

Similar yet Different: A Comparative Study of Profitability Performance of Indian Retail Sector with a Special Reference to Big Bazaar and D Mart

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ABSTRACT

Indian retail market has developed by means of one of the fastest-growing markets due to economic growth and the access of more than a few new players. Rising revenue as well as demand for quality products increases consumption expenditure. The existing research work goes to analyse the performance of the Indian retail segment and the aspects that make the Profit of Big Bazaar and D Mart, Different, despite their similar Sales revenue. Some variables such as Net Profit Margin, Inventory, Inventory turnover ratio, accounts receivables and Trade payables have been taken to study the profitability of the two selected players. It has been divulged that notwithstanding the insignificant variance in sales of Big Bazaar and D Mart, there has been a significant variance in Net Profit Margin, Inventory, Inventory Turnover ratio, Accounts Receivables and Trade Payables thereof. Though the sales of Big Bazaar and D Mart are marginally different, D Mart's position and profitability performance have comparatively been seen healthier.

Keywords: Accounts Receivables, Inventory, Inventory turnover ratio, Net Profit margin, Retail sector, Sales, Trade payables
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INTRODUCTION

India's retail market experienced a major change and has observed great growth in the last 10 years. The retail market in India is projected to nurture from an estimated US\$ 672 bn in 2017 to US\$ 1,200 bn in 2021. The retail sector stretched to US\$ 950 bn in 2018 and is anticipated to touch the level of US\$1.1 trillion by 2021. Total consumption expenditure is expected to reach nearly US\$ 3,600 billion by 2021 from US\$ 1,824 bn in 2017. World's fifth-largest worldwide terminus in the retail space and ranked 63 in World Bank's Doing Business in 2019.

The existing research study has initiated with the two basic financial information i.e., Sales and Profit of the two top players of Indian Retail Sector i.e., Big Bazaar and D Mart (As far as Market Cap is concerned, almost 2/3rd of the Market Cap of Indian Retail Sector is jointly possessed by both of them). In 2020, their sales were almost similar yet their profits were different. Hence, the present study explores the whys and wherefores for the difference in the profitability of both the players of Indian retail players. It is observed that variables like inventory and inventory

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turnover ratio, Accounts receivables and trade payable influence the profitability of the Big Bazaar the most.

It is hypothesized for the existing study that there is no significant difference between Big Bazaar and D Mart in six variables i.e., Sales, Net Profit Margin, Inventory and Inventory Turnover Ratio, Accounts Receivables and Trade Payable. The study has been carried out as follows: the existing segment gives the introduction about the present study. The second section discusses a literature review on research work carried out on the Retail sector. The third segment sketches the methodology of the existing study. The fourth section discusses the result

and discussion and the last part of the study outlines findings, conclusion and suggestions.

LITERATURE REVIEW

Existing shops in retail sector tend to be larger, convey more stock-keeping units have a self-administration arrange and an empirical climate. Present-day organisations additionally tend to have more elevated amounts of offers per unit of space, stock turnover and gross edge however bring down net edge levels, when contrasted with conventional organizations (Radhakrishnan, 2003). Even the variety of products accessible with the particular vender augmented pointedly in the previous a couple of decades (Hoch et al., 1994).

Financial performance of the retail sector companies in India can be measured by the variables such as annual sales revenue and profit (Barros & Alves, 2003) (Sellers-Rubio & Mas-Ruiz, 2006) (Thomas et al., 1998) (Perrigot & Barros, 2008) (Yu & Ramanathan, 2009) (Ali et al., 2013) (Gandhi & Shankar, 2014), Earnings per share, Price-Earning ratio, Enterprise Worth (Khanna & Kanika, 2017). Even the level of satisfaction of consumers about facilities being provided by different organised retail (Jain, 2016), adoption of innovative marketing strategies (Sirajuddin & Satish Kumar, 2018) and product Attributes (Soujanya, 2020) can be used to measure financial performance. Future Group (Big Bazaar) and Avenue Supermarts (D-mart) have full-fledged and in what manner they are similar to the chosen benchmark – Walmart, and when compared to Walmart, how closely they are following the standards set by the global retail giant (Balasubramanya, Rohra, & Sawhney, 2018). The foremost and inconsequential encounters like rivalry, less capable human force, government policies, tax, Kirana stores etc. are to be addressed by the retailers (Nagpal & Sinha, 2017). Systematized venders face rivalry from the unsystematized vendors as chief challenge (Aehsan-UI-Haq & Khan, 2016), tracked by rivalry between prearranged vendors and the incompetence of circulation networks, interior logistical problem and retail shrinkage (Rahman, 2012). Hence, to improve their performance, retailers in shopping centres prerequisite to consider the undertaking of exhibiting the esteem included by the store — the arrangement of the store could be the prime driver (Sinha & Banerjee, 2004). India has become the third-most striking retail bazaar for worldwide venders amid the chief developing bazaars (Shubhakar & Sanjay Kumar, 2014). The retail sector showed a positive response in developing countries with the increase in skills and productivity of the labor

