climate. This will offer some kind of cooling and refreshing. The usage of refrigerators allows for the long-term preservation of produce and other goods. The major appliances found in every home are refrigerators, mixer/grinders, gas stoves, pressure cookers, TVs, air conditioners, music players, home theatres, digital players, ceiling fans, air purifiers, personal computers, vacuum cleaners, ironing boards, water purifiers, and water heaters. For the contemporary lifestyle of today, these pricey yet required household items represent a significant investment. Domestic appliances have become more user-friendly as a result of technological developments and inventions, enabling the quickest completion of household duties.

How well all the household objects are arranged can, to a large extent, determine the beauty and comfort of a home. The placement of household equipment is a critical matter because the kitchen is a key space in the home. They are crucial in the design process. On the one hand, we require specific appliances to make kitchen tasks comfortable and productive. To get the most of their placement among the home things, however, these appliances must be set up properly.

It is not necessary that having every appliance in the kitchen will make housekeeping tasks comfortable or efficient. This is where design plays a vital and significant role. Without a dedicated space for each home appliance, they may reduce the comfort and efficiency of household tasks, defeating the entire purpose for which they were purchased. A wonderfully built home can undoubtedly become the most significant space in the home, bringing the entire family together frequently and keeping them bound in the ties of domestic bliss.

## **Significance of the Study**

Domestic Appliances industry in India has shown remarkable growth in recent past. This gives a thrust in studying the financial performance of the Domestic Appliances sector. Financial Performance analysis of Companies operating in a sector is an important aspect to be done while studying the performance of the sector. The liquidity, profitability and leverage happen to be the most prominent aspects of this financial performance analysis and are measured by almost all the Companies willing to learn their financial performance. This research study is intended in measuring the leverage of the companies selected for study in domestic appliances sector.

### **Review of Literature**

The review of literature is done to enlighten the researchers about the various tools and techniques used by the previous researchers in doing similar researches. Based on the review the researcher gets better idea to carry out the current research. To get a clear picture of the methodology used in the historical studies, reviewing those literatures become inevitable.

P. Kasthuri, C. Rajendran (2020) analysed the financial performance of two top most home appliances Companies in India during the 5 years period from 2014 to 2018. The study evaluated the impact of working capital on profitability of the companies and the trend of liquidity and activity of the chosen companies. Correlation, regression, and trend analysis are used for the study.

“India Kitchen Appliances Market Forecast & Opportunities, 2019” reports the expected growth potentiality of Indian Home appliances market and projects related statistical data and also the related information about the market structure, expected trend of home appliances consumer behavior, home appliances market projections and future growth in demand for home appliances.

Nisha S Tatkar(2016), in her study found that the changes in demographics, such as people’s rapid shifting from joint family setup to nuclear family setup, fast phase urbanization, increase in disposable family income due to large scale industrial development and the quench for comfort and luxury, play a vital role in growing the demand for home appliances day by day. Moreover, now a day’s almost all members of the family are working and hence have very little time to do the household chores. So, they are compelled to depend on advanced modern home appliances to reduce their burden.

### **Objectives of the Study**

The objectives of the study are as below:

- To evaluate the Leverage status of the selected Domestic Appliances manufacturing companies in India.
- To rank the chosen Domestic Appliances manufacturing companies according to their leverage status during the study period.
- To bring out the best performing Company based on leverage status.

### **Period of the Study**

The present study is carried out for a period of ten years starting from 2012-13 to 2021-22. The ten years data is collected and analyzed for the purpose of attaining the above listed objectives.

### **Sample Design**

The present study is done on the universe of Domestic Appliances manufacturing companies in India. This especially comprises only the Domestic Appliances manufacturing companies that are listed in NSE. This universe is derived from the official website of money control ([www.moneycontrol.com](http://www.moneycontrol.com)). The universe also excludes the white goods manufacturing companies which are not taken for the research study. Totally seven companies coming under Consumer durable sector in India, are listed in NSE. Out of those seven companies, four are white goods manufacturing units which are not within the scope of present study. The remaining three domestic appliances manufacturing companies comes under the study scope.

