



The problems and clashes of the shift towards IFRS in the big economies: India's experience as a model during the period 2006-2020.

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The problems and clashes of the shift towards IFRS in the big economies: India's experience as a model during the period 2006-2020

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Abstract: This paper attempts to find out up to what extent IFRS has been adopted by the Indian organizations, and what is the approach adopted by the Indian government to achieve convergence with IFRS, and what benefits, challenges and opportunities Indian companies are facing in the implementation of IFRS. For study this problems, the paper uses panel cointegration with a corresponding vector error correction model (VECM) to investigate during the period 2006-2020. The results showed a long run relationship between the quality of the Indian financial reporting environment and institutional factors in same period. This paper provides new empirical evidence in large Economies for increase resource allocation efficiency like India.

Key words: Globalization; large Economies; International accounting convergence; IFRS; Economic Consequences; India.

JEL classification: E02; E60; F33; M41; M48.

المخلص: تحاول هذه الورقة معرفة إلى أي مدى تم اعتماد المعايير الدولية لإعداد التقارير المالية من قبل المنظمات الهندية، وما هو النهج الذي تتبناه الحكومة الهندية لتحقيق التقارب مع IFRS، وما هي الفوائد والتحديات والفرص التي تواجهها الشركات الهندية في تنفيذ IFRS، لدراسة هذه المشكلات، تستخدم الورقة التكامل المشترك مع نموذج تصحيح خطأ (VECM) خلال الفترة 2006-2020، أظهرت النتائج وجود تحسن في جودة بيئة التقارير المالية الهندية بعد التقارب لنفس الفترة. تقدم هذه الورقة أدلة تجريبية جديدة في الاقتصادات الكبيرة لزيادة كفاءة تخصيص الموارد مثل الهند.

الكلمات المفتاحية: العولمة؛ الإقتصادات الكبيرة؛ التقارب المحاسبي الدولي؛ المعايير الدولية لإعداد التقارير المالية؛ العواقب الاقتصادية؛ الهند.

تصنيف JEL: E02; E60; F33; M41; M48.

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INTRODUCTION

International Financial Reporting Standards (IFRS) convergence, in recent years, has gained momentum all over the world, currently; IFRSs are used in Europe Union 2005, Australia 2005, Hong Kong 2005, Singapore and Turkey 2007, Ghana 2007, China 2008, Korea 2011, Japan 2011, Mexico, Malaysia and Nigeria 2012, Canada 2011, and others. According to IASB statistics at the end of March 2017, there 140 countries (93%) formally adopt IFRS among the 150 countries, of which 126 countries (84%) oblige all their local companies to comply with IFRS, as well as 88 local and international exchanges adopting IFRS in which more than 49,000 companies (Paul Pacter, 2017, P 04).

During the last decade, India has emerged as a strong economy on the global economic map. India became the world's fifth largest economy last year, according to data from the IMF's October World Economic Outlook. As the economic growth for the year 2019 reached 4.2 %, and it is expected to reach 07 % in the year 2021, and the report, published by the Financial Express website, indicated that the size of the Indian economy reached \$ 2.94 trillion, which puts it in the fifth place in the world in terms of strength Economy. India, in this ranking, has leapfrogged France (2.71 trillion \$) and the UK (2.83 trillion \$) (IMF, 2020, p 07).

The complex nature of IFRSs and the differences between IFRSs and the existing GAAP local because some unavoidable reasons like legal and regulatory requirements, economic environment, level of preparedness, conceptual differences etc. Thus, it can be argued that even if there has been a lot of deliberation on convergence of Indian accounting standards with IFRS, it is difficult to adopt IFRS considering the indigenous problems. In this changing scenario, the converging to IFRS by Indian companies will be very challenging because of the economic losses it could inflict, and on the contrary it could also be rewarding too Benefits to corporate in the Indian context world class peer standards for financial reporting.

At present, the Accounting Standards Board (ASB) of the Institute of Chartered Accountants of India (ICAI) formulates Accounting Standards (Ass or Ind-AS), the ICAI is of the view that IFRSs should be adopted for the public interest entities such as listed entities, banks and insurance entities and large sized entities. In order to resolve this

problem, the ICAI has given a roadmap through which, IFRS can be adopted in India in a phased manner from April, 2011.

