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Impact of transition to International Financial Reporting Standards: Empirical Evidence from India

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Abstract

The International Financial Reporting Standards (IFRS) are a set of accounting standards that countries can choose to adopt in full or in part. There are 143 countries around the world that have adopted IFRS, in some form. This study analyses the impact of the transition, from generally accepted accounting principles of Indian jurisdiction (IGAAP) to international financial reporting standards (IFRS), on NIFTY50 companies. The impact of IFRS on the financial variables of the NIFTY50 companies was studied with the application of Grey Comparability Index and Wilcoxon Signed Rank Test. It was concluded that the financial ratios of sample firms got significantly affected, as a result of the IFRS adoption in India.

1. Introduction to IFRS

Globalization has changed, the closed economy into an open economy, across the globe. Now a days, national economy is rapidly getting integrated with international market, by spreading their trade and business to outside their own country (Agca, A & Aktas). Foreign Direct Investments, Foreign Institutional Investors, Merger and Acquisition, Franchising and Outsourcing of Business are some examples of international transaction at the global level (DeFond, M. (2018)). To integrate business of different countries in the world market, it was necessary for the business to adopt a common set of accounting standard, since accounting is the language of business (Hung, M. (2000)). Therefore, international professionals, from different countries, established the International Accounting Standard Committee in 1973 (Sandhya Bhatia & Arindam Tripathy (2018)). The main objective of the committee was to develop and issue International Accounting Standards. The Ministry of Corporate Affairs so far notified 35 Accounting Standards. In 2001, International Accounting Standard Committee was replaced by the International Accounting Standard Board. Now, the Board issues the International Financial Reporting Standard (IFRS), that was formerly known as International Accounting Standards (Abdulkadir Madawaki 2012). The use of common set of accounting standards throughout the world, provides an easy way of comparability and transparency of financial information. It also reduces the cost of preparing financial statements (Bhatia, S & Tripathy, A. 2018). A constant use of accounting standards always provides higher quality information and as a result investors across the globe, can make better investment decision and avail more funds in the market, at reasonable cost. In short the company can reduce its overall cost of capital.

The introduction of International Financial Reporting Standards (IFRS), for listed companies in many countries around the world, is one of the most significant regulatory changes in accounting history (Holger Daske et al 2008). Over 100 countries have recently started adopting IFRS reporting or decided to use these standards. Even in U.S, the Securities and Exchange Commission (SEC) allowed U.S. firms, to prepare their financial statements, in accordance with IFRS (Aburous, D. 2018). Prior literature clearly demonstrates the roles of underlying accounting standards, in creating and establishing the value of financial statements in, providing the quality assurance to the various external stakeholders such as investors and lenders (Barth et al., 2001; Jonas and Blanchet, 2000; Hung, 2000; Papadatos and Makri, 2013). In addition, the internal stakeholders, mainly managers also get affected by the economic consequences because in a way accounting information

forms the basis for their employment contracts (**Armstrong et al., 2010; Beyer et al., 2010; Graham et al., 2005**).

IFRS in India and Its Applicability

The year 2016 marked the dawn of a new era, in Indian financial reporting, as the convergence with International Financial Reporting Standards (IFRS) had become a reality (**Sarada R Krishnan 2018**). The adoption of Indian Accounting Standards (Ind AS) by the largest Indian companies and declaration of the first quarter results for financial year (FY) 2016-17, created significant impact on the accounting practices. Ind AS comprises of 41 accounting standards that are largely converged with IFRS and it was announced by the Ministry of Corporate Affairs in India (**Bhatia, S & Tripathy, A. 2018**).

Indian banks were required to comply with Ind AS from April 2018. But some banks were still not prepared to implement Ind-AS. Hence, the implementation of Ind AS by banks, was postponed by one year for the preparedness of the banks and the amendments to be made in the schedule of the Banking Regulation Act (**Economic Times April 06, 2018**).

The Council of the ICAI has finalized the roadmap and as per the roadmap, the first set of accounting standards i.e. converged accounting standards (Ind AS) was applied to the specified class of companies (**Table-1**), for preparing its first consolidated financial statements, using Indian Accounting Standards (Ind AS) for the accounting period beginning on or after April 1, 2016, with comparison for the year ending 31st March 2016 or thereafter. (**Indian Accounting Standards (Ind AS): An Overview, Revised 2018**).

