



ADOPTION OF IND-AS AND ITS IMPACT ON PROFITABILITY: A STUDY ON INFORMATION TECHNOLOGY COMPANIES IN INDIA

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ABSTRACT

The transition from Indian GAAP to Ind-AS for aligning Indian financial reporting with International Financial Reporting Standards (IFRS) marked a paradigm shift in financial reporting in India. This transition was a significantly impacted on performance of Indian Companies.

Therefore, the study is undertaken to know the impact of Ind-AS on the profitability of information technology companies. The study period covered a total of sixteen years from 2008-09 to 2023-24; further, it was divided into two regimes, eight years each of pre-adoption (2008-09 to 2015-16) and post-adoption (2016-17 to 2023-24). The study considers Net Profit Ratio (NPR), Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), and Earnings per Share (EPS) as measures of profitability. We used a Shapiro-Wilk test to check the normality in a data set, and further, the paired t-test (parametric) and Wilcoxon rank test (non-parametric) have been used based on normality distribution. The results indicate that the profitability position of the majority of companies was better in the pre-adoption period of Ind-AS; a decline in almost every profitability ratio is notable in the post-adoption period of Ind-AS. Further, the study also found that changes in accounting areas such as depreciation & amortization, fair valuation of derivative & financial instruments, revenue recognition, and reclassification of actuarial gains/losses may impact on profitability.

KEYWORDS: International Financial Reporting Standards (IFRS), Indian Accounting Standards (Ind-AS), Profitability, and Indian IT Companies.

1. INTRODUCTION

Indian Accounting Standards (Ind-AS) are converged with International Financial Reporting Standards (IFRS) to bring uniformity and transparency in financial reporting. These standards were notified by the Ministry of Corporate Affairs (MCA) under section 133 of the Companies Act, 2013, vide Companies (Indian Accounting Standards) Rules, 2015, and implemented in a phased manner from 1st April 2016. The transition from Indian GAAP to Ind-AS has significant impact on the financial statements, particularly in revenue recognition, lease accounting, financial instruments, and fair value measurement. The shift to Ind-AS has altered profitability metrics for companies.

IND AS AND PROFITABILITY

The changes in revenue recognition, expense classification, and fair value measurement under Ind-AS can influence the reported profits (Chaturvedi, 2024). The treatment of certain expenses, such as finance costs and amortization, can affect the calculation of net income (Chaturvedi, 2024). The reported profitability number would be more volatile because of changes in fair valuation of derivatives and financial instruments (including equity, debt, and foreign currency loan obligations), amortization of goodwill, and reclassification of actuarial gains/losses (CRISIL, 2016). The financial statements of companies migrating to the revised accounting standards will undergo significant changes in the reported net worth and profitability (CRISIL, 2016). Decrease in the profits due to expected credit loss (ECL) model used for recognition of impairment loss on financial assets, company's share in Ind-AS adjustments of the associates and joint venture, recognition and measurement of employee stock option plan (ESOP) at fair value, foreign currency translation adjustments, and income tax adjustment (Das, 2020).

2. LITERATURE REVIEW

The study was attempted to explore the potential results of Ind-AS and its impact on profitability and overall performance.



Sl. No	Authors	Key Findings
1	Mistry, K. (2019)	The adoption of Ind-AS does not make significant differences in the financial ratios because of minor difference in the financial ratios.
2	Sodha, S.S. (2019)	Found no impact of Ind-AS on the current ratio of Tata Motors Ltd. and Bajaj Auto Ltd., but impacted on the ROCE of Tata Motors Ltd., while no impact for Bajaj Auto Ltd.
3	Agnishwar & Debabrata. (2020)	The average values of profitability ratios decreased after the adoption of Ind AS. But statistically, no significant impact on ROA, while Ind AS had a significantly affected on the ROE for NIFTY 50 companies.
4	Rao, N. et.al. (2020)	Increase in liquidity and profitability position but a decrease in liabilities and leverage under IFRS.
5	Agarwal & Rakesh Kumar (2020)	Found no difference in the profitability after the transition from IGAAP to Ind-AS.
6	Chaturvedi & Chaturvedi (2024)	There is nuanced impacts of Ind-AS adoption on financial performance and decline in NPR, ROI, and ROE under Ind-AS for Wipro Ltd.
7	Bheemanagouda & Stanley (2024)	Significant change in the current and non-current liabilities, as well as total income and total expenses under new accounting standards, due to various recognition and disclosure criteria introduced in Ind-AS.