The present paper tries to highlight the benefits, limitations, difficulties, problems, and the challenges posed by the adoption of IFRS in India, therefor, the objectives of the study are:-

1. To examine impact of IFRSs in Indian economic.
2. To know the various phases of implementation of IFRSs in India.
3. To examine benefits and the challenges ahead in the implementation of IFRS in India; and
4. To find out the possible ways to address the challenges.

1. India's Perspective: Attempts made for convergence

India immediately after independence establishes the Institute of Chartered Accountants of India in 1949 to regulate the profession of accounting. The Institute of Cost & Works Accountants of India came into being at a much later stage in 1959 (Moni Deepa Das, Partha Priya Das, 2014, p 120). The Institute of Chartered Accountants of India (ICAI) set up the Accounting Standards Board (ASB) on 21 April, 1977, to prepare accounting standards. In 1982, ICAI set up the Auditing and Assurance Standards Board (initially known as the Auditing Practice Committee) to prepare auditing standards. ICAI became one of the associate members of the International Accounting Standards Committee (IASC) in June 1973 (ankar Thappa, 2012, p 96). The other objectives of the board are; to consider and designate the new domain for Accounting Standards, formulation of Accounting Standards, review the existing Accounting Standards and revise as per need, adaptation of Indian accounting standards with IFRS (Shabarisha & Manjunatha, 2013, p 220).

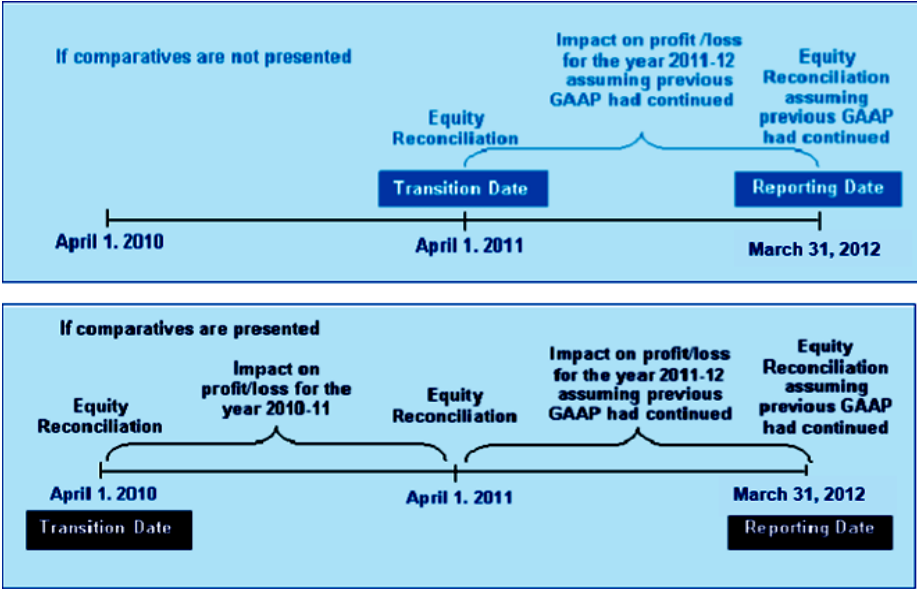
In 2006, ICAI was given the responsibility of formulating the convergence process and ensure smooth convergence. For this purpose, the Accounting Standard Board (ASB) of ICAI constituted a Task Force in the year 2006 to explore the approach for convergence with IFRS and lay down the road map for convergence with IFRS. And with the objectives of (Bhargava & Divya, 2013, p 215):-

a) Formulating Frequently Asked Questions on Indian Accounting Standards converged with IFRS in consultation with the Accounting Standards Board.

b) Dealing with industry-specific issues involved in implementation of Indian Accounting Standards converged with IFRS.

- c) Interacting with Central Government and State Governments on issues related to implementation of Indian Accounting Standards converged with IFRS.
- d) Interacting with national and international bodies on issues in implementation of Indian Accounting Standards converged with IFRS.
- e) Taking adequate steps to enhance knowledge of the members and other stakeholders for proper implementation of Indian Accounting Standards converged with IFRS by conducting workshops, seminars, IFRS Certificate Course in India and abroad, and train the trainer’s programmes.
- F) Developing Course Material for Certificate Course and e-learning.
- g) Co-ordinating with Accounting Standards Board regarding issues in IFRS/ Indian Accounting Standards converged with IFRS.
- h) Co-ordinating with Direct Taxes Committee, Indirect Taxes Committee and Corporate Laws and Corporate Governance Committee and other Committees of the Institute with regard to various issues in IFRS/ Indian Accounting Standards converged with IFRS.
- i) Dealing with any other tasks related to implementation of Indian Accounting Standards converged with IFRS.

