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A Study On The Impact Of Ifrs Adoption On Key Financial Benchmark Ratios

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Abstract: This study has been undertaken to investigate the impact of IFRS (IND AS) implementation on key financial benchmark ratios. Indian banks at present are still using the benchmark ratios for appraisal of loans based on the key financial benchmark ratios which were calculated long back on Generally Accepted Accounting Principles (IGAAP). At present most of the companies are using IND AS standards but the ratios that are being used by the banks are calculated on IGAAP. So, there was a need to understand whether these ratios are being impacted or not.

Index Terms – IND AS, IFRS, Profitability Ratios, Benchmark Ratios.

I. INTRODUCTION

The adoption of International Financial Reporting Standards (IFRS) represents a significant transformation in financial reporting, aimed at enhancing transparency, comparability, and reliability of financial statements globally. In the context of Indian banks, this transition from Indian Generally Accepted Accounting Principles (IGAAP) to IFRS has profound implications for their financial disclosures and performance metrics.

The Securities and Exchange Board of India (SEBI) first announced the voluntary adoption of IFRS in India in 2010. This move was intended to begin aligning Indian accounting standards with the globally recognized IFRS to enhance transparency and comparability of financial statements across borders.

Mandatory Implementation Phase I (2016)

The Ministry of Corporate Affairs (MCA) mandated the adoption of Indian Accounting Standards (Ind AS), which are closely aligned with IFRS, starting in April 2016 for certain companies. This included all listed companies and unlisted companies with a net worth of ₹500 crore or more, along with their holding, subsidiary, joint venture, and associate companies.

Mandatory Implementation Phase II (2017)

The next phase began in April 2017, targeting companies whose securities are listed or are in the process of being listed, with a net worth less than ₹ 500 crore, and unlisted companies with a net worth between ₹ 250 crore and ₹ 500 crore, including their related entities.

Broader Applicability (2018 onwards)

By April 2018, the adoption of Ind AS became mandatory for all listed companies in India. This standard applies to both consolidated and stand-alone financial statements, ensuring that companies do not need to maintain dual accounting systems, thereby simplifying compliance and reporting processes.

Indian Banks were supposed to transition to IFRS during the last phase but at present Indian banks are expected to transition to International Financial Reporting Standards over the next few years. However, the exact timing is not yet clear. In the context of above still Indian banks, are using Indian Generally Accepted Accounting Principles (GAAP) to file their financial return and disclosures.

This study tries to examine how the implementation of IFRS guidelines impacts key benchmark ratios such as profitability, liquidity, and solvency ratios in corporations. As Indian banks are using the benchmark ratios which were based on IGAAP, it is important to understand that after the implementation of IND AS(IFRS) in Indian corporate, these benchmark ratios have changed sufficiently or not.

Some of the Indian companies till 2016 before mandatory filing in IND AS(IFRS) were doing dual filing, one was intended for the Indian capital market, and the other was for the US Capital market. So, these data become valuable to study the impact of IFRS adoption in these companies and based upon the impact of IFRS on these companies, various ratios it could be generalised towards the impact these changes of accounting methodology can have on banks acceptable key benchmark ratio.

II. RESEARCH OBJECTIVE

The primary objective of this research is to assess the impact of adopting International Financial Reporting Standards (IFRS) on the benchmark ratios accepted by Indian banks towards appraisal of credit decision. This involves:

1. Evaluating changes in key financial ratios, such as profitability, liquidity, and solvency, before and after the implementation of IFRS.
2. Analyzing the probable challenges faced by Indian banks in transitioning from Indian GAAP to IFRS and accommodation or probable realigning these benchmark ratios based on the change in accounting standard.
3. Providing insight into banks and policymakers to optimize the adoption process and enhance financial reporting standards.

III. HYPOTHESIS

Below are the Hypothesis conceptualized and accordingly, data were collected to understand the impact of IFRS on benchmark ratios

Ho1: Transition to IFRS from Indian GAAP has no impact on Debt Equity Ratio (D/E).

Ho2: Transition to IFRS from Indian GAAP has no impact on Current Ratio (CR).

Ho3: Transition to IFRS from Indian GAAP has no impact on TOL/TNW.

Ho4: Transition to IFRS from Indian GAAP has no impact on Total debt/ EBITDA.

