**Chapter 6**

# THE PERFORMANCE ANALYSIS OF THE COMPANIES –AFTER MERGER AND ACQUISITION

This chapter contains Second core part of the present thesis. The researcher has attempted the study of various deals by comparing Pre and Post merger and acquisition period result. Here, the comparative analysis of selected ratios and figures of acquiring companies has been done. Further the statistical tool named 'Paired T-Test' is applied on the same as a test of significance at significance level @ 0.05. The figures from each deal are analyzed individually based on objectives in order to test hypothesis and forming conclusive findings and suggestions for the next chapter. The chapter is divided into three parts namely comparative study of results from pre and after merger and acquisition period, T-Test on results and Mean difference study of overall and sectorial analysis. The predefined objectives for framing hypothesis in earlier chapter of research methodology for the companies gone under merger and acquisition, to gain synergy in terms of performance of the company are being tested here by applying Paired T test for finding the significant changes for the Acquirer Company for the period of pre and post four years of the merger and acquisition. The test of following null hypothesis has been done;

1. Ho 1 for Profitability - There is no significant effect of Merger and acquisition on profitability of the acquiring entity before and after merger and acquisition.

2. H0 2 for Turnover - There is no significant effect of Merger and acquisition on Turnover of the acquiring entity before and after merger and acquisition.

3. H0 3 for Asset Utilization - There is no significant effect of Merger and acquisition on Asset Utilization of the acquiring entity before and after merger and acquisition.

4. H0 4 for Debt Utilization - There is no significant effect of Merger and acquisition on Debt Utilization of the acquiring entity before and after merger and acquisition.

5. H0 5 for capital structure - There is no significant effect of Merger and acquisition on Capital Structure of the acquiring entity before and after merger and acquisition.

6. H0 6 for Shareholders Earnings - There is no significant effect of Merger and acquisition on Shareholders Earnings of the acquiring entity before and after merger and acquisition.

## 6.1 – Test of Profitability:

### 6.1.1 – Comparative Analysis

In order to examine profitability of the acquiring entity before and after merger and acquisition along with profitability trend of acquired entity before merger and acquisition, Gross profit ratio and Net profit ratio are taken into consideration by taking average value of before four years and after four years of merger and acquisition.

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 3.61 | 3.85 | 4.00 | 22.27 | 8.43 |
| | ANI Technologies Private Limited | -42.42 | -156.44 | -313.49 | -576.73 | -272.27 |
| Technology | Tata Consultancy Services Limited | 34.58 | 34.52 | 34.15 | 35.88 | 34.78 |
| | Sterlite Technologies Limited | 22.09 | 21.82 | 19.15 | 21.93 | 21.25 |
| E-Commerce | Flipkart  Private Limited | -12.26 | -9.23 | -1.17 | -3.78 | -6.61 |
| | Snapdeal Private Limited | -31.16 | -20.18 | -47.03 | -237.60 | -83.99 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 23.45 | 8.19 | 0.34 | -4.32 | 6.91 |
| | Strides Pharma Science Limited | 16.49 | 24.04 | 24.59 | 19.20 | 21.08 |
| Real Estate | Prestige Estate Projects Limited | 36.06 | 31.97 | 22.94 | 26.16 | 29.28 |
| | Delhi Land and Finance  Limited | 125.18 | 49.48 | 59.60 | 60.97 | 73.81 |
| | | | | | | |

(Table 6.1– Gross Profit Ratio for four years After Merger and Acquisition – Source: Database Tool)

## Growth Analysis of Companies Before and After Merger and Acquisition from Various Sectors

| Comparative of Gross Profit | | | | | |
|---|---|---|---|---|---|
| **Acuirer Compnaies** | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | **Before M&A** | **After M&A** | **Before M&A** | **After M&A** |
| **Sector** | **Company Name** | Average | Average | Average | Average |
| **Travel and Hospitality** | Thomas Cook India Limited | 31.41 | 8.43 | -385.24 | -263.84 |
| | ANI Technologies Private Limited | -416.65 | -272.27 | | |
| **Technology** | Tata Consultancy Services Limited | 35.78 | 34.78 | 45.44 | 56.03 |
| | Sterlite Technologies Limited | 9.66 | 21.25 | | |
| **E-Commerce** | Flipkart Private Limited | -22.63 | -6.61 | -270.53 | -90.60 |
| | Snapdeal Private Limited | -247.90 | -83.99 | | |
| **Pharmaceutical** | Sun pharamaceutical Industries Limited | 34.73 | 6.91 | 60.51 | 27.99 |
| | Strides Pharma Science Limited | 25.78 | 21.08 | | |
| **Real Estate** | Prestige Estate Projects Limited | 30.43 | 29.28 | 128.85 | 103.09 |
| | Delhi Land and Finance Limited | 98.42 | 73.81 | | |

(Table 6.2– Average of Gross Profit Ratio for Comparison – Source: Computation by Researcher)

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| **Sector** | **Company Name** | **4** | **3** | **2** | **1** | **Average** |
| **Travel and Hospitality** | Thomas Cook India Limited | -0.15 | -0.49 | 0.31 | 6.63 | 1.58 |
| | ANI Technologies Private Limited | -61.53 | -179.56 | -345.30 | -631.09 | -304.37 |
| **Technology** | Tata Consultancy Services Limited | 24.41 | 25.93 | 25.52 | 26.87 | 25.68 |
| | Sterlite Technologies Limited | 11.01 | 8.89 | 6.91 | 8.89 | 8.93 |
| **E-Commerce** | Flipkart Private Limited | -12.55 | -9.63 | -1.60 | -4.25 | -7.01 |
| | Snapdeal Private Limited | -33.20 | -23.15 | -149.51 | -569.03 | -193.72 |
| **Pharmaceutical** | Sun pharamaceutical Industries Limited | 3.40 | -0.30 | -14.06 | -18.36 | -7.33 |
| | Strides Pharma Science Limited | 7.67 | 12.64 | 12.09 | 8.45 | 10.22 |
| **Real Estate** | Prestige Estate Projects Limited | 7.82 | 11.85 | 7.75 | 27.12 | 13.64 |
| | Delhi Land and Finance Limited | 45.49 | 20.86 | 15.90 | 17.25 | 24.88 |

(Table 6.3– Net Profit Ratio for four years After Merger and Acquisition – Source: Database Tool)

| Comparative of Net Profit | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | Before M&A | After M&A | Before M&A | After M&A |
| Sector | Company Name | Average | Average | Average | Average |
| Travel and Hospitality | Thomas Cook India Limited | 12.29 | 1.58 | -409.41 | -302.80 |
| | ANI Technologies Private Limited | -421.70 | -304.37 | | |
| Technology | Tata Consultancy Services Limited | 27.17 | 25.68 | 29.08 | 34.61 |
| | Sterlite Technologies Limited | 1.91 | 8.93 | | |
| E-Commerce | Flipkart Private Limited | -25.24 | -7.01 | -276.72 | -200.73 |
| | Snapdeal Private Limited | -251.47 | -193.72 | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 2.01 | -7.33 | -14.40 | 2.89 |
| | Strides Pharma Science Limited | -16.41 | 10.22 | | |
| Real Estate | Prestige Estate Projects Limited | 16.10 | 13.64 | 46.30 | 38.51 |
| | Delhi Land and Finance Limited | 30.20 | 24.88 | | |

(Table 6.4– Average of Net Profit Ratio for Comparison – Source: Computation by Researcher)

On the basis of above tables,

Thomas Cook India Limited was having downwards trend in performance after merger and acquisition. The company is having average gross profit ratio of 8.43% in these four years starting from the 2015 with 22.27% to in 2018 with 3.61. The company manages to earn enough to meet operating expenses. The performance of the company in terms of gross profit has been reduced nearly 22% after merger and acquisition period comparing average gross profit ratio with before merger and acquisition. However in terms of net profit also company fall down continuously, due to cost of acquisition and other expenditure in 2015 company had net profit ratio is only 6.63% so Overall reduction in Net profit ratio has been found with 6% comparing with 2018 at -0.15%. In last two years of after merger and Acquisition Company suffered from net loss, even though they were minor.

ANI Technologies Private limited has increasing trend in gross profit and net profit ratio even though both are in negative terms. It is observed that the benefit of acquisition have been enjoyed by the company. The average gross profit ratio of before merger and acquisition of the company was -416.65% and it has been reduced to -272.27% in after acquisition period for the period of 2016-2019. Similarly in net profit ratio improvement of nearly 117% has been found comparing average net profit

ratio of four years between pre and after acquisition period. The company is having positive effect of acquisition in terms of revenue generation from operation.

Tata Consultancy Services Limited has similar performance in after merger and acquisition period of four year 2016-2019. The average performance of the company in terms of gross profit is 34.78%. The slight decrease of 1% has been observed in gross profit, in 2016 35.88% and in 2019 34.58% and the same difference observed with comparison of average gross profit in before acquisition period with 35.78%. In terms of net profit, the average performance of the company has minor decrease of 2% comparing with before acquisition period 27.17% and after acquisition period 25.68%. However, this minor change in profitability is material for stake holders for big scale of companies. Overall operations of the company has remains the same.

Sterlite Technologies Limited has effective improvement of 12% in terms of average gross profit ratio comparing before acquisition period 9.66% and after acquisition period 21.25% of 2016-19. The performance of the company is similar in terms of net profit ratio. The average net profit ratio of the company after acquisition period is 8.93% and the difference of 7% is treated as improvement in performance comparing the average net profit ratio of the company in before acquisition period 1.91%. The company has gain advantage in terms of revenue generation from operation after acquisition.

Flipkart Private Limited has positive improvement in terms of profitability however both gross profit ratio and net profit ratio are in negative terms but having reducing trend year after year. The average improvement in gross profit ratio is 14% and net profit ratio 18% has been observed. The average gross profit ratio of before acquisition period is -22.63% and after acquisition period of 2016-2019 is -6.61%. The average net profit ratio of before acquisition period is -25.24% and after acquisition period is -7.01%. The after acquisition period generating return from operation trend shows downside but average performance is better than earlier period.

Snapdeal Private Limited is having mix trend with significant improvement in profitability in terms of gross profit, company has average gross profit ratio is -83.99% for the after acquisition period of 2017-2020 comparing with the average gross profit ratio with the before acquisition period is -247.90%. Similarly in terms of net profit, company has average net profit ratio is -193.72% for the after acquisition period comparing with the average gross profit ratio with the before acquisition period

is -251.47%. However, company is having overall profitability in negative terms but significant improvement has been observed with the combine scale of operation.

Sun pharmaceutical Industries Limited is having significant downfall in profitability after acquisition period of 2015-2018; the average gross profit ratio of the company is 6.91% which was 34.73% in before acquisition period. The reduction of 27% has been observed. Similarly in net profit ratio, the average net profit ratio of the company in after acquisition period -7.33% which was 2.01% in before acquisition period. The company's profitability comes to loss in after acquisition period.

Strides Pharma Science Limited is not having major movement in after acquisition period, however it has marginal downfall in average gross profit ratio of 4% in comparison of after acquisition ratio of 21.08% and pre acquisition period of 25.78%. in terms of net profit company have started generating net profit in after acquisition period with the average net profit ratio of 10.22% comparing with the average net profit ratio of -16.41% in before acquisition period. Overall profitability of the company has been improved.

Prestige Estate Projects Limited has similar performance in after merger and acquisition period of four year 2017-2020. The average performance of the company in terms of gross profit is 29.28%. The increase of 10% has been observed in gross profit, in 2017 26.16% and in 2020 36.06% and the slight difference of 1% has been observed with comparison of average gross profit in before acquisition period with 30.43%. In terms of net profit, the average performance of the company has minor decrease of 3% comparing with before acquisition period 16.10% and after acquisition period 13.64%.

DLF Limited has observed downfall in average gross profit ratio after acquisition period of 2017-2020 with average gross profit of 73.81% comparing with the before acquisition period 98.42%. Nearly 25% decreased. Similarly in the average net profit ratio company has 5% downfall after acquisition period with average net profit ratio of 24.88% and before acquisition period of 30.20%. The performance of company has decreased minor in terms of overall profitability.

### 6.1.2 – Test of Hypothesis

To test hypothesis on profitability, Null Hypothesis (H0) has been framed that there is no significant effect of Merger and acquisition on profitability of the acquiring entity

before and after merger and acquisition. Paired T-Test is applied on combine average of gross profit ratio and net profit ratio for the individual acquirer company and for the sector combine average of the gross profit ratio and net profit ratio for both the companies are taken into consideration and results are;

| Paired T- Test on comparative of Profitability | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Acquirer Compnaies | | | | | | | | | | |
| Deal Wise and Sector wise | | | | | | | | | | |
| | | Before M&A | | | Post M&A | | | | | |
| Sector | Company Name | GP | NP | Mean | GP | NP | Mean | T-Value | P- Value | Mean Diff. |
| Travel and Hospitality | Thomas Cook India Limited | 31.41 | 12.29 | 21.85 | 8.43 | 1.58 | 5.00 | 2.75 | 0.22 | -16.85 |
| | ANI Technologies Private Limited | -416.65 | -421.70 | -419.18 | -272.27 | -304.37 | -288.32 | -9.68 | 0.07 | 130.86 |
| | Total | -385.24 | -409.41 | -397.33 | -263.84 | -302.80 | -283.32 | -15.42 | 0.04 | 114.01 |
| | | | | | | | | | | |
| Technology | Tata Consultancy Services Limited | 35.78 | 27.17 | 31.47 | 34.78 | 25.68 | 30.23 | 5.07 | 0.12 | -1.24 |
| | Sterlite Technologies Limited | 9.66 | 1.91 | 5.78 | 21.25 | 8.93 | 15.09 | -4.07 | 0.15 | 9.30 |
| | Total | 45.44 | 29.08 | 37.26 | 56.03 | 34.61 | 45.32 | -3.18 | 0.19 | 8.06 |
| | | | | | | | | | | |
| E-Commerce | Flipkart Private Limited | -22.63 | -25.24 | -23.94 | -6.61 | -7.01 | -6.81 | -15.46 | 0.04 | 17.13 |
| | Snapdeal Private Limited | -247.90 | -251.47 | -249.69 | -83.99 | -193.72 | -138.86 | -2.09 | 0.28 | 110.83 |
| | Total | -270.53 | -276.72 | -273.62 | -90.60 | -200.73 | -145.66 | -2.46 | 0.25 | 127.96 |
| | | | | | | | | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 34.73 | 2.01 | 18.37 | 6.91 | -7.33 | -0.21 | 2.01 | 0.29 | -18.58 |
| | Strides Pharma Science Limited | 25.78 | -16.41 | 4.69 | 21.08 | 10.22 | 15.65 | -0.70 | 0.61 | 10.96 |
| | Total | 60.51 | -14.40 | 23.06 | 27.99 | 2.89 | 15.44 | 0.31 | 0.81 | -7.62 |
| | | | | | | | | | | |
| Real Estate | Prestige Estate Projects Limited | 30.43 | 16.10 | 23.27 | 29.28 | 13.64 | 21.46 | 2.74 | 0.22 | -1.81 |
| | Delhi Land & Finance Limited | 98.42 | 30.20 | 64.31 | 73.81 | 24.88 | 49.34 | 1.55 | 0.36 | -14.97 |
| | Total | 128.85 | 46.30 | 87.57 | 103.09 | 38.51 | 70.80 | 1.87 | 0.31 | -16.77 |
| | | | | | | | | | | |

(Table 6.5 – Paired T-Test Results – Source: Computation by Researcher)

From the above table, It has been observed that the average profitability of

Thomas Cook India Limited has decreased marginally (16.85%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=2.75, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost after merger and acquisition. The significance value of change (0.22) is less than the level of significance.

ANI Technologies Private Limited has significant improvement (130.86%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-9.68, p<0.05) in average profitability ratio before and after Merger and Acquisition. Increase in profitability ratio can be attributed to increase in operating revenue from operation after merger and acquisition. The significance value of change (0.07) is less than the level of significance.

Travel and Hospitality sector as whole, has increased significantly (114.01%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-15.42, p>0.05) in average profitability ratio before and after Merger

and Acquisition. Increase in profitability ratio can be attributed to increase in operating revenue from operation and comparatively lower cost of operation after merger and acquisition. The significance value of change (0.04) is less than the level of significance.