Table-1 Roadmap for Implementation of Ind AS

Phase I (FY 2016-17 and onwards)
1. Companies (listed or unlisted), having net worth of Rs. 500 crore* or more; and 2. Holding, subsidiary, joint venture or associate companies, covered by the above point. *as on 31st March, 2014 or the first audited financial statements for accounting period which ends after that date (i.e. March 31, 2014)
Phase II (FY 2017-18 and onwards)
1. Companies, whose equity or debt securities are listed or are in the process of being listed on any stock exchange in India or outside India; 2. Unlisted companies, having net worth of Rs. 250 crore* or more; and 3. Holding, subsidiary, joint venture or associate companies, covered in point (1) and (2) above. *as on 31st March, 2014 or the first audited financial statements for accounting period which ends after that date (i.e. March 31, 2014)

Source: Indian Accounting Standards (Ind AS): An Overview (Revised 2018).

2. Literature Review

There are several studies, analysing the process of transition to IFRS in India. Some recent articles have examined the impact of adopting IFRS by Indian firms. **Tarapada Ghosh (2019)** studied whether profit and equity were significantly impacted because of IFRS convergence and identified that the influence of OCI, on profits of the non-financial sector companies in India was not significant because of IFRS convergence. **Sarada R Krishnan (2018)** found that the pursuit of full IFRS convergence was strongly favoured by transnational forces, that were invariably challenged in the Indian context. **Bhatia, S. and Tripathy, A. (2018)** examined the performance efficiencies of IT firms and their impact on transition, from generally accepted accounting principles to International Financial Reporting Standards (IFRS), using data envelopment analysis. **Dina Aburous (2018)** found that the technical dependency of corporate accounting, on audit, blurs the boundaries between the two fields. **DeFond, M., et al. (2018)** examined the effectiveness of China's IFRS adoption, from the perspective of an important set of financial report users and foreign institutional investors. **Ramona**

Neag (2014) found that the application of IFRS had a limited effect on net income and shareholders' equity, for all 67 companies under the study. **Zayyad et al. (2014)**, using One-Sample, Kolmogorov-Smirnov Test and Mann-Whitney U test examined the effect of IFRS adoption on the performance evaluation of a firm by using a set of selected financial ratios. **Ibiamke and Briggs (2014)** found that IFRS adoption caused negative impact on financial ratios on the Nigerian listed companies. **Anwer S. Ahmed (2013)** studied the effects of mandatory adoption of IFRS, on three groups of accounting quality metrics, namely, income smoothing, reporting aggressiveness, and earnings management to meet or beat a target. **Serkan Terzi et al. (2013)** observed statistically significant differences in book value/market value ratio analysis, under local GAAP and IFRS. **Zeghal et al. (2011)** studied the effects of IFRS adoption, on earnings management of French companies and found that mandatory IFRS adoption caused a reduction in the earnings management level. **Lantto and Sahlström (2009)** analysed the transition effects of IFRS, on financial reporting in Finland, with the use of financial ratios. The study revealed that selected financial ratios were significantly affected, as a result of the IFRS adoption. **Agca and Aktas (2007)** studied the results of the financial ratios, gathered from the financial statements, prepared in accordance with IFRS and the financial statements prepared according to the local regulations. It is found that some selected variables were statistically significant. **Jermakowicz et al. (2007)** examined the value relevance of IFRS transition effects, on DAX-30 listed German companies. It is found that IFRS transition improved the comparability of the financial statements. **Callao et al. (2007)** examined the effect of IFRS on the comparability and relevance of financial reporting in Spain, by using IBEX-35 companies. It was pointed out that comparability of accounts worsened when IFRS and local GAAP were used together in a country. **Jermakowicz (2004)** studied the effects of IFRS adoption on BEL-20 companies in Belgium, by using primary data. It was concluded that IFRS transition had significant impact on the selected companies. **Arce and Mora (2002)** investigated the value relevance of accounting statements, using alternative accounting measures, under different accounting systems in Europe, and found that the value relevance of accounting statements, prepared by using IFRS was high.

NEED FOR THE STUDY

The transition to IFRS is being done in different phases and this study would be helpful especially for Phase II companies, including banks, NBFC's and insurance companies, as they can benefit from the transition experience and journey of Phase 1 companies. This study provides useful insights into how Ind AS adoption had impacted the NIFTY50 firms in India during the first phase of transition.

