Impact of Acquisitions on Financial Performance of Selected Softwarecompanies in India

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Abstract: The objective of the study is to examine the impact of Acquisitions on financial status of selected software companies in India. This study is based on Infosys, Panaya, CMC and TCS companies. It also estimates the pre and post-acquisition financial position of companies using financial parameters like Earning per share, Dividend per share, Return on Assets and Net Profit Margin. The period of study is for 6 years which is divided into 3 years for pre-acquisition and 3 years for post-acquisition performance. The data of Acquisitions has collected based on the financial parameters, Paired T-test has used for finding the statistical significance effect and to estimate their performance on merged companies. As the critical value is greater than the calculated value i.e. -2.919>-6.679, Rejected the Null hypothesis, i.e. there is a major difference between performance of pre and post merger as per earning per share. As the calculated value is greater than critical value i.e. 3.64 >2.919, accepted the Null hypothesis, i.e. there is no major difference in the Earning per Share. The terminal goal behind acquisition is to achieve growth in business. A well-analysed and the authentic plan will dramatically improve the chances of getting new implements to be in a competitive world. The strategic partnership of TCS-CMC and INFOSYS- PANAYA will provide few guidance for traditional players.
Keywords: Acquisition, TCS, Infosys, EPS, DPS, ROA, paired t-test

I. INTRODUCTION

Today, the software sector is booming with respect to competition, products, people, markets, customers and technology. To expand the business and to be in the competition the growth strategy is divided into two types they are organic and inorganic. Acquisitions[1] (M&A) is the inorganic growth strategies for achieving accelerated and consistent growth. In the present context after the globalization, liberalization, and privatization the technological developments in the business environment has developed a lot[2]. Due to increase in high competition globally in India, many software companies are acquiring other developed companies strategically to sustain and to achieve the growth in their sector.

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Acquisitions
TCS and CMC

CMC is an IT software company in Delhi. It started by taking over the IBM installations in 1978. Later Indian Government, decided to disinvest it to the public. In 2001 it was merged with TCS. The intension of Government of India is to improve the tax less revenue transactions through disinvestment to reach the fiscal deficit budget. So that government can improve the under developed areas where there is no welfare and public service [3].As man power in India is lower among IT sector the growth of the companies reducing its market value. To regain its market value IT sector has decided to privatise the companies. According to the recent Mergers and Acquisitions happened in India October, 2015 TCS acquired CMC in organic manner. The aim of the companies after the merger is to be in a rationalized

Structure in performing all the operational works related to the company to gain the financial status and flexible among the other companies. The companies are stressing more on the operational works and their standards to simplify the business process and to get high productivity which will help them in increase their capabilities and thus can result in getting high business opportunities. Therefore Tata Sons acquired a 51% stake in the CMC Limited for Rs.152 crores. The chairman of TATA has officially decided to purchase the rights of IT sector, communication systems and Parliamentary affairs from the respected Mr Promod Mahajan[4], in this take over TATA handed the stake of CMC at the rate of 72 crores. In addition to that they also announced an additional 16.69 percent stake at 281.26 per each share TCS took over the consolidation of market leadership through CMC acquisition.

Infosys Acquisition with Panaya

Infosys is a leading consultancy for the technical services globally. In the year 2014 Infosys commenced an agreement with Panaya to acquire it completely, as the Panaya Company provides best solutions for automation and for large scale enterprises. Infosys purchased Panaya at an enterprise value of 200 million USD.

This agreement helps Infosys to reconstruct its new strategy to compete with the other companies, which gives more productivity based on the present service lines on their innovation and artificial intelligence. As the cloud quality provided by the Panaya is more accurate than the Infosys, this acquisition gives more effective impact in a positive manner for the Infosys which leads the company to be in high standards.

II. LITERATURE REVIEW

Roberts, Wallace, Moles, UK, 2003. Cross Border impact of shareholders wealth in India by Jayanth Kalghagi &Rabindranath V. Bad. Impact of Merger & Acquisition Announcement on Share Price – A Case of Selected Indian Listed Companies by S. Poornima and V. Chitra. Matt H. Evans, "Mergers & Acquisitions (part1)", Reasons for Merger and Acquisitions, March, 2000, pp. Technopark, May,2013 Analysis across Industries in India by S.Poornima & S. Subhashini. Long run acquisitions of industries in India by Rena Kohli. Mergers and Acquisitions in Banking Sector by K. Saini, Sambhavna, Mohender Kumar Gupta, Shiva Kumar Deene. Banks effectiveness after M & A by B Rajesh Kumar Tiwari. A Study on Pre-Merger and Post-Merger/Acquisition on selected cement companies in India by Ms Bindiya kunal and Sherman (2006) in this study they covered a vital part in economic health and how the primary benefits provided by the company after and before acquisitions. In fact, regression analysis stated there is an effective growth in the business. Where there is higher growth in the business the cash flow in the business is more in worth by Bernd Wirtz (2003) explained in a simple and short form in 1990 by Behrens: fusion and overtakes of organisations are effected by the Acquisitions and Mergers. Sind Fusion und Übernahmen von Unternehmenbzw. Deren Teilberei chenoder Toch tergesellschaften". Ben MC Mergers and Acquisitions in the finance corporation world, Investment in banking sector how the Transactions are changing daily and how the companies separated and together to form large ones.