Figure 01: First-time adoption of IFRS converges Indian accounting standards



Source: Firdosh Sheikh,Op cit, p 04.

The Council of ICAI has also finalized the roadmap for convergence in the meeting held on March 20-22, 2015. The revised roadmap recommends Ind AS (IFRS) to be implemented for the preparation of consolidated financial statements of listed and unlisted companies having net worth of Rs. 500 crores or more from the beginning of accounting year 2016 along with previous year comparatives i.e. 2015-16 but the stand alone financial statement will continue to be prepared as per existed notified accounting standards which will be upgraded over a period of time. The following is the summary of the roadmap (Gagandeep, 2018, p 448):-

Voluntary adoption

Companies can voluntarily adopt Ind AS for accounting periods beginning on or after 1 April 2015 with comparatives for period ending 31 March 2015 or thereafter. However, once they have chosen this path, they cannot switch back.

Mandatory applicability

Phase I

Ind AS will be mandatorily applicable to the following companies for periods beginning on or after 1 April 2016, with comparatives for the period ending 31 March 2016 or thereafter:-

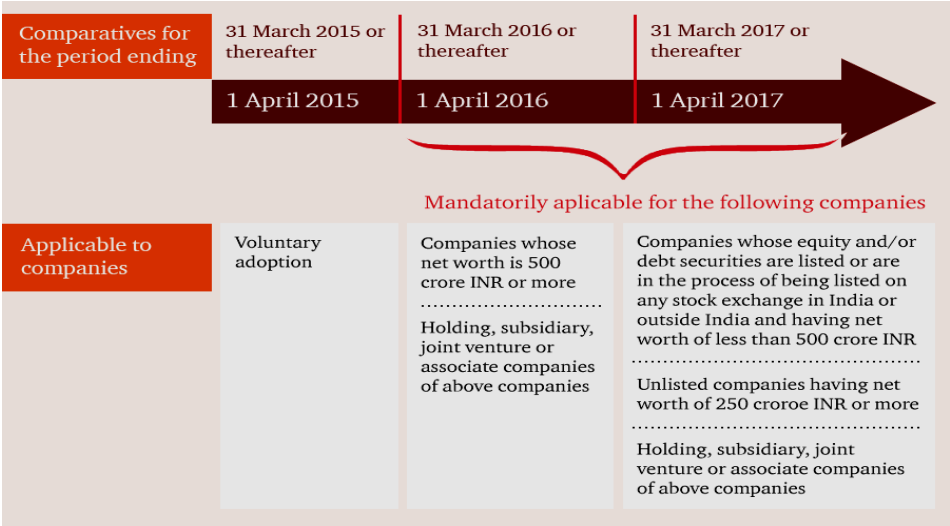
- Companies whose equity and/or debt securities are listed or are in the process of listing on any Stock exchange in India or outside India and having net worth of 500 crore INR or more.
- Companies having net worth of 500 crore INR or more other than those covered above.
- Holding, subsidiary, joint-venture or associate companies of companies covered above.

Phase II

Ind AS will be mandatorily applicable to the following companies for periods beginning on or after 1 April 2017, with comparatives for the period ending 31 March 2017 or thereafter:-

- Companies whose equity and/or debt securities are listed or are in the process of being listed on any Stock exchange in India or outside India and having net worth of less than rupees 500 Crore.
- Unlisted companies other than those covered in Phase I and Phase II whose net worth are more than 250 crore INR but less than 500 crore INR.
- Holding, subsidiary, joint-venture or associate companies of above companies.

Figure 02: The new road map of IFRS converge Indian



Source: Sonia Aggarwal, 2016, p 03.

The new roadmap proposes implementation of Ind-AS in a phased manner as shown below (Kumar Misra & Vimal Aggarwal, 2014, p 21):-

- a. All listed and unlisted companies having Net worth of INR 500 crores or more will mandatorily adopt Ind-AS starting from 1st April 2016.
- b. Unlisted companies having Net worth of INR 250 crores or more and all listed companies will mandatorily adopt Ind-AS starting from April 2017.
- c. Listed or Unlisted companies whose Net Worth becomes INR 250 crores will mandatorily adopt Ind-AS starting from April 2018.
- d. All companies, not falling under the mandatory road-map may adopt Ind-AS voluntarily starting from April 2015.