OBJECTIVES OF THE STUDY

The main objective of this study was to identify the impact of mandatory transition to International Financial Reporting Standards on their financial performance, in India with effect from 1st April 2016. This study analysed the impact of adopting International Financial Reporting Standards (IFRS), on its financial performance, by comparing its financial reports prepared under IFRS and IGAAP, during the same year of convergence i.e. 1st April 2016 by using the key financial ratios of selected NIFTY50 companies in India.

HYPOTHESES OF THE STUDY

The following null hypotheses were tested in the study.

NH01: There is no normality in selected financial variables during IGAAP and IFRS

NH02: There lies no significant prudence in the selected financial variables after converging to IFRS

NH03: There is no statistically significant difference between the selected financial variables IGAAP and IFRS.

NH04: There is no significant difference in the Book to Market ratio prepared under IGAAP and IFRS.

3. METHODOLOGY OF THE STUDY

In order to study the impact of transition of top NIFTY50 listed companies, the largest and most liquid Indian securities with net worth of above Rs500 crores and those which had converged with IFRS, were selected for this study. There were thirty nine companies, which fulfilled these criteria. Hence, all the thirty nine companies were selected for this study. Eleven banks, including

financial institutions, were excluded from the sample as they were not part of first time convergence of IFRS in India (Amrutha, P. et al., (2019)). The financial data relating to thirty nine sample companies were taken from the Prowess Database, websites of BSE India and respective company’s websites. The other relevant data for this study were also collected from journal, newspapers, e-IFRS and websites. The study was confined to the year in which the IFRS convergence happened in India i.e. 1st April 2016. So the study compared the financial reports and ratios, prepared during the first year of convergence of IFRS with IGAAP financial report, for the period 1st April 2016.

As pointed out earlier, the main aim of this study was to examine the financial performance of sample firms with respect to first time convergence with IFRS. The financial performance was studied in terms of liquidity, profitability and leverage ratios of the sample NIFTY companies. These financial ratios were identified from previous research studies (Serkan et al., (2013), Callao et al., (2007) & Amrutha Pavithran et al., (2018)). The list of the sample companies and selected variables used in this study, is given in Table-1 and Table-2.

Industry	No of Companies
Automobile	7
Energy	7
Infrastructure	5
IT	4
Metals	6
Packed Foods	2
Personal Care	2
Pharmaceuticals	3
Total	39

Source: Collected from CMIE Prowess Database

**Table - 2
 List of Variables (Financial Ratios) Used in the Study**

Sl. No	Type of Ratios	Ratios
1	Liquidity Ratios	Current Ratio (CR)
2		Quick Ratio (QR)
3	Profitability Ratios	Gross Profit Ratio (GPR)
4		Asset Turnover Ratio (ATR)
5		Return on Assets (ROA)
6		Return on Equity (ROE)
7	Leverage Ratios	Debt Equity Ratio (DER)
8		Debt to Worth Ratio (DW)
9		Equity Ratio (ER)

For the purpose of testing the hypotheses of this study, Gray’s index of conservatism (to find out how prudent are the accounting practices followed by a country), Descriptive Statistics (which describes the nature of the variables), Kolmogorov-Smirnov (to test whether the variables are normally distributed or not), Wilcoxon signed-ranks test (to test the statistically significant difference between the IFRS and GAAP variables) and Logistic Regression Model, were used. The tools used in this study are briefly explained below:

- a) In order to determine whether the variables are normally distributed or not, Kolmogorov-Smirnov tests for normal distribution were used. The decision rule is to reject the null hypothesis that the series is normally distributed if the p-value is less than 0.05 at two tails (Sandhya Bhatia et al., (2018) and Amrutha Pavithran et al., (2018)).
- b) The Grays Comparability Index was first used in 1980. The index compared the profits of companies from UK, France and Germany, to the values adjusted according to criteria employed by a financial analysts organization, the EFFAS6 (Costelstrate 2013). The

results merely confirmed empirically that large German and French companies were significantly more prudent in their evaluation policies than the companies from the UK (IoannisTsalavoutas et al., 2019).