IV. METHODOLOGY

This study employs a quantitative research design to investigate the impact of the transition from Indian Generally Accepted Accounting Principles (IGAAP) to International Financial Reporting Standards (IFRS) on selected financial ratios of major Indian companies, specifically Wipro, Tata Consultancy Services (TCS), Dr. Reddy's Laboratories, and Infosys. The methodology is outlined as follows:

1. Data Collection

The study focuses on four prominent companies in the Indian IT and pharmaceutical sectors: Wipro, TCS, Dr. Reddy's, and Infosys. Financial statements from the years 2010 to 2015 are analyzed, as these companies were filing as per USA and as per Indian accounting standards. The data is compiled from the annual reports of each company, which include financial statements prepared under both IGAAP and IFRS. These reports are sourced from each company's official websites and regulatory filings.

2. Variable Definition

The following key ratios are studied for the above-mentioned companies. These ratios are very critical for a bank in taking decisions related to credit. Banks usually benchmark these ratios for decision making and in case of any deviation from these benchmark ratios the bank will have to record this deviation, and they will have to follow the due process in the decision making. Below are the ratios which were part of the study.

Debt Equity Ratio (D/E): The debt-to-equity ratio (D/E ratio) depicts how much debt a company has compared to its assets. It is calculated by dividing a company's total debt by total shareholder equity.

Note a higher debt-to-equity ratio states the company may have a more difficult time covering its liabilities.

Debt to equity ratio formula is calculated by dividing a company's total liabilities by shareholders' equity.

DE Ratio= Total Liabilities / Shareholder's Equity

Current Ratio (CR): The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current asset on its balance sheet to satisfy its current debt and other payables.

A ratio under 1.00 indicates that the company's debts due in a year or less are greater than its cash or other short-term assets expected to be converted to cash within a year or less. In general, the higher the current ratio, the more capable a company is of paying its obligations because it has a larger proportion of short-term asset value relative to the value of its short-term liabilities.

However, though a high ratio—say, more than 3.00—could indicate that the company can cover its current liabilities three times, it also may indicate that it is not using its current assets efficiently, securing financing very well, or properly managing its working capital. This is why it is helpful to compare a company's current ratio to those of similarly sized businesses within the same industry.

TOL/TNW: The Total Outside Liabilities to Total Net Worth (TOL/TNW) ratio is a financial metric that measures a company's financial leverage and risk. It's calculated by dividing a company's total liabilities by its total net worth.

It measures

- Total Outside Liabilities (TOL): All debts and obligations, including current liabilities and long-term debt
- Total Net Worth (TNW): The sum of share capital and surplus reserves, or a company's realizable assets
- A high TOL/TNW ratio indicates that a company is highly leveraged, meaning it relies more on debt than equity
- A low TOL/TNW ratio indicates that a company has a high promoter stake and is considered less risky
- A ratio between 1 and 3 is often considered ideal
- A ratio of less than 1 is considered the best
- It's a key indicator of a company's financial structure and risk level
- It's a key financial indicator that influences credit rating

Total Debt/EBITDA: Debt-to-earnings before interest, taxes, depreciation, and amortization (EBITDA) is a ratio that measures the amount of income generated and available to pay down debt before a company account for interest, taxes, depreciation, and amortization expenses. A high ratio result could indicate a company has a debt load that might be too high.

Banks often include a certain debt-to-EBITDA target in the covenants for business loans, and a company must maintain this agreed-upon level or risk having the entire loan become due immediately. Credit rating agencies commonly use this metric to assess a company's probability of defaulting on issued debt. Firms with a high debt-to-EBITDA ratio may not be able to service their debt appropriately, leading to a lowered credit rating.

The debt-to-EBITDA ratio compares a company's total obligations to the actual cash the company brings in from its operations. It reveals how capable the firm is of paying its debt and other liabilities if taxes and the expenses from depreciation and amortization are deferred.

3. Analytical Framework

Financial ratios of these companies are computed for both (IGAAP and IFRS) pre-adoption (2010 - 2015) as these companies started filling as per IND As (IFRS) from 2016 onwards in India.

Statistical Testing: Statistical tests (such as t-tests) will be conducted to evaluate the significance of differences in financial ratios as per IGAAP and IFRS. This will help in testing the formulated hypotheses (H1 to H4).

