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A COMPARATIVE STUDY ON FINANCIAL REPORTING UNDER INDIAN GAAP AND IND AS

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A COMPARATIVE STUDY ON FINANCIAL REPORTING UNDER INDIAN GAAP AND IND AS

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Abstract:

IFRS has become a crucial component of modern business as a result of the globalization of the financial market. IFRS was gradually implemented in India through Ind AS. In India, dual reporting procedures are used for corporate reporting. The main goal of this study is to compare the positions of a few chosen organizations using financial statements prepared in accordance with IGAAP and Ind AS. The financial statements of four chosen companies that were prepared in accordance with IGAAP and Ind AS were taken into consideration for the analysis. The Gray comparability index was used to study various aspects of the profit and loss statement and balance sheet in order to gauge the relative impact. The current study is an analytical descriptive study that is desk-based. In contrast to IGAAP, the study indicated that Ind AS based procedures typically had no appreciable impact on the profit and loss statement and balance sheet.

Kev Words: IFRS, IGAAP, Ind AS.

T. Introduction:

Globalization has made it possible for developing economies like India to gradually integrate with industrialized economies through cross-border commerce and investments. Money has become the most fungible investment since the WTO was established since it may move freely across international borders. The regional accounting standards (languages) are therefore no longer necessary because shareholders are no longer confined to the borders of the respective sovereign countries but rather are dispersed throughout the continents. Therefore, there was a perceived urgent need for universally acknowledged, high quality financial reporting in order to improve understanding and to promote the openness and comparability of financial reports, which enable users to make informed decisions. This necessitated the harmonization of accounting standards or the development of international accounting standards, also known as international financial reporting standards (IFRS), which are issued by the international accounting standards board (IASB). These standards include international accounting standards (IAS) issued by the international accounting standards board, international financial reporting standards (IFRSs), and interpretations issued by the standing interpretations committee (IFRIC). Utilizing a single set of superior accounting standards will simplify international investment and other economic decisions, boost market effectiveness, and lower the cost of capital raising.

"The International Accounting Standards Board (IASB) has established a set of widely praised, principle-based financial reporting standards known as International Financial Reporting Standards (IFRS)" (IASB). Accounting treatment in these principles-based financial reporting standards derives from the classification and definition of an accounting element. Various exceptions are connected to rule-based reporting standards to establish a standardized practices, but accounting measurement would significantly diverge from the transaction's core value. (Ghosh, 2016)

The London-based IASB, an organization that sets international standards, is responsible for IFRSs. The IASB prioritizes creating standards based on solid, unambiguous concepts from which interpretation is required (sometimes referred to as principles-based standards). As opposed to this, standards sets like generally accepted accounting principles (GAAP) contain a lot more application guidance. These requirements are sometimes known as rules-based requirements. The IFRS

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approach, in accordance with one school of thinking, focuses more on the business or economic goal of a transaction and the underlying rights and duties than it does on giving prescriptive rules because IFRS are largely principles-based standards (or guidance). IFRS offers principles that serve as direction. ¹

About 120 countries and reporting jurisdictions allow or demand the use of IFRS for domestically listed firms, albeit only about 90 of them have completely complied with the IASB's IFRS and include a notation in their audit reports attesting to this compliance. ²

Financial reporting may be impacted by all the nations that have harmonised their accounting standards with IFRSs. Indian GAAP (IGAAP) and Indian Accounting Standards (Ind ASs) are gradually merging into IFRS for financial reporting in India. Since some Indian companies already use Ind ASs for financial reporting, this research article aims to investigate the effects of the convergence of IFRSs on their financial reports.

II. IFRS Global Scenario

No national barrier can significantly impede money flight between any two nations since we live in a global village. Companies, including small businesses, look for cash wherever it is offered at the greatest rate. Lenders and investors look for investment opportunities wherever they may earn the highest returns relative to the inherent dangers. Investors and lenders want financial information that is up-to-date, trustworthy, and cross-border comparable in order to evaluate the risks and returns of their various investment options. The amount of international investment is staggering.

When businesses all over the world adhere to the same high standards, financial data is more comparable and transparent, and the cost of preparing financial statements is decreased. Capital market participants can make better decisions when standards are enforced rigorously and consistently because they obtain better-quality information. Markets can distribute money more effectively as a result, and businesses can cut their cost of capital.

A collection of standards that are accepted throughout the world for commercial entities to prepare their financial accounts is known as IFRS Standards. The items that should be recognized as assets, liabilities, income, and costs, as well as how to measure them, present them in a set of financial statements, and make related disclosures about them, are all specified by IFRS Standards.