3. OBJECTIVE OF THE STUDY

To investigate the impact of Ind-AS adoption on the profitability of Indian information technology companies.

4. HYPOTHESIS OF THE STUDY

H₀₁: The profitability ratios of each selected company are normally distributed for pre and post-adoption periods of Ind-AS.

H₀₂: There is no significant impact of Ind-AS adoption on profitability of each selected company.

5. RESEARCH METHODOLOGY

5.1 Sample Design

The information technology sector is having a higher impact due to changes in the accounting treatments under Ind-AS. Therefore, the present study is mainly concentrated on Indian IT companies. Totally, there are ten companies that are commonly listed and indexed in both the S&P BSE IT and NSE NIFTY IT indices. Out of that, the authors were finally considered only nine sample companies by removing L& Technology services due to inadequate data as per IGAAP. Table 1 contains the list of selected companies.

Table 1 List of Sample Companies

Sl. No	Name of the sample companies	Status of Selection/Rejection
1	Infosys Ltd	Selected
2	Wipro Ltd	Selected
3	TCS Ltd	Selected
4	HCL Technologies Ltd	Selected
5	Tech Mahindra Ltd	Selected
6	Persistent Systems Ltd	Selected
7	Mphasis Ltd	Selected
8	LTIMindtree Ltd	Selected
9	Coforge Ltd	Selected
10	L&T Technology Services Ltd	Not Selected due to insufficient data

5.2 Study Period

This study covered a period of total sixteen years from 2008-09 to 2023-24; further, it was divided into two regimes, eight years each of pre-adoption (2008-09 to 2015-16) and post-adoption (2016-17 to 2023-24).

5.3 Data Sources

The financial data related to the variables were taken from the annual reports of the respective companies. The other relevant data were collected from various journals, periodic reports, and websites.

5.4 Variables

The measurement of all the profitability variables has been explained in table 2

Table 2 Variables' Definitions and Sources of Data Collection

Sl. No	Variable	Acronym	Measurement	Source
1	Net Profit Ratio	NPR	$\frac{\text{Net profit After Tax}}{\text{Net sales}} \times 100$	Annual Reports of Selected Companies
2	Return on Assets	ROA	$\frac{\text{Net profit after tax}}{\text{Total Assets}} \times 100$	
3	Return on Equity	ROE	$\frac{\text{Net profit after tax}}{\text{Total Equity}} \times 100$	
4	Return on Capital Employed	ROCE	$\frac{\text{Net profit after tax}}{\text{Capital Employed}} \times 100$	
5	Earnings Per Share	EPS	$\frac{\text{Net profit after tax}}{\text{Number of shares outstanding}} \times 100$	

6. DATA ANALYSIS

6.1 Descriptive Statistics

The descriptive statistics of all profitability variables used in the model are shown in table 3