### **Data source**

The present study is purely based on secondary data. The said secondary data is collected from the published annual reports of the Companies chosen for the study.

### **Scope of the study**

The scope of the study is limited to the three Home appliances manufacturing companies in India, listed with NSE and reflected in [www.moneycontrol.com](http://www.moneycontrol.com). The scope is limited to analysis of leverage status using ratio analysis as financial analysis tool and mean, t test and ANOVA as statistical tool. The Companies selected for the study are:

- Bajaj Electricals Limited
- TTK Prestige Limited
- Butterfly Gandhimathi Appliances Ltd

### **Leverage ratios**

Leverage results from using borrowed capital as a funding source when investing to expand the firm's asset base and generate returns on risk capital. Using of debt capital and Owned capital concurrently by a company to acquire its assets is the usual practice of the most of the companies to boost up their profits and to increase the EPS is known as leverage. Leverage is an investment strategy of using borrowed money specifically, the use of various financial instruments or borrowed capital to increase the potential return of an investment.

There are six common ratios used to measure a company's leverage. They are

- Debt Equity Ratio
- Proprietary Ratio
- Debt to Net worth Ratio
- Fixed Assets to Long Term Debts Ratio
- Interest Coverage Ratio
- Dividend Coverage Ratio

These ratios describe how well a company can liquidate its assets to meet its current obligations.

### **Limitations of the Study**

There are six ratios available to calculate and study the Leverage status of any Company. However, only Proprietary ratio and Debt to Net Worth ratio are used in this study.

### **Hypotheses for Leverage Analysis**

Ho: There is no significant difference between the Shareholders Equity or Proprietary ratio of selected manufacturing units during the study period.

Ho: There is no significant difference between the Debts to Net Worth ratio of selected manufacturing units during the study period.

### Proprietary Ratio

Share Holders Equity Ratio, also called as Proprietary Ratio, is calculated by dividing the total debts by the Shareholder's Equity. The ratio is used to evaluate a company's financial leverage. It is a measure of the degree to which a company is financing its operations through External liabilities. More specifically, it reflects the ability of shareholder equity to cover all outstanding debts in the event of a business downturn.

Table 1.1 depicts that the Share Holders Equity Ratio of the selected companies calculated from the Annual Reports of the companies using the formula below.

### Proprietary Ratio = Shareholders Equity/ Total Debts

**H0:** There is no significant difference in Share Holders Equity or Proprietary Ratio of selected Companies during the study period.

**H1:** There is a significant difference in Share Holders Equity Ratio of selected Companies during the study period.

**Table 1.1**

### Proprietary Ratio

Year	Bajaj	TTK	Butterfly
March 2013	0.56	0.72	0.35
2014	0.51	1	0.59
2015	0.36	2.04	0.50
2016	0.32	2.58	0.66
2017	0.35	2.64	0.67
2018	0.39	3.13	0.79
2019	0.37	2.51	0.63
2020	0.26	3.05	0.69

2021	0.43	3.18	0.64
2022	0.61	3.32	0.85
Total	4.17	24.18	6.37
Average	0.42	2.42	0.64
Minimum	0.26	0.72	0.35
Maximum	0.61	3.32	0.85

**Source:** Calculated from Annual Reports.

From Table 1.1 it is evident that the Share Holders Equity ratio of Bajaj Electricals Limited is maximum during March 2022 with a reading of 0.61 and minimum during March 2020 with a reading of 0.26. The Share Holders Equity ratio of TTK Prestige Limited is maximum during March 2022 with a reading of 3.32 and minimum during March 2013 with a reading of 0.72. The Share Holders Equity ratio of Butterfly Gandhimathi Appliances Limited is maximum during March 2022 with a reading of 0.85 and minimum during March 2013 with a reading of 0.35. The average Share Holders Equity Ratio for Bajaj Electricals Limited is 0.42 TTK Prestige Limited is 2.42 and Butterfly Gandhimathi Appliances Limited is 0.64 during the study period.