It has been observed that both the development of IFRS Standards and their widespread implementation have continued to advance. 17 IFRS, 26 IAS, 19 IFRIC, and 8 SIC have all been implemented thus far. A rising number of jurisdictions have been found to mandate the application of IFRS Standards.

126 (84%) of the 150 jurisdictions surveyed require IFRS Standards for all or the majority of their domestic listed corporations and financial institutions, accounting for almost 98% of the world's GDP. The application of IFRS Standards for at least part of such companies is permitted or mandated in 13 more jurisdictions (9%). IFRS Standards are used by 27,000 of the 49,000 companies that are listed on the 88 biggest stock exchanges in the world. China, India, Japan, and the United States are home to 90% of the businesses that do not adhere to IFRS Standards.

III. IFRS in India

Indian Accounting Standards (Ind AS), which are based on and basically converged with IFRS Standards as produced by the IASB, have been adopted in India instead of IFRS Standards. On the basis of IFRS Standards, the ICAI creates an exposure draught of the Indian Accounting Standard. The proposed final Ind AS is approved by the ICAI Council following consideration of submissions, and the Ministry of Corporate Affairs subsequently announces its adoption.

Indian Accounting Standards (Ind AS) are IFRS Standards as issued by the Board with some modifications, such as terminology changes, option eliminations, disclosure additions, disclosures that are deemed to be in conflict with local law eliminations, addition of other disclosures, addition of presentation requirements, addition of (and, in some cases, deletion of) examples, and modifications to the principles for recognizing assets, liabilities, income, and expenses. Some of

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those changes must be made, while others are optional. Each particular Ind AS provides an Appendix that details the revisions. ⁵

For accounting periods beginning on or after April 1, 2015, all businesses, including privately held ones, may utilise Ind AS. In 2016 and 2017, Ind AS was gradually been implemented for large unlisted enterprises and public companies (except than those on the SME Exchange). Companies that don't implement Ind AS will keep using the current Accounting Standards (IGAAP). Some businesses may voluntarily offer IFRS financial statements to investors in addition to Ind AS financial accounts. ⁶

Commercial banks, insurance providers, and non-bank businesses must began preparing their financial statements using Ind AS as of 1 April 2018, which was declared by the Indian government on 18 January 2016. At present it is observed that many companies are preparing financial statements as per IGAAP as well Ind AS.

IV. Review of Literature

A comparison of balance sheets created for a few IT companies under Indian GAAP and IFRS was conducted by Kantayya & Panduranga in 2017. The study's conclusions showed that Infosys Limited and Wipro Limited's total assets, total liabilities, and total equity, which are created in accordance with Indian GAAP and IFRS, respectively, have quantitative disparities.

Achalapathi & Sireesha (2015) examined the effects of IFRS adoption on the stability, liquidity, profitability, and value of the chosen 10 Indian enterprises that have voluntarily implemented IFRS using key financial ratios. For evaluating the relative impact of IFRS adoption on the financial ratios of chosen organisations, Gray's Comparability Index is used. The implementation of IFRS has resulted in statistically significant increases in liquidity, profitability, and valuation ratios. The study found substantial variations between Indian financial measurements based on Indian GAAP and those based on IFRS.

Shukla (2015) used a sample of ten companies to research the effects of IFRS adoption on the financial activities of Indian enterprises. The analysis found that financial risk, investment activity, operating activity, and debt covenant had not significantly improved. In other words, the implementation of IFRS has not significantly altered financial activities.

(2014) Kamath and Desai looked into how the adoption of IFRS might affect financial activity. Eight Indian enterprises that have released their financial accounts using both IFRS and Indian GAAP have been chosen as a sample. The four most significant areas of financial activity, investment activity, and operating activity were the focus of the study. The findings showed that the implementation of IFRS has led to a quantifiable rise in investment and operating activity. However, there has been no corresponding improvement in financial activities.

Bhargava and Shikha (2013) examined how IFRS affected Wipro Ltd.'s financial statements and several key ratios. The consolidated financial statements prepared in accordance with GAAP and IFRS are contrasted. The disparity in total assets and liabilities is discovered to be caused by the reclassification of assets and liabilities as well as by the different approaches to revenue recognition. It is underlined that IFRS is a fair value principle-based accounting system, enhancing worldwide comparability, quality of disclosure, and financial statement comprehension.

Yadav (2012) investigated the effects of adopting IFRS, potential difficulties, and the adoption process in India. He discovered that moving from Indian GAAP to IFRS will be very challenging, but considering the benefits that this adoption will bring, a convergence with IFRS is highly advised. This move is not without challenges because a thorough implementation would necessitate a total overhaul of accounting procedures, account formats, and disclosure standards.

