

**A STUDY ON IMPACT OF FACTORS AFFECTING FIRM'S PROFITABILITY OF SELECTED
INDIAN IT COMPANIES**

Mr. Chethan Kumar N, PG Research Scholar, Department of Management Studies, Global Academy of Technology, Bengaluru – 560 098

Prof. Sarah Merlyn, Assistant Professor, Department of Management Studies, Global Academy of Technology, Bengaluru – 560 098

ABSTRACT

The purpose of study is to examine the impact of factors affecting profitability, a Descriptive statistic, correlation analysis and regression analysis method used to analyze firm's profit, on selected Indian IT companies. This study involves understanding relationship between the variables. The study mainly deals with the various Factors affecting Firm's Profitability of TCS, Infosys, HCL, Wipro and Tech Mahindra. Analysis for the last 10 years' have been done, by collecting financial statements. The study used Return on assets as dependent variable and current ratio, Debt ratio, Sales Growth, Firm Size, Firm age as Independent variable.

keywords: Profitability, Indian IT companies, Regression model, Debt ratio, Correlation Analysis.

I. INTRODUCTION

IT Industry playing a significant role in today's world. Companies in china, UK, United states are among the top companies in the world. IT sector demonstrated to the entire world through export of software products, some IT companies excel in outsourcing. Indian IT sectors like TCS, Infosys, Wipro are well known for outsourcing and consulting companies. After 1991 India witnessed a substantial growth in Indian economy. The global outsourcing market has grown from \$ 2 trillion in 2008 to \$3 trillion in 2015. The IT industry grown from 14% to 56% of the total outsourcing market during this time period. A significant portion of India's services are in the IT-BPM industry, according to the Economic Survey.

STATEMENT OF THE PROBLEM

The competition in this sector has led to a decrease in profit margins, which has made it difficult for companies to differentiate themselves from their competitors. Profit is not only confined with attracting clients and earning more profits, it also involves minimizing cost in the organization for that companies have to understand the factors which affects the profitability of business.

OBJECTIVE OF THE STUDY

- This study aims to determine the factors of Indian IT sectors which affects the profitability.
- To examine the relationship b/w the variables of profitability on Return on assets of Indian IT Company.
- To study the impact of variables profitability on Return on assets.

II. REVIEW OF LITERATURE

Eissa A. Al-Homid (2021) In this article, they analyse the Factors affecting the profitability of Indian listed firms a panel data approach found that the company should concentrate on leverage, company efficiency and firm size which gives more profit.

Hariato Lim and Rofikoh Rokhim (2021) In this article, they studied the Factors affecting profitability of pharmaceutical company, An Indonesian evidence and concluded with the main goal to assess the importance of a firm's operating income and how it relates to their liquidity and sustainability

Men Thi BUI, Hieu Minh NGUYEN (2021) In this article, they analyse the Determinants Affecting Profitability of Firms, A Study which conducted on Oil and Gas Industry in Vietnam and found that gap should be filled in diverse factors. It is suggested that companies have to avoid more debt to reduce the risk.

Bishnu Prasad Bhattarai (2020) In this article, they determined the Factors influencing profitability of insurance companies in Nepal and findings which explains, the size and financial power of insurance companies are important determinants.

Muhammad Aqil, Rizwan Raheem Ahmed, Jolita Veinhardt and Dalia Streimikiene (2019) In this article, they analyse the Factors Influencing the Profitability of Heavy Vehicle Industry. By analyzing in Case of Pakistan. And concluded that the quick ratio, inventory turnover, accounts receivable turnover, and average accounts payable are the factors that have the most impact on the return on assets of the heavy vehicle sector in Pakistan.

Dechasa Seifu Ashenafi, Dechasa Seifu Ashenafi (2018) In this article, they analyse the Factors Affecting Profitability of Microfinance Institutions, on Study of MFIs in Southern Nation Nationalities Peoples Regional State and found that, microfinance institutions should look for opportunities to cut expenses and implement a sound credit management strategy.

Matthijs C. T. Kant (2018) In this article, they analyse the Factors influencing the profitability of manufacturing firms listed on the New York stock exchange and suggested that companies need to be careful about how much leverage and debt issuance they have because they have negative consequences. R&D investments are essential part of the business

Shah, Mumtaz Hussain and Khan, Sajjad (2017) In this article, they analyse the Factors Effecting Commercial Banks Profitability in Pakistan and it aims to investigate which factors equity, debt, bank size, and assets yield higher profits and which one's banks should prioritize in order to increase profits.

