



Impact of IFRS Adoptiation Compared with IGAAP on Accounting Ratio towards the End of the Recession Period

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Abstract

The main goal of this research is to analyze the effects of IFRS adoption on key financial factors by Indian companies at the end of the recession. The study explores the influence of IFRS. The report uses an creative approach called the 'same year-long project' approach for testing (2011-12) to explain this effect. Gray Index was used to assess the effect of IFRS adoption on the financial ratios of six Indian firms while the Paired sample t test was used to test the statistical importance of the mean difference between the IFRS ratios and the IGAAP. The research key results are that IFRS adoption has had a negative impact on most of the Indian companies ' financial ratios, but the effect was not statistically important and it was found that there is no gap between IGAAP and IFRs by way of a t test.

Key Words: IFRS, IGAAP, t test, Recession, Same Firm-Year

1 .Introduction

The Indian economy has endured a turbulent phase since the crisis of 2008-09, just like so many other countries worldwide. The inflation rate has been 8.98%, but many sectors have endured significant consequences. The average inflation rate of the year 2011-12 was 9.30 per cent, which shows India is recovering from recession during that year. Against this, if we look at it in a different direction, rising inflation is having an unfavorable impact. In fact, in 2011-12 India is now recovering from recession.

The Indian GAAP typically assesses capital assets at historical expenditures, i.e. the assets are much smaller than their actual replacement costs, which results in undervalued depreciation costs. In the other hand, commodity prices rise throughout inflation but only purchasing expenses are included in the company's sales account under the expense principle. Liability, special cash substitute and statements lose their buying power value as well. Benefit and ROI are excessive, but prices are not unreasonable. Both of these factors are taken into account in IFRS adoption by the Indian Company as well as in IAS-29, which is planned at the end of the previous reporting cycle as a way of understanding the higher inflation in the economy. The amount of the price index or the buying power of the reporting currency is then determined by regular firms.

From 1 April 2012, the Core Group of the Indian Minister of Corporate Affairs (MCA) proposed that IFRS converge. To date, the IFRS should be deemed willingly by an Indian corporation with global aspires.

1.1 Concept of IFRS

IFRS was developed as a popular global business vocabulary to make company disclosures accessible and equivalent across international borders. IFRS (International Financial Reporting Standards).

It consists of

- International Financial Reporting Standards (IFRSs)—developed by the IASB;
- International Accounting Standards (IASs)—adopted by the IASB;
- Interpretations originated from the International Financial Reporting Interpretations Committee (IFRICs); and
- Standing Interpretations Committee (SICs).

1.2 Road map for IFRS adaptation in India

In India ICAI recommended a staggered IFRS strategy for 2011. They suggested the guide to this case that time. [Enclosure – A]

However, considering some legal issues and some recent improvements to the international standard that will soon occur, IFRS can not be adopted in India until 2014. As a CA institute delegate, "Because new standards in important realms such as leasing and financial instruments should be established by the International Accounting Standards Council, we do not want to face hardships for our business. We have therefore recommended that IFRS be implemented on 1 April 2015 "(The Hindu, Business Side, 2013).

They suggested a new road map for introducing IFRS in India, according to the Ministry of Corporate Affairs. [Annex-B].

In this article I tried to explore the effect that IFRS would have on Indian businesses, who already voluntarily adopted IFRS during the recession and who will soon be adopting IFRS.

2.Review of Literature:

In India, IFRS implementation remains a very small field of study. Because it is still not needed by ICAI in India. But ICAI's and the Ministry of Corporate Affairs' recent actions indicate that India Briefing (2014) will soon be introduced in India. 'All provisions and guidelines of the current Company Act will be notified within a months by the Department of Corporate affairs, which will effectively begin the process of converging India's accounting practises to International Financial Reporting Standards (IFRS). The ministry says, 'Let the Company Act be informed and we will then take over the convergence of IAS-IFRS," said K Raghu, president of the Indian Institute of Chartered Company Accountants, the responsible regulator who wrote to the corporate ministry and issued the new route map for the introduction of IFRS from next April.

In this article I have sought to see the impact of international accounting principles on Indian businesses as they willingly implement them at the end of recession. My analysis of related literature show that IFS

implementation or execution does not have major consequences on certain countries and has positive effects on some countries.