4. Data Analysis

Software Tools: Data will be analyzed using statistical software such as Excel for carrying out hypothesis testing.

Comparative Analysis: Ratios will be compared within each company and across the sample to determine trends and the extent of impact due to the transition to IFRS.

V. DATA COLLECTION AND ANALYSIS

As the scope of this study was to gather the financial ratios of companies which were at the same time filling two returns complying with two different accounting standards which were IGAAP (Indian Generally accepted accounting principal) and IFRS (International Financial Reporting Standard) and compare between these ratios to find out that whether there any significant changes has happen due to change in the accounting standards. For this, four companies were selected, which were Wipro, Infosys, TCS and Dr Reddy's. Selection of these companies was based on the fact that these companies were filling in IGAAP and IFRS during the time period 2010 to 2015, as these companies were not only doing business in India but were also active in US market and as per the local laws, they were expected to file their return in IFRS also.

The Ministry of Corporate Affairs (MCA) released a press release on January 2, 2015, outlining the roadmap for implementing Ind AS (Comparable to IFRS) was made mandatory for companies with a net worth of at least 500 crore rupees and debt securities listed on an Indian or foreign stock exchange to file from 2016 onwards.

Wipro Financial Ratio: Financial statement of Wipro was studied and following data was collected.

	IGAAP				IFRS			
	D/E	CR	TOL/TN W	TOTAL DEBT/EBIT DA	D/E	CR	TOL/TN W	TOTAL DEBT/EBIT DA
2010	0.34264 4	2.16	0.92841	1.1346	0.31	1.9	0.9343	1.2
2011	0.2348	2.17	0.8369	0.84	0.21	2.3	0.70638	0.91
2012	0.2146	1.99	0.7989	0.83	0.2	2.32	0.6866	0.92
2013	0.16	1.82	0.803	0.54	0.22	2.12	0.6721	0.91
2014	0.16	2.22	0.6627	0.49	0.14	2.59	0.55928	0.57
2015	0.21	2.22	0.675	0.68	0.19	2.66	0.55	0.82

TCS Financial Ratio: Financial statements of TCS were studied and following data were collected.

	IGAAP				IFRS			
	D/E	CR	TOL/TN W	TOTAL DEBT/EBIT DA	D/E	CR	TOL/TN W	TOTAL DEBT/EBIT DA
2011	0	2.35	0.36281	0.00627	0.0029	2.94	0.3059	0.007138
2012	0	2.22	0.43234	0.008601	0.00382	3.36	0.273353	0.009365
2013	0.01	2.67	0.36581	0.012441	0.00558 3	3.59	0.27	0.01246986
2014	0.01	2.74	0.367281	0.010685	0.00529	3.87	0.247	0.013657
2015	0.01	2.4	0.451126	0.013218	0.00611 8	3.333	0.3053	0.01566

Infosys Financial Ratio: Financial statement of Infosys was studied and following data were recorded

	IGAAP				IFRS			
	D/E	CR	TOL/TN W	TOTAL DEBT/EBITD A	D/E	CR	TOL/TN W	TOTAL DEBT/EBITD A
2011	0	4.59	0.2046	0	0	5.01	0.14547	0
2012	0	4.38	0.2328	0	0	4.72	0.15051	0
2013	0	4.36	0.23377	0	0	4.82	0.1732	0
2014	0	3.55	0.2946	0	0	4.73	0.2099	0
2015	0	3.05	0.3293	0	0	4.1	0.2242	0

Dr Reddy's Laboratories Financial statement was studied, and important ratios were recorded for study.

	IGAAP				IFRS			
	D/E	CR	TOL/TN W	TOTAL DEBT/EBITD A	D/E	CR	TOL/TN W	TOTAL DEBT/EBITD A
2010	0.39	1.48	0.929	2.93	0.34	1.44	0.9183	7.31
2011	0.59	1.14	1.223	2.011127832	0.51	1.16	1.118	1.866
2012	0.65	1.52	1.2698	1.671830695	0.56	1.6	1.12	1.764
2013	0.5	1.52	1.117599	1.435193114	0.504	1.58	0.999	1.741
2014	0.53	1.78	1.038	1.575239391	0.4927	1.91	0.90899	1.71
2015	0.37	1.74	0.8875	1.257293075	0.3874	1.872	0.7733	1.64

So, for all the company's important ratios were recorded for the given time period and tabulated for further study.