Gray's comparability index measures the relative impact of IFRS adoption, on the financial variables of the sample NIFTY companies, under this study. This helped to compare financial ratios under two separate regimes and to determine which accounting standard result was more prudent(Tsalavoutas, I., & Evans, L. (2010). This index is expressed by the formula:

$$1 - \frac{R_{GAAP} - R_{IFRS}}{R_{IFRS}}$$

Where:

R_{GAAP} = financial ratio under Indian GAAP

R_{IFRS} = financial ratio under IFRS

The interpretation of the results will be done in the following manner:

When the Comparability Index is '1' it means that the two sets of standards (IGAAP and IFRS) result in the same value. When the Comparability Index is higher than '1' then the IFRS values are higher than those pertaining to the former standards (IGAAP). When the comparability Index is lower than 1 then the IFRS values are lower than those obtained by applying the former standards (IGAAP). Hence the IFRS results are said to be more prudent than the former standards IGAAP when the comparability Index value is greater than '1'. But this index does not show whether the difference obtained is statistically significant or not (Haller, A., Ernstberger, J., & Froschhammer, M. (2009).

- c) Wilcoxon Signed-Ranks Test is the non parametric test, which is used for detecting whether the differences between the two populations are statistically significant or not. The decision rule is to reject the null hypothesis if the differences between the two populations are not statistically significant and the p-value is less than 0.05 at two tails (Sandhya Bhatia et al.,(2018) and Amrutha Pavithran et al., (2018).

4. EMPIRICAL ANALYSIS

The impact of transition to IFRS, in respect of sample NIFTY firms selected in this study was studied under the following headings:

- 4.1 Nature of Financial Variables of sample NIFTY Firms
- 4.2 Grey Comparability Index of sample NIFTY Firms
- 4.3 Normality Analysis of Financial Variables of sample NIFTY Firms
- 4.4 Results of Wilcoxon Signed Rank Test of sample NIFTY Firms
- 4.5 Impact of IFRS on Book to Market Ratio of sample NIFTY Firms

4.1 Nature of Financial Variables of sample NIFTY Firms

Table - 3 reveals the nature of data relating to financial variables, calculated separately during the pre and post period of convergence to IFRS, for the sample NIFTY companies during the study period. The mean values of various liquidity ratios, during IGAAP period, were at 2.164 (CR) and 1.683 (QR). The values, after adopting IFRS, were at 2.567 (CR) and 2.008 (QR). It is to be noted that the average values of liquidity ratios of sample firms together had significantly increased after converging with IFRS reporting standards. Further, while comparing the standard deviation values, during IGAAP and IFRS period of liquidity ratios, an upward trend in the standard deviation was observed during the IGAAP from CR (1.051), QR (1.204) to CR (1.374), QR (1.526). Hence it is inferred that the liquidity ratios (Current Ratio and Quick Ratio) recorded an improvement while preparing the financial statements under IFRS. The results clearly indicated that the liquidity position of the sample firms had improved on converging to IFRS.

The values of different profitability ratios, during the IFRS period, were at 0.130 (ROA), 0.213(ROE), 1.425(GPR) and 3.409(ATR), which gradually improved to 0.133 (ROA) and 0.259(ROE) but at 0.145(GPR) and 1.653(ATR) it declined after converging with IFRS. The same declining effect was recorded in their standard deviation values also, which were lower in IGAAP period, at 0.066 (ROA) and 0.125 (ROE), but increased to 0.074 (ROA) and 0.201 (ROE) after converging with IFRS. The GPR and ATR values decreased from (3.687) to (0.088) and from (4.802) to (1.024) respectively. In other words, the values of profitability ratios did show mixed results while preparing the financial statements under IFRS, in respect sample firms. This clearly indicated that the convergence with IFRS, showed much effect on the growth or profitability of the sample firms.

In respect of leverage ratios, during IGAAP period, the mean values, of 3.631 (DR), 0.682 (DW) and 0.613 (ER), improved on converging with IFRS, at 3.702 (DR), 0.809 (DW) and 0.656 (ER). The analysis of standard deviation clearly showed that there was similar trend recorded in the case of DR, DW and ER, where the mean values had improved after converging to IFRS. The values of standard deviation also improved, in respect of DR, DW and ER, from 1.233 to 1.716, 0.329 to 0.413 and from 0.115 to 0.197 respectively. The results indicated that the leverage ratios exhibited a considerable improvement while preparing the financial statements, under IFRS, which meant that the debt and equity management of the sample firms were quite impacted, by switching over to new accounting standards, which is IFRS.