3. Objectives:

My literature review found that where a nation has changed its accounting language from a local standard to IFRS. The aims of this thesis are therefore: Based on this concept:

1. To see whether or not IFRS adaptation has a big effect on the leverage ratio.
2. To see whether or not IFRS adaptation greatly changes the activity-based ratio.
3. If IFRS adaptation has or may not have a substantial effect on the liquidity ratio.
4. Whether or not IFRS is more conservative in contrast to IGAAP through the Gray Comparability Index.

4. Methodology:

This section illustrates the test sample in accordance with the data selection, variable calculation and statistical analysis process.

4.1 Data sources and sample size:

Financial ratios are widely used for accounting procedures, in particular for decision-making. In addition to this ratios, the company's financial status and results are also beneficial material. Six Indian businesses that voluntarily implemented IFRS before 2014 were included in this study. According to the previous discussion, ICAI given notice and recommended the road map for the introduction of IFRS in India. However, in India it is still not obligatory to enforce IFRS. For their own interest, certain businesses [see Annex C] follow IFRS. The estimates measured in this paper are based on estimates from financial statement made up of Indian GAAP and IFRS (2011-12) in compliance with two accounting principles. The original year for the adoption of IFRS, which is 2011-12, was collectively reported by ICAI and Corporate Affairs, with the exception of Dobur. IFRS scientific improvement is still not made compulsory;

Dabur India Ltd has published its financial statements accordingly until 2010. I shall therefore deem the 2010-11 financial statement for Dabur India Ltd.

4.2 Variability and hypothesis:

The compilation of the factors from the balance sheet and income statement of the organisation was gathered in this analysis. The chosen variables help measure the ratios of profitability, market and liquidity in relation to the financial structure of the firm. In this study, ten financial ratios were taken into consideration. For each ratio, descriptive statistics to explain the characteristics of the collected data are presented. It encompasses core pattern calculation, uncertainty calculation and dispersion measurement.

This hypothesis was made to decide whether there were any variations in the planning of the financial statement between the IFRS and the Indian GAAP.

H01: The leverage rate measured on the local GAAP-based and IFRS-based argument has no statistically meaningful difference.

H02: The activity-based ratio measured on the basis of local GAA PA and IFRS-based financial statements is not statistically relevant.

H03: The liquidity ratio measured on the local GAAP-based and IFRS-based financial statements does not vary statistically.

For the hypothesis of this analysis, a paired sample t- test was used. The judgement rule is to deny the nullifier presumption if the measured value drop below the critical value of t or if the p-value is below 0,025 (or is less than 0,025). I have also found the Gray Comparability Index (conservatism index)[s. J Gray-1980] to assess if IFRS adversely or positively impacts the financial statements.

$$\text{IFRS} = 1 - (\text{IFRS number} - \text{Local GAAP number}) / \text{Local IFRS number}.$$

If the Index Median is below +1.0, it means that IFRS is more cautious, and that the Index value is less than +1.0 indicates the reverse.

5. Results and Findings

LEVERAGE RATIOS

INSERT TABLE - I

H₀₁: The leverage rate measured on the local GAAP-based and IFRS-based argument has no statistically meaningful difference.

The t-test of paired sample for the statistical significance of the difference of means provide the following t value and p value; Equity to Assets ratio (p value-0.3289, t value- 1.110), Current liability to Equity ratio (p value-0.3927, t value-0.956), Debt to equity (p value- 0.9878, t value- 0.0216), Debt to total Assets (p value- 0.5737, t value-0.6117). The critical value of two tailed t with the degree of freedom 5* is 2.5764 and p is 0.025. The calculated values show that the t value and the p value are less than 2.5764 and more than 0.025 respectively for all the ratio. Thus, null hypothesis is accepted and it can be concluded that IFRS adaptation does not significantly affect the leverage ratio of Indian Companies towards the end of the recession. Irene Jindrichovska. I&kubickova (2014) found the same things that IFRS does not significantly impact on key financial ratios of the Czech Republic Companies.

ACTIVITY BASE RATIOS

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H₀₂: The activity-based ratio measured on the basis of local GAA PA and IFRS-based financial statements is not statistically relevant.