Table 3 Results of descriptive statistics of each selected company

Companies	Statistics	Profitability Ratios									
		NPR		ROA		ROE		ROCE		EPS	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Infosys Ltd.	Mean	24.17	18.93	21.14	18.54	26.21	26.33	26.09	24.38	124.83	53.43
	SD	2.53	2.10	2.90	0.90	2.97	3.64	2.98	2.34	39.71	12.59
	Min	20.86	16.13	18.20	17.22	23.65	20.81	23.60	20.70	59.84	35.44
	Max	27.60	22.73	27.02	20.06	32.80	31.81	32.74	27.83	186.49	71.07
Wipro Ltd.	Mean	16.88	14.94	14.13	11.05	23.70	16.81	21.19	15.02	29.04	20.82
	SD	1.33	1.73	1.04	1.15	2.67	1.79	1.72	1.92	5.67	6.24
	Min	15.05	12.38	12.67	9.68	20.05	14.62	18.83	12.41	21.72	14.99
	Max	18.56	17.55	15.99	13.14	28.61	19.74	23.31	18.20	36.47	34.98
TCS Ltd.	Mean	22.31	21.23	26.38	27.15	36.87	38.89	35.31	36.03	69.45	108.53
	SD	1.73	2.51	1.67	2.38	1.92	7.25	2.01	5.88	34.79	21.61
	Min	19.10	18.48	23.21	24.35	33.48	30.26	31.51	29.25	26.81	83.05
	Max	24.62	26.65	28.54	31.48	39.21	50.48	37.23	45.94	123.28	134.19
HCL Tech Ltd.	Mean	14.94	15.91	15.13	15.92	25.96	22.73	21.80	20.63	36.81	50.47
	SD	4.14	1.35	4.47	2.11	5.08	2.21	6.46	2.71	15.02	9.86
	Min	10.37	14.29	9.99	12.96	20.02	18.59	13.96	16.23	18.69	36.79
	Max	20.25	18.09	21.71	18.81	33.30	25.98	31.38	25.00	58.15	62.23
Tech Mahindra Ltd.	Mean	14.25	10.34	16.73	10.77	27.83	17.30	23.18	14.92	71.47	45.65
	SD	4.03	2.65	8.07	2.33	10.71	3.76	12.29	3.25	35.00	11.82
	Min	9.87	4.61	10.64	5.52	19.22	8.83	13.91	7.78	27.46	26.66
	Max	22.72	12.61	35.68	12.82	52.21	20.66	51.91	18.55	130.25	63.32
Persistent Systems Ltd.	Mean	15.01	10.77	14.79	12.76	18.49	17.79	18.16	16.63	39.38	63.99
	SD	2.58	0.72	1.07	1.17	1.46	3.57	1.37	2.56	12.92	30.22
	Min	11.13	9.54	13.54	11.00	16.74	14.26	16.66	13.92	18.43	37.68
	Max	19.13	12.09	16.37	14.83	20.68	23.23	20.47	21.07	64.07	123.73
Mphasis Ltd.	Mean	15.29	12.64	14.18	12.79	19.49	18.30	18.88	17.01	35.54	63.88
	SD	4.14	0.79	8.02	1.38	11.19	2.87	11.42	2.43	10.95	17.87
	Min	11.70	11.71	4.42	10.82	6.04	12.87	5.51	12.71	14.40	37.69
	Max	21.66	13.88	27.84	14.56	38.74	19.96	38.69	19.96	52.00	87.05
LTIMindtree Ltd.	Mean	14.20	14.60	23.33	19.33	40.37	27.61	26.79	27.69	44.07	105.71
	SD	1.12	1.12	6.29	2.21	10.63	2.67	4.28	5.27	17.38	37.40
	Min	12.65	12.91	16.45	16.63	28.03	22.89	22.63	21.01	13.84	57.08



	Max	15.82	16.04	36.90	22.73	61.88	30.97	36.47	38.03	64.14	154.85
Coforge Ltd.	Mean	11.35	10.28	13.03	12.41	19.94	19.52	18.80	23.61	30.43	81.54
	SD	2.97	0.89	3.49	1.38	6.14	3.32	5.95	2.93	9.74	33.06
	Min	5.14	9.10	5.77	10.22	8.40	14.82	8.06	18.95	18.74	40.80
	Max	15.05	11.49	17.97	14.03	29.62	24.21	26.92	27.48	45.82	131.56

Source: Annual reports of the selected company, compiled by authors using SPSS 2016.