**Table 1.2**

**ANOVA Table for Proprietary ratio**

Source of variance	Sum of squares	Degree of freedom	Mean squares	F value	P Value
Between Groups	24.071	2	12.035	42.151	3.34
Within Groups	7.709	27	.286		
Total	31.780	29			

**Source:** Calculated from Annual Reports.

From Table 1.2, calculated value of F is greater than the Table value of F at 5 per cent level of significance. Hence the alternate hypothesis H1 is accepted and the null hypothesis H0 is rejected.

**Inference:**

There is a significant difference in Share Holders Equity ratios of selected Companies during the study period.

**Debt to Net worth Ratio**

The debt to net worth ratio is a metric used to compare the level of debt of a company to its net worth. A ratio below 100 per cent means that a company can settle its liabilities using its assets. Investors and lenders use the ratio to determine their level of risk.

Table 2.1 depicts the Debt to Net worth Ratio of BEL, TTK & Butterfly calculated from the Annual Reports of the selected companies using the below formula.

**DNW ratio = Total Debts/Net worth**

**H0:** There is no significant difference in Debt to Net worth Ratio of selected Companies during the study period.

**H1:** There is a significant difference in Debt to Net worth Ratio of selected Companies during the study period.

**Table 2.1**

**Debt to Net worth Ratio**

Year	Bajaj	TTK	Butterfly
March 2013	1.79	1.40	2.84
2014	1.96	1.00	1.69
2015	2.80	0.49	2.01
2016	3.12	0.39	1.52
2017	2.83	0.38	1.49
2018	2.53	0.32	1.26
2019	2.68	0.40	1.59
2020	3.79	0.33	1.45
2021	2.31	0.31	1.55



2022	1.65	1.30	1.18
Total	25.45	6.31	16.60
Average	2.54	0.63	1.66
Minimum	1.65	0.31	1.18
Maximum	3.79	1.40	2.84

**Source:** Calculated from Annual Reports.

From Table 2.1 it is evident that the Debt to Net worth ratio of Bajaj Electricals Limited is maximum during March 2020 with a reading of 3.79 and minimum during March 2022 with a reading of 1.65. The Debt to Net worth ratio of TTK Prestige Limited is maximum during March 2013 with a reading of 1.40 and minimum during March 2021 with a reading of 0.31. The Debt to Net worth ratio of Butterfly Gandhimathi Appliances Limited is maximum during March 2013 with a reading of 2.84 and minimum during March 2022 reading of 1.18. The average Debt to Net worth Ratio for Bajaj Electricals Limited is 2.54, TTK Prestige Limited is 0.63 and Butterfly Gandhimathi Appliances Limited is 1.66 during the study period.

**Table 2.2**

**ANOVA Table for Debt To Net worth Ratio**

Source of Variance	Sum of squares	Degree of freedom	Mean squares	F value	P Value
Between Groups	18.349	2	9.174	33.075	3.34
Within Groups	7.489	27	.277		
Total	25.838	29			

**Source:** Calculated from Annual Reports.

From Table 2.2, calculated value of F is greater than the Table value of F at 5 per cent level of significance. Hence the alternate hypothesis H<sub>1</sub> is accepted and the null hypothesis H<sub>0</sub> is rejected.

**Inference:**

There is a significant difference in Debt to Net worth Ratio of selected Companies during the study period.

**Table 3.1****Comparison on the basis of Mean value of Ratios in relation to Leverage**

<b>Leverage Ratios</b>	<b>Bajaj Electricals Limited</b>	<b>TTK Prestige Limited</b>	<b>Butterfly GM Limited</b>
Proprietary Ratio	0.42	2.42	0.64
Debt to Net worth Ratio	2.54	0.63	1.66
Sum of mean	2.96	3.05	2.3
Average score	1.48	1.53	1.15
Ranking	2	1	3

From Table 3.1 it is evident that Butterfly Gandhimathi Appliances Limited ranks third, Bajaj Electricals Limited ranks second and TTK Prestige Limited ranks first in Leverage status during the study period.

**Conclusion**

From the above Leverage analysis of selected Domestic Appliances manufacturing Companies, it is concluded that TTK Prestige Limited performed best during the study period and Bajaj Electricals Limited performance is average. The Leverage status of Butterfly Gandhimathi Appliances Limited lags far behind the other two companies chosen for the study during the study period.

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