force in the host nation (Dutt, 1997). Hence, FDI should be promoted in a country for the successful promotion of retail trade (Aitken et al., 1997).

From the above review of empirical works, it can be seen that various authors have approached to study the performance of the retail segment in different ways in fluctuating stages of scrutiny. It gives an idea of extensive and assorted works on the performance of the retail sector. It was perceived that studies on the performance of the retail segment in various aspects provide divergent results relating to the study period overlap or coincide. The main reason for the divergence in the outcomes is the use of a different method for the dimension of the performance of the retail sector. All the studies aimed to analyse the performance of the retail sector in India & abroad with several factors. The survey of the prevailing works reveals that no explicit exertion was undertaken to study the Profitability Performance of the Indian retail sector by making a comparative study of Big Bazaar and D Mart. The present study is an attempt in this direction and therefore, goals to augment the works of the study relating to the Indian Retail Sector.

OBJECTIVES

To study profitability performance of Indian retail sector

To study the variables/factors that make Profit of Big Bazaar and D Mart Different, despite Similar Sales Revenue

METHODOLOGY

Geographical Coverage: The existing study had geographical coverage of Indian retail sector.

Sample and Sampling Techniques: Looking at the objectives of the present study, there was a need to take a sample covering the Indian retail sector and henceforth a sample of the present study consists of two top players of the Indian Retail Sector i.e., Big Bazaar and D Mart (as far as Market Cap (Almost 2/3rd of the Market Cap of Indian retail sector is jointly possessed by them is concerned) using a convenient sampling method. The selected samples represent the majority of the Indian retail sector so the outcome of the study would give the exact scenario of the Indian Retail sector.

Data Collection: The existing work was created on the secondary information composed from twelve-monthly reports of the selected players.

Period of the Study: The existing work was carried out for the period of five years 2015-16 to 2019-20.

Hypothesis of the Study: The subsequent hypothesis was formulated in this study:

H0 = There is no significant difference in the Means of selected variables between Big Bazaar and D Mart.

H1 = There is significant difference in the Means of selected variables between Big Bazaar and D Mart.

Research Design: Founded on the Works Review, the present study begins with a couple of basic monetary data i.e., sales and profit of the sample. Sales of the carefully chosen sample were almost similar yet their profits were different. To study profitability variables such as Inventory and inventory turnover ratio, Accounts receivables and trade payable has been selected which affect the profitability the most. Thus, the present study gives an overview of the Indian Retail Sector by making a comparative study of Big Bazaar and D Mart.

Hypothesis Framing and Testing: To determine whether the means of the selected variables of Big Bazaar and D Mart are different or not, the researcher has conducted a T-Test: Paired Two Sample for means and hence the hypotheses of the study were verified by t-Test: Paired two sSample for Means.

Limitations: The existing research work is based on secondary data, so the limitation of secondary data is also prevailing with this study. The terrestrial room was restricted to Big Bazaar and D Mart. Hence, the generalisation of findings might be limited to Retail Sectors similar to the Indian Retail Sector. The present study has been limited to the selected sample and variables of the Indian Retail Sector only.