The overall analysis of ratios, during the IGAAP and IFRS periods, clearly indicated that the liquidity ratios (CR and QR) had outperformed on converging with IFRS with all the sample NIFTY companies and the performance had improved invariably (Kathiravan, C et al., 2019 and Kathiravan, C et al., 2020). The valuation ratios and leverage ratios also followed a similar trend in their mean values and they had reported rise in their ratios (DR, DW and ER), after adopting IFRS standards. The performance of the sample firms was considered to be good in the case of leverage ratios. But in the case of profitability ratios (ATR and GPR), there was a decline in the mean values, which was visible during the IFRS period and rise in the (ROA and ROE) ratios, after converging with IFRS. Hence the profitability ratios had recorded a mixed performance after converging with IFRS, in respect of sample firms, considered in this study. In other words, convergence to IFRS by the sample firms had drastically impacted the liquidity position, profitability and the investment potential of the sample companies.

4.2 Grey Comparability Index of sample NIFTY Firms:

Gray's comparability index is a tool used to measure the relative impact of financial variables, on converging to IFRS by the sample NIFTY companies (Tsalavoutas, I., & Evans, L. (2010)). This tool helps to compare financial ratios, under two separate regimes and to find out which accounting standard would be more prudent. **Table - 3** shows the average value of Comparability Index for each sample variable, for all the thirty nine sample companies, used in this study. It is observed from the results that majority of index values were greater than 'one' indicating that upon transition to IFRS by the sample NIFTY companies, these ratios experienced a positive effect. The values of sample ratios of grey comparability index were CR (1.157), QR (1.162), ROA (1.023), ROE (1.177), GPR (1.829), DR (1.019), DW (1.157) and ER (1.065). Hence the null hypotheses (NH02) - **there lies no significant prudence in the selected financial ratios after converging to IFRS** was rejected. In other words, IFRS was a highly prudent set of accounting Standards, with regard to the above mentioned sample ratios. Therefore, principal based accounting was considered as more efficient in the case of CR, QR, ROA, ROE, GPR, DR, DW and ER. It is also observed from the comparability index values that the value of ATR (0.062) ratios was less than +1.0 in respect of sample firms. As per the results of Grey's comparability index, the null hypothesis (NH02) - **there lies no significant prudence in the selected financial ratios after converging to IFRS** was accepted. Thus, from the results of Grey's comparability index, it was concluded that IGAAP or the Rule Based Accounting was more prudent and efficient on the financial ratios, namely, CR, QR, ROA, ROE, GPR, DR, DW and ER, during the study period.

4.3 Normality Analysis of Financial Variables of sample NIFTY Firms

Normality analysis is used, to determine whether the sample variables are normally distributed or not, by using Kolmogorov-Smirnov Tests. **Table-5** summarises the normality results of

the sample ratios, reported under Indian GAAP and IFRS reporting standards. Under K-S statistic, the observed cumulative frequency distribution, for sample variables, to a theoretical distribution was compared. From the results of normality analysis, it is evident that the significant values for Liquidity Ratios, Profitability Ratios and Leverage Ratios, under the IFRS reporting standards were greater than the p-value of 0.05, during the study period. The significant values of the various individual ratios earned liquidity ratios, at 0.101 (CR) and 0.102 (QR), leverage ratios at 0.191 (DR), 0.200 (DW), 0.201 (ER) and profitability ratios at 0.200 (ROA), 0.202 (ROE), 0.153 (GPR) and 0.059 (ATR) in respect of sample firms. Similarly, in the IGAAP reporting standards, the values of liquidity ratios were 0.151 (CR), 0.130 (QR), while the values of leverage ratios were at 0.200 (DR), 0.200 (DW) and 0.201 (ER). The values of profitability ratios were at 0.200 (ROA), 0.191 (ROE), 0.200 (GPR) and 0.202 (ATR) and the actual values of all sample financial ratios were greater than the p-value of 0.05 in respect of all the sample firms.

In other words, under the IGAAP reporting standards and IFRS reporting standards, the values of all the variables were not statistically significant (as the sig. value was greater than 0.05). Hence, **NH01- There is no normality in selected financial variables computed by using local GAAP and IFRS**, was accepted for the sample companies during the study period. Therefore, it is inferred that the sample variables were not normally distributed. Since the values of sample ratios were not normally distributed, non parametric test, namely, Wilcoxon Signed-Rank Test was further used to evaluate the relationship between the selected financial variables, during the pre and post periods of convergence with IFRS.

4.4 Results of Wilcoxon Signed Rank Test of Sample NIFTY Firms

Wilcoxon Signed-Ranks Test is the non parametric test used for detecting the differences between the two populations, to be statistically significant or not. The decision rule is to reject the null hypothesis when the differences between the two populations are not statistically significant and if the p-value is less than 0.05 at two tails (**Sandhya Bhatia et al., (2018) and Amrutha Pavithran et al., (2018)**). The results of Wilcoxon Signed Rank Test for the sample companies under each sector are given in **Table-6**. An attempt has been made to examine the effects of liquidity, profitability and leverage ratios of the sample firms, under IFRS reporting and IGAAP reporting standards.