Tata Consultancy Services Limited has minor decreased (1.24%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=5.07, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost after merger and acquisition. The significance value of change (0.12) is less than the level of significance.

Sterlite Technologies Limited has increased marginally (9.30%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-4.07, p>0.05) in average profitability ratio before and after Merger and Acquisition. Increase in profitability ratio can be attributed to increase in operating revenue from operation after merger and acquisition. The significance value of change (0.15) is less than the level of significance.

Technology sector as whole has marginally improvement (8.06%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-3.18, p>0.05) in average profitability ratio before and after Merger and Acquisition. Improvement in profitability ratio can be attributed to increase in operating revenue from operation and lower cost of operation after merger and acquisition. The significance value of change (0.19) is less than the level of significance.

Flipkart Private Limited has increased marginally (17.13%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-15.46, p<0.05) in average profitability ratio before and after Merger and Acquisition. Increase in profitability ratio can be attributed to increase in operating revenue from operation after merger and acquisition. The significance value of change (0.04) is less than the level of significance.

Snapdeal Private Limited has improved significantly (110.83%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-2.09, p>0.05) in average profitability ratio before and after Merger and Acquisition. Improvement in profitability ratio can be attributed to increase in operating revenue

from operation and lower cost of operation after merger and acquisition. The significance value of change (0.28) is less than the level of significance.

E-Commerce sector as whole has significant positive improvement (127.96%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-2.46, p>0.05) in average profitability ratio before and after Merger and Acquisition. Increase in profitability ratio can be attributed to increase in operating revenue from operation and lower cost of operation with the extension of number of user with internet after merger and acquisition. The significance value of change (0.25) is less than the level of significance.

Sun Pharmaceutical Industries Limited has decreased marginally (18.58%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=2.01, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost after merger and acquisition. The significance value of change (0.29) is less than the level of significance.

Strides Pharma Science Limited has increased marginally (10.96%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.70, p>0.05) in average profitability ratio before and after Merger and Acquisition. Increase in profitability ratio can be attributed to increase in operating revenue from operation and lower cost of operation after merger and acquisition. The significance value of change (0.61) is greater than the level of significance.

Pharmaceutical sector as whole has decreased marginally (7.62%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.31, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost and lower generation of revenue from operation after merger and acquisition. The significance value of change (0.81) is greater than the level of significance.

Prestige Estate Projects Limited has decreased marginally (1.81%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=2.74, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost after merger and acquisition. The significance value of change (0.22) is less than the level of significance.

DLF Limited has decreased marginally (14.97%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.55, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost after merger and acquisition. The significance value of change (0.36) is less than the level of significance.

Real Estate sector as whole has decreased marginally (16.77%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.87, p>0.05) in average profitability ratio before and after Merger and Acquisition. Decrease in profitability ratio can be attributed to increase in operating cost and lower generation of revenue from operation after merger and acquisition. The significance value of change (0.31) is less than the level of significance.

**6.1.3 – Overall Analysis**
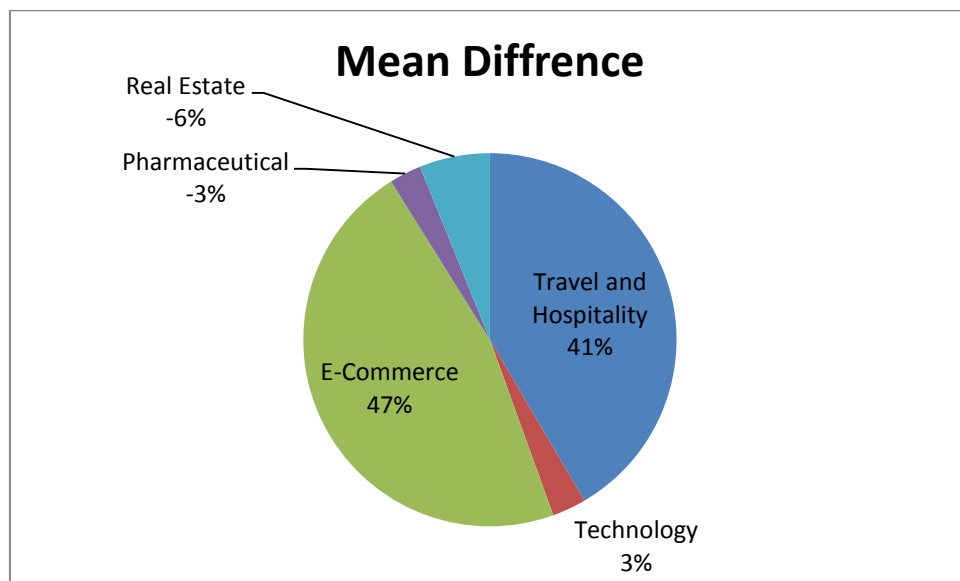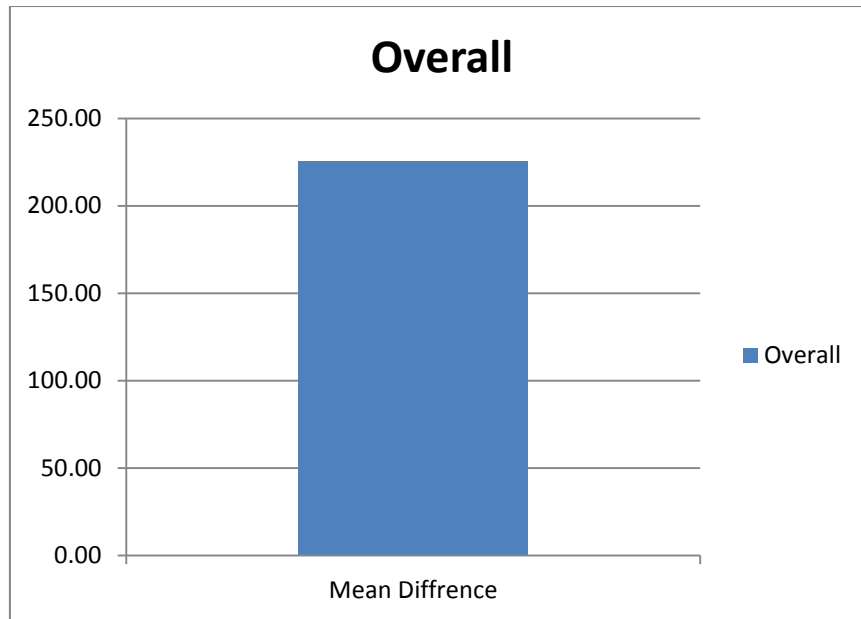
(Figure 6.1 – Overall Average mean difference of Profitability – Source: Computation by Researcher)

From the above two charts, the researcher has attempted to show significant change by taking difference of mean of profitability of all the acquirer companies as whole and sector wise between before and after merger and acquisition period of four years. It has been observed that overall profitability of companies has been increased by 225.64%. Further it has been observed that this positive difference is due to E-Commerce (127.96%, 47%) and Travel and Hospitality (114.01%, 41%) and Technology (8.06%, 3%) sector's performance in spite of the negative performance of the Pharmaceutical (7.62%, 3%) and Real Estate (16.77%, 6%). The positive difference can be attributed to overall increment in revenue from operation, lowering the cost of operation along with the reducing the interest cost and other overhead expenditure. The negative difference can be attributed to high cost of operation, less revenue generation from operation and higher of interest cost and other overhead cost.

| Summary of Hypothesis | | | |
|---|---|---|---|
| Test of Profitability | | | |
| H0- There is no significant effect of Merger and acquisition on profitability of the acquiring entity before and after merger and acquisition | | | |
| Signifiance level @ 0.05 | | | |
| Sector | Company Name | P- Value | Result |
| Travel and Hospitality | Thomas Cook India Limited | 0.22 | Accepted |
| | ANI Technologies Private Limited | 0.07 | Accepted |
| | For Sector | 0.04 | Rejceted |
| | | | |
| Technology | Tata Consultancy Services Limited | 0.12 | Accepted |
| | Sterlite Technologies Limited | 0.15 | Accepted |
| | For Sector | 0.19 | Accepted |
| | | | |
| E-Commerce | Flipkart Private Limited | 0.04 | Rejected |
| | Snapdeal Private Limited | 0.28 | Accepted |
| | For Sector | 0.25 | Accepted |
| | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.29 | Accepted |
| | Strides Pharma Science Limited | 0.61 | Accepted |
| | For Sector | 0.81 | Accepted |
| | | | |
| Real Estate | Prestige Estate Projects Limited | 0.22 | Accepted |
| | Delhi Land and Finance Limited | 0.36 | Accepted |
| | For Sector | 0.31 | Accepted |
| | | | |

(Table 6.6 – Summary of Hypothesis Test of Profitability – Source: Computation by Researcher)

## 6.2 – Test of Turnover:

### 6.2.1 – Comparative Analysis

In order to examine change in Turnover of the acquirer entity before and after merger and acquisition along with Turnover trend of acquirer entity before merger and acquisition, amount of Sales in absolute terms is taken into consideration by taking average value of before four years and after four years of merger and acquisition.

| Turnover | | | | | | |
|---|---|---|---|---|---|---|
| Amount in Millions | | | | | | |
| Acquirer Companies - After Merger and Acquisition | | | | | | |
| | | | | | | |
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 3781.03 | 3771.3 | 3423.4 | 2673.61 | 3412.33 |
| | ANI Technologies Private Limited | 18856.1 | 14907 | 10778 | 4945.1 | 12371.40 |
| Technology | Tata Consultancy Services Limited | 1231700 | 973560 | 926930 | 858640 | 997707.50 |
| | Sterlite Technologies Limited | 48626.3 | 28651 | 22559 | 20356.6 | 30048.13 |
| E-Commerce | Flipkart  Private Limited | 305712 | 214386 | 152644 | 128180 | 200230.58 |
| | Snapdeal Private Limited | 8139 | 8138 | 4361 | 9038 | 7419.00 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 89824.9 | 76840 | 77333 | 80284.4 | 81070.38 |
| | Strides Pharma Science Limited | 15374.4 | 14696 | 13818 | 22034.9 | 16480.89 |
| Real Estate | Prestige Estate Projects Limited | 33558 | 24411 | 29925 | 21764 | 27414.50 |
| | Delhi Land and Finance Limited | 23699.5 | 32954 | 30559 | 37029.6 | 31060.50 |
| | | | | | | |

(Table 6.7– Turnover for four years After Merger and Acquisition – Source: Database Tool)

| Acuirer Compnaies | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Deal Wise | | | Sector Wise | | |
| | | Before M&A | After M&A | | Before M&A | After M&A | |
| | | | | | | | |
| Sector | Company Name | Average | Average | % Change | Average | Average | % Change |
| Travel and Hospitality | Thomas Cook India Limited | 14606.50 | 3412.33 | -76.64 | 14926.54 | 15783.73 | 5.74 |
| | ANI Technologies Private Limited | 320.03 | 12371.40 | 3765.67 | | | |
| Technology | Tata Consultancy Services Limited | 563839.18 | 997707.50 | 76.95 | 593433.23 | 1027755.63 | 73.19 |
| | Sterlite Technologies Limited | 29594.05 | 30048.13 | 1.53 | | | |
| E-Commerce | Flipkart  Private Limited | 33055.02 | 200230.58 | 505.75 | 38327.37 | 207649.58 | 441.78 |
| | Snapdeal Private Limited | 5272.35 | 7419.00 | 40.72 | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 30960.15 | 81070.38 | 161.85 | 39597.38 | 97551.26 | 146.36 |
| | Strides Pharma Science Limited | 8637.23 | 16480.89 | 90.81 | | | |
| Real Estate | Prestige Estate Projects Limited | 23071.20 | 27414.50 | 18.83 | 51007.74 | 58475.00 | 14.64 |
| | Delhi Land and Finance Limited | 27936.54 | 31060.50 | 11.18 | | | |

(Table 6.8  – Average of Turnover for Comparison – Source: Computation by Researcher)

On the basis of above tables,

Thomas Cook India Limited was having upwards trend in performance after merger and acquisition. The company is having average Sales of 3412 in these four years starting from the 2015 with 2673 to in 2018 with 3781. The company manages to generate enough revenue from sales to meet operating expenses. The performance of the company in terms of Sales has been reduced nearly 76.64% after merger and

acquisition period comparing average Sales with before merger and acquisition with 14606.

ANI Technologies Private limited has increasing trend in Sales. It is observed that the benefit of acquisition have been enjoyed by the company. The average Sales of before merger and acquisition of the company was 320 and it has been increased to 12371 in after acquisition period for the period of 2016-2019. The company is having positive effect due to improvement of internet facility and number of users with internet of acquisition in terms of revenue generation from operation.

Tata Consultancy Services Limited has improved performance in after merger and acquisition period of four year 2016-2019. The average performance of the company in terms of Sales is 997707. The significant increase of 76% has been observed in sales, in 2016 858640 and in 2019 1231700 and the same difference observed with comparison of average Sales in pre -acquisition period with 563839.

Sterlite Technologies Limited has minor improvement of 1.53% in terms of average Sales comparing before acquisition period 29594 and after acquisition period 30048 of 2016-19. The trend of company has shown increasing way after merger and acquisition period starting with 2016 20356 to ending in 2019 with 48626.

Flipkart Private Limited has significant positive improvement in terms of Turnover having increasing trend year after year. The average improvement in Sales is 505% and has been observed. The average Sales of before acquisition period is 33055 and after acquisition period of 2016-2019 is 200230. However due to heavy debt fund invested company is not able to generate profit. The after acquisition period generating return from operation trend shows upside and average performance is better than earlier period due number of user increased with the internet and purchase things online.

Snapdeal Private Limited is having increasing trend with significant improvement in Turnover in terms of sales, company has average Sales is 7419 for the after acquisition period of 2017-2020 comparing with the average Sales with the before acquisition period is 5272. However, company is having in negative profit but significant improvement has been observed with the combine scale of operation. The average performance is better than earlier period due number of user increased with the internet and purchase things online.

Sun pharmaceutical Industries Limited is having significant improvement in Turnover after acquisition period of 2015-2018; the average Sales of the company is 81070 which were 30960 in before acquisition period. The improvement of 161.85% has been observed. The company has shown mix trend with overall addition after merger and acquisition period starting with 2015 80284 to ending in 2019 with 89824. Downfall In middle two years has been observed.

Strides Pharma Science Limited is having major movement in after acquisition period; however it has significant improvement in average Sales of 90% in comparison of after acquisition ratio of 16480 and pre acquisition period of 8637. The company has shown decreasing trend with overall addition after merger and acquisition period starting with 2016 22034 to ending in 2019 with 15374. Overall Turnover of the company has been improved.

Prestige Estate Projects Limited has similar performance in after merger and acquisition period of four year 2017-2020. The average performance of the company in terms of Sales is 27414. The increase of 19% has been observed in sales with comparison of average Sales in before acquisition period with 23071, in 2017 21764 and in 2020 33558. Downfall In middle two years has been observed.

DLF Limited has observed improvement in average Sales after acquisition period of 2017-2020 with average Sales of 31060 comparing with the before acquisition period 27936. The increase of 11% has been observed, in 2017 37029 and in 2020 23699. The company has shown downwards trend. The performance of company has increased marginally in terms of overall Turnover.