Dr. John Francis T. Diaz (2017) In this article, they analyse the Factors Affecting the Profitability of Indonesian Real Estate Publicly-listed Companies and found that companies that have more assets have high sales growth and can optimize their operations. Real estate firms should concentrate on customer receivables because they generate more profit.

Swagatika Nanda and Ajaya Kumar Panda (2017) In this article, they analyse the determinants of corporate profitability and suggests that Managers should focus on elements that influence financial performance. Additionally, nominal exchange rate is more illuminating when describing profitability. **METHODOLOGY**

3.1 Type of Research: Causal research, to study the relationship b/w the dependent and independent variables.

3.2 PERIOD OF THE STUDY: Annual reports are collected from April 2013 to March 2022

3.3 LIST OF SELECTED COMPANIES FOR THE ANALYSIS: Five Indian IT companies are selected for the analysis

3.4 DATA ANALYSIS TOOLS USED: Descriptive statistics, correlation analysis and Regression analysis

3.5 HYPOTHESIS TESTING
Hypothesis 1:

H0: The current ratio has no significant impact on return on assets. H1: The current ratio has significant impact on return on asset.

Hypothesis 2:

H0: The Debt ratio has no significant impact on return on assets. H1: The Debt ratio has significant impact on return on assets.

Hypothesis 3:

H0: The Sales growth has no significant impact on return on assets. H1: The Sales growth has significant impact on return on assets.

Hypothesis 4:

H0: The Firm size has no significant impact on return on assets. H1: The Firm size has significant impact on return on assets.

Hypothesis 5:

H0: The Firm age has no significant impact on return on assets. H1: The Firm age has significant impact on return on assets.

III. DATA ANALYSIS AND FINDINGS

Table 4.1 Descriptive Statistics of TCS, Infosys, HCL, Wipro and Tech Mahindra

	Return on Assets	Current Ratio	DebtRatio	Sales Growth	FirmSize	FirmAge
Mean	0.19	2.98	0.26	0.16	10.77	46.9
SD	0.02	0.79	0.06	0.19	0.33	3.03
Minimum	0.16	1.78	0.19	-0.03	10.1	42.4
Maximum	0.23	4.40	0.37	0.58	11.18	51.4

Source: <https://www.moneycontrol.com>

Interpretation

According to table 4.1, Mean value of the return on assets is 0.19 and its standard deviation is 0.02. it means the value of profitability can be deviate from mean to positive and negative sides by 0.02. the maximum value of ROA is 0.23 and minimum value is 0.16. thus when considering the average value of ROA Selected IT companies those are in favorable positions by profitability.

Table 4.2 Correlation Analysis of TCS, Infosys, HCL, Wipro and Tech Mahindra

	Return on Assets	Current Ratio	DebtRatio	Sales Growth	FirmSize	FirmAge
Return on Assets	1					
Current Ratio	-0.1945	1				
Debt Ratio	0.3352	-0.8587	1			
Sales Growth	0.4019	-0.3139	0.3365	1		
Firm Size	-0.1694	0.1631	-0.2531	-0.2424	1	
Firm Age	0.1326	-0.0548	0.1589	0.2554	-0.9424	1

Source: <https://www.moneycontrol.com>

Interpretation

Current ratio and firm size has a low degree of negative relation on Return on assets. Debt ratio, sales growth, Firm age has a low degree negative relation on return on assets. Current ratio and debt ratio has a High degree negative relation, it means to maintain current ratio, it is not necessary to borrow more debts.

Table 4.3 Regression Analysis of TCS, Infosys, HCL, Wipro and Tech Mahindra

Regression Statistics				
Multiple R	0.8299			
R Square	0.6917			
Adjusted R Square	0.3063			
Standard Error	0.0176			
Observations	10			
ANOVA				
	df	SS	MS	F
Regression	5	0.0032	0.0006	2.1114
Residual	4	0.0014	0.0004	
Total	9	0.0047		

	Coefficients	Standard Error	t Stat
Intercept	0.0004	1.3060	-0.2005
Current Ratio	0.0029	0.0349	0.0523
Debt Ratio	0.1213	0.4303	0.3498
Sales Growth	0.0244	0.0753	0.5470
Firm Size	0.0055	0.0869	0.3055
Firm Age	0.0023	0.0089	0.2116

Source: <https://www.moneycontrol.com>

Interpretation

In the above ANOVA table f Statistic value is 2.1114 that is above 2.56, so above data is not predictable on return on assets at 0.05 level of significance.