From the results of Table-6, it is evident that liquidity ratios showed significant differences on convergence to IFRS. The current ratios and quick ratios had recorded significant values (sig value) which were less than that of p-value (0.05). It is significant that this trend was seen in all the nine sectors, namely automobile, energy, infrastructure, information technology, metals, packed foods, personal care, pharmaceuticals and others. A drastic impact was observed in the liquidity ratios in respect of all the sample companies and it implied the capability of companies to pay its short term obligations, had improved on converging with IFRS.

It is a known fact that profitability ratios are financial metrics, used by analysts and the investors, to measure and evaluate the ability of a company to generate income (profit). The profitability ratios of six major sectors, namely, infrastructure, IT, packed foods, personal care, pharmaceuticals and others, showed significant differences between local GAAP-based and IFRS-based financial statements. This is evident from the return on asset ratio, return on equity ratio, gross profit ratio and asset turnover ratio, which had reported significant values, which were less than p-value 0.05, whereas automobile and energy sectors showed an impact only on the Return on Equity Ratio, Gross Profit Ratio and Asset Turnover Ratio, with their sig values being less than p-value 0.05. Return on Assets (ROA) ratio earned a significant value of 0.398 for automobile sector and 0.735 energy sector which were greater than the p-value 0.05. This showed comparatively less impact on its profitability ratios. On the other hand, Metals sector had shown high impact in all the profitability ratios (ROA, ROE and GRP with sig value of 0.00, which was less than the p-value of 0.05) except the ATR with the sig value of 0.655 being greater than the p-value of 0.05. This showed no impact on the performance of the sample firms on convergence with IFRS. Hence it is clear that the performance, profitability and growth of the sample companies were visible and created impact after convergence to IFRS in all the nine sectors of sample firms.

According to the leverage ratios, only infrastructure, packed foods and personal care, registered high impact on the performance, due to converging with IFRS in respect of DR, DW

and ER, with sig value being less than the p-value of 0.05. All other sectors reported nil or negligible impact on converging with IFRS. The leverage ratios, used as the tool for gauging ability to meet long-term obligations of sample firms with enough working capital left to operate has not been highly impacted from the convergence with IFRS, during the study period. Therefore, it is clear from the results that only Infrastructure, Packed foods and personal care sectors managed to maintain a balance between their debt and equity after converging with IFRS.

It could be observed from Table-6 that liquidity ratios were found to be statistically significant (Asymp.Sig< 0.05), for all the nine sectors, due to convergence with IFRS. Looking at the profitability ratios, infrastructure, IT, packed foods, personal care, pharmaceuticals and others were found to be statistically significant (Asymp.Sig< 0.05). Sectors such as infrastructure, packed foods and personal care sectors were found to be statistically significant (Asymp.Sig< 0.05) in case of leverage ratios also. Hence, it is concluded that the **NH03- 'There is no significant difference between the selected financial variables computed using local GAAP and IFRS'**, was rejected in the case of all the five companies. **Agca and Aktas (2007) and Callao et al. (2007)** indicated that current ratios were influenced by the IFRS adoption on financial statements. In, in the same line, it is understood from the results of this study that the profitability, liquidity, investment potential and growth of the sample companies were influenced, on converging to IFRS.

4.5 Impact of IFRS on Book to Market Ratio of sample NIFTY Firms

The results of Table 7 indicate that there was a significant impact on Book to Market ratio, on converging with IFRS, by various sectors of sample NIFTY companies. This was done using the Wilcoxon signed Rank Test on each sector individually. The automobile, energy, infrastructure and personal care sectors reported a statistically significant impact at five percent interval. This result was in line with the results of Hung and Subramanyam (2007). Therefore, the **NH04 - There is no significant difference in the book to market ratio prepared under IGAAP and IFRS** was rejected, in the case of automobile, energy, infrastructure and personal care sectors. However, the information technology, metals, packed foods, pharmaceuticals and other sectors did not show statistically significant impact, on the book to market ratio. Hence the **NH04- There is no significant difference in the book to market ratio prepared under IGAAP and IFRS** was accepted, in the case of information technology, metals, packed foods, pharmaceuticals and other sectors. Therefore, it could be concluded from Table 7 that the impact on book to market ratio clearly indicated that the transition to IFRS had influenced the value of the sample companies among the investors market.