**6.2.2 – Test of Hypothesis**

To test hypothesis on Turnover, Null Hypothesis (H0) has been framed that there is no significant effect of Merger and acquisition on Turnover of the acquiring entity before and after merger and acquisition. Paired T-Test is applied on combine average of Sales and net profit ratio for the individual acquirer company and for the sector combine average of the Sales and net profit ratio for both the companies are taken into consideration and results are;

| | | Before M&A | After M&A | T-Value | P- Value | Mean Diff. |
|---|---|---|---|---|---|---|
| **Paired T-Test** | | | | | | |
| **Acquirer Compnaies** | | | | | | |
| **Deal Wise and Sector wise** | | | | | | |
| | | | | | | |
| **Sector** | **Company Name** | Average | Average | | | |
| Travel and Hospitality | Thomas Cook India Limited | 14606.50 | 3412.33 | 3.76 | 0.03 | -11194.18 |
| | ANI Technologies Private Limited | 320.03 | 12371.40 | -4.25 | 0.02 | 12051.37 |
| | Total | 7463.27 | 7891.86 | -0.04 | 0.98 | 428.60 |
| | | | | | | |
| Technology | Tata Consultancy Services Limited | 563839.18 | 997707.50 | -11.63 | 0.00 | 433868.33 |
| | Sterlite Technologies Limited | 29594.05 | 30048.13 | -0.07 | 0.95 | 454.08 |
| | Total | 296716.61 | 513877.81 | -1.00 | 0.50 | 217161.20 |
| | | | | | | |
| E-Commerce | Flipkart  Private Limited | 33055.02 | 200230.58 | -8.13 | 0.00 | 167175.56 |
| | Snapdeal Private Limited | 5272.35 | 7419.00 | -0.84 | 0.46 | 2146.65 |
| | Total | 19163.68 | 103824.79 | -1.03 | 0.49 | 84661.10 |
| | | | | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 30960.15 | 81070.38 | -9.95 | 0.00 | 50110.23 |
| | Strides Pharma Science Limited | 8637.23 | 16480.89 | -3.41 | 0.04 | 7843.66 |
| | Total | 19798.69 | 48775.63 | -1.37 | 0.40 | 28976.94 |
| | | | | | | |
| Real Estate | Prestige Estate Projects Limited | 23071.20 | 27414.50 | -1.84 | 0.16 | 4343.30 |
| | Delhi Land and Finance Limited | 27936.54 | 31060.50 | 0.67 | 0.55 | 3123.96 |
| | Total | 25503.87 | 29237.50 | -6.12 | 0.10 | 3733.63 |
| | | | | | | |

(Table 6.9– Paired T-Test Results – Source: Computation by Researcher)

From the above table, It has been observed that the average Turnover of;

Thomas Cook India Limited has decreased significantly (11194) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=3.76, p<0.05) in average Turnover before and after Merger and Acquisition. Decrease in Turnover can be attributed to increase in competitors and failure of retention of customer after merger and acquisition. The significance value of change (0.03) is less than the level of significance.

ANI Technologies Private Limited has significant improvement (12051) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-4.25, p<0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.02) is less than the level of significance.

Travel and Hospitality sector as whole, has increased marginally (428) after merger and acquisition. The test results of paired sample t-test indicate significant difference

(t=-0.04, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. However new entrants of competitors will attract the customers of existing business with new offers and scheme. The significance value of change (0.98) is greater than the level of significance.

Tata Consultancy Services Limited has majorly increased (433868) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-11.63, p<0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.00) is less than the level of significance.

Sterlite Technologies Limited has increased marginally (454) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.07, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.95) is greater than the level of significance.

Technology sector as whole has majorly improved (217161) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1, p>0.05) in average Turnover before and after Merger and Acquisition. Improvement in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Flipkart Private Limited has increased majorly (167175) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-8.13, p<0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.00) is less than the level of significance.

Snapdeal Private Limited has improved marginally (2146) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.84, p>0.05) in average Turnover before and after Merger and Acquisition.

Improvement in Turnover ratio can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.46) is greater than the level of significance.

E-Commerce sector as whole has significant improvement (84661) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.03, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The improvement in internet facility played major role. The significance value of change (0.49) is greater than the level of significance.

Sun Pharmaceutical Industries Limited has increased majorly (50110) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-9.95, p<0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.00) is less than the level of significance.

Strides Pharma Science Limited has increased marginally (7843) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-3.41, p<0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.04) is greater than the level of significance.

Pharmaceutical sector as whole has Increased majorly (28976) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.37, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.40) is greater than the level of significance.

Prestige Estate Projects Limited has increased marginally (4343) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.84, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of

satisfaction of existing customer after merger and acquisition. The significance value of change (0.16) is greater than the level of significance.

DLF Limited has increased marginally (3123) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.67, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.55) is greater than the level of significance.

Real Estate sector as whole has increased marginally (3733) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-6.12, p>0.05) in average Turnover before and after Merger and Acquisition. Increase in Turnover can be attributed to increase in number of customer and level of satisfaction of existing customer after merger and acquisition. The significance value of change (0.10) is greater than the level of significance.

### 6.2.3 – Overall Analysis
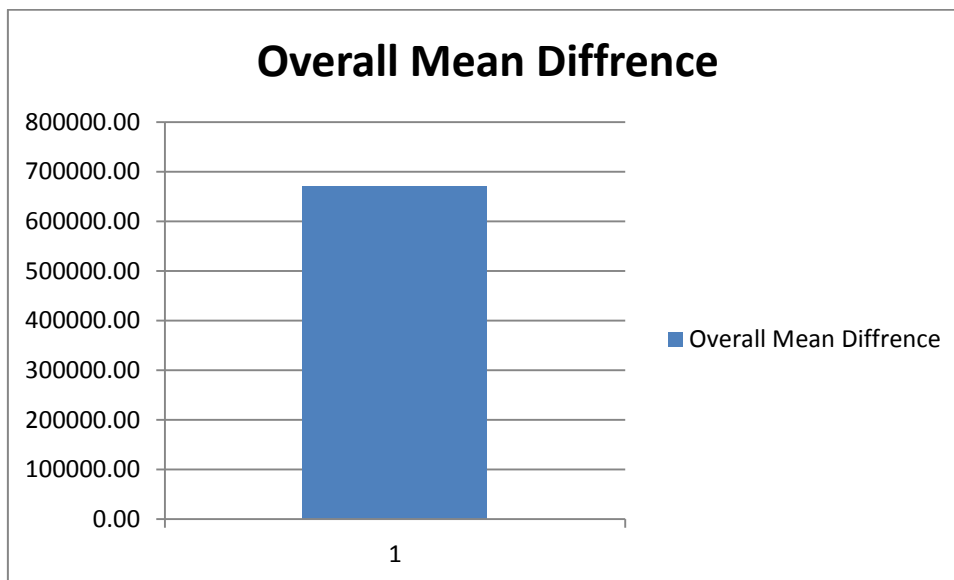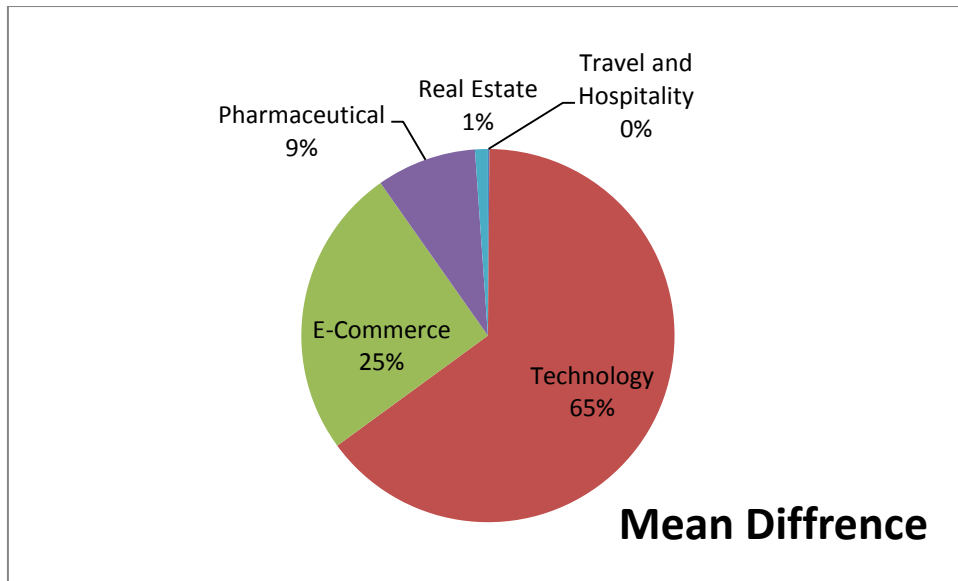
(Figure 6.2 – Overall Average Mean difference of Turnover – Source: Computation
by Researcher)

From the above two charts, the researcher has attempted to show significant change by taking difference of mean of Turnover of all the acquirer companies as whole and sector wise between before and after merger and acquisition period of four years. It has been observed that overall Turnover of companies has been increased by 669923. Further it has been observed that this positive difference is due to all the sectors but majorly E-Commerce (84661, 25%) and Technology (217161, 65%) sector's performance. Travel and Hospitality has very low positive performance (428) and performance of the Pharmaceutical (28976, 9%) and Real Estate (3733, 1%) are minor. The positive difference can be attributed to overall increment in revenue from operation due to increase in number of customer and level of satisfaction of existing customer, improved quality of services and faster customer grievance redressed, efforts for retention of existing customer and promotion for attracting new customers, benefit of economies of scale.

| Summary of Hypothesis | | | |
|---|---|---|---|
| Test of Turnover | | | |
| H0- There is no significant effect of Merger and acquisition on turnover of the acquiring entity before and after merger and acquisition | | | |
| Signifiance level @ 0.05 | | | |
| Sector | Company Name | P- Value | Result |
| Travel and Hospitality | Thomas Cook India Limited | 0.03 | Rejceted |
| | ANI Technologies Private Limited | 0.02 | Rejceted |
| | For Sector | 0.98 | Accepted |
| | | | |
| Technology | Tata Consultancy Services Limited | 0.00 | Rejceted |
| | Sterlite Technologies Limited | 0.95 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| E-Commerce | Flipkart  Private Limited | 0.00 | Rejceted |
| | Snapdeal Private Limited | 0.46 | Accepted |
| | For Sector | 0.49 | Accepted |
| | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.00 | Rejceted |
| | Strides Pharma Science Limited | 0.04 | Rejceted |
| | For Sector | 0.40 | Accepted |
| | | | |
| Real Estate | Prestige Estate Projects Limited | 0.16 | Accepted |
| | Delhi Land and Finance Limited | 0.55 | Accepted |
| | For Sector | 0.10 | Accepted |
| | | | |

(Figure 6.10 – Summary of Hypothesis Test of – Source: Computation by Researcher)

## 6.3 – Test of Asset Utilization

### 6.3.1 – Comparative Analysis

In order to examine Asset Utilization of the acquiring entity before and after merger and acquisition along with Asset Utilization trend of acquired entity before merger and acquisition, Return on Asset Ratio and Total Asset Turnover Ratio are taken into consideration by taking average value of before four years and after four years of merger and acquisition.

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | -0.12 | -0.38 | 0.25 | 2.00 | 0.44 |
| | ANI Technologies Private Limited | -16.52 | -40.80 | -58.76 | -48.07 | -41.04 |
| Technology | Tata Consultancy Services Limited | 25.70 | 21.91 | 21.34 | 26.22 | 23.79 |
| | Sterlite Technologies Limited | 13.24 | 8.27 | 5.98 | 6.29 | 8.44 |
| E-Commerce | Flipkart  Private Limited | -24.28 | -15.81 | -2.58 | -5.79 | -12.11 |
| | Snapdeal Private Limited | -16.72 | -9.24 | -26.42 | -89.16 | -35.39 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.56 | -0.04 | -2.02 | -3.22 | -1.18 |
| | Strides Pharma Science Limited | 1.98 | 3.05 | 2.41 | 3.41 | 2.71 |
| Real Estate | Prestige Estate Projects Limited | 0.92 | 1.16 | 1.16 | 3.25 | 1.62 |
| | Delhi Land and Finance Limited | 2.42 | 1.72 | 1.27 | 1.89 | 1.82 |
| | | | | | | |

(Table 6.11– Return on Total Asset for four years After Merger and Acquisition –

Source: Database Tool)

| Comparative of Return on Total Asset | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | Before M&A | After M&A | Before M&A | After M&A |
| Sector | Company Name | Average | Average | Average | Average |
| Travel and Hospitality | Thomas Cook India Limited | 4.92 | 0.44 | -135.94 | -40.60 |
| | ANI Technologies Private Limited | -140.87 | -41.04 | | |
| Technology | Tata Consultancy Services Limited | 29.51 | 23.79 | 31.18 | 32.24 |
| | Sterlite Technologies Limited | 1.67 | 8.44 | | |
| E-Commerce | Flipkart  Private Limited | -29.19 | -12.11 | -63.19 | -47.50 |
| | Snapdeal Private Limited | -34.00 | -35.39 | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 4.97 | -1.18 | -2.23 | 1.54 |
| | Strides Pharma Science Limited | -7.20 | 2.71 | | |
| Real Estate | Prestige Estate Projects Limited | 3.09 | 1.62 | 5.26 | 3.45 |
| | Delhi Land and Finance Limited | 2.17 | 1.82 | | |

(Table 6.12– Average of Return on Total Asset for Comparison – Source:

Computation by Researcher)

Growth Analysis of Companies Before and After Merger and Acquisition from Various Sectors

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 1.92 | 1.55 | 1.69 | 1.89 | 1.76 |
| | ANI Technologies Private Limited | 56.02 | 0.52 | -0.24 | 25.42 | 20.43 |
| Technology | Tata Consultancy Services Limited | 0.62 | 0.68 | 0.68 | 0.64 | 0.66 |
| | Sterlite Technologies Limited | 0.92 | 0.90 | 0.66 | 0.66 | 0.79 |
| E-Commerce | Flipkart Private Limited | 0.71 | 0.41 | 0.41 | 1.61 | 0.79 |
| | Snapdeal Private Limited | 6.11 | 8.14 | 5.59 | 4.67 | 6.13 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 5.17 | 3.91 | 2.31 | 2.49 | 3.47 |
| | Strides Pharma Science Limited | 1.94 | 1.72 | 2.74 | 2.85 | 2.31 |
| Real Estate | Prestige Estate Projects Limited | 3.59 | 3.75 | 3.39 | 4.14 | 3.72 |
| | Delhi Land and Finance Limited | 6.22 | 9.22 | 11.03 | 11.96 | 9.61 |

(Table 6.13– Total Asset Turnover Ratio for four years After Merger and Acquisition

– Source: Database Tool)

| Comparative of Total Asset Turnover Ratio | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | Before M&A | After M&A | Before M&A | After M&A |
| Sector | Company Name | Average | Average | Average | Average |
| Travel and Hospitality | Thomas Cook India Limited | 1.31 | 1.76 | 6.03 | 22.19 |
| | ANI Technologies Private Limited | 4.71 | 20.43 | | |
| Technology | Tata Consultancy Services Limited | 0.76 | 0.66 | 1.49 | 1.44 |
| | Sterlite Technologies Limited | 0.73 | 0.79 | | |
| E-Commerce | Flipkart Private Limited | 0.43 | 0.79 | 2.53 | 6.92 |
| | Snapdeal Private Limited | 2.10 | 6.13 | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 4.47 | 3.47 | 7.13 | 5.78 |
| | Strides Pharma Science Limited | 2.66 | 2.31 | | |
| Real Estate | Prestige Estate Projects Limited | 5.85 | 3.72 | 14.90 | 13.33 |
| | Delhi Land and Finance Limited | 9.05 | 9.61 | | |

(Table 6.14– Average of Total Asset Turnover Ratio for Comparison – Source:

Computation by Researcher)

On the basis of above tables,

Thomas Cook India Limited was having downwards trend in performance after merger and acquisition. The company is having average Return on Asset Ratio of 0.44% in these four years starting from the 2015 with 2% to in 2018 with -0.12%. The company has not managed to earn enough revenue by using assets. The performance of the company in terms of Return on Asset Ratio has been reduced nearly 3% after merger and acquisition period comparing average Return on Asset Ratio with before merger and acquisition. However in terms of Total Asset Turnover

Ratio company marginally improved, due to cost of acquisition and other expenditure along with change in revenue from operations in 2015 company had Total Asset turnover Ratio is only 1.89% and in 2018 it was 1.92%. Overall improvement in Total Asset Turnover Ratio has been found with 0.40% comparing with average of before merger and acquisition 1.31%. The improvement is very minor.