RESULT AND DISCUSSION

Sales

As p-value is more than 0.05, Null hypothesis is accepted and alternate hypothesis is rejected. The variance amid the means of **Sales** of Big Bazaar and D Mart is statistically insignificant. Hence, the sample selected provides enough evidence to conclude that the two-population means are indifferent and hence there is no significant difference in the means of **Sales** of Big Bazaar and D Mart. Specifically, the mean of **sales of Big Bazaar** is greater than that of D Mart hence it is said that Big Bazaar have more **sales** revenue as compared to D Mart throughout the study retro. As Big Bazaar has high sales as compared to D Mart, it can be said that Big Bazaar has generated more income to run and accomplish its operations and it should be in a better position for the evolution and expansion of the

t-Test: Paired two sample for Means of sales of Big Bazaar and D Mart

	BIG BAZAAR	D Mart
Mean	16567.26	16059.04
Variance	31125355	41116516
Observations	5	5
Pearson Correlation	0.79705	
Hypothesized Mean Difference	0	
Df	4	
t Stat	0.291344	
P(T ≤ t) one-tail	0.392636	
t Critical one-tail	2.131847	
P(T ≤ t) two-tail	0.785272	
t Critical two-tail	2.776445	

organisation. To have a true picture, the impact of sales on Net Profit Margin ought to be investigated.

Net Profit Margin

As p-value is less than 0.05, Null hypothesis is forbidden and alternate hypothesis is accepted. The variance amid the means of Net Profit Margin of Big Bazaar and D Mart is statistically significant. Hence, the sample selected provides enough evidence to conclude that the two population means are different and hence there is a noteworthy variance in the means of Net Profit

t-Test: Paired two sample for Means of net profit margin

	BIG BAZAAR	D Mart
Mean	1.242	4.63
Variance	2.53997	0.5621
Observations	5	5
Pearson Correlation	-0.20858	
Hypothesized Mean Difference	0	
Df	4	
t Stat	-3.99251	
P(T ≤ t) one-tail	0.008115	
t Critical one-tail	2.131847	
P(T ≤ t) two-tail	0.016231	
t Critical two-tail	2.776445	



Margin of Big Bazaar and D Mart. Specifically, the mean of Net Profit Margin of D Mart is superior than that of Big Bazaar hence it is said that despite lesser sales as associated to Big Bazaar, D Mart has more efficiently utilised its income and converted the same into profit by containing operating cost. It also shows that D Mart's overall financial health is sound as compared to Big Bazaar. D Mart was expanding its net margins over a period which are generally rewarded with share price growth because share price growth is typically highly correlated with earnings growth which is also reflected in the share price of D Mart. As of 1/4/2021 share price of D Mart was ₹2912.7 (which was around ₹600 in 2017), while Big Bazaar's Share price was ₹44.75 (which was around ₹250 in 2017). It shows that expansion on Net Profit Margin has augmented in the Share price of D Mart a while. As a result, it can be said that stockholders of D Mart have got an increase in their investment by six times, while investors in stocks of Big Bazaar got a reduction in their investment by 5 times.

It is also reproduced in the Market Cap of both companies. As of 1/4/2021. Market Cap of Big Bazaar was ₹2426.72 crores, while D Mart's Market Cap was ₹188677.3 crores. As sales revenue of the sample under the study was similar yet their profitability was different, the researcher found that there has been a great difference in closing Inventory of the sample and it would be the significant factor/variable for this difference. Hence, it has become necessary to study whether there was a noteworthy variance in the inventory of both the corporations or not during the study period.

Inventory

As p-Value is less than 0.05, Null hypothesis is rejected and alternate hypothesis is accepted. The variance amid the means of **Inventory** of Big Bazaar and D Mart is statistically significant. Hence, the sample selected provides enough evidence to conclude that the two population means are diverse and hence there is a substantial variance in the means of **Inventory** of Big Bazaar and D Mart. Specifically, the mean of **Inventory** of D Mart is lesser than that of Big Bazaar hence it can be said that D mart has a much slower sales cycle (30 Days) as compared to Big Bazaar (which has a sales cycle of 90 Days). It shows that at the end of the year, Big Bazaar has much higher unsold inventory as compared to D Mart. It also shows that Big Bazaar has significantly more blocking of the fund after inventory which ultimately increases interest cost on the fund invested in the market/inventory. Therefore, it has become

t-Test: Paired two sample for Means of inventory

	BIG BAZAAR	D Mart
Mean	4349.66	1245.21
Variance	695614.2079	250001.3
Observations	5	5
Pearson Correlation	0.973833035	
Hypothesized Mean Difference		0
Df		4
t Stat	19.00585418	
P(T ≤ t) one-tail	0.0000225734861569652	
t Critical one-tail	2.131846786	
P(T ≤ t) two-tail	0.0000451469723139304	
t Critical two-tail	2.776445105	

necessary to check whether there is another variable i.e. Accounts Receivables that has also resulted in the blockage of a fund or not. Moreover, it has also become necessary to see the impact of blockage of funds over fund repayment capacity i.e. Accounts Payables of the sample selected.