The Reserve Bank of India, in its recent press release has notified that the banking companies in India are also in the process of adopting Ind-AS from the accounting year ending on 31st march 2018 onwards. Similarly, IRDA has also assured that insurance companies in India will

start following Ind-AS as soon as the international Accounting standard on Insurance contract is finalized which is currently under construction (Ram Singh, Santosh Kumar, 2019, p 93).

Further, the endeavour of the ICAI is not only to bridge the gap between ASs and IFRSs by issuance of new AS but also to ensure that the existing ASs are in line with the changes in international thinking on various accounting issues. So far, the Board has issued 32 Accounting Standards.

The ICAI has issued ED of Ind-AS 41 to help companies transition to using Ind-AS as their basis of financial reporting. ED of Ind-AS 41 applies when an entity adopts Ind-AS for the first time by an explicit and unreserved statement of compliance with Ind-AS. It requires companies to:-

1. Identify the date of transition and the reporting date for first Ind-AS financial statements; select and apply accounting policies that are in force as on the reporting date retrospectively to all of the periods presented in the first Ind-AS financial statements after considering the optional exemptions and mandatory exceptions;

2. Identify and quantify accounting adjustments for preparation of first Ind-AS financial statements; and make extensive disclosures to explain the transition to Ind-AS by way of reconciliation statements.

2. Benefits, Challenges and the economic Cost implication of IFRS Adoption in Indian companies

2.1. Benefits of IFRS Adoption for Indian companies

The potential benefits that India stands to gain after IFRS adoption are seen in the light of (Eleng, D. Mbotor, Bassey, E. Ude, 2017, p 876):-

1. Promotion of the compilation of meaningful data on the performance of various reporting entities at both public and private levels in India thereby encouraging comparability, transparency, efficiency and reliability of financial reporting in India. The adoption of IFRS is expected to result in better quality of financial reporting due to consistent application of accounting principles and improvement in reliability of financial statements. This will eliminate the need for multiple reports and significant adjustment for preparing consolidated financial statements or filing financial statements in different stock exchanges, thus improving investment and financing decision-making in Indian companies, more efficient allocation of resources; and Higher economic growth.

2. Assurance of useful and meaningful decisions on investment portfolio in India. Investors can easily compare financial results of corporation and make investment decisions (Usha Rajendra Pillewar, 2015, p 75).

3. Attraction of direct foreign investment. Countries attract investment through greater transparency and a lower cost of capital for potential investors. For example, cross-border listing is greatly facilitated by the use of IFRS.

4. Assurance of easier access to external capital for local companies. On the other hand, the transition to IFRS will enable Indian entities to have access to international capital markets without having to go through the cumbersome conversion and filing process, it will facilitate companies to set targets and milestones based on a global business environment, rather than an inward perspective (Pawan Jain, 2011, p 130).

5. Reduction of the cost of doing business across borders by eliminating the need for supplementary information from Indian companies, risk management and internal controls, better design and implementation of a uniform set of internal controls to mitigate risks (Rimmi Jain, Meenu rani, p 734).

6. Facilitation or easy consolidation of financial information of the same company with offices in different countries. Multi-nationals companies avoid the hassle of restating their accounts in local GAAPs to meet the requirements of national stock exchange and regulators, making the consolidation of accounts of foreign subsidiaries easier and lowering overall cost of financial reporting.

7. Easier regulation of financial information of entities in India.

8. Enhanced knowledge of global financial reporting standards by tertiary institutions in India. In addition to reduce accountants' fees and improving local accounting experiences, where the convergence with IFRSs also create more business opportunity to the accounting professionals in a great way that they are able to sell their services as experts in different parts of the world, it offers them more opportunities in any part of the world if same accounting practices prevail throughout the world. They are able to quote IFRSs to clients to give them backing for recommending certain ways of reporting.

9. Additional and better quality financial information for shareholders and supervisory authorities. Government to be able to better access the tax liabilities of multinational companies (Anju Dagar, 2014, p 17).