ANI Technologies Private limited has increasing trend in Return on Asset Ratio and Total Asset Turnover Ratio even though return generated is in negative terms. It is observed that the benefit of acquisition have been enjoyed by the company. The average Return on Asset Ratio of before merger and acquisition of the company was -140.87% and it has been reduced to -41.04% in after acquisition period for the period of 2016-2019. Similarly in Total Asset Turnover Ratio improvement of nearly 16% has been found comparing average Total Asset Turnover Ratio of four years between pre and after acquisition period. The company is having positive effect of acquisition in terms of generating return by using assets.

Tata Consultancy Services Limited has marginally decreasing performance in after merger and acquisition period of four year 2016-2019. The average performance of the company in terms of Return on Asset Ratio is 23.79%. The slight decrease of 6% has been observed in Return on Asset with comparison of average Return on Asset Ratio in before acquisition period with 29.51%., in 2016 26.22% and in 2019 25.70% and the same marginal difference observed in terms of Total Asset Turnover Ratio, the average performance of the company has minor decrease of 0.10% comparing with before acquisition period 0.76% and after acquisition period 0.66%. However, this minor change in Asset Utilization is material for stake holders for big scale of companies. Overall operations of the company has remains the same. The company is having falling effect of acquisition in terms of generating return by using assets.

Sterlite Technologies Limited has effective improvement of 7% in terms of average Return on Asset Ratio comparing before acquisition period 1.67% and after acquisition period 8.44% of 2016-19. The performance of the company is minor improvement in terms of Total Asset Turnover Ratio. The average Total Asset Turnover Ratio of the company after acquisition period is 0.79% and the difference of 0.06% is treated as improvement in performance comparing the average Total Asset Turnover Ratio of the company in before acquistion period 0.73%. The company has gain advantage in terms of generating return by using assets after acquisition.

Flipkart Private Limited has marginal improvement in terms of Asset Utilization however return on Asset Ratio and Total Asset Turnover Ratio is in reducing trend year after year. The average improvement in Return on Asset Ratio is 17% and Total Asset Turnover Ratio 0.37% has been observed. The average Return on Asset Ratio of before acquisition period is -29.19% and after acquisition period of 2016-2019 is -12.11%. The average Total Asset Turnover Ratio of before acquisition period is 0.43% and after acquisition period is 0.79%. The after acquisition period generating return from operation trend shows downside but average performance is better than earlier period. The company has gain advantage in terms of generating return by using assets after acquisition.

Snapdeal Private Limited is having mix trend with significant improvement in Asset Utilization in terms of Asset utilization, company has average Return on Asset Ratio is -35.39% for the after acquisition period of 2017-2020 comparing with the average Return on Asset Ratio with the before acquisition period is -34%. Where, in terms of Total Asset Turnover Ratio, company has average Total Asset Turnover Ratio is 6.13% for the after acquisition period comparing with the average Total Asset Turnover Ratio with the before acquisition period is 2.10%. However, company is having overall Asset Utilization in positive terms but significant improvement has been observed with the combine scale of operation even though return generated by the company is not significant enough to turn profitability in positive.

Sun pharmaceutical Industries Limited is having marginal downfall in Asset Utilization after acquisition period of 2015-2018; the average Return on Asset Ratio of the company is -1.18% which was 4.97% in before acquisition period. The reduction of 6% has been observed. Similarly in Total Asset Turnover Ratio, the average Total Asset Turnover Ratio of the company in after acquisition period 3.47% which was 4.47% in before acquisition period. The company's Asset Utilization comes to loss in generating return by using assets after acquisition.

Strides Pharma Science Limited is having marginal positive movement in after acquisition period; it has marginal increase in average Return on Asset Ratio of 9% in comparison of after acquisition ratio of 2.71% and pre acquisition period of -7.20%. However, in terms of Total Asset Turnover Ratio company have marginal downfall in after acquisition period with the average Total Asset Turnover Ratio of 2.31% comparing with the average Total Asset Turnover Ratio of 2.66% in before

acquisition period. Overall Asset Utilization of the company has been improved. The company has started generating return by using assets after acquisition.

Prestige Estate Projects Limited has downfall performance in after merger and acquisition period of four year 2017-2020. The average performance of the company in terms of Return on Asset Ratio is 1.62%. The marginal decrease of 3% has been observed in Return on Asset, in 2017 3.25% and in 2020 0.92% and the slight difference of 2% has been observed with comparison of average Return on Asset Ratio in pre -acquisition period with 3.09%. In terms of Total Asset Turnover Ratio, the average performance of the company has minor decrease of 2% comparing with before acquisition period 5.85% and after acquisition period 3.72%. The performance of company has downfall in terms of generating return by using assets after acquisition period.

DLF Limited has observed downfall in average Return on Asset Ratio after acquisition period of 2017-2020 with average Return on Asset Ratio of 1.82% comparing with the before acquisition period 2.17%. Very minor 1% decreased. However in the average Total Asset Turnover Ratio company has 0.55% increment after acquisition period with average Total Asset Turnover Ratio of 9.61% and before acquisition period of 9.05%. The performance of company has decreased minor in terms of overall Asset Utilization. The company has inefficient management of combined assets for generating revenue after acquisition.

## 6.3.2 – Test of Hypothesis

To test hypothesis on Asset Utilization, Null Hypothesis (H0) has been framed that there is no significant effect of Merger and acquisition on Asset Utilization of the acquiring entity before and after merger and acquisition. Paired T-Test is applied on combine average of Return on Asset Ratio and Total Asset Turnover Ratio for the individual acquirer company and for the sector combine average of the Return on Asset Ratio and Total Asset Turnover Ratio for both the companies are taken into consideration and results are;

| | | Before M&A | | | After M&A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sector | Company Name | RTA | TATO | Mean | RTA | TATO | Mean | T-Value | P- Value | Mean Diff. |
| **Travel and Hospitality** | Thomas Cook India Limited | 4.92 | 1.31 | 3.12 | 0.44 | 1.76 | 1.10 | 0.82 | 0.56 | -2.02 |
| | ANI Technologies Private Limited | -140.87 | 4.71 | -68.08 | -41.04 | 20.43 | -10.30 | -1.37 | 0.40 | 57.77 |
| | Total | -135.94 | 6.03 | -64.96 | -40.60 | 22.19 | -9.20 | -1.41 | 0.39 | 55.75 |
| | | | | | | | | | | |
| **Technology** | Tata Consultancy Services Limited | 29.51 | 0.76 | 15.13 | 23.79 | 0.66 | 12.22 | 1.04 | 0.49 | -2.91 |
| | Sterlite Technologies Limited | 1.67 | 0.73 | 1.20 | 8.44 | 0.79 | 4.62 | -1.02 | 0.49 | 3.42 |
| | Total | 31.18 | 1.49 | 16.33 | 32.24 | 1.44 | 16.84 | -0.92 | 0.53 | 0.51 |
| | | | | | | | | | | |
| **E-Commerce** | Flipkart Private Limited | -29.19 | 0.43 | -14.38 | -12.11 | 0.79 | -5.66 | -1.04 | 0.49 | 8.72 |
| | Snapdeal Private Limited | -34.00 | 2.10 | -15.95 | -35.39 | 6.13 | -14.63 | -0.49 | 0.71 | 1.32 |
| | Total | -63.19 | 2.53 | -30.33 | -47.50 | 6.92 | -20.29 | -1.78 | 0.33 | 10.04 |
| | | | | | | | | | | |
| **Pharmaceutical** | Sun pharmaceutical Industries Limited | 4.97 | 4.47 | 4.72 | -1.18 | 3.47 | 1.15 | 1.39 | 0.40 | -3.57 |
| | Strides Pharma Science Limited | -7.20 | 2.66 | -2.27 | 2.71 | 2.31 | 2.51 | -0.93 | 0.52 | 4.78 |
| | Total | -2.23 | 7.13 | 2.45 | 1.54 | 5.78 | 3.66 | -0.47 | 0.72 | 1.21 |
| | | | | | | | | | | |
| **Real Estate** | Prestige Estate Projects Limited | 3.09 | 5.85 | 4.47 | 1.62 | 3.72 | 2.67 | 5.40 | 0.12 | -1.80 |
| | Delhi Land and Finance Limited | 2.17 | 9.05 | 5.61 | 1.82 | 9.61 | 5.72 | -0.24 | 0.85 | 0.11 |
| | Total | 5.26 | 14.90 | 10.08 | 3.45 | 13.33 | 8.39 | 14.33 | 0.04 | -1.69 |
| | | | | | | | | | | |

*Table caption (above table): Paired T- Test on comparative of Asset Utilization / Acquirer Compnaies / Deal Wise and Sector wise*

(Table 6.15– Paired T-Test Results – Source: Computation by Researcher)

From the above table, It has been observed that the average Asset Utilization of;

Thomas Cook India Limited has decreased marginally (2.02%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=0.82$, $p>0.05$) in average Asset Utilization ratio before and after Merger and Acquisition. Decrease in Asset Utilization ratio can be attributed to inefficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.56) is greater than the level of significance.

ANI Technologies Private Limited has significant improvement (57.77%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=-1.37$, $p>0.05$) in average Asset Utilization ratio before and after Merger and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.40) is greater than the level of significance.

Travel and Hospitality sector as whole, has increased significantly (55.75%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=-1.41$, $p>0.05$) in average Asset Utilization ratio before and after Merger and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.39) is greater than the level of significance.

Tata Consultancy Services Limited has minor decreased (2.91%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.04, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Decrease in Asset Utilization ratio can be attributed to inefficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.49) is greater than the level of significance.

Sterlite Technologies Limited has increased marginally (3.42%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.02, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.49) is less than the level of significance.

Technology sector as whole has marginally improvement (0.51%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.92, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Improvement in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.51) is greater than the level of significance.

Flipkart Private Limited has increased marginally (8.72%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.04, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.49) is greater than the level of significance.

Snapdeal Private Limited has improved marginally (1.32%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.49, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Improvement in Asset Utilization ratio can be attributed to inefficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.71) is less than the level of significance.

E-Commerce sector as whole has significant positive improvement (10.04%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.78, p>0.05) in average Asset Utilization ratio before and after Merger

and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.33) is greater than the level of significance.

Sun Pharmaceutical Industries Limited has decreased marginally (3.57%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.39, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Decrease in Asset Utilization ratio can be attributed to inefficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.40) is less than the level of significance.

Strides Pharma Science Limited has increased marginally (4.78%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.93, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.52) is greater than the level of significance.

Pharmaceutical sector as whole has increased marginally (1.21%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.47, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Increase in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.72) is greater than the level of significance.

Prestige Estate Projects Limited has decreased marginally (1.80%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=5.40, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Decrease in Asset Utilization ratio can be attributed to inefficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.12) is greater than the level of significance.

DLF Limited has increased marginally (0.11%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.24, p>0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Decrease in Asset Utilization ratio can be attributed to efficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.85) is less than the level of significance.

Real Estate sector as whole has decreased marginally (1.69%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=14.33, p<0.05) in average Asset Utilization ratio before and after Merger and Acquisition. Decrease in Asset Utilization ratio can be attributed to inefficient use of combined assets in order to generate revenue after merger and acquisition. The significance value of change (0.04) is less than the level of significance.

## 6.3.3 – Overall Analysis
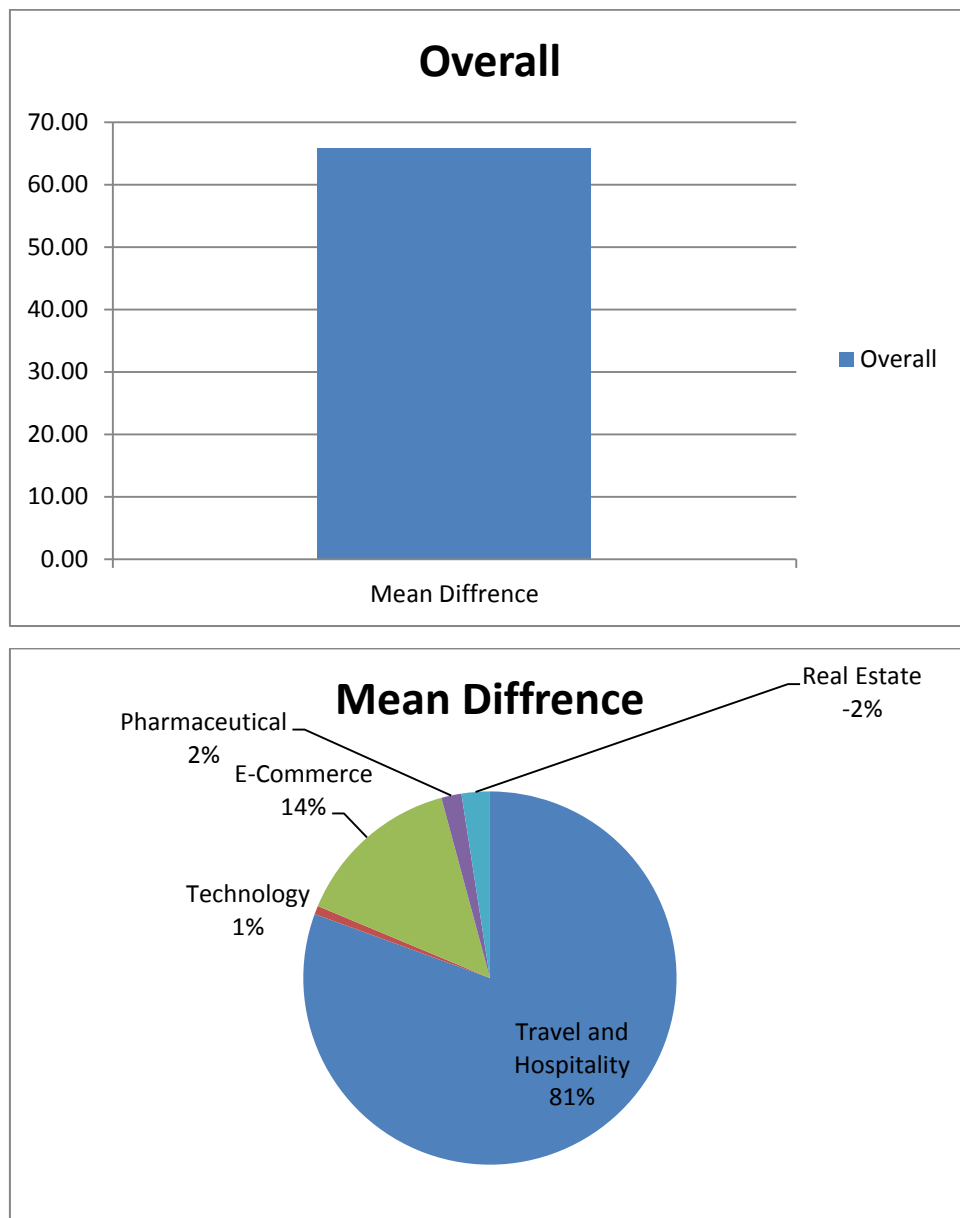


(Figure 6.3– Overall Average mean difference of  – Source: Computation by Researcher)

From the above two charts, the researcher has attempted to show significant change by taking difference of mean of Asset Utilization of all the acquirer companies as whole and sector wise between before and after merger and acquisition period of four years. It has been observed that overall Asset Utilization of companies has been increased by 65.82%. Further it has been observed that this positive difference is due to E-Commerce (10.04%, 14%), Travel and Hospitality (55.75%, 81%), Pharmaceutical (1.21%, 2%) and Technology (0.51%, 1%) sector's performance in spite of the negative performance of the Real Estate (1.69%, 2%). The positive difference can be attributed to efficient use of combined assets with minimum or no event of breakdown or strike of employees, optimum utilization of plant and machinery along with other assets are done in order to generate revenue from operation which further reflect in terms of return on asset.

| Summary of Hypothesis | | | |
|---|---|---|---|
| Test of Asset Utilization | | | |
| H0- There is no significant effect of Merger and acquisition on Asset Utilization of the acquiring entity before and after merger and acquisition | | | |
| Signifiance level @ 0.05 | | | |
| Sector | Company Name | P- Value | Result |
| Travel and Hospitality | Thomas Cook India Limited | 0.56 | Accepted |
| | ANI Technologies Private Limited | 0.40 | Accepted |
| | For Sector | 0.39 | Accepted |
| | | | |
| Technology | Tata Consultancy Services Limited | 0.49 | Accepted |
| | Sterlite Technologies Limited | 0.49 | Accepted |
| | For Sector | 0.53 | Accepted |
| | | | |
| E-Commerce | Flipkart  Private Limited | 0.49 | Accepted |
| | Snapdeal Private Limited | 0.71 | Accepted |
| | For Sector | 0.33 | Accepted |
| | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.40 | Accepted |
| | Strides Pharma Science Limited | 0.52 | Accepted |
| | For Sector | 0.72 | Accepted |
| | | | |
| Real Estate | Prestige Estate Projects Limited | 0.12 | Accepted |
| | Delhi Land and Finance Limited | 0.85 | Accepted |
| | For Sector | 0.04 | Rejceted |
| | | | |

(Table 6.16 – Summary of Hypothesis Test  – Source: Computation by Researcher)

## 6.4 – Test of Debt Utilization

### 6.4.1 – Comparative Analysis

In order to examine Debt Utilization of the acquiring entity before and after merger and acquisition along with Debt Utilization trend of acquired entity before merger and acquisition, Debt Asset Ratio and Return on Net Worth are taken into consideration by taking average value of before four years and after four years of merger and acquisition.