From the above table R-Square value is 0.6917 that is 69.17%. which indicates that current ratio, debt ratio, sales growth, firm size and firm age explains 69.17% variation in Return on assets remaining explained by other variable which is not considered in this study. This means current ratio, debt ratio, and sales growth, firm size and firm age is impacting 69.17% on Return on assets.

For every unit change in the current ratio, the Return on Assets is positively impacted by 0.29%. If the current ratio goes up by one unit, the return on assets will increase by 0.29%.

A change in the debt ratio for one unit has a positive impact on return on assets of 12.13%. If the debt ratio goes up by one unit, the return on assets will increase by 12.13%.

Sales growth of 1 unit has a positive impact on Return on Assets of 2.44%. If sales grow by 1 unit, the impact on the return on assets will increase by 2.44%.

Changes in company size of one unit have a 0.55% positive influence on return on assets. If the business size grows by only one unit, the return on assets will increase by 0.55%.

For every unit change in company age, the Return on Assets shows a positive impact of 0.23%. If the age of the business rises by one unit, the return on assets will rise by 0.23%.

3.6 Limitations

- This research is limited to Indian IT sectors only.
- The data which are collected are confined with Internal Factors of the business.
- Secondary data is collected for selected companies, because of the lack of data in private limited companies.
- This analysis which is made are applicable only to selected IT firms in INDIA it is not applicable for whole IT Sector.

Findings

- Current ratio and Firm size has a negative relation.
- Debt ratio, Sales growth and firm age has a positive relation.
- In regression R square value is 0.6917 that is 69.17% is impacting on ROA.
- Current ratio, Debt ratio, Sales growth, Firm size and Firm age has a positive change. That is if increase in 1-unit cause in positive change in ROA.
- Debt ratio is impacting more positive change of 12.13% on ROA.
- Firm age is impacting less positive change of 0.23% on ROA.

Conclusion

From this study the above variables are impacting 69.17% on Return on assets. While Debt ratio has a positive change of 12.13%. companies have to concentrate more on debts that it has to decrease its debt, to have less impact on Return on assets. Current ratio and firm size has a negative relation on return on assets, that means higher current ratio is not necessary to gain more return on assets.

Reference

- Al-Homaidi, E. A., Farhan, N. H., Alahdal, W. M., Khaled, A. S., & Qaid, M. M. (2021). Factors affecting the profitability of Indian listed firms: a panel data approach. *International Journal of Business Excellence*, 23(1), 1-17.
- Lim, H., & Rokhim, R. (2021). Factors affecting profitability of pharmaceutical company: An Indonesian evidence. *Journal of Economic Studies*, 48(5), 981-995.
- BUI, M. T., & NGUYEN, H. M. (2021). Determinants affecting profitability of firms: A study of oil and gas industry in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(1), 599-608.

- Bhattarai, B. P. (2020). Factors influencing profitability of insurance companies in Nepal. *International Journal of Management*, 11(9).
- Aqil, M., Ahmed, R. R., Vveinhardt, J., & Streimikiene, D. (2019). Factors influencing the profitability of heavy vehicle industry: a case of Pakistan. *Montenegrin Journal of Economics*, 15(1), 61-72.
- Ashenafi, D. S., & Kingawa, C. D. (2018). Factors affecting profitability of microfinance institutions (a study of MFIs in southern nation nationalities peoples regional state). *Journal of Economics and Sustainable Development*, 9(5), 34-45.
- Kant, M. (2018). Factors influencing the profitability of manufacturing firms listed on the New York Stock Exchange (*IBA Bachelor's thesis conference, University of Twente*).
- Shah, M. H., & Khan, S. (2017). Factors effecting commercial banks profitability in Pakistan. *Journal of Business and Tourism*. 3(1).
- Diaz, J. F. T., & Hindro, M. C. T. (2017). Factors affecting the profitability of Indonesian realestate publicly listed companies. *Asian Journal of Finance and Accounting*, 9(1), 396-428.
- Nanda, S., & Panda, A. K. (2018). The determinants of corporate profitability: an investigation of Indian manufacturing firms. *International Journal of Emerging Markets*, 13(1), 66-86.