For Activity based ratio, the t test show the following t and p value: Assets turnover ratio (p value- 0.35558, t value - -1.016) , Fixed Assets Turnover (p value – 0.4324 , t value – - 0.853), Return on Assets (p value – 0.2342 , t value – 1.352) , Receivable Turnover (p value – 0.255 , t

Value - -1.285), Net profit margin (p value – 0.250, t value – 1.299), Return on Equity (p value – 0.187133 , t value – 1.527) . Since the calculated t is less than critical value (2.57) and the p value is more than 0.025

for all the ratios we accept the null hypothesis. This leads to the conclusion that IFRS adaptation does not

significantly affect the Activity based ratio of Indian Firm towards the end of the recession. YhlasSarbetor (2013) disclosed more or less same result for activity base ratios when he carried a study on impact of IFRS ratio in U.K market.

LIQUIDITY RATIO

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H₀₃: The liquidity ratio measured on the local GAAP-based and IFRS-based financial statements does not vary statistically.

For Liquidity ratio, the t test shows the following t and p value: Current ratio (P value=0.6694, t value =-0.4599), Quick ratio (P value=0.6, t value=0.562). Since the calculated t is less than critical value (2.57) and the p value is more than 0.025 for all the ratios we accept the null hypothesis. This leads to the conclusion that IFRS adaptation does not significantly affect the liquidity ratio of Indian Firm towards the end of the recession.

VII. CONCLUSIONS

These results led to the fact that IFRS adoption had no substantial impact on Indian firms' financial ratios at the end of the recession. It is not entirely sufficient to equate IFRS-based ratios with IGAAP-based ratios, so it is recommended that prospective analysts should take a precautionary stance for consideration of the financial ratios during their transition to IFRS.

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APPENDIX & TABLES:

APPENDIX-A: Earlier Road map for IFRS adaptation in India

Phase	Date	Coverage
Phase 1	Opening Balance sheet as of 1 April 2011*	Companies that are part of NSE 50 (Nifty 50). Companies that are part of BSE Sensex (BSE 50). Companies whose shares or other securities are listed on a stock exchange outside India. Companies, listed or not, having net worth exceeding INR1,000 crore.
Phase 2	Opening Balance sheet as of 1 April 2013	Companies not listed in phase 1 and having net worth exceeding INR500 crore.
Phase 3	Opening Balance sheet as of 1 April 2013	Listed companies not covered in the earlier phases

Source: PWC, 2010

APPENDIX-B: Proposed new road map for implementing IFRS

Phase	Date	Coverage
Phase 1	Opening Balance sheet as of 1 April 2015	net worth of over Rs 1,000 crore
Phase 2	Opening Balance sheet as of 1 April 2016	net worth of Rs 500-1,000 crore
Phase 3	Opening Balance sheet as of 1 April 2017	all other companies (including listed ones)

Source: The Hindu, Business line, 2013

APPENDIX-C: List of Companies, adopt IFRS**TABLE - I**

1	WIPRO
2	ROLTA INDIA
3	INFOSYS
4	GREAT EASTERN ENERGY CORPORATION
5	DABUR INDIA LTD
6	NOIDA TOLL BRIDGE LTD
7	Dr reddy

LEVERAGE RATIO**Descriptive Statistics of Leverage Ratios, Paired sample t test and their Gray Comparability Index**

COMPANY	RATIO(I GAAP)	RATIO(IFRS)	INDEX
Equity to Assets Ratio			
1	0.399462817	0.418594589	0.954295224
2	0.364629416	0.38827461	0.939101879
3	0.202876634	0.142487835	1.423817231
4	0.277222616	0.280848645	0.987089028
5	0.983782166	0.513227471	1.91685407
6	0.143076798	0.186388736	0.767625778
TOTAL	2.371050447	1.929821885	
Mean	0.395175075	0.321636981	
Median	0.320926016	0.334561627	0.970692126
Standard Deviation	0.303925893	0.143246962	
Skewness	1.914149995	-0.005249772	
Kurtosis	4.057073143	-1.556967793	
Maximum	0.983782166	0.513227471	
Minimum	0.143076798	0.142487835	
Paired sample t-test	p value =0.328955324,t value= 1.110		
Current Liability To Equity Ratio			
1	0.807834896	0.647127554	1.248339514
2	0.426270531	0.39993567	1.065847745
3	0.830852995	0.872495688	0.952271749
4	0.417371195	0.415668677	1.004095853
5	0.828423905	0.54759124	1.512850909
6	0.72662388	0.680236875	1.06819243
TOTAL	4.037377402	3.563055704	1.248339514
Mean	0.672896234	0.593842617	
Median	0.767229388	0.597359397	0.967020087
Standard Deviation	0.198167394	0.178569781	
Skewness	-0.823798633	0.494551897	
Kurtosis	-1.933198362	-0.385146649	
Maximum	0.830852995	0.872495688	
Minimum	0.417371195	0.39993567	