Table 3 presents the results of the descriptive analysis of financial variables of each selected company by highlighting the potential relationship of mean values between two periods of Ind-AS. It clearly indicates a significant decline in the NPR during the post-adoption period for several companies. Conversely, NPR increased for HCL Tech (**14.94 to 15.91**) and LTIMindtree (**14.20 to 14.60**) during the same period. During the post-adoption period, ROA increased for TCS (**26.38 to 27.15**) and HCL Tech (**15.13 to 15.92**). However, the remaining companies experienced a significant decline in ROA during the same period. Similarly, the ROE also declined for several companies in post-adoption period but increased for TCS (**36.87 to 38.89**) and Infosys (**26.21 to 26.33**). In the post-adoption period, ROCE increased for only TCS (**35.31 to 36.03**), LTIMindtree (**26.79 to 27.69**), and Coforge (**18.80 to 23.61**). However, the remaining companies experienced a decline in ROCE during the same period. In the post-adoption period, EPS increased for the majority companies but declined for Infosys (**124.83 to 53.43**), Wipro (**29.04 to 20.82**), and Tech Mahindra (**71.47 to 45.65**) during the same period.

6.2 Shapiro – Wilk Test (Normality Test)

Table 4 Results of the normality test (Shapiro-Wilk test) of each selected company

Variables	Infosys Ltd		Wipro Ltd		TCS Ltd	
	Statistics	Sig	Statistics	Sig	Statistics	Sig
NPR	0.957	0.613	0.943	0.392	0.968	0.802
ROA	0.817	0.005	0.955	0.569	0.971	0.848
ROE	0.933	0.268	0.951	0.500	0.920	0.169
ROCE	0.903	0.089	0.935	0.294	0.940	0.351
EPS	0.877	0.077	0.916	0.144	0.941	0.364
Variables	HCL Tech Ltd		Tech Mahindra Ltd		Persistent Systems Ltd	
	Statistics	Sig	Statistics	Sig	Statistics	Sig
NPR	0.962	0.693	0.901	0.085	0.879	0.038
ROA	0.976	0.920	0.677	0.000	0.975	0.913
ROE	0.930	0.240	0.778	0.001	0.960	0.666
ROCE	0.948	0.464	0.665	0.000	0.967	0.784
EPS	0.929	0.235	0.887	0.050	0.815	0.004
Variables	Mphasis Ltd		LTIMindtree Ltd		Coforge Ltd	
	Statistics	Sig	Statistics	Sig	Statistics	Sig
NPR	0.698	0.000	0.951	0.502	0.927	0.217
ROA	0.843	0.011	0.792	0.002	0.893	0.061
ROE	0.885	0.047	0.839	0.009	0.966	0.774
ROCE	0.867	0.024	0.883	0.044	0.915	0.141
EPS	0.949	0.476	0.914	0.136	0.868	0.026

Source: Annual reports of the selected companies, compiled by authors using SPSS 2016.

If p-value > 0.05 accept H₀ and if p-value ≤ 0.05 reject H₀

Table 4 presents the results of the Shapiro-Wilk test (normality test) of each selected company during the pre- and post-adoption periods of Ind-AS. The test reveals that the significance value (p-value) of profitability ratios is **greater than 0.05** for most companies, except Tech Mahindra, Mphasis, and LTIMindtree. Therefore, the researcher has failed to reject the null hypothesis (**H₀₁**). On the other hand, the significance value (p-value) of profitability ratios is **less than or equal to 0.05** for Tech Mahindra, Mphasis, and LTIMindtree, so the null hypothesis is rejected for these three companies and conclude that profitability ratios of all the companies, except Tech Mahindra, Mphasis, and LTIMindtree follow a normal distribution.

6.3 Paired T-Test and Wilcoxon Rank Test

Table No 5 Results of paired t-test and Wilcoxon rank test of each selected company

Variables	Infosys Ltd			Wipro Ltd			TCS Ltd		
	Mean	Std. Dev	Sig	Mean	Std. Dev	Sig	Mean	Std. Dev	Sig
NPR	5.247	1.515	0.000	1.935	2.699	0.082	1.071	3.111	0.363
ROA	2.595	3.444	0.093*	3.077	1.510	0.001	-0.763	2.227	0.365
ROE	-0.117	6.319	0.960	6.883	3.058	0.000	-2.021	6.472	0.406
ROCE	1.713	5.046	0.369	6.175	2.123	0.000	-0.711	5.163	0.708
EPS	7.140	47.337	0.004	8.220	7.768	0.020	-3.907	40.967	0.031