Data Analysis:

Data related to the financial ratios were clubbed together for hypothesis testing of each hypothesis. The Paired T test was used to study the statistical difference between ratios. Below is the result of the test.

Ho1: Transition to IFRS from Indian GAAP has no impact on Debt Equity Ratio (D/E).

To test the hypothesis Debt equity ratios of all the companies were clubbed together and divided in two parts one part as per the IGAAP and another as per IFRS. Below is the test result

Test of Hypothesis: Two tail

H0: There is no significant difference in D/E ratio in both accounting standards

H1: There is significant difference in D/E under both approach

t-Test: Paired Two Sample for Means

	IGAAP	IFRS
Mean	0.243446889	0.227261722
Variance	0.04928789	0.040642001
Observations	18	18
Pearson Correlation	0.991263197	
Hypothesized Mean Difference	0	
df	17	
t Stat	1.983398906	
P(T<=t) one-tail	0.031857661	

t Critical one-tail	1.739606726	
P(T<=t) two-tail	0.063715322	
t Critical two-tail	2.109815578	

H0: Fail to reject

The result means that the D/E ratio under both the method does not have any significant difference.

Ho2: Transition to IFRS from Indian GAAP has no impact on Current Ratio (CR).

To test the Hypothesis on Current ratios all the company's current ratio were calculated and tabulated in two groups for testing hypothesis. The results of the test are below.

Test of Hypothesis: Two tail

H0: There is no significant difference in Current ratio in both accounting standards

H1: There is significant difference in Current ratio under both approach

t-Test: Paired Two Sample for Means

	IGAAP	IFRS
Mean	2.457727273	2.90568182
Variance	0.94932316	1.48303632
Observations	22	22
Pearson Correlation	0.94700856	
Hypothesized Mean Difference	0	
df	21	
t Stat	-4.884551797	
P(T<=t) one-tail	3.93784E-05	
t Critical one-tail	1.720742903	
P(T<=t) two-tail	7.87569E-05	
t Critical two-tail	2.079613845	

H0: Reject

H1: Fail to reject

There is a significant difference between both accounting standards in measuring Current Ratio

The Result means that there is a significant difference between the current ratio calculated under both the accounting standards.

Ho3: Transition to IFRS from Indian GAAP has no impact on TOL/TNW.

To test the Hypothesis on TOL/TNW all the companies TOL/TNW were calculated and tabulated in two groups for testing hypothesis. The results of the test are below.

Test of Hypothesis: Two tail

H0: There is no significant difference in TOL/TNW in both accounting standards

H1: There is a significant difference in TOL/TNW under both approaches

t-Test: Paired Two Sample for Means

	IGAAP	IFRS
Mean	0.656556614	0.556867409
Variance	0.118034608	0.115309451
Observations	22	22
Pearson Correlation	0.992431819	
Hypothesized Mean Difference	0	
df	21	
t Stat	11.07725196	
P(T<=t) one-tail	1.56888E-10	
t Critical one-tail	1.720742903	
P(T<=t) two-tail	3.13776E-10	
t Critical two-tail	2.079613845	

T statistics > T critical

Reject the Null Hypothesis

H0: Reject

H1: Fail to reject

There is a significant difference between both accounting standards in measuring TOL/TNW

The Result means that there is a significant difference between the TOL/TNW calculated under both accounting standards.

Ho4: Transition to IFRS from Indian GAAP has no impact on Total debt/ EBITDA

To test the Hypothesis on Total Debt/ EBITDA all the companies Total Debt/ EBITDA were calculated and tabulated in two groups for testing hypothesis. The results of the test are below.