5. LIMITATIONS OF THE STUDY

The present study suffered from the following major limitations. Firstly, the study considered only the transition period which is the 1st April 2016 for this study. Therefore, time period was very limited. Secondly, all the sample **NIFTY** companies which had converged with IFRS reporting from 1st April 2016, as per the new roadmap alone were considered for this study. Out of the fifty companies thirty nine of them were picked up for this study and eleven companies were not included due to unavailability of data. Hence the sample size was limited to thirty nine companies. Thirdly, the study was based on secondary data and it was confined only to thirty nine selected sample companies listed under **NIFTY50**. Finally, all the limitations associated with statistical tools, would apply to this study also.

6. CONCLUSION

This study analysed the impact of adopting IFRS in respect of financial variables. The financial ratios prepared by sample NIFTY companies' key players in each industry were selected, to measure the difference between IGAAP and IFRS based financial statements. The study analysed the transition happened on 1st April 2016 on which is the first phase of convergence with IFRS happened in India marked the commencement of the study. The results of Gray's Comparability Index indicated the fact that the prudence in the financial ratios of the sample companies under the new set of accounting standard (IFRS) had improved. The Wilcoxon's Signed Ranks was used to test the statistical significance and the study identified significant differences between Indian GAAP-based and IFRS-based financial ratios. The liquidity and profitability ratios clearly showed high impact compared to the leverage ratios, in all the nine sectors. Indeed, the studies of **Agca and Aktas (2007) and Callao et al. (2007)** indicated

that current ratios were influenced by the IFRS adoption on financial statements. It is evident that IFRS would be the dominant accounting standard moving forward. The study also analysed the impact on book to market ratio after converging to IFRS on individual sectors of sample NIFTY companies by using Wilcoxon Signed Rank Test. It is found that the automobile, energy, infrastructure and Personal Care sectors had reported statistically significance impact at five percent interval. These results are compatible with the results of the studies, conducted by **Callao et al. (2007) and Jarva and Lantto (2010)**. It is believed that this study will be useful for business managers, analysts and creditors to understand IFRS transition. In addition, the regulatory agencies may find this study beneficial for the harmonization process of IFRS as India is still in the process of fully converging with IFRS, especially for banking sector and Small and Medium Scale Enterprises (SMEs). This study did not concentrate much on measuring the impact of each IFRS standard on the financial reports of the company. These constraints, which may be considered further, would provide the way for more accurate results in future studies.

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Table 3: Results of Descriptive Statistics for the Financial Variables of Sample NYFTY Companies at the transition date 1st April 2016									
Table 4: Results of GAs Comparability Index Test for sample NYFTY Companies at transition date 1st April 2016									
Financial Ratios	Mean	Std. Deviation	Min	Max	Mean	Std. Deviation	Min	Max	
	IGAAP Liquidity Ratios				IFRS Comparability Index				
CR	2.164	1.051	1.393	4.809	2.567	1.374	1.350	5.795	
QR	1.683	1.204	0.714	4.781	2.008	1.526	0.712	5.772	
CR	2.164		2.567		1.157				
ROA	0.130	0.066	0.056	0.208	0.133	0.074	0.045	0.231	
ROE	0.213	0.125	0.063	0.433	0.259	0.201	0.078	0.732	
GPR	1.425	3.687	0.067	11.264	0.145	0.088	0.039	0.319	
ATR	3.409	4.802	0.580	15.831	1.653	1.024	0.451	3.091	
Leverage Ratios									
DR	3.631	1.233	2.391	6.360	3.702	1.716	2.123	7.549	
DW	0.682	0.329	0.237	1.189	0.809	0.413	0.258	1.429	
ER	0.613	0.115	0.440	0.795	0.656	0.197	0.401	0.795	
CR-Current Ratio, QR-Quick Ratio, ROA- Return on Assets, ROE- Return on Equity, GPR- Gross Profit Ratio, ATR- Asset Turnover Ratio, DR-Debt Ratio, DW-Debt to Worth Ratio, ER- Equity Ratio.									
Source: Compiled from Prowess Database and computed using SPSS									