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In their 2011 study, Swamynathan & Sindhu, they looked at how the transition from Indian GAAP to IFRS affected financial statements. It has been noted that there are little differences between the net income position under Indian GAAP and IFRS reporting. However, equity and total liability are not the same. Convergence to IFRS has not considerably changed the return on equity, return on asset, total asset turnover, or net profit ratio, but it has dramatically changed the leverage ratio. The study came to the conclusion that Indian GAAP is a cautious approach while IFRS is a fair value oriented and balance sheet oriented accounting where there are more transparent disclosures.

V. Research Gap

From the examination, it has been discovered that numerous studies have compared IGAAP financial reporting methods with freely disclosed IFRS financial reports on the company. The comparative comparison of financial reporting procedures under IGAAP and Ind AS, or standards that have converged with IFRS, hasn't received much attention, though. Thus, a glaring research gap has been found.

VI. Following are the objectives of the study

- 1. The study makes an effort to determine how the convergence of IFRSs has affected the financial reporting of a few particular Indian enterprises.
- 2. To know the impact of principles of IGAAP and Ind AS on the annual reports of selected companies.

VII. Research Methodology

The research is empirical in nature and exploratory. Relevant data and information have been gathered for the exploratory part of the study from published literature such as books. journals, articles, and reports; from regulatory rules developed by authoritative bodies; from news and feature articles published in financial dailies, finance-related magazines, and from periodicals.

All of the IT industry's companies, including those that make up the NSE-NIFTY 50 index and HCL Technologies Ltd. (HCL), Infosys Ltd. (Infosys), Tata Consultancy Services Ltd. (TCS), Tech Mahindra Ltd. (Tech Mahindra), and Wipro Ltd. (Wipro), have been chosen as the study's sample for empirical analysis. Gray's Comparability Index (GCI) has been utilized for analysis. The published annual reports of the sample companies served as the source for the secondary data required for this project. The financial situation as of March 31, 2022, is the subject of the analysis.

VIII. Analysis and Findings

The quantitative changes in financial reporting brought on by the modifications to the accounting standard have been studied in this article. To perform this study, 4 listed Indian companies from the Nifty 50 Index's IT sector were chosen. Companies prepared their financial reports prior to the period, financial year beginning on April 1, 2022, in accordance with Indian GAAP (IGAAP). For the fiscal year beginning on April 1, 2022, all listed and unlisted Indian companies with a net value of at least Rs. 500 crore are required to prepare their financial reports in accordance with Indian Accounting Standards (Ind AS).

The financial reports for the fiscal year ending on March 31, 2022, are thus available under both IGAAP and Ind AS (the statistics as of March 31, 2022, however, must be restated under Ind AS because the fiscal year ending on March 31, 2023 requires the previous year's figures for comparison purposes). The consolidated financial statements prepared in accordance with IGAAP are contrasted with those prepared in accordance with Ind AS. The information in the profit and loss and balance sheet was entirely taken from the company's annual reports. All data relates to the time frame that ended on March 31, 2022.

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The assets, liabilities, equity, and profit components of financial statements prepared in accordance with IGAAP and Ind AS are subject to Gray's Comparability Index (GCI). Gray created this index in 1980 as a way to measure the effect of various accounting techniques using the Conservatism Index.

The following Formulae are used The Index is calculated as under

1. Total Comparability Index of Non-Current Assets (NCA) = 1 Total NCA (Ind AS)-Total NCA (IGAAP)

Total NCA (Ind AS)

2. Total Comparability Index of Current Assets (CA) = 1 Total CA (Ind AS)-Total CA (IGAAP)

Total CA (Ind AS)

Total Equity (Ind AS)-Total Equity 3. Total Comparability Index of Total Equity - 1 (IGAAP)

Total Equity (Ind AS)

4. Total Comparability Index of Total Non-Current Liabilities (NCL) =

Total NCL(Ind AS)-Total NCL (IGAAP)

Total NCL (Ind AS)

5. Total Comparability Index of Total Current Liabilities (CL) Total CL(Ind AS)-Total CL (IGAAP)

Total CL (Ind AS)

6. Total Comparability Index of Total Equity and Liabilities =

Total Equity and Liabilities(Ind AS)-Total Equity and

Liabilities(IGAAP) Total Equity and Liabilities(Ind AS)

7. Total Comparability Index of Total Income = 1 Total Income(Ind AS)-Total Income(IGAAP)

Total Income(Ind AS)

8. Total Comparability Index of Total Expenses - Total Expenses (Ind AS)-Total Expenses (IGAAP)

Total Expenses (Ind AS)

9. Total Comparability Index of Profit before tax (PBT) = PBT (Ind AS)-PBT (IGAAP) PBT (Ind AS)

The transition from Indian GAAP to Ind AS' accounting influence on the components of the statements of financial positions is examined in the study using Ind AS as a benchmark.