Further, Excess inventory also implies slow inventory turnover and therefore, it has become necessary to check their Inventory Turnover Ratio.

Inventory Turnover Ratio

t-Test: Paired two sample for Means of inventory turnover ratio

	BIG BAZAAR	D Mart
Mean	4	12.872
Variance	1.2029	0.03337
Observations	5	5
Pearson Correlation	-0.372220593	
Hypothesized Mean Difference		0
df		4
t Stat	-16.8544975	
P(T ≤ t) one-tail	0.000036319019162661	
t Critical one-tail	2.131846786	
P(T ≤ t) two-tail	0.000072638038325322	
t Critical two-tail	2.776445105	

As p-Value is less than 0.05, Null hypothesis is rejected and alternate hypothesis is accepted. The variance amid

the means of Inventory Turnover Ratio of Big Bazaar and D Mart is statistically significant. Hence, the sample selected provides enough evidence to conclude that the two population means are different and hence there is a momentous variance in the means of Inventory Turnover Ratio of Big Bazaar and D Mart. Specifically, the mean of Inventory Turnover Ratio of D Mart is higher than that of Big Bazaar hence it can be said that in a given period, D Mart has comparatively more replaced the inventories that it has sold. Big Bazaar has a slower inventory turnover which implies excess inventory (despite higher sales). Here, it can be distinguished that the middling inventory of Big Bazaar was ₹4349.66 Crore, while the average inventory of D Mart was ₹1245.21 Crore throughout the study period, which proves that Big Bazaar has higher unsold inventories as compared to D Mart. (It is noted that High volume, low margin industries—such as retailers and supermarkets—tend to have the highest inventory turnover).

Accounts Receivables

t-Test: Paired two sample for Means of account receivables

	BIG BAZAAR	D Mart
Mean	326.016	37.358
Variance	45811.94	676.1111
Observations	5	5
Pearson Correlation	0.505724	
Hypothesized Mean Difference	0	
Df	4	
t Stat	3.193193	
P(T ≤ t) one-tail	0.016558	
t Critical one-tail	2.131847	
P(T ≤ t) two-tail	0.033115	
t Critical two-tail	2.776445	

As p-Value is less than 0.05, Null hypothesis is rejected and alternate hypothesis is accepted. The variance amid the means of **Accounts Receivables** of Big Bazaar and D Mart is statistically significant. Hence, the sample selected provides enough evidence to conclude that the two population means are different and hence there is a weighty variance in the means of **Accounts**

Receivables of Big Bazaar and D Mart. Specifically, mean of **Accounts Receivables** of Big Bazaar is more than that of D Mart hence it is said that significant fund of Big Bazaar has to remain uncollected over a period and on the other hand its Net Profit Margin has been very low which shows that Big Bazaar has very tight liquidity position, cash catastrophe and as a result, it has to borrow funds which ultimately increases interest cost and affects the Profit adversely. Low Accounts Receivables in the case of D Mart indicates a high receivables turnover ratio which indicates that D Mart's collection of accounts receivable is efficient and that it has a from head to foot proportion of quality customers that make payment of their debts swiftly. While in the case of Big Bazaar High Accounts Receivables indicates a low receivables turnover ratio which might be the result of the inefficient collection, inadequate credit policies, or customers who are not monetarily viable or creditworthy. Now it has become necessary to check the Trade Payables of the sample under the study.

Trade Payables

t-Test: Paired two sample for Means of trade payables

	Variable 1	Variable 2
Mean	3368.18	337.472
Variance	1595983	12650.58
Observations	5	5
Pearson Correlation	0.664115	
Hypothesized Mean Difference	0	
Df	4	
t Stat	5.687216	
P(T ≤ t) one-tail	0.00236	
t Critical one-tail	2.131847	
P(T ≤ t) two-tail	0.00472	
t Critical two-tail	2.776445	