III. RESEARCH GAP:

There are different research works on Acquisition on different sectors in India when compared to the software companies, there is a lot of data to be analysed. In this research the data is based on the parameters from the company website related to 3 years i.e. Pre-acquisition and Post-acquisition of the company.

IV. RESEARCH QUESTIONS:

a. What is the Impact of Acquisitions on Financial status of selected software companies in India?
b. How the Acquisitions effecting the companies before and after it happened?

V. OBJECTIVES OF THE STUDY:

- An Empirical estimation of financial status on TATA and INFOSYS companies based on their Pre and Post-Acquisition.
- To examine the opportunities of software companies after the Acquisition.

VI. HYPOTHESIS OF THE STUDY:

Based on the objectives areas from the literature survey, the following research hypothesis is tested:

6.1. Null Hypothesis (Ho): There is no significant impact on the financial performance of the pre and post-acquisition position on software Companies in India.

Alternative Hypothesis (H₁): There is significant impact on the financial performance of the pre and post-acquisition position on software Companies in India.

6.2. Hypotheses Testing:
The Average pre-acquisition and post-acquisition performance ratios is calculated, using "Paired T-tests"

$$t = \frac{x - \mu 0}{s/\sqrt{n}}$$

Here, s stands for standard deviation of the sample and n for sample size.
The degrees of freedom for T-test is n – 1.

VII. SCOPE FOR RESEARCH STUDY:

This Research is based on the selected software companies' position before and after the Acquisition took place. Although this study has confined to two companies due to the recent trend many companies in IT sector as well as Government sector are coming up with new Mergers and Acquisition for the Welfare of the people and the Economy to bring change in accordance with the other sectors. As the Economic policies has well developed in India the impact of the Merges and Acquisitions brought huge result in their financial performance as well as the economic growth. In further research different sectors can be compared to the past and pre -acquisition with other companies. In this study it is well understandable that the analysis are perfect to exhibit that the selected companies are positive towards their Acquisitions which led the companies' high profits.

VIII. LIMITATIONS:

Sincere efforts are made to make this study as much objective and systematic as Possible. Hence objectivity would be limited only to the some extent of information collected through various sources.
Following limitations were realized during the conduct of study.

- Findings are confined to two software companies thus the results cannot be generalized.
- The entire population is represented by sample taken for the study.
- Some of the analysis are inferential in nature, which require further Investigation to be concluded as facts.

IX. RESEARCH METHODOLOGY:

The present study examines the position of selected software companies in India based on the parameters data that has taken from the company websites.

9.1 Tools used for the study
In this research T-Test is used to analyse the key factors effect on the financial status of Tata and Infosys companies the data related to Pre-acquisition and Post-acquisition.

9.2 Sample collection
The sample collection is based on secondary data that has collected from the official website of TATA and INFOSYS companies in India.

9.3 Sample Size
The sample size data is taken from the population related to the financial status of
TATA and INFOSYS.

The analysis is restricted to the period of 6 years (2012-2017) and the data is analysed in the form of quarters to get an appropriate result on the status of specified companies.
The sampling methods have been used in this research. This study is based on the trends in Acquisitions in IT sector. Convenience sampling techniques are used as it is feasible, due to the time consistent, costs and conveniences. In this research T-Test is used to analyse the collected data of Tata and Infosys companies the data related to Pre-Acquisition and Post-Acquisition.

X.   DATA ANALYSIS AND INTERPRETATION:

10.1 TCS Merger with CMC:
A.   Earnings Per Share:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	72.666	123
Variance	422.33	63
Observations	3	3
Pearson Correlation	0.96	
Hypothesized Mean Difference	0	
Df	2	
t Stat	-6.67	
P(T<=t) one-tail	0.0108	
t Critical one-tail	2.91	
P(T<=t) two-tail	0.02	
t Critical two-tail	4.30	

Interpretation: As the critical value is greater than the calculated value i.e. -2.919>-6.679, Rejected the Null hypothesis, i.e. there is a major difference between performance of pre and post merger as per earning per share. Therefore the volatility in EPS has changed much, after acquisition when compared to the volatility before the acquisition in India.