Variables	HCL Tech Ltd			Tech Mahindra Ltd			Persistent Systems Ltd		
	Mean	Std. Dev	Sig	Mean	Std. Dev	Sig	Mean	Std. Dev	Sig
NPR	-0.962	5.157	0.614	3.908	4.400	0.040	4.246	2.685	0.012*
ROA	-0.793	5.892	0.714	5.953	8.303	0.036*	2.030	1.380	0.004
ROE	3.222	6.458	0.020	1.052	11.068	0.017*	0.698	2.719	0.491
ROCE	1.172	8.505	0.708	8.252	12.954	0.050*	1.530	2.112	0.080
EPS	-1.366	20.266	0.031	2.581	31.452	0.050*	-2.461	27.342	0.012*

Variables	Mphasis Ltd			LTIMindtree Ltd			Coforge Ltd		
	Mean	Std. Dev	Sig	Mean	Std. Dev	Sig	Mean	Std. Dev	Sig
NPR	2.633	3.757	0.036*	-0.397	1.370	0.439	1.066	2.558	0.277
ROA	1.383	8.764	0.779*	4.001	7.619	0.032*	0.597	3.457	0.640
ROE	1.170	13.689	0.779*	1.275	11.754	0.025*	0.427	8.917	0.896
ROCE	1.868	13.120	0.779*	-0.896	6.787	0.674*	-4.812	8.324	0.146
EPS	-2.833	27.089	0.021	-6.164	30.817	0.001	-5.111	28.594	0.012*

Source: Annual reports of the selected companies, compiled by authors using SPSS 2016.

If p -values > 0.05 accept H_0 and if p -values < 0.05 reject H_0

* Results of Wilcoxon Rank Test

Table 5 presents the results of the paired t-test and Wilcoxon rank test of each selected company. The significance value (p-value) of most of the profitability ratios is less than 0.05, except for three companies, viz., TCS, Mphasis, and Coforge. Therefore, the null hypotheses (H_0) is rejected, and we conclude that there is a significant impact of Ind-AS adoption on the profitability of Infosys, Wipro, HCL Tech, Tech Mahindra, Persistent Systems, and LTIMindtree.

7. DISCUSSION OF THE RESULTS

- The mean values of NPR, ROA, ROE, ROCE, and EPS declined for the majority of the companies during the post-adoption period of Ind-AS. Similar results were found on some other company in the study of **Agnishwar & Debabrata (2020)** and **Chaturvedi & Chaturvedi (2024)**.
- Secondly, there is a significant impact of Ind-AS adoption on the profitability of the majority companies, thus significant impact on profitability were found in the study of **Wagle (2022)** and **Gupta, et.al (2017)**.
- Thirdly, the adoption of Ind-AS does not make any significant difference in the profitability ratios of TCS, Mphasis, and Coforge.
- Fourthly, the profitability position of the majority of companies was better in the pre-adoption period of Ind-AS; a decline in almost every profitability ratio is notable in the post-adoption period of Ind-AS.
- Finally, the changes in accounting areas such as depreciation & amortization, employee stock option, consolidation, revenue recognition, financial instruments, and reclassification of actuarial gains/losses may impact on the profitability of the companies. Similar reasons were found in the study of **Gupta, et.al (2017)**.

8. CONCLUSION

In view of the above discussion, findings of the study overall conclude that the effect of Ind-AS on profitability is different for different companies. Although the dimensional impact of Ind-AS on profit is predominantly seen as negative for the majority of companies. Which shows that the profitability position of the majority of companies was better in the pre-adoption period of Ind-AS; a decline in almost every profitability ratio is notable in the post-adoption period of Ind-AS. Therefore, the companies should focus on increasing sales volume while reducing



costs to enhance profits and strengthen its profitability position. Additionally, it improves the financial reporting systems and develops investors' confidence by bringing Indian companies in line with global best practices. The present study was limited to only nine companies in the information technology sector and considered five profitability variables to examine the impact of Ind-AS on profitability. The study can be extended further by covering other profitability variables such as Gross Profit Ratio (GPR), Operating Profit Ratio (OPR), and market-based performance measures like Tobin's Q ratio. It can also extend by concentrating on different companies across various sectors.

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