2.2. Challenges and the economic Cost implication of IFRS Adoption in Indian companies

Several studies have identified challenges limiting IFRS adoption both in India and other economies. IFRS is expected to engineer growth in bilateral economic activities. As identified by Obaze (2007). The principal impeding factors in the adoption process of IFRS in Europe, America and the rest of the world are not necessary technical but cultural issues, mental models, legal impediments, educational needs and political influences. According to (Ball, Robin & Wu, 2000), the historical differences in accounting thought, context, ethos and practices makes harmonization and moving from one tradition to another difficult (Nobes, 1983, Ball, 1995). As noted by Armstrong et al, (2007) and Soderstrom & Sun (2007), cultural, political and business differences may also continue to impose significant obstacles in the progress towards a single global financial communication system because a single set of accounting standards cannot reflect the differences in national business practices arising from differences in institution and cultures (Vinayagamoorthy and Sankar, 2012, p 224).

Among the most important problems that Indian companies face in adopting international financial reporting standards are the following:-

1. Shortage of resources: Accounting resources is a major challenge in India with population of more than 1 billion has a dearth of trained staff on IFRS.

2. Information and communication technology (ICT) systems may not be able to supply information in all instances to be required to achieve compliance with IFRS, which suggests that more ICT system changes will be seen in the future.

3. The transition to IFRS will place a burden on company staff. Training of staff will be deemed necessary. Further, companies have to employ staff on a permanent basis to take responsibility for compliance with accounting standards and disclosure requirements. This will increase the Manpower cost for companies.

4. Taxes: Tax authorities should ensure that there is clarity on the tax treatment of items arising from convergence to IFRS (Ankar Thappa, 2012, p 98).

5. Distributable profits: IFRS is fair value driven, which often results in unrealized gains and losses, whether this can be considered for the

purpose of computing distributable profits, will have to be debated, in order to ensure that distribution of unrealized profits will not eventually lead to reduction of share capital.

6. In emerging economies like India, a significant part of the economic activities is carried on by small- and medium-sized entities (SMEs). Such entities face problems in implementing, the accounting standards because of Scarcity of resources and expertise with the SMEs; and the cost of compliance is not commensurate with the expected benefits (Naresh & Vishlesh, 2016, p 10).

7. Level of Awareness: The transition plan to IFRS and its implications for preparers and users of financial statements, regulators, educators and other stakeholders have to be effectively coordinated and communicated. This should include raising awareness on the potential impact of the conversion, identifying regulatory synergies to be derived and communicating the temporary impact of the transition on business performance and financial position (Srinivasa Rao and Malyadri .P, 2015, p 02).

2.3. Other requirements necessary for adopting IFRSs

As the convergence process involves concerted efforts of legal and regulatory authorities concerned, all recommendations to various authorities have to be considered and closed by the respective regulators. This is the last mile to go to complete the convergence process. The list of such recommendations sent to the various Ministries/Regulatory authorities is presented here:-

- Changes required in Company's Act 1956;
- Changes required in SEBI guidelines;
- Changes required in IRDA rules and regulations;
- Changes required in RBI Banking Regulation Act;
- Standards to be notified by NACAS.

In addition to implementation of the changes suggested by way of notifications/guidelines and so on, the applicability of IFRS to the types of entities has to be finalised (Kedar V. Marulkar, 2013, p 03).

3. Research Methodology

3.1. The problems

In accordance with the above literature review, our paper intends to answer the following research question:-

What is the impact of adoption IFRS on the Indian institutional environment during the period 2006-2020?. In statistical terms: Is there any statistical impact to enhance the quality of the Indian financial reporting environment by adopting IFRS on the Indian institutional environment during the period 2006-2020?

H₀: There is no significant relation between adoption IFRS and the quality of the Indian financial reporting environment during the period 2006-2020?

3.2. Research hypotheses

For the purpose of this study, the researchers expect that the adoption of IFRS will result in a increase the efficiency of Indian financial reporting environment, for that, the main Hypothesis is:-

The improvement of the Indian financial reporting environment is driven by the extent to which the Indian institutional environment accepts IFRS during the period 2006-2020, in statistical words, there is a statistically significant relationship between enhancing the quality of the financial reporting environment by adopting IFRS and the Indian institutional environment during the period 2006-2020.

H₁: There is a significant relation between the quality of the Indian financial reporting environment after adopting IFRS and Indian institutional environment during the period 2006-2020.