To evaluate the impact of Ind AS on Indian financial statements, total non-current assets, total current assets, total assets, total equities, total non-current liabilities, total current liabilities, total equity and liabilities, total income, total expenses, and profit before tax are used as the denominators. There is no quantitative change or influence (increase or decrease) scenario on Published by : Dr. Harisingh Gour University

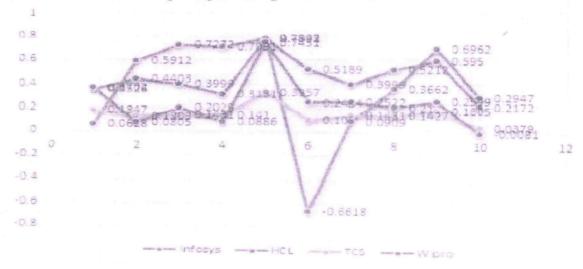
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the Indian GAAP by Ind AS, according to the neutral value of the index, which is one. A bigger index indicates that the assets, liabilities, equity, income, expenses, and profit were recorded using IGAAP rather than Ind AS.

Table 1: Company wise Gray's comparability Index (GCI) on major financial elements in

Name of Compa nies	Tot al NC A	Tot al CA	Tota I Asse ts	Equit y	Tot al NC L	Tot al CL	Tot al Equ ity and Liabiliti	Total Inco me	Total Expe nses	Profit befor etax
Infosys	0.062 8	0.59	0.7272	0.709	0.78 03	- 0.661 8	0.0909	0.366	0.6962	0.2947
HCL	0.352 6	0.44	0.3999	0.313	0.78 32	0.518	0.3999	0.521	0.5950	0.2172
TCS	0.184 7	0.13	0.1431	0.141	0.33 57	0.105	0.1431	0.142 7	0.1805	0.0379
Wipro	0.370 2	0.08 05	0.2029	0.088	0.74 51	0.248	0.2522	0.210	0.2599	0.0081

Graph Representing data from table 1



Interpretation: Comparing the GCI of the Balance sheet items it has been found that there is no significant quantitative change in total current assets and equity since the GCI score for all the companies are less than 1. It has been also found that except GCI of total non current liabilities of Infosys is highest yet all the values of the other companies are 0 which indicate there is no significant change under IGAAP and Ind AS. It is due to the interest amount in Trust Under the head "investment", which has been depicted under IGAAP reporting but not disclosed under IND AS, The total current Liability of Infosys has decreased Under Ind AS which is showing negative value under GCI from IGAAP. As well profit before tax in Wipro is showing negative value, it is because of the difference in the principles.

Another reason for difference is fair value based valuation "Property, plant and Equipment" under Ind AS. At the time of examining the difference under the head non-current liabilities it has been identified that few reasons e.g. accounting for deferred taxes under IGAAP is

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fundamentally very different compare to Ind AS, discounting on provision is not permitted in Ind AS, contingent asset is not disclosed in the financial statement in Ind AS, reclassification of items etc.

It has been witnessed from the study that there is no such quantitative change in profit and loss statements' items like total income, total expenses and profit before tax under both IGAAP and Ind AS since the GCI for all the items for all the companies are very close to zero.

Conclusion: There is no such significant quantitative change in profit and Loss statements IX. items like total income, total expenses, and profit before tax due to change in accounting reporting practices from IGAAP based reporting to converge with IFRS i.e Ind AS based reporting. It is found from the study that there is no significant quantitative change in total current assets, total non-current assets and equity from IGAAP based reporting to Ind AS based reporting except few situation due to some reclassification provisions. Accounting treatment for taxes, discounting on provision, contingent asset may be the reason for the difference under the head non-current liabilities from IGAAP reporting to Ind AS. It is found that the variation in total assets and liabilities is because of the reclassification among equity and liability and also because of the difference in the concept of revenue recognition.

References:

1. K.V. Achalapathi and P. Bhanusireesha (2015). Osmania Journal of International Business Studies, 10: Impact of IFRS Adoption on Financial Statements of Selected Indian Companies (1).

2. Shikha and Bhargava, V. (2013). The International Journal of Management, 2 The Effect of International Financial Reporting Standards on Financial Statements and

Ratios (2).