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 0.05 | 0.13 | 0.13 | 0.12 | 0.10 |
| Travel and Hospitality | ANI Technologies Private Limited | 12.73 | 15.85 | 16.97 | 7.77 | 13.33 |
| Technology | Tata Consultancy Services Limited | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Technology | Sterlite Technologies Limited | 0.46 | 0.50 | 0.53 | 0.45 | 0.49 |
| E-Commerce | Flipkart  Private Limited | 0.01 | 0.02 | 0.00 | 0.07 | 0.03 |
| E-Commerce | Snapdeal Private Limited | 0.00 | 0.01 | 0.04 | 0.03 | 0.02 |
| Pharmaceutical | Sun pharmaceutical Industries Limited | 0.19 | 0.18 | 0.17 | 0.18 | 0.18 |
| Pharmaceutical | Strides Pharma Science Limited | 0.20 | 0.16 | 0.30 | 0.31 | 0.24 |
| Real Estate | Prestige Estate Projects Limited | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Real Estate | Delhi Land and Finance Limited | 0.14 | 0.23 | 0.44 | 0.35 | 0.29 |

(Table 6.17– Debt Asset Ratio for four years After Merger and Acquisition – Source: Database Tool)

| Comparative of Debt Asset Ratio | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | Before M&A | After M&A | Before M&A | After M&A |
| Sector | Company Name | Average | Average | Average | Average |
| Travel and Hospitality | Thomas Cook India Limited | 0.31 | 0.10 | 8.09 | 13.43 |
| Travel and Hospitality | ANI Technologies Private Limited | 7.78 | 13.33 | 8.09 | 13.43 |
| Technology | Tata Consultancy Services Limited | 0.00 | 0.00 | 0.48 | 0.49 |
| Technology | Sterlite Technologies Limited | 0.47 | 0.49 | 0.48 | 0.49 |
| E-Commerce | Flipkart  Private Limited | 0.00 | 0.03 | 0.02 | 0.05 |
| E-Commerce | Snapdeal Private Limited | 0.02 | 0.02 | 0.02 | 0.05 |
| Pharmaceutical | Sun pharmaceutical Industries Limited | 0.05 | 0.18 | 0.28 | 0.42 |
| Pharmaceutical | Strides Pharma Science Limited | 0.24 | 0.24 | 0.28 | 0.42 |
| Real Estate | Prestige Estate Projects Limited | 0.00 | 0.00 | 0.39 | 0.29 |
| Real Estate | Delhi Land and Finance Limited | 0.39 | 0.29 | 0.39 | 0.29 |

(Table 6.18– Average of Debt Asset Ratio for Comparison – Source: Computation by Researcher)

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 31.44 | -0.72 | 0.46 | 2.91 | 8.52 |
| | ANI Technologies Private Limited | -27.22 | -66.44 | -138.2 | -65.8 | -74.41 |
| Technology | Tata Consultancy Services Limited | 38.1 | 33.27 | 30.31 | 35.49 | 34.29 |
| | Sterlite Technologies Limited | 34.34 | 23.8 | 17.89 | 22.21 | 24.56 |
| E-Commerce | Flipkart  Private Limited | -61.4 | -40.1 | -6.02 | -12.2 | -29.93 |
| | Snapdeal Private Limited | -43.48 | -25.7 | -54.92 | -136.03 | -65.03 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 1.41 | -0.11 | -4.88 | -9.78 | -3.34 |
| | Strides Pharma Science Limited | 3.39 | 28.19 | 3.35 | 5.13 | 10.02 |
| Real Estate | Prestige Estate Projects Limited | 5.51 | 6.31 | 4.81 | 13.28 | 7.48 |
| | Delhi Land and Finance Limited | 8.44 | 3.52 | 2.53 | 4.06 | 4.64 |

(Table 6.19– Return on Net Worth for four years After Merger and Acquisition –

Source: Database Tool)

| Comparative of Return on Net Worth Ratio | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | Before M&A | After M&A | Before M&A | After M&A |
| Sector | Company Name | Average | Average | Average | Average |
| Travel and Hospitality | Thomas Cook India Limited | 12.32 | 8.52 | 123.24 | -65.89 |
| | ANI Technologies Private Limited | 110.91 | -74.41 | | |
| Technology | Tata Consultancy Services Limited | 41.96 | 34.29 | 46.64 | 58.85 |
| | Sterlite Technologies Limited | 4.68 | 24.56 | | |
| E-Commerce | Flipkart  Private Limited | -66.38 | -29.93 | -164.52 | -94.96 |
| | Snapdeal Private Limited | -98.14 | -65.03 | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 3.75 | -3.34 | 69.81 | 6.68 |
| | Strides Pharma Science Limited | 66.06 | 10.02 | | |
| Real Estate | Prestige Estate Projects Limited | 11.36 | 7.48 | 17.02 | 12.12 |
| | Delhi Land and Finance Limited | 5.66 | 4.64 | | |

(Table 6.20– Average of Return on Net Worth for Comparison – Source:

Computation by Researcher)

On the basis of above tables,

Thomas Cook India Limited was having downwards trend in performance after merger and acquisition. The company is having average Debt Asset Ratio of 0.10 in these four years starting from the 2015 with 0.12 to in 2018 with 0.05.  The company minor increase in debt. The performance of the company in terms of Debt Asset Ratio has been reduced nearly 0.20 after merger and acquisition period comparing average Debt Asset Ratio with before merger and acquisition.  However in terms of Return on

Net worth also company falls down in average performance, so Overall reduction in Return on Net Worth has been found with 5% comparing with before merger and acquisition period at 12.32%. The performance of the company has no improvement in utilizing debt fund and generating good amount of return on net worth.

ANI Technologies Private limited has increasing trend in Debt Asset Ratio and decreasing trend on Return on Net Worth. It is observed that the benefit of acquisition have been enjoyed by the company in debt asset ratio. The average Debt Asset Ratio of before merger and acquisition of the company was -139.26% and it has been reduced to 13.33% in after acquisition period for the period of 2016-2019. However, in Return on Net Worth downfall of nearly 184% has been found comparing average Return on Net Worth of four years between pre and after acquisition period. The company is having mix effect of acquisition in terms of revenue generation with the utilization of debt funds. It makes company more risky for investment.

Tata Consultancy Services Limited has similar performance in after merger and acquisition period of four year 2016-2019. The average performance of the company in terms of Debt Asset Ratio is 0. The no change has been observed in debt asset ratio, the company manages its debt asset in very efficient manner and no change observed with comparison of average Debt Asset Ratio in before acquisition period with 0. However, in terms of Return on Net worth, the average performance of the company has minor decrease of 6% comparing with before acquisition period 41.96% and after acquisition period 34.29%. This minor change in generating return is material for stake holders for big scale of companies. The risk level of company has slightly increased.

Sterlite Technologies Limited has marginal downfall 0.02 in terms of average Debt Asset Ratio comparing before acquisition period 0.47 and after acquisition period 0.49 of 2016-19. The performance of the company is increased in terms of Return on Net Worth. The average Return on Net Worth of the company after acquisition period is 24.56% and the difference of 20% is treated as improvement in performance comparing the average Return on Net Worth of the company in before acquisition period 4.68%. The company has gain advantage in terms of revenue generation from efficient use of debt fund.

Flipkart Private Limited has minor decrease in terms of Debt Utilization with Debt Asset Ratio and significant improvement with Return on Net Worth. The average

downfall in Debt Asset Ratio is 0.03 and improvement in Return on Net Worth 36% has been observed. The average Debt Asset Ratio of before acquisition period is 0 and after acquisition period of 2016-2019 is 0.03. The average Return on Net Worth of before acquisition period is -66.38% and after acquisition period is -29.93%. The after acquisition period generating return from revenue generation from efficient use of debt fund shows upside and average performance is better than earlier period.

Snapdeal Private Limited is having mix trend with significant improvement in Debt Utilization in terms of return on net worth, company has no change in average Debt Asset Ratio is 0.02 for the after acquisition period of 2017-2020 comparing with the average Debt Asset Ratio with the before acquisition period is 0.02. The positive difference has been generated in terms of return on net worth. The company has average Return on Net Worth is -65.03% for the after acquisition period comparing with the average Return on Net worth with the before acquisition period is -98.14%. However, company is having overall Debt Utilization in positive terms but significant improvement has been observed with the revenue generation from efficient use of debt fund.

Sun pharmaceutical Industries Limited is having significant downfall in Debt Utilization after acquisition period of 2015-2018; the average Debt Asset Ratio of the company is 0.18 which was 0.05 in before acquisition period. The reduction of 0.13 has been observed. Similarly in Return on Net Worth, the average Return on Net Worth of the company in after acquisition period -3.34% which was 3.75% in before acquisition period. The company's Debt Utilization comes to loss in revenue generation from efficient use of debt fund after acquisition period.

Strides Pharma Science Limited is having major movement in after acquisition period in Return on Net worth; however Debt asset ratio has no change in comparison of after acquisition ratio of 0.24 and pre acquisition period of 0.24. In terms of Return on Net worth, company has downfall in after acquisition period with the average Return on Net Worth of 10.02% comparing with the average Return on Net Worth of 66.06% in before acquisition period. Overall Debt Utilization of the company has been inefficient revenue generation from efficient use of debt fund after acquisition period.

Prestige Estate Projects Limited has marginal decreased performance in after merger and acquisition period of four year 2017-2020. The average performance of the company in terms of Debt Asset Ratio has no change with comparison of average

Debt Asset Ratio in pre -acquisition period with 0. In terms of Return on Net worth, the average performance of the company has minor decrease of 4% comparing with before acquisition period 11.36% and after acquisition period 7.48%.

DLF Limited has observed minor improvement in average Debt Asset Ratio after acquisition period of 2017-2020 with average Debt Asset Ratio of 0.29 comparing with the before acquisition period 0.39. Nearly 0.10 increased. However marginal downfall in the average Return on Net Worth of company has 1% after acquisition period with average Return on Net Worth of 4.64% and before acquisition period of 5.66%. The performance of company has decreased minor in terms of overall Debt Utilization due to inefficient revenue generation from efficient use of debt fund after acquisition period.

### 6.4.2 – Test of Hypothesis

To test hypothesis on Debt Utilization, Null Hypothesis (H0) has been framed that there is no significant effect of Merger and acquisition on Debt Utilization of the acquiring entity before and after merger and acquisition. Paired T-Test is applied on combine average of Debt Asset Ratio and Return on Net Worth for the individual acquirer company and for the sector combine average of the Debt Asset Ratio and Return on Net Worth for both the companies are taken into consideration and results are;

| | | Before M&A | | | After M&A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sector | Company Name | DA | RONW | Mean | DA | RONW | Mean | T-Value | P- Value | Mean Diff. |
| Travel and Hospitality | Thomas Cook India Limited | 0.31 | 12.32 | 6.32 | 0.10 | 8.52 | 4.31 | 1.12 | 0.46 | -2.00 |
| | ANI Technologies Private Limited | 7.78 | 110.91 | 59.35 | 13.33 | -74.41 | -30.54 | 0.10 | 0.94 | -89.89 |
| | Total | 8.09 | 123.24 | 65.66 | 13.43 | -65.89 | -26.23 | 0.11 | 0.93 | -91.89 |
| Technology | Tata Consultancy Services Limited | 0.00 | 41.96 | 20.98 | 0.00 | 34.29 | 17.15 | 1.00 | 0.50 | -3.83 |
| | Sterlite Technologies Limited | 0.47 | 4.68 | 2.58 | 0.49 | 24.56 | 12.52 | -1.00 | 0.50 | 9.95 |
| | Total | 0.48 | 46.64 | 23.56 | 0.49 | 58.85 | 29.67 | -1.00 | 0.50 | 6.11 |
| E-Commerce | Flipkart  Private Limited | 0.00 | -66.38 | -33.19 | 0.03 | -29.93 | -14.95 | -1.00 | 0.50 | 18.24 |
| | Snapdeal Private Limited | 0.02 | -98.14 | -49.06 | 0.02 | -65.03 | -32.51 | -1.00 | 0.50 | 16.55 |
| | Total | 0.02 | -164.52 | -82.25 | 0.05 | -94.96 | -47.46 | -1.00 | 0.50 | 34.79 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.05 | 3.75 | 1.90 | 0.18 | -3.34 | -1.58 | 0.96 | 0.51 | -3.48 |
| | Strides Pharma Science Limited | 0.24 | 66.06 | 33.15 | 0.24 | 10.02 | 5.13 | 1.00 | 0.50 | -28.02 |
| | Total | 0.28 | 69.81 | 35.05 | 0.42 | 6.68 | 3.55 | 1.00 | 0.50 | -31.50 |
| Real Estate | Prestige Estate Projects Limited | 0.00 | 11.36 | 5.68 | 0.00 | 7.48 | 3.74 | 1.00 | 0.50 | -1.94 |
| | Delhi Land and Finance Limited | 0.39 | 5.66 | 3.02 | 0.29 | 4.64 | 2.46 | 1.21 | 0.44 | -0.56 |
| | Total | 0.39 | 17.02 | 8.70 | 0.29 | 12.12 | 6.20 | 1.04 | 0.49 | -2.50 |

*Paired T- Test  on comparative of Debt Utilization*
*Acquirer Compnaies*
*Deal Wise and Sector wise*

(Table 6.21– Paired T-Test Results – Source: Computation by Researcher)

From the above table, It has been observed that the average Debt Utilization of;

Thomas Cook India Limited has decreased marginally (2%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.12, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.46) is greater than the level of significance.

ANI Technologies Private Limited has decreased marginally (16.37%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.10, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.94) is greater than the level of significance.

Travel and Hospitality sector as whole, has decreased marginally (18.37%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.11, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.93) is greater than the level of significance.

Tata Consultancy Services Limited has decreased marginally (3.83%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is less than the level of significance.

Sterlite Technologies Limited has increased marginally (9.95%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition.

Increase in Debt Utilization ratio can be attributed to higher return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Technology sector as whole has marginally improvement (6.11%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Improvement in Debt Utilization ratio can be attributed to higher return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Flipkart Private Limited has increased marginally (18.24%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Increase in Debt Utilization ratio can be attributed to higher return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Snapdeal Private Limited has improved marginally (16.55%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Improvement in Debt Utilization ratio can be attributed to increase return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

E-Commerce sector as whole has significant positive improvement (34.79%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Increase in Debt Utilization ratio can be attributed to increase lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Sun Pharmaceutical Industries Limited has decreased marginally (3.48%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.96, p>0.05) in average Debt Utilization ratio before and after Merger and

Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.51) is greater than the level of significance.

Strides Pharma Science Limited has increased marginally (28.02%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Increase in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Pharmaceutical sector as whole has decreased marginally (31.50%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Prestige Estate Projects Limited has decreased marginally (1.94%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

DLF Limited has decreased marginally (0.56%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=121, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger and acquisition. The significance value of change (0.44) is greater than the level of significance.