AS P-Value is less than 0.05, Null hypothesis is rejected and alternate hypothesis is accepted. The variance amid the means of **Trade Payables** of Big Bazaar and D Mart is statistically significant. Hence, the sample selected provides enough evidence to conclude that the two population means are different and hence there is a substantial variance in the means of **Trade Payables** of Big Bazaar and D Mart. Specifically, the mean of **Trade Payables** of Big Bazaar is higher than that of D Mart hence it is said that Big Bazaar was not making payment



to the suppliers in time as a result suppliers would also not supply the goods at a competitive rate which ultimately narrow down the profit margin of the Big Bazaar (It is to be noted here that average Net Profit Margin of Big Bazaar was 1.24 %, while that of D Mart was 4.63% during the study period.) As a result, Supplier may shift to the competitors over a period because rival organisations are making payment in time. (It is to be noted here that the average trade payable of D Mart is 10 % of Big Bazaar)

FINDINGS, CONCLUSION, AND SUGGESTIONS

Findings

1. Big Bazaar has high sales as compared to D Mart, it is said that Big Bazaar has generated more income to run and manage its operations and it might be in a better position for the evolution and expansion of the organisation.
2. Despite lesser sales as compared to Big Bazaar, D Mart has more efficiently utilised its revenue and translated it into profit by containing operating cost. It also reflects that D Mart's overall financial health is sound as compared to Big Bazaar.
3. Inventory of D Mart is lesser than that of Big Bazaar hence it is said that D mart has a much slower sales cycle (30 Days) as associated to Big Bazaar (which has a sales cycle of 90 Days). It also shows that Big Bazaar has significantly more blocking of the fund after inventory which ultimately increases interest cost on the fund invested in the market/ inventory.
4. Inventory Turnover Ratio of D Mart is higher than that of Big Bazaar hence it can be said that in a given period, D Mart has comparatively more replaced the inventories that it has sold. Big Bazaar has a slower inventory turnover that implies excess inventory (despite higher sales).
5. Accounts Receivables of Big Bazaar is more than that of D Mart and hence it can be said that its credit and collection policy might be weak because its funds remain uncollected over a period that adversely affects liquidity position, creates cash crisis and borrowing of funds for payment which ultimately increases interest cost and affects the profitability adversely.
6. Trade Payables of Big Bazaar is greater than that of D Mart hence it is said that Big Bazaar has not been making payment to the suppliers in time as a result supplier might also not supply the goods at a competitive rate which ultimately narrow down the profit margin of the Big Bazaar.

CONCLUSION

It is concluded that despite the insignificant difference in the means of sales revenue of Big Bazaar and D Mart, there was a weighty variance in the means of Net Profit Margin because of significant difference in inventory, inventory turnover ratio, accounts receivables and trade payables of Big Bazaar and D Mart. Though the sales of Big Bazaar and D Mart are marginally different, D Mart's position and profitability performance have been seen healthier. This can be reflected by the Share Prices and Market Cap of both organizations. During the study period, the investors of D Mart have got an increase in the investment by 6 times, while depositors in shares of Big Bazaar have got a reduction in their investment by 5 times, while the Market Cap of Big Bazaar was ₹2426.72 crores and that of D Mart was ₹188677.3 crores.

SUGGESTIONS

1. It is suggested that high volume, low margin industries, such as retailers and supermarkets, tend to have the highest inventory turnover. Supermarkets should have stringent cash and credit policy to reduce their accounts receivables and has high receivables turnover ratio. This would result in a reduction in the borrowing of funds and interest cost as well as the release of funds and timely payment for trade payables which will result in the supply of goods at a competitive rate which will, in turn, widen the profit margin.
2. It is also suggested to implement effective marketing strategies consisting of the seasonal campaign, promotional prices, creating awareness among consumers, work with brands, free samples, social media campaigns, and personalized in-store advertisement.
3. It is also suggested to implement Micromarketing market targeting Strategies which covers local marketing (cities, neighbourhoods and specific stores). It is noted that the target audience for such kind of superstores is middle income. Hence, it is suggested that the supermarkets ought to keep in mind likes, preferences, choices of this class to have high inventory turnover to improve its liquidity position, profitability over a period and solvency in long the run. Ultimately, it will increase in share price over a period and Market Cap as well.
4. It is also proposed to have a proper selection of the location of the superstore in such a way that it ought not to be in over-investment in non-current

assets and adequate venture in current assets. It is also suggested to have owned premises for the supermarkets to evade the burden of rent. It is also advised to increase the number of stores in phase manner by reinvestment of profit to avoid the investment of the borrowed funds and thereby to avoid the burden of interest.

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