Paired sample t-test	p value =0.392769,t value=0.956		
Debt To Equity Ratio			
1	0.234803915	0.082202096	2.856422484
2	0.946694938	1.072514534	0.882687281
3	0.000705716	0.003345499	0.210945018
4	1.059261464	1.066454618	0.993255077
5	0.191684752	0.006664038	28.76405644
6	0.160977607	0.204831377	0.785903066
TOTAL	2.594128392	2.436012161	
Mean	0.432354732	0.406002027	
Median	0.213244333	0.143516737	0.937971179
Skewness	0.854744425	0.885994228	
Kurtosis	-1.668034141	-1.893092845	
Maximum	1.059261464	1.072514534	
Minimum	0.000705716	0.003345499	
Paired sample t-test	p value =0.983785684,t value=0.0216		
Debt To Assets Ratio			
1	0.189682796	0.053195241	3.565785055
2	0.403548154	0.428936818	0.940810248
3	0.000586347	0.002918933	0.200876981
4	0.442105223	0.44329178	0.997323304
5	0.158796231	0.003649169	43.51572891
6	0.116970174	0.139333856	0.839495706
TOTAL	1.311688924	1.071325797	
Mean	0.224401226	0.203626111	
Median	0.174239513	0.096264549	0.969066776
Standard Deviation	0.171132506	0.205655081	
Skewness	0.349270262	0.73990452	
Kurtosis	-1.316869249	-1.953609137	
Maximum	0.442105223	0.44329178	
Minimum	0.000586347	0.002918933	
Paired sample t-test	P value=0.573752201,t value= 0.6117		

Researcher's computation using MS-Excel Version 2007

TABLE - II

Descriptive Statistics of Activity Base Ratios, Paired sample t test and their Gray Comparability Index

COMPANY	RATIO(I GAAP)	RATIO(IFRS)	INDEX
Assets Turnover Ratio			
1	0.748551944	1.172137075	0.638621506
2	2.53914004	2.436108918	1.042293315
3	1.082580177	1.077637975	1.004586143
4	0.159144634	7.495968075	0.021230698
5	0.272563125	0.669602991	0.407051832
6	6.164631236	5.601286081	1.100574251
TOTAL	10.96661116	18.45274112	
Mean	1.827768526	3.075456853	
Median	0.915566061	1.804122997	0.821603825
Standard Deviation	2.290738363	2.818919573	2.290738363

Skewness	1.793197474	0.983565403	1.793197474
Kurtosis	3.137500303	-0.870358895	3.137500303
Maximum	6.164631236	7.495968075	6.164631236
Minimum	0.159144634	0.669602991	0.159144634
Paired sample t-test	p value =0.355813,t value= -1.016		
Fixed Assets Turnover			
1	0.443094241	0.436896962	1.014184759
2	2.087518834	1.968435764	1.060496295
3	0.222168485	0.227623677	0.976034162
4	0.777691476	7.082683442	0.109801812
5	0.372159996	0.277776302	1.339783103
6	5.702863702	5.141306698	1.109224568
TOTAL	9.605496734	15.13472285	
Mean	1.600916122	2.522453808	
Median	0.610392858	1.202666363	1.037340527
Standard Deviation	2.120933433	2.919431128	
Skewness	1.966779812	0.966435057	
Kurtosis	3.82763784	-0.934374316	
Maximum	5.702863702	7.082683442	
Minimum	0.222168485	0.227623677	
Paired sample t-test	p value =0.432497153,t value= -0.853		
Return On Assets			
1	0.014222079	0.187781167	0.075737513
2	0.060341005	-0.01261239	-4.784264027
3	0.309814324	0.319755871	0.968908945
4	1.361861653	-0.015459919	-88.08983199
5	3.611157361	0.215732853	16.73902383
6	0.089077152	0.100689421	0.8846724
TOTAL	5.446473573	0.795887003	
Mean	0.907745596	0.132647834	
Median	0.199445738	0.144235294	0.480204957
Standard Deviation	1.418370559	0.133424137	
Skewness	1.867954928	0.119369022	
Kurtosis	3.294801277	-1.368480825	
Maximum	3.611157361	0.319755871	
Minimum	0.014222079	-0.015459919	
Paired sample t-test	p value =0.234247476,t value =1.352		
Net Profit Margin			
1	0.010645965	0.187514618	0.056774051
2	0.153214261	-0.030725156	-4.986606411
3	0.335398845	0.344581069	0.9733525
4	0.216732974	-0.115887058	-1.870208609
5	0.984268334	0.144455363	6.813650324
6	0.549127794	0.563990254	0.973647665
TOTAL	2.249388172	1.093929091	
Mean	0.374898029	0.182321515	
Median	0.276065909	0.165984991	0.515063275
Standard Deviation	0.349310123	0.248103704	
Skewness	1.184785047	0.464115292	