Real Estate sector as whole has decreased marginally (2.50%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.04, p>0.05) in average Debt Utilization ratio before and after Merger and Acquisition. Decrease in Debt Utilization ratio can be attributed to lower return generated by using assets along with comparative addition in debt funds after merger

and acquisition. The significance value of change (0.49) is greater than the level of significance.

### 6.4.3 – Overall Analysis
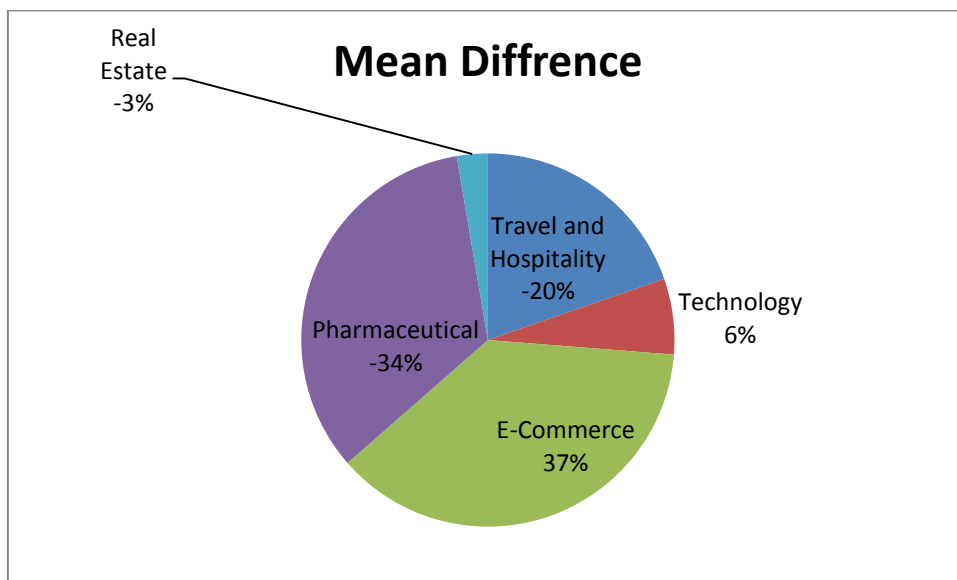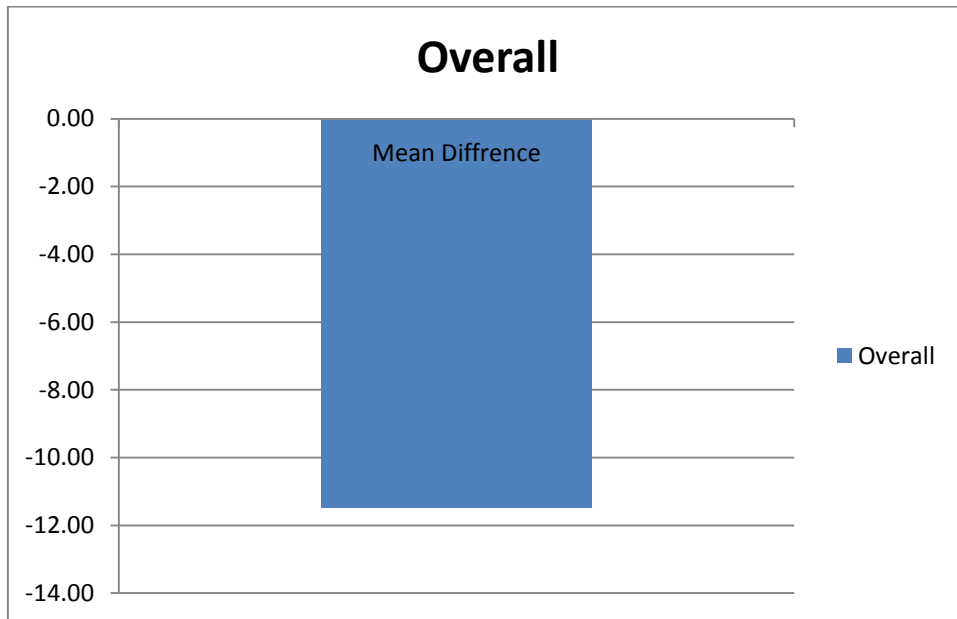




(Figure 6.4– Overall Average mean difference of   – Source: Computation by Researcher)

From the above two charts, the researcher has attempted to show significant change by taking difference of mean of Debt Utilization of all the acquirer companies as whole and sector wise between before and after merger and acquisition period of four years. It has been observed that overall Debt Utilization of companies has been decreased by 11.46%. Further it has been observed that this negative difference is due to Travel and Hospitality (18.01%, 20%), Pharmaceutical (31.50%, 34%) and Real Estate (2.50%, 3%) sector's performance in spite of the positive performance of the E-Commerce (34.79%, 37%) and Technology (6.11%, 6%). The positive difference can be attributed to overall decrement in revenue generation by using asset and inefficient management of debt funds. From the investor's perspectives, it seems comparatively high risky firms to invest which generate lower rate of return.

| Summary of Hypothesis | | | |
|---|---|---|---|
| Test of Debt Utilization | | | |
| H0- There is no significant effect of Merger and acquisition on Debt Utilization of the acquiring entity before and after merger and acquisition | | | |
| Signifiance level @ 0.05 | | | |
| Sector | Company Name | P- Value | Result |
| Travel and Hospitality | Thomas Cook India Limited | 0.46 | Accepted |
| | ANI Technologies Private Limited | 0.94 | Accepted |
| | For Sector | 0.99 | Accepted |
| | | | |
| Technology | Tata Consultancy Services Limited | 0.50 | Accepted |
| | Sterlite Technologies Limited | 0.50 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| E-Commerce | Flipkart Private Limited | 0.50 | Accepted |
| | Snapdeal Private Limited | 0.50 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.51 | Accepted |
| | Strides Pharma Science Limited | 0.50 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| Real Estate | Prestige Estate Projects Limited | 0.50 | Accepted |
| | Delhi Land and Finance Limited | 0.44 | Accepted |
| | For Sector | 0.49 | Accepted |
| | | | |

(Table 6.22– Summary of Hypothesis Test of Debt Utilization – Source: Computation by Researcher)

## 6.5 – Test of Capital Structure

### 6.5.1 – Comparative Analysis

In order to examine Capital Structure of the acquiring entity before and after merger and acquisition along with Capital Structure trend of acquired entity before merger and acquisition, Debt Equity Ratio and Return on Capital Employed are taken into consideration by taking average value of before four years and after four years of merger and acquisition.

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 0.05 | 0.16 | 0.16 | 0.14 | 0.13 |
| | ANI Technologies Private Limited | 0.51 | 0.29 | 0.18 | 0.02 | 0.25 |
| Technology | Tata Consultancy Services Limited | 0 | 0 | 0 | 0 | 0.00 |
| | Sterlite Technologies Limited | 0.88 | 1.01 | 1.14 | 0.82 | 0.96 |
| E-Commerce | Flipkart  Private Limited | 0.03 | 0.04 | 0 | 0.1 | 0.04 |
| | Snapdeal Private Limited | 0 | 0.02 | 0.07 | 0.05 | 0.04 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.31 | 0.29 | 0.27 | 0.3 | 0.29 |
| | Strides Pharma Science Limited | 0.25 | 0.19 | 0.44 | 0.45 | 0.33 |
| Real Estate | Prestige Estate Projects Limited | 0.91 | 1.12 | 0.82 | 0.7 | 0.89 |
| | Delhi Land and Finance Limited | 0.17 | 0.32 | 0.82 | 0.53 | 0.46 |
| | | | | | | |

(Table 6.23 –Debt Equity Ratio for four years After Merger and Acquisition – Source: Database Tool)

| Comparative of Debt Equity Ratio | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | Before M&A | After M&A | Before M&A | After M&A |
| Sector | Company Name | Average | Average | Average | Average |
| Travel and Hospitality | Thomas Cook India Limited | 0.49 | 0.13 | 0.49 | 0.38 |
| | ANI Technologies Private Limited | 0.00 | 0.25 | | |
| Technology | Tata Consultancy Services Limited | 0.00 | 0.00 | 0.93 | 0.96 |
| | Sterlite Technologies Limited | 0.93 | 0.96 | | |
| E-Commerce | Flipkart  Private Limited | 0.00 | 0.04 | 1.12 | 0.08 |
| | Snapdeal Private Limited | 1.12 | 0.04 | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.09 | 0.29 | 0.42 | 0.63 |
| | Strides Pharma Science Limited | 0.33 | 0.33 | | |
| Real Estate | Prestige Estate Projects Limited | 0.67 | 0.89 | 1.31 | 1.35 |
| | Delhi Land and Finance Limited | 0.64 | 0.46 | | |

(Table 6.24– Average of Debt Equity Ratio for Comparison – Source: Computation by Researcher)

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| **Sector** | **Company Name** | **4** | **3** | **2** | **1** | **Average** |
| Travel and Hospitality | Thomas Cook India Limited | 2.84 | 3.27 | 3.48 | 7.46 | 4.26 |
| | ANI Technologies Private Limited | -27.21 | -66.44 | -106.7 | -65.72 | -66.52 |
| Technology | Tata Consultancy Services Limited | 51.8 | 42 | 38.43 | 45.03 | 44.32 |
| | Sterlite Technologies Limited | 30.55 | 21.17 | 15.38 | 22.81 | 22.48 |
| E-Commerce | Flipkart  Private Limited | -58.57 | -38.78 | -5.48 | -11.42 | -28.56 |
| | Snapdeal Private Limited | -39.73 | -23.57 | -51.71 | -127.96 | -60.74 |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 2.38 | 0.75 | -1.77 | -5.11 | -0.94 |
| | Strides Pharma Science Limited | 4.19 | 7.31 | 5.8 | 6.95 | 6.06 |
| Real Estate | Prestige Estate Projects Limited | 9.36 | 7.97 | 7.42 | 9.65 | 8.60 |
| | Delhi Land and Finance Limited | 9.15 | 5.69 | 6.23 | 9.6 | 7.67 |

(Table 6.25– Return on Capital Employed for four years After Merger and

Acquisition – Source: Database Tool)

| Comparative of Return On Capital Employed | | | | | |
|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | |
| | | Deal Wise | | Sector Wise | |
| | | **Before M&A** | **After M&A** | **Before M&A** | **After M&A** |
| **Sector** | **Company Name** | **Average** | **Average** | **Average** | **Average** |
| Travel and Hospitality | Thomas Cook India Limited | 16.07 | 4.26 | 130.63 | -62.25 |
| | ANI Technologies Private Limited | 114.56 | -66.52 | | |
| Technology | Tata Consultancy Services Limited | 51.97 | 44.32 | 60.21 | 66.79 |
| | Sterlite Technologies Limited | 8.25 | 22.48 | | |
| E-Commerce | Flipkart  Private Limited | -60.19 | -28.56 | -128.69 | -89.31 |
| | Snapdeal Private Limited | -68.50 | -60.74 | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 5.94 | -0.94 | 15.82 | 5.13 |
| | Strides Pharma Science Limited | 9.88 | 6.06 | | |
| Real Estate | Prestige Estate Projects Limited | 12.46 | 8.60 | 22.52 | 16.27 |
| | Delhi Land and Finance Limited | 10.07 | 7.67 | | |

(Table 6.26– Average of Return on Capital Employed for Comparison – Source:

Computation by Researcher)

On the basis of above tables,

Thomas Cook India Limited was having downwards trend in performance after
merger and acquisition. The company is having average Debt Equity Ratio of 0.13 in
these four years starting from the 2015 with 0.14 to in 2018 with 0.05.  The company
has generated lower revenue after investing more capital rather than debt fund. The
debt fund of the company against the equity of the company has been reduced 0.36
after merger and acquisition period comparing average Debt Equity Ratio with before

merger and acquisition. However in terms of Return on Capital Employed also company falls down continuously, due to cost of acquisition and other expenditure, company failed to generate return on capital invested. So, Overall reduction in Return on Capital Employed has been found with 12% comparing before and after merge and acquisition.

ANI Technologies Private limited has decreasing trend in Debt Equity Ratio and Return on Capital Employed. The company have increased debt fund over a equity. The average Debt Equity Ratio of before merger and acquisition of the company was 0 and it has been increased to 0.25 in after acquisition period for the period of 2016-2019. Similarly in Return on Capital Employed decreased of nearly 170% has been found comparing average Return on Capital Employed of four years between pre and after acquisition period. The company failed to generate return on capital invested and use of more debt fund makes company more risk for investment.

Tata Consultancy Services Limited has no change in performance in after merger and acquisition period of four year 2016-2019. The company having more equity funds over debt and the no difference has observed with comparison of average Debt Equity Ratio in before acquisition period. In terms of Return on capital Employed, the average performance of the company has minor decrease of 7% comparing with before acquisition period 51.97% and after acquisition period 44.32%. However, this minor change in return generated with Capital invested is material for stake holders for big scale of companies. Overall operations of the company has remains the same.

Sterlite Technologies Limited has minor improvement of debt fund 0.03 in terms of average Debt Equity Ratio comparing before acquisition period 0.93 and after acquisition period 0.96 of 2016-19. The performance of the company has improved in terms of Return on Capital Employed. The average Return on Capital Employed of the company after acquisition period is 22.48% and the difference of 14% is treated as improvement in performance comparing the average Return on Capital Employed of the company in before acquisition period 8.25%. The company has gain advantage in terms of revenue generation for capital employed and effective use of debt and equity funds.

Flipkart Private Limited has minor improvement in terms of Capital Structure however both Debt Equity Ratio and Return on Capital Employed. The average improvement in Debt Equity Ratio is 0.04 and Return on Capital Employed 32% has

been observed. The average Debt Equity Ratio of before acquisition period is 0 and after acquisition period of 2016-2019 is 0.03. The average Return on Capital Employed of before acquisition period is -60.19% and after acquisition period is -28.56%. The after acquisition period generating return from operation trend shows downside but average performance is better than earlier period. The company has gain advantage in terms of revenue generation for capital employed and effective use of debt and equity funds.

Snapdeal Private Limited is having marginal improvement in Capital Structure. In terms of Debt equity, company has average Debt Equity Ratio is 0.04 for the after acquisition period of 2017-2020 comparing with the average Debt Equity Ratio with the before acquisition period is 1.12. Similarly in terms of Return on Capital Employed, company has average Return on Capital Employed is -60.74% for the after acquisition period comparing with the before acquisition period is -68.50%. However, company is having overall improvement has been observed with the combine scale of operation for capital employed and effective use of debt and equity funds.

Sun pharmaceutical Industries Limited is having significant downfall in Capital Structure after acquisition period of 2015-2018; the average Debt Equity Ratio of the company is 0.29 which was 0.09 in before acquisition period. The increase in debt fund has been observed. Similarly in Return on Capital Employed, the average Return on Capital Employed of the company in after acquisition period -0.94% which was 5.94% in before acquisition period. The company's Capital Structure comes to loss in after acquisition period in generating revenue for capital invested.

Strides Pharma Science Limited has marginal downfall movement in after acquisition period; however it has no effect in average Debt Equity Ratio of 0.33 in comparison of after acquisition ratio and before acquisition period. In terms of Return on capital employed, in after acquisition period with the average return on Capital Employed of 6.06% comparing with the average return on Capital Employed of 9.88% in before acquisition period. Overall Capital Structure of the company has been decreased in terms of generating return for capital invested.

Prestige Estate Projects Limited has marginal downfall performance in after merger and acquisition period of four year 2017-2020. The average performance of the company in terms of Debt Equity Ratio is 0.89        . The increase of 0.22 has been observed in debt funds, with comparison of average Debt Equity Ratio in pre -

acquisition period with 0.67. In terms of Return on capital employed, the average performance of the company has minor decrease of 4% comparing with before acquisition period 12.46% and after acquisition period 8.60%. The company has not generated return on capital invested along with the increase in utilization of debt fund. DLF Limited has observed marginal improvement in average Debt Equity Ratio after acquisition period of 2017-2020 with average Debt Equity Ratio of 0.46 comparing with the before acquisition period 0.64. The equity fund has increased and debt fund has been decreased. In the average Return on Capital Employed company has 3% downfall after acquisition period with average Return on Capital Employed of 7.67% and before acquisition period of 10.07%. The performance of company has decreased minor in terms of overall Capital Structure due to lower generation of revenue for capital invested with the use of proportion of debt and equity fund.