3.3. Empirical models and variables involved

We use the degree of cointegration and causal relationships between the quality of the Indian financial reporting environment after adopting IFRS and Indian institutional environment variables of interest in the long-run starting with 2006. Therefore, in order to empirically test the research hypothesis, the general model is:-

$$\text{Quality accounting} = \text{Quality of institutional reform} + \text{Quality of local GAAP}$$

Quality of institutional reform = Economic Reform + Financial Reform + Tax Reform + Political and Legal reform + Social and cultural reform + Educational and technological reform + business environment reform (1).

And Assuming: Quality IFRS > Quality of local GAAP, Equation (1) can be redrafted as follows:-

Quality accounting = Economic Reform + Financial Reform + Tax Reform + Political and Legal reform + Social and cultural reform + Educational and technological reform + Business Environment reform

$$Y_i = B_0 + B_1 \text{ ECO} + B_2 \text{ FIN} + B_3 \text{ TAX} + B_4 \text{ POLLEG} + B_5 \text{ SOCCUL} + B_6 \text{ EDUC} + B_7 \text{ XBUE} + \varepsilon_i$$

The variables are defined as follows:-

First: the independent variables used are: the quality of the Indian financial reporting environment: the strength of reporting standards INDAS 01: this indicator shows the development of the Indian national accounting standards by adoption of IFRS during 2006-2020.

Secondly: the dependent variable used is the institutional environment by using Three indicators: (1) Economic factors ECO: this indicator reflects the degree of development of Indian Economic markets during 2006-2020; (2) Political and legal factors POL: this indicator explains the evolution of the political environment in India during the period 2006-2020; (3) Technological readiness TEC: This indicator explains the development of the Firm-level technology absorption in Indian companies during the period 2006-2020.

3.4. Sample selection, and database

Data used in this study is a quantitative data. Samples collected in this study were 105 observations during the period 2006-2020 (15 years). Data source was taken from the Global Competitiveness Reports issued by the World Economic Forum: <http://reports.weforum.org/global-competitiveness-index-2017-2018/downloads/>, for years: 2006... 2020. Subsequently, comparative data which are referred to the research were collected "by hand" and were transferred to spreadsheets for processing.