3. T. P. Ghosh (2016). Indian Accounting Standards Illustrated Guide, Taxmann Publications, New Delhi.

4. Jain, P. (2011). Opportunities and Challenges of IFRS Implementation in India, World Journal of Social Sciences, 1(1), 125.

5. R. Kamath and R. Desai (2014). IUP Journal of Accounting Research & Audit Practices, 13(3), 25-36. The Impact of IFRS Adoption on the Financial Activities of Companies in India: An Empirical Study

6. R. Kantayya and V. Panduranga (2017). Management Today, An International Journal of Management Studies, 7(2), 75-85. A Comparative Study of Balance Sheets Prepared under Indian GAAP and IFRS with Special Reference to Select IT Companies.

A. J. Nandakumar, K. Mehta, T. P. Ghosh, and Y. A. Alkafaji (2010). International Financial Reporting Standards: Understanding the Basics, Hoboken, NJ: John

Wiley & Sons, Inc.

7. P. Pacier (2017). The Global Financial Reporting Language: A Guide to IFRS Standards, IFRS Foundation, United Kingdom.

- 8. S. Shobana and D. Sindhu (2011). International Journal of Multidisciplinary Research, 1(7), 317-337. Financial Statement Effects on Convergence to IFRS - A Case Study in India
- 9. Suchita and Shukla (2015). International Conference on Multidisciplinary Research & Practice, 3(1), 323. An Empirical Study of the Impact of Adoption of IFRS on the Financial Activities of Companies in India

10. Rules for Corporations (Indian Accounting Standards), 2015. ICAL Concept Paper on India's Convergence with IFRS

11. PWC. Conceptual paper comparing and contrasting IFRS, US GAAP, IND AS, and Indian GAAP.

URLs:

ISSN: 0974-0066

www.ifrs.org

www.mca.gov.in

www.infosys.com

www.wipro.com

www.hcltech.com

www.tcs.com

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	IGA	IN	GCI	IGA	IN	GCI		IN	GCI		IN	GCI	
	AP	AS		AP	AS		AP	AS		AP	AS	GCI	
Total	4695	5070	1	2653	409	0.35	2707	3320	0.18		4543	0.37	
NCA	0	0	28	6	92	26	1	4	47	06	02	0.37	
Total CA	2746	6718	0.59	2688	480	0.44	9419	1083				0.08	
PTO 4	1	5	12	7	41	03	2	10	03	26	52	0.00	
Total	3215	1178	0.72	5342	890	0.39	1212	1415	0.14		1075	0.20	
Assets	6	85	72	3	33	99	63	14	31	32	054	29	
Total	2203	7573	0.70	4259	620	0.31	7717	8984	-	-	6545	0.08	
equity	0	6	91	1	06	31	3	6	10	11	45	86	
Total	1012	4214		1083	270	1	4409			2603	4205	00	
Liability	6	9		2	27		0	8		21	09		
Total	1877	8546	0.78	1789	825	0.78	6189		0.33	2858	1121	0.74	
NCL			03		2	32		1	57	4	80	51	
Total CL	9938	3360	-	9043	187	0.51	3790	4235	0.10	2317	3083	0.24	
	7	3	0.66		75	89	1	1	50	37	29	84	
		-	18					1	1 30	37	29	04	
Total	1071	1178	0.09	5342	890	0.39	1212	1415	0.14	8038	1075	0.25	
Equity	64	85	09	3	33	99	63	14	31	28	054	5	
and										20	034	22	
Liability													
Total	7854	1239	0.36	4151	867	0.52	1678	1957	0.14	6428	9127	0.21	
Income	1	36	62	8	18	12	27	72	27	05	8137	0.21	
Total	2849	9382	0.69	2825	697	0.59	1181	1440	0.18	-	32	00	
Expenses	5	6	62	0	66	50	04	85		4901	6623	0.25	
Profit	2123	3011	0.29	1326	169	0.21	4972	-	05	63	81	99	
before	5	0	47	8	51	72	3	5168	0.03	1526	1514	-	
Tax					- 1	1 day	3	7	79	42	08	0.00	
Profit for	(48)	2214		1087	135		2010	2044		,		81	
the year		6		4	23		3818 7	3844		1213	1224		
Total	2118	1823		277	757		(250			53	34		
other	7	47			151		(250	(95)		(148	1145		
comprehe					1)			7)	2	- 1	
nsive		1											
Income				1		1 1							
Total	2135	2232		1115	142		3793	2925					
comprehe	8	8		1	80		7	3835		1198	1338		
isive				-	00		1	4		66	86		
ncome				100								-	
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(Source: Compiled from annual reports of respective companies)

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