Test of Hypothesis: Two tail

H0: There is no significant difference in TOTAL DEBT/ EBITDA in both accounting standards

H1: There is significant difference in TOTAL DEBT/ EBITDA under both approach

t-Test: Paired Two Sample for Means

	IGAAP	IFRS
Mean	0.736265	0.829958227
Variance	0.463913	0.529308606
Observations	17	17
Pearson Correlation	0.982079	
Hypothesized Mean Difference	0	
df	16	
t Stat	-2.73735	
P(T<=t) one-tail	0.007304	
t Critical one-tail	1.745884	
P(T<=t) two-tail	0.014609	
t Critical two-tail	2.119905	

T statistics > T critical

H0: Reject

H1: Fail to reject

There is significant difference in TOTAL DEBT/ EBITDA under both approach

The Result means that there is a significant difference between the Total debt/ EBITDA calculated under both accounting standards.

vi. KEY FINDINGS BASED ON HYPOTHESIS TESTING RESULT

Based on the Hypothesis result, the following key findings can be mentioned

Debt Equity Ratio (HO1):

The hypothesis that the transition to IFRS from Indian GAAP has no impact on the Debt Equity Ratio (D/E), failed to reject or in other words have no significant difference in both the methodology. This indicates that the adoption of IFRS did not significantly alter the leverage position of the companies studied. The D/E ratio remained relatively stable, suggesting that the financial structure and risk profiles of these organizations were not materially influenced by the new reporting standards.

Current Ratio (HO2):

The hypothesis that IFRS transition has no impact on the Current Ratio (CR) was rejected. This finding indicates a significant change in liquidity post-adoption of IFRS. The probable reason could be better asset management and clearer representation of short-term financial health.

Total Outside Liabilities to Tangible Net Worth (HO3):

The rejection of the hypothesis concerning the TOL/TNW ratio indicates that the transition to IFRS significantly altered the relationship between total outside liabilities and tangible net worth. This suggests a shift in financial reporting treatment, potentially affecting how businesses reflect their capital structure and financial risk.

Total Debt/EBITDA (HO4):

The hypothesis that the Total Debt/EBITDA ratio was unaffected by the transition to IFRS was also rejected. This outcome suggests that there were notable changes in how companies managed their debt levels relative to their earnings. An increase in this ratio could indicate challenges in maintaining a healthy earnings buffer against debt, while a decrease could point to improved profitability and debt management strategies.

One notable factor is there to interpret the result of this study. The purpose of this study was to understand whether adoption of IFRS has altered the benchmark ratios or not, but the purpose of this study was not to find that adoption has impacted the ratios positively or negatively. Also, as the outcome of this study showed that there were significant changes in the benchmark ratios due to the treatment of various items in both the accounting standards.

VII. CONCLUSION

The transition from Indian GAAP to IFRS has led to significant changes in key financial ratios, directly impacting the way banks assess credit risk, financial stability, and corporate performance. The findings of this study indicate that IFRS adoption has altered the reporting of liquidity, solvency, and leverage metrics, requiring banks to adapt their risk assessment models, financial covenants, and lending strategies. To mitigate potential risks and enhance decision-making, banks must refine their credit evaluation frameworks, strengthen communication with borrowers, and invest in IFRS-focused training for credit and risk teams. Additionally, proactive engagement with regulators and industry experts will help ensure alignment with global financial practices while maintaining robust risk management. By implementing these strategic measures, banks can improve financial transparency, enhance risk mitigation, and position themselves for more informed lending decisions in an IND AS(IFRS)-compliant financial environment.

VIII. LIMITATION

This study has several limitations that must be considered when interpreting the findings. The sample size is restricted to four companies—Wipro, TCS, Dr. Reddy's, and Infosys—limiting the generalizability of results across the broader Indian corporate sector, as their unique characteristics may not reflect the experiences of other firms transitioning to IFRS. The analysis covers a six-year period (2010-2015), which may not fully capture the long-term financial effects of IFRS adoption, as these impacts can evolve over time. Additionally, the study focuses on the IT and pharmaceutical sectors, whose financial reporting practices may differ from other industries, limiting the applicability of the conclusions. Data accuracy and availability also pose challenges, as inconsistencies in financial reports could affect result reliability. Furthermore, external economic factors and regulatory changes during the study period were not considered, meaning financial ratio variations may not be solely attributable to IFRS adoption. The study primarily employs a quantitative approach, potentially overlooking qualitative influences such as management decisions, market conditions, and investor sentiment, which also impact financial performance. Lastly, financial ratios are based on certain assumptions that may vary across companies and time periods, introducing the possibility of inconsistencies in reporting and interpretation.

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