**6.5.2 – Test of Hypothesis**

To test hypothesis on Capital Structure, Null Hypothesis (H0) has been framed that there is no significant effect of Merger and acquisition on Capital Structure of the acquiring entity before and after merger and acquisition. Paired T-Test is applied on combine average of Debt Equity Ratio and Return on Capital Employed for the individual acquirer company and for the sector combine average of the Debt Equity Ratio and Return on Capital Employed for both the companies are taken into consideration and results are;

| Sector | Company Name | Before M&A | | | After M&A | | | T-Value | P- Value | Mean Diff. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | DE | ROCE | Mean | DE | ROCE | Mean | | | |
| | **Paired T- Test on comparative of Capital Structure** | | | | | | | | | |
| | **Acquirer Compnaies** | | | | | | | | | |
| | **Deal Wise and Sector wise** | | | | | | | | | |
| **Travel and Hospitality** | Thomas Cook India Limited | 0.49 | 16.07 | 8.28 | 0.13 | 4.26 | 2.20 | 1.06 | 0.48 | -6.08 |
| | ANI Technologies Private Limited | 0.00 | 114.56 | 57.28 | 0.25 | -66.52 | -33.13 | 1.00 | 0.50 | -90.41 |
| | Total | 0.49 | 130.63 | 65.56 | 0.38 | -62.25 | -30.94 | 1.00 | 0.50 | -96.49 |
| **Technology** | Tata Consultancy Services Limited | 0.00 | 51.97 | 25.98 | 0.00 | 44.32 | 22.16 | 1.00 | 0.50 | -3.83 |
| | Sterlite Technologies Limited | 0.93 | 8.25 | 4.59 | 0.96 | 22.48 | 11.72 | -1.00 | 0.50 | 7.13 |
| | Total | 0.93 | 60.21 | 30.57 | 0.96 | 66.79 | 33.88 | -1.01 | 0.50 | 3.31 |
| **E-Commerce** | Flipkart Private Limited | 0.00 | -60.19 | -30.10 | 0.04 | -28.56 | -14.26 | -1.00 | 0.50 | 15.84 |
| | Snapdeal Private Limited | 1.12 | -68.50 | -33.69 | 0.04 | -60.74 | -30.35 | -0.76 | 0.59 | 3.34 |
| | Total | 1.12 | -128.69 | -63.79 | 0.08 | -89.31 | -44.61 | -0.95 | 0.52 | 19.17 |
| **Pharmaceutical** | Sun pharamaceutical Industries Limited | 0.09 | 5.94 | 3.02 | 0.29 | -0.94 | -0.32 | 0.94 | 0.52 | -3.34 |
| | Strides Pharma Science Limited | 0.33 | 9.88 | 5.10 | 0.33 | 6.06 | 3.20 | 1.00 | 0.50 | -1.91 |
| | Total | 0.42 | 15.82 | 8.12 | 0.63 | 5.13 | 2.88 | 0.96 | 0.51 | -5.25 |
| **Real Estate** | Prestige Estate Projects Limited | 0.67 | 12.46 | 6.56 | 0.89 | 8.60 | 4.74 | 0.89 | 0.54 | -1.82 |
| | Delhi Land and Finance Limited | 0.64 | 10.07 | 5.35 | 0.46 | 7.67 | 4.06 | 1.16 | 0.45 | -1.29 |
| | Total | 1.31 | 22.52 | 11.91 | 1.35 | 16.27 | 8.81 | 0.99 | 0.50 | -3.11 |

(Table 6.27 – Paired T-Test Results – Source: Computation by Researcher)

From the above table, It has been observed that the average Capital Structure of;

Thomas Cook India Limited has decreased marginally (6.08%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.06, p>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.48) is greater than the level of significance.

ANI Technologies Private Limited has significant downfall (90.41%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, p>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Travel and Hospitality sector as whole, has decreased significantly (96.49%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, p>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested

capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Tata Consultancy Services Limited has minor decreased (3.83%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=1$, $p>0.05$) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Sterlite Technologies Limited has increased marginally (7.13%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=-1$, $p>0.05$) in average Capital Structure ratio before and after Merger and Acquisition. Increase in Capital Structure ratio can be attributed to proportionate change in capital structure along with the more generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Technology sector as whole has marginally improvement (3.31%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=-1.01$, $p>0.05$) in average Capital Structure ratio before and after Merger and Acquisition. Improvement in Capital Structure ratio can be attributed to proportionate change in capital structure along with the more generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Flipkart Private Limited has increased marginally (15.84%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=-1$, $p>0.05$) in average Capital Structure ratio before and after Merger and Acquisition. Increase in Capital Structure ratio can be attributed to proportionate change in capital structure along with the more generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Snapdeal Private Limited has improved significantly (3.34%) after merger and acquisition. The test results of paired sample t-test indicate significant difference ($t=-0.76$, $p>0.05$) in average Capital Structure ratio before and after Merger and

Acquisition. Improvement in Capital Structure ratio can be attributed to proportionate change in capital structure along with the more generation of revenue for invested capital after merger and acquisition. The significance value of change (0.59) is greater than the level of significance.

E-Commerce sector as whole has marginal improvement (19.17%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.95, p>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Increase in Capital Structure ratio can be attributed to proportionate change in capital structure along with the more generation of revenue for invested capital after merger and acquisition. The significance value of change (0.52) is greater than the level of significance.

Sun Pharmaceutical Industries Limited has decreased marginally (3.34%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.94, P>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.52) is greater than the level of significance.

Strides Pharma Science Limited has decreased marginally (1.91%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1, P>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

Pharmaceutical sector as whole has decreased marginally (5.25%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.96, P>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.51) is greater than the level of significance.

Prestige Estate Projects Limited has decreased marginally (1.82%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.89, P>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.54) is greater than the level of significance.

DLF Limited has decreased marginally (1.29%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.16, P>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.45) is greater than the level of significance.

Real Estate sector as whole has decreased marginally (3.11%) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.99, P>0.05) in average Capital Structure ratio before and after Merger and Acquisition. Decrease in Capital Structure ratio can be attributed to proportionate change in capital structure along with the lower generation of revenue for invested capital after merger and acquisition. The significance value of change (0.50) is greater than the level of significance.

**6.5.3 – Overall Analysis**

## Overall
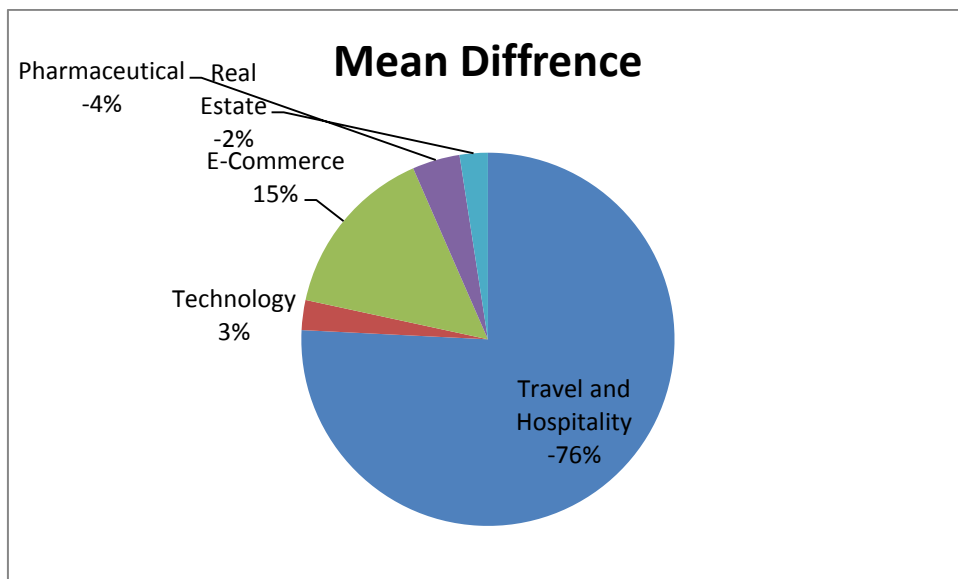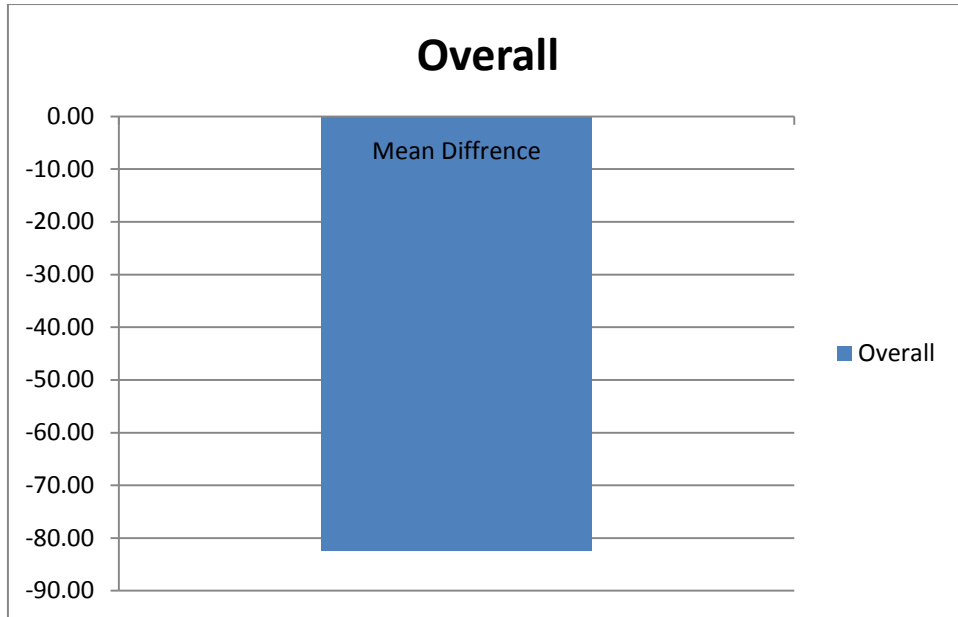


## Mean Diffrence



(Figure 6.5– Overall Average mean difference of  – Source: Computation by Researcher)

From the above two charts, the researcher has attempted to show significant change by taking difference of mean of Capital Structure of all the acquirer companies as whole and sector wise between before and after merger and acquisition period of four years. It has been observed that overall Capital Structure of companies has been decreased by 82.37%. Further it has been observed that this negative difference is due to Travel and Hospitality (96.49%, 76%), Pharmaceutical (5.25%, 4%) and Real Estate (3.11%, 2%) sector's performance in spite of the positive performance of the

E-Commerce (19.17%, 15%) and Technology (3.31%, 3%). The negative difference can be attributed to overall decrement in revenue generation for the amount of capital invested and comparatively increase in debt fund. From the investor's perspectives, it seems comparatively high risky firms to invest which generate lower rate of return for the capital invested.

| Summary of Hypothesis | | | |
|---|---|---|---|
| Test of Capital Structure | | | |
| H0- There is no significant effect of Merger and acquisition on Capital Structure of the acquiring entity before and after merger and acquisition | | | |
| Signifiance level @ 0.05 | | | |
| Sector | Company Name | P- Value | Result |
| Travel and Hospitality | Thomas Cook India Limited | 0.48 | Accepted |
| | ANI Technologies Private Limited | 0.50 | Rejceted |
| | For Sector | 0.50 | Rejceted |
| | | | |
| Technology | Tata Consultancy Services Limited | 0.50 | Accepted |
| | Sterlite Technologies Limited | 0.50 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| E-Commerce | Flipkart  Private Limited | 0.50 | Rejected |
| | Snapdeal Private Limited | 0.59 | Accepted |
| | For Sector | 0.52 | Accepted |
| | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.52 | Accepted |
| | Strides Pharma Science Limited | 0.50 | Accepted |
| | For Sector | 0.51 | Accepted |
| | | | |
| Real Estate | Prestige Estate Projects Limited | 0.54 | Accepted |
| | Delhi Land and Finance Limited | 0.45 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |

(Table 6.28 – Summary of Hypothesis Test of Capital Structure – Source: Computation by Researcher)

## 6.6 – Test of Shareholders Earnings

### 6.6.1 – Comparative Analysis

In order to examine change in Earnings per Share of the acquirer entity before and after merger and acquisition along with Earnings per Share trend of acquirer entity before merger and acquisition, Value of Earning per share is taken into consideration by taking average value of before four years and after four years of merger and acquisition.

| Acquirer Companies - Before Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 1.86 | 2.31 | 2.64 | 1.96 | 2.19 |
| | ANI Technologies Private Limited | -183.30 | -8.29 | -13.16 | -1.09 | -51.46 |
| Technology | Tata Consultancy Services Limited | 49.16 | 47.09 | 32.62 | 27.98 | 39.21 |
| | Sterlite Technologies Limited | 2.14 | 1.27 | 1.21 | 1.11 | 1.43 |
| E-Commerce | Flipkart Private Limited | -1,530.92 | -1,644.99 | -1,778.25 | -1145.10 | -1524.82 |
| | Snapdeal Private Limited | -98666.7 | -439733.3 | -118535.4 | -53774.3 | -177677.44 |
| Pharmaceutical | Sun pharmaceutical Industries Limited | -13.66 | 2.49 | 8.2 | 6.68 | 0.93 |
| | Strides Pharma Science Limited | 89.36 | 593.65 | 9.55 | 20.3 | 178.22 |
| Real Estate | Prestige Estate Projects Limited | 10.69 | 11.05 | 9.71 | 7.89 | 9.84 |
| | Delhi Land and Finance Limited | 5.47 | 5.28 | 2.98 | 2.95 | 4.17 |

(Table 6.29 – Earning per Share for four years Before Merger and Acquisition – Source: Database Tool)

| Acquirer Companies - After Merger and Acquisition | | | | | | |
|---|---|---|---|---|---|---|
| Sector | Company Name | 4 | 3 | 2 | 1 | Average |
| Travel and Hospitality | Thomas Cook India Limited | 14.35 | -0.023 | 0.15 | 1.22 | 3.92 |
| | ANI Technologies Private Limited | -4,832.44 | -11,453.57 | -15,924.65 | -754.541 | -8241.30 |
| Technology | Tata Consultancy Services Limited | 80.17 | 66.08 | 60.03 | 58.57 | 66.21 |
| | Sterlite Technologies Limited | 13.3 | 6.35 | 3.91 | 4.59 | 7.04 |
| E-Commerce | Flipkart Private Limited | -4,506.82 | -2,836.26 | -452.37 | -1,008.46 | -2200.98 |
| | Snapdeal Private Limited | -1125.83 | -785 | -32600 | -171430 | -51485.21 |
| Pharmaceutical | Sun pharmaceutical Industries Limited | 1.27 | -0.1 | -4.52 | -7.12 | -2.62 |
| | Strides Pharma Science Limited | 12.33 | 99.64 | 12.14 | 19.5 | 35.90 |
| Real Estate | Prestige Estate Projects Limited | 6.55 | 7.71 | 6.19 | 15.74 | 9.05 |
| | Delhi Land and Finance Limited | 9.34 | 3.85 | 2.05 | 3.34 | 4.65 |

(Table 6.30 – Earning per Share for four years After Merger and Acquisition – Source: Database Tool)

Growth Analysis of Companies Before and After Merger and Acquisition from Various Sectors

| Comparative of Earnings per Share | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Acuirer Compnaies | | | | | | | | |
| | | Deal Wise | | | Sector Wise | | | |
| | | Before M&A | After M&A | | Before M&A | After M&A | | |
| Sector | Company Name | Average | Average | % Change | Average | Average | % Change |
| Travel and Hospitality | Thomas Cook India Limited | 2.19 | 3.92 | 78.99 | -49.27 | -8237.38 | 16620.19 |
| | ANI Technologies Private Limited | -51.46 | -8241.30 | 15915.42 | | | |
| Technology | Tata Consultancy Services Limited | 39.21 | 66.21 | 68.86 | 40.65 | 73.25 | 80.21897 |
| | Sterlite Technologies Limited | 1.43 | 7.04 | 391.27 | | | |
| E-Commerce | Flipkart  Private Limited | -1524.82 | -2200.98 | 44.34 | -179202.25 | -53686.19 | -70.0416 |
| | Snapdeal Private Limited | -177677.44 | -51485.21 | -71.02 | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.93 | -2.62 | -382.21 | 179.14 | 33.29 | -81.4198 |
| | Strides Pharma Science Limited | 178.22 | 35.90 | -79.85 | | | |
| Real Estate | Prestige Estate Projects Limited | 9.84 | 9.05 | -8.01 | 14.01 | 13.69 | -2.23135 |
| | Delhi Land and Finance  Limited | 4.17 | 4.65 | 11.39 | | | |

(Table 6.31 – Average of Earning per Share for Comparison – Source: Computation by Researcher)

On the basis of above tables,

Thomas Cook India Limited was having mix increasing trend in performance after merger and acquisition. The company is having average Earning per Share of 3.92 in these four years starting from the 2015 with 1.22 to in 2018 with 14.35.  The company manages to generate enough revenue from operations and investments to generate Earning per Share to meet Shareholder's expectations. The performance of the company in terms of Earning per Share has been increased nearly 79% after merger and acquisition period comparing average Earning Per Share with before merger and acquisition with 2.19.