Kurtosis	1.247129007	-0.359753344	
Maximum	0.984268334	0.563990254	
Minimum	0.010645965	-0.115887058	
Paired sample t-test	P value=0.250457935,t value=1.299		
Receivable Turnover			
1	4.626096259	1.41340867	3.27300685
2	3.09615672	3.036080754	1.019787341
3	6.121946706	6.05017301	1.011863082
4	2.976075195	13.44472807	0.221356295
5	11.65386671	28.27123311	0.412216427
6	99.64775825	100.2087875	0.994401397
TOTAL	128.1218998	152.4244111	
Mean	21.35364997	25.40406852	
Median	5.374021483	9.747450541	0.983132239
Standard Deviation	38.48880445	37.94059659	
Skewness	2.412553422	2.1128931	
Kurtosis	5.852860425	4.578650589	
Maximum	99.64775825	100.2087875	
Minimum	2.976075195	1.41340867	
Paired sample t-test	p value =0.255007299,t value= -1.285		
Return On Equity			
1	0.01760518	0.290176436	0.060671
2	0.141555656	-0.031536047	-4.48869
3	0.372887052	0.366484185	1.017471
4	3.26295075	-0.000719373	-4535.82
5	4.359069479	0.393966953	11.06456
6	0.122590455	0.148021116	0.828196
TOTAL	8.276658572	1.166393269	
Mean	1.379443095	0.194398878	
Median	0.257221354	0.219098776	0.444433
Standard Deviation	1.918623252	0.184327279	
Skewness	1.091985505	-0.246140387	
Kurtosis	-1.047141713	-2.243625817	
Maximum	4.359069479	0.393966953	
Minimum	0.01760518	-0.031536047	
Paired sample t-test	p value=0.187133 ,t value=1.527		

Source: Researcher's computation using MS-Excel Version 20

TABLE III**LIQUIDITY RATIO****Descriptive Statistics of Liquidity Ratios, Paired sample t test and their Gray Comparability Index**

COMPANY	RATIO(I GAAP)	RATIO(IFRS)	INDEX
Current Ratio			
1	2.981231215	2.718082252	1.096814202
2	6.433732321	1.236279328	5.204108953
3	4.715090277	6.346202266	0.742978254
4	0.476508223	0.46967815	1.014542029

5	1.201625698	2.082141513	0.577110485
6	0.720505687	0.64769535	1.112414482
TOTAL	2.981231215	2.718082252	
Mean	16.52869342	13.50007886	
Median	2.754782237	2.250013143	1.0556
Standard Deviation	2.091428456	1.659210421	
Skewness	2.415362054	2.181316398	
Kurtosis	0.709967549	1.677277673	
Maximum	-1.15262753	3.003079521	
Minimum	6.433732321	6.346202266	
Paired sample t-test	P value=0.6694, t value =0.4599		
Quick Ratio			
1	2.862540354	2.612117116	1.095869835
2	6.433732321	1.236279328	5.204108953
3	4.715090277	6.346202266	0.742978254
4	0.476508223	0.46967815	1.014542029
5	1.071395971	1.413749843	0.757839851
6	0.718040025	0.645482695	1.112407862
TOTAL	16.27730717	12.7235094	
Mean	2.712884528	2.1205849	
Median	1.966968162	1.325014586	1.055205932
Standard Deviation	2.431098569	2.203655045	
Skewness	0.751602188	1.873165076	
Kurtosis	-1.122746167	3.602549025	
Maximum	6.433732321	6.346202266	
Minimum	0.476508223	0.46967815	
Paired sample t-test	P value=0.6 ,t value=0.562		

Source: Researcher's computation using MS-Excel Version 2007