B.   Dividend Per Share:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	26.33	47
Variance	26.33	9
Observations	3	3
Pearson Correlation	0.682	
Hypothesized Mean Difference	0	
Df	2	
t Stat	-9.454	
P(T<=t) one-tail	0.005	
t Critical one-tail	2.919	
P(T<=t) two-tail	0.011	
t Critical two-tail	4.302	

Interpretation: As the calculated value is less than the critical value i.e. -9.454 < -2.919, Rejected the Null hypothesis, i.e. there is a major difference in them.
Therefore the volatility in DPS has changed much after acquisition when compared to the volatility before the acquisition in India.

C.   Return on Assets:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	31.33	28
Variance	1.333	4
Observations	3	3
Pearson Correlation	0.866	
Hypothesized Mean Difference	0	
Df	2	
t Stat	5	
P(T<=t) one-tail	0.018	
t Critical one-tail	2.919	
P(T<=t) two-tail	0.037	
t Critical two-tail	4.302	

Interpretation: As the calculated value is greater than critical value i.e. 5 > -2.919,
accepted Null hypothesis, i.e. there is no major difference in them.
The volatility in ROA has changed much after acquisition when compared to the volatility before the acquisition in India.

D.   Net Profit Margin:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	28	26
Variance	4	1
Observations	3	3
Pearson Correlation	0.5	
Hypothesized Mean Difference	0	
Df	2	
t Stat	2	
P(T<=t) one-tail	0.091	
t Critical one-tail	2.919	
P(T<=t) two-tail	0.183	
t Critical two-tail	4.302	

Interpretation: As the calculated value is greater than critical value i.e. 2 > -2.919,
Accepted the Null hypothesis, i.e. there is no major difference in them.
The volatility in NPM has changed much after acquisition when compared to the volatility before the acquisition in India.

10.2 INFOSYS:

A. Earnings Per Share:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	137	62
Variance	804	67
Observations	3	3
Pearson Correlation	-0.86	
Hypothesized Mean Difference	0	
Df	2	
t Stat	3.640	
P(T<=t) one-tail	0.033	
t Critical one-tail	2.919	
P(T<=t) two-tail	0.067	
t Critical two-tail	4.302	

Interpretation: As the calculated value is greater than critical value i.e. 3.64 >2.919,

Accepted the Null hypothesis, i.e. there is no major difference in the Earning per Share

When compared to pre-acquisition and post-acquisition. The EPS does not change much after acquisition.

B. Dividend per Share:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	49.66	31
Variance	86.33	127
Observations	3	3
Pearson Correlation	0.950	
Hypothesized Mean Difference	0	
Df	2	
t Stat	8.539	
P(T<=t) one-tail	0.006	
t Critical one-tail	2.919	
P(T<=t) two-tail	0.013	
t Critical two-tail	4.302	

Interpretation: As the calculated value is greater than critical value i.e. 8.539 >2.919, accepted the Null hypothesis, i.e. there is no major difference in the Dividend per Share When compared to pre-acquisition and post-acquisition. The Volatility in DPS does not change much after acquisition when compared to the Volatility before acquisition in India.

C. Return on Assets:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	22.33	18.66
Variance	6.333	0.333
Observations	3	3
Pearson Correlation	0.114	
Hypothesized Mean	0	

Difference		
Df	2	
t Stat	2.523	
P(T<=t) one-tail	0.063	
t Critical one-tail	2.919	
P(T<=t) two-tail	0.127	
t Critical two-tail	4.302	

Interpretation: As the calculated value is greater than critical value i.e. 2.523 > -2.919, Accepted the Null hypothesis, i.e. there is no major difference in the Return on Assets.

The empirical evidence suggests that the volatility in ROA has changed much after acquisition when compared to the volatility before the acquisition in India.

D. Net Profit Margin:

Paired Two Sample t-Test for Means		
	Variable 1	*Variable 2*
Mean	26	24
Variance	1	3
Observations	3	3
Pearson Correlation	0	
Hypothesized Mean Difference	0	
Df	2	
t Stat	1.732051	
P(T<=t) one-tail	0.112702	
t Critical one-tail	2.919986	
P(T<=t) two-tail	0.225403	
t Critical two-tail	4.302653	

Interpretation: As the calculated value is greater than critical value i.e. 1.732 > -2.919, Accepted the Null hypothesis, i.e. there is no major difference in the Net Profit Margin.

The volatility in NPM has changed much after acquisition when compared to the volatility before the acquisition in India.

XI. FINDINGS AND SUGGESTIONS:

From overall research we found that after the Acquisition the companies got high market share value when compared to the past position of the company. Hence, Acquisitions helps the company to increases the value of the business as-well-as the Market share which influences the market value of the companies.

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