ANI Technologies Private limited has decreasing trend in Earning per Share after merger and acquisition. It is observed that the benefit of acquisition have been enjoyed by the company. But the average Earning per Share of before merger and acquisition of the company was -51.46 and it has been decreased to -8241.30 in after acquisition period for the period of 2016-2019. The company is having negative effect due to high cost of acquisition and other long term debt in absence of enough generation of profitability from operations.

Tata Consultancy Services Limited has improved performance in after merger and acquisition period of four year 2016-2019. The average performance of the company in terms of Earning per Share is 66.21. The significant increase of 69% has been observed in Earning per Share comparing the average Earning per share before

merger and acquisition 39.21. Tata means Trust; any company of Tata group has managed to fulfill shareholder's expectation since incorporation.

Sterlite Technologies Limited has tremendous improvement of 391% in terms of average Earning Per Share comparing before acquisition period 1.43 and after acquisition period 7.04 of 2016-19. The trend of company has shown increasing way after merger and acquisition period starting with 2016 4.59 to ending in 2019 with 13.3.

Flipkart Private Limited has significant downfall in terms of Earnings Per Share having decreasing trend year after year. The average decrement in Earning per Share is 44.34% and has been observed. The average Earning per Share of before acquisition period is -1524.82 and after acquisition period of 2016-2019 is -2200.98. It may be due to heavy debt fund invested in the company is not able to generate profit. The after acquisition period generating return from operation trend shows upside and average performance is better than earlier period due number of user increased with the internet and purchase things online.  However number of customers is yet to reach breakeven for profitability.

Snapdeal Private Limited is having increasing trend with significant improvement in Earnings Per Share in terms of Earning per Share even though it was in negative terms, company has average Earning per Share is -51485.21 for the after acquisition period of 2017-2020 comparing with the average Earning per Share with the before acquisition period is -177677.44. However, company is having in negative profit but significant improvement has been observed with the combine scale of operation. The average performance is better than earlier period due number of user increased with the internet and purchase things online. Overall 71% increment in terms of Earning per Share has been observed after merger and acquisition period.

Sun pharmaceutical Industries Limited is having minor decrement in Earnings Per Share after acquisition period of 2015-2018; the average Earning per Share of the company is -2.62 which was 0.93 in before acquisition period. The decrement of 382%% has been observed. The company has failed to manage debt fund and couple of bad acquisition decisions made company insufficient to generate enough return and fulfills the expectation of shareholders.

 Strides Pharma Science Limited is having major movement in after acquisition period; however it has significant decrement in average Earning Per Share of 80% in

comparison of after acquisition ratio of 35.90 and pre acquisition period of 178.22. Overall Earnings Per Share of the company has been decreased even though it was in positive terms. The shareholders expectation has not fulfilled due to insufficient use of resources and corporate decision making by executives.

Prestige Estate Projects Limited has marginal decrement in performance after merger and acquisition period of four year 2017-2020. The average performance of the company in terms of Earning Per Share is 9.05. The decrease of 8% has been observed in Earning Per Share with comparison of average Earning Per Share in pre - acquisition period with 9.84.

DLF Limited has observed minor improvement in average Earning Per Share after acquisition period of 2017-2020 with average Earning Per Share of 4.65 comparing with the before acquisition period 4.17. The increase of 11% has been observed. The company has shown upwards trend. The performance of company has increased marginally in terms of overall Earnings Per Share. Shareholders of the company have some relief.

### 6.6.2 – Test of Hypothesis

To test hypothesis on Earnings Per Share, Null Hypothesis (H0) has been framed that there is no significant effect of Merger and acquisition on Earnings Per Share of the acquiring entity before and after merger and acquisition. Paired T-Test is applied on combine average of Sales and net profit ratio for the individual acquirer company and for the sector combine average of the Sales and net profit ratio for both the companies are taken into consideration and results are;

| Paired T- Test on comparative of Earning per Share | | | | | |
| --- | --- | --- | --- | --- | --- |
| Acquirer Compnaies | | | | | |
| Deal Wise and Sector wise | | | | | |
| | | | | | |
| Sector | Company Name | Before M&A Average | After M&A Average | T-Value | P- Value | Mean Diff. |
| Travel and Hospitality | Thomas Cook India Limited | 2.19 | 3.92 | -0.48 | 0.66 | 1.73 |
| | ANI Technologies Private Limited | -51.46 | -8241.30 | 2.41 | 0.09 | -8189.84 |
| | Total | -24.63 | -4118.69 | 1.00 | 0.50 | -4094.06 |
| | | | | | | |
| Technology | Tata Consultancy Services Limited | 39.21 | 66.21 | -9.68 | 0.00 | 27.00 |
| | Sterlite Technologies Limited | 1.43 | 7.04 | -2.92 | 0.06 | 5.61 |
| | Total | 20.32 | 36.63 | -1.52 | 0.37 | 16.30 |
| | | | | | | |
| E-Commerce | Flipkart Private Limited | -1524.82 | -2200.98 | 0.73 | 0.52 | -676.16 |
| | Snapdeal Private Limited | -177677.44 | -51485.21 | -1.09 | 0.35 | 126192.23 |
| | Total | -89601.13 | -26843.09 | -0.99 | 0.50 | 62758.03 |
| | | | | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.93 | -2.62 | 0.53 | 0.63 | -3.55 |
| | Strides Pharma Science Limited | 178.22 | 35.90 | 1.20 | 0.32 | -142.31 |
| | Total | 89.57 | 16.64 | 1.05 | 0.48 | -72.93 |
| | | | | | | |
| Real Estate | Prestige Estate Projects Limited | 9.84 | 9.05 | 0.27 | 0.80 | -0.79 |
| | DLF Limited | 4.17 | 4.65 | -0.40 | 0.72 | 0.48 |
| | Total | 7.00 | 6.85 | 0.25 | 0.85 | -0.16 |
| | | | | | | |

(Table 6.32– Paired T-Test Results – Source: Computation by Researcher)

From the above table, It has been observed that the average Earnings Per Share of;

Thomas Cook India Limited has increased marginally (1.73) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.48, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The significance value of change (0.66) is greater than the level of significance.

ANI Technologies Private Limited has significant decrease (8189) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=2.41, P<0.05) in average Earnings Per Share before and after Merger and Acquisition. Decrease in Earnings Per Share can be attributed to increase in debt fund and inefficient management of resources along with increase in competition. The significance value of change (0.09) is less than the level of significance.

Travel and Hospitality sector as whole, has decreased significantly (4094) after merger and acquisition. The test results of paired sample t-test indicate significant

difference (t=1, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund with lower generation of revenue from operation and underutilization of resources after merger and acquisition. However new entrants of competitors will attract the customers from existing business with new offers and scheme. The significance value of change (0.50) is greater than the level of significance.

Tata Consultancy Services Limited has marginally increased (27) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-9.68, P<0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The significance value of change (0.00) is less than the level of significance.

Sterlite Technologies Limited has increased marginally (5.61) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-2.92, P<0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The significance value of change (0.06) is greater than the level of significance.

Technology sector as whole has marginally improved (16.30) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.52, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Improvement in Earnings Per Share can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The significance value of change (0.37) is greater than the level of significance.

Flipkart Private Limited has decreased (676) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.73, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund and inefficient management of resources along with increase in competition. The significance value of change (0.52) is greater than the level of significance.

Snapdeal Private Limited has improved significantly (126192) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-1.09, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Improvement in Earnings Per Share ratio can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The significance value of change (0.35) is greater than the level of significance.

E-Commerce sector as whole has significant improvement (62758) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.99, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The improvement in internet facility played major role. The significance value of change (0.50) is greater than the level of significance.

Sun Pharmaceutical Industries Limited has minor decreased (3.55) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.53, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund and inefficient management of resources along with increase in competition. The significance value of change (0.63) is greater than the level of significance.

Strides Pharma Science Limited has decreased marginally (142) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.20, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund and inefficient management of resources along with increase in competition. The significance value of change (0.32) is greater than the level of significance.

Pharmaceutical sector as whole has minor decreased (72) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=1.05, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund with lower generation of revenue from operation and underutilization of resources after merger and acquisition. However new entrants of competitors will attract the

customers from existing business with new offers and scheme. The significance value of change (0.48) is greater than the level of significance.

Prestige Estate Projects Limited has minor decreased (0.79) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.27, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund and inefficient management of resources along with increase in competition. The significance value of change (0.80) is greater than the level of significance.

DLF Limited has minor increased (0.48) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=-0.40, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in revenue from investment along with other revenue and benefit of combination with large customer base has been enjoyed after merger and acquisition. The significance value of change (0.72) is greater than the level of significance.

Real Estate sector as whole has minor decreased (0.16) after merger and acquisition. The test results of paired sample t-test indicate significant difference (t=0.25, P>0.05) in average Earnings Per Share before and after Merger and Acquisition. Increase in Earnings Per Share can be attributed to increase in debt fund with lower generation of revenue from operation and underutilization of resources after merger and acquisition. However new entrants of competitors will attract the customers from existing business with new offers and scheme. The significance value of change (0.85) is greater than the level of significance.

### 6.6.3 – Overall Analysis
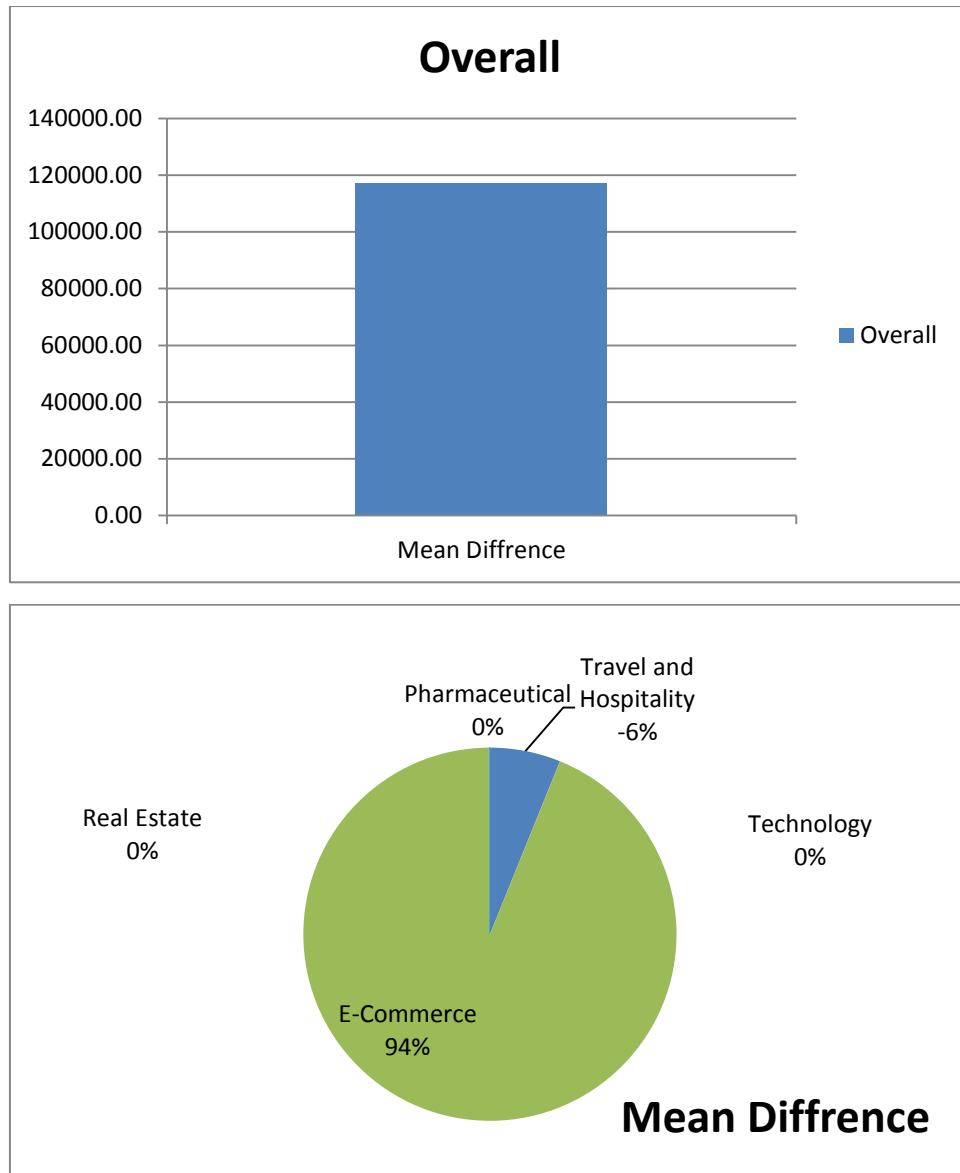
(Figure 6.6– Overall Average mean difference of Earning per Share – Source: Computation by Researcher)

From the above two charts, the researcher has attempted to show significant change by taking difference of mean of Earnings Per Share of all the acquirer companies as whole and sector wise between before and after merger and acquisition period of four years. It has been observed that overall Earnings Per Share of companies has been increased by 117214. Further it has been observed that by taking mean of mean, this positive difference is due to all the sectors but majorly E-Commerce (62758, 94%) and Travel and Hospitality (-4094, 6%) sector's performance. Technology has very low positive performance (16.30) and negative performance of the Pharmaceutical (-

72.93) and Real Estate (-0.16) are very minor. The positive difference can be attributed to overall increment in revenue from operation due to increase in number of customer and resources, efficient management of debt fund and investment, level of satisfaction of existing customer, improved quality of services and faster customer grievance redressed, efforts for retention of existing customer and promotion for attracting new customers, benefit of economies of scale.

| Summary of Hypothesis | | | |
|---|---|---|---|
| Test of Earning per Share | | | |
| H0- There is no significant effect of Merger and acquisition on Shareholders earnings of the acquiring entity before and after merger and acquisition | | | |
| Signifiance level @ 0.05 | | | |
| Sector | Company Name | P- Value | Result |
| Travel and Hospitality | Thomas Cook India Limited | 0.66 | Accepted |
| | ANI Technologies Private Limited | 0.09 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| Technology | Tata Consultancy Services Limited | 0.00 | Rejected |
| | Sterlite Technologies Limited | 0.06 | Accepted |
| | For Sector | 0.37 | Accepted |
| | | | |
| E-Commerce | Flipkart  Private Limited | 0.52 | Accepted |
| | Snapdeal Private Limited | 0.35 | Accepted |
| | For Sector | 0.50 | Accepted |
| | | | |
| Pharmaceutical | Sun pharamaceutical Industries Limited | 0.63 | Accepted |
| | Strides Pharma Science Limited | 0.32 | Accepted |
| | For Sector | 0.48 | Accepted |
| | | | |
| Real Estate | Prestige Estate Projects Limited | 0.80 | Accepted |
| | DLF Limited | 0.72 | Accepted |
| | For Sector | 0.85 | Accepted |
| | | | |

(Table 6.33– Summary of Hypothesis Test of Shareholder's Earnings – Source: Computation by Researcher)