Profitability Ratio			
ROA	0.130	0.133	1.023
ROE	0.213	0.259	1.177
GPR	1.425	0.145	1.829
ATR	3.409	1.653	0.062
Leverage Ratio			
DR	3.631	3.702	1.019
DW	0.682	0.809	1.157
ER	0.613	0.656	1.065
CR-Current Ratio, QR-Quick Ratio, ROA- Return on Assets, ROE- Return on Equity, GPR- Gross Profit Ratio, ATR- Asset Turnover Ratio, DR-Debt Ratio, DW-Debt to Worth Ratio, ER- Equity Ratio.			
Source: Compiled from Prowess Database and computed using SPSS			

Table 6: Results of Wilcoxon Signed Rank Test of sample NIFTY companies at the

Table 5 : Results of Kolmogorov-Smirnov Test of Normality of sample NIFTY Companies at the transition date 1st April 2016				
Financial Ratios	IFRS		IGAAP	
	Statistic	Sig.	Statistic	Sig.
Liquidity Ratios				
CR	0.379	0.101	0.178	0.151
QR	0.352	0.102	0.306	0.130
Leverage Ratios				
DR	0.229	0.191	0.244	0.200
DW	0.167	0.200	0.178	0.200
ER	0.163	0.201	0.188	0.201
Profitability Ratios				
ROA	0.223	0.200	0.199	0.200
ROE	0.165	0.202	0.190	0.191
GPR	0.502	0.153	0.190	0.200
ATR	0.352	0.059	0.229	0.202
CR-Current Ratio, QR-Quick Ratio, DR-Debt Ratio, DW-Debt to Worth Ratio, ER- Equity Ratio, ROA- Return on Assets, ROE- Return on Equity, GPR- Gross Profit Ratio, ATR- Asset Turnover Ratio				
Source: Compiled from Prowess Database and computed using SPSS				

transition date 1 st April 2016										
Sectors	Financial Ratios	Liquidity Ratios		Leverage Ratios			Profitability Ratios			
		CR	QR	DR	DW	ER	ROA	ROE	GPR	ATR
Automobile	Z-Stat	-0.676	-0.676	-0.626	-0.845	-2.028	-0.845	-1.521	-2.366	-1.014
	Sig Value	0.013	0.013	0.049	0.398	0.043	0.398	0.028	0.018	0.010
Energy	Z-Stat	-1.183	-0.676	-1.014	-1.690	-2.028	-0.338	-0.507	-2.366	-2.366
	Sig Value	0.037	0.013	0.010	0.091	0.043	0.735	0.012	0.018	0.018
Infrastructure	Z-Stat	-0.135	-0.405	-0.674	-1.483	-2.028	-1.214	-1.753	-2.028	-0.944
	Sig Value	0.023	0.016	0.050	0.038	0.043	0.025	0.020	0.043	0.045
IT	Z-Stat	-0.365	-0.365	-0.730	-0.730	-1.826	-1.461	-1.826	-1.826	-1.826
	Sig Value	0.015	0.015	0.045	0.045	0.068	0.044	0.028	0.028	0.028
Metals	Z-Stat	-1.324	-0.447	-0.447	-0.447	-0.447	1.342	1.342	1.342	-0.447
	Sig Value	0.040	0.045	0.655	0.655	0.655	0.011	0.011	0.011	0.655
Packed foods	Z-Stat	-1.324	-1.324	-1.324	-1.324	-1.324	-1.324	-1.324	-1.324	-1.324
	Sig Value	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Personal Care	Z-Stat	-0.447	-0.447	-1.324	-1.324	-0.447	-1.324	-1.324	-1.324	-1.324
	Sig Value	0.045	0.045	0.018	0.018	0.045	0.018	0.018	0.018	0.018
Pharmaceuticals	Z-Stat	-1.069	-0.535	-1.604	-1.604	-1.604	-0.535	0.301	-1.604	-1.069
	Sig Value	0.025	0.013	0.109	0.109	0.109	0.013	0.020	0.009	0.015
Others	Z-Stat	-1.604	-1.604	-1.604	-1.604	-0.535	-1.069	-1.069	-1.069	-1.604
	Sig Value	0.009	0.009	0.009	0.009	0.593	0.025	0.025	0.025	0.009

CR-Current Ratio, QR-Quick Ratio, DR-Debt Ratio, DW-Debt to Worth Ratio, ER- Equity Ratio, ROA- Return on Assets, ROE- Return on Equity, GPR- Gross Profit Ratio, ATR- Asset Turnover Ratio

Source: Compiled from Prowess Database and computed using SPSS