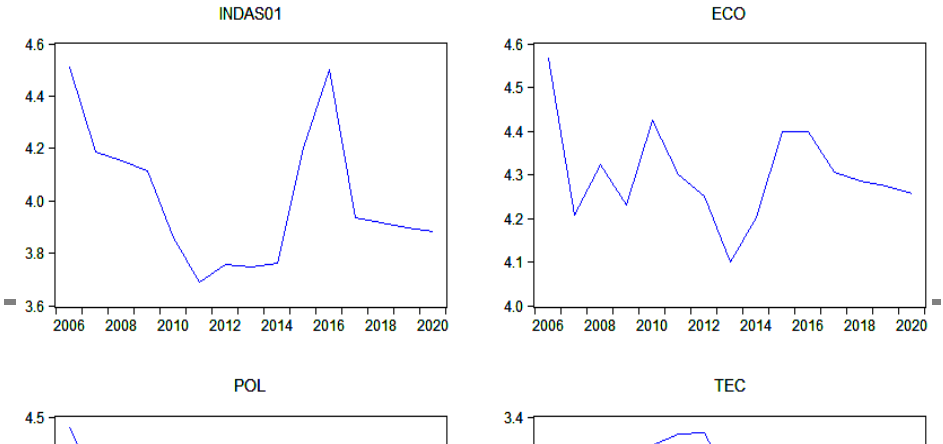
4. Empirical results

The results of the study can be addressed in the following order:-

4.1. Graphical representation of variables

As follows:-

Figure 03: Graphical representation of variables



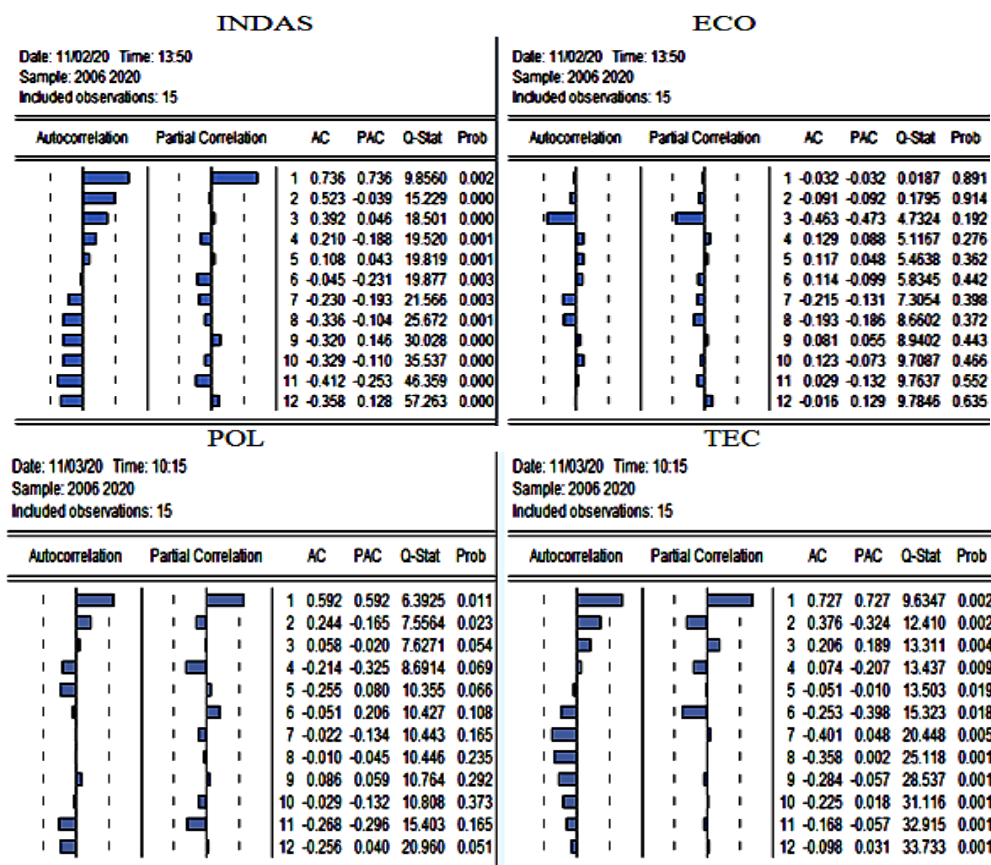
Source: Based on Eview.7 program outputs.

The graph representation of time series showed that it is possible to say that there are significant relationship between the Indian financial reporting environment after adoption IFRS $INDAS01_t$ and the indicators of the institutional environment ECO_t , POL_t and TEC_t during 2006-2020.

4.2. Autocorrelation Test

The test results are given as follows:-

Figure 04: Autocorrelation Test Results



Source: Based on Eview.7 program outputs.

Based on figure (04), we observe: (1) the series stationary in level: It basically includes ECO_t , because the Q-Stat at $h=12$ she is less than Q-table $X^2_{0.05}=21.026$, In other words: $Q\text{-Stat} = 9.785 < 21.026$, because that the ECO_t , is series stationary in level. (2) The series not stationary in level: Variables include: $INDAS01_t$, POL_t , TEC_t because the Q-Stat at $h=12$ is large than Q-table $X^2_{0.05}=21.026$, In other words: $Q\text{-Stat} = 57.263, 20.96, 33.733 > 21.026$, because that $INDAS01_t$, POL_t , TEC_t , are series not stationary in level and become stationary after first differenced, this means: $INDAS_t, POL_t, TEC_t \sim I(1)$.

4.3. Unit Root Test

Here we begin with non-stationary tests to identify the number of unit roots in each of our relevant variables: $INDAS01_t$, ECO_t , POL_t , TEC_t , if the absolute test statistics is more than critical value (absolute) then we can reject null hypothesis and accept alternative hypothesis. But if the test statistics is less than critical value, we cannot reject null hypothesis, and the H_0 is:-

H_0 : $INDAS01_t$, ECO_t , POL_t , TEC_t has unit root meaning that variable in not stationary

H_1 : $INDAS01_t$, ECO_t , POL_t , TEC_t do not have unit root meaning stationary.

The results of this test as follows:-

Table 01: Summary Results of Unit Root Test

		In level						First differences					
		ADF test			Philips-Perron tesr			ADF test			Philips-Perron tesr		
		Model 01	Model 02	Model 03	Model 01	Model 02	Model 03	Model 04	Model 05	Model 06	Model 04	Model 05	Model 06
INDAS01	statistic value	-0.832	-2.309	-2.175	-0.975	-2.62	-2.33	-3.553	-3.415	-3.236	-4.459	-4.149	-3.828
	critical value	-1.968	-3.12	-3.829	-1.968	-3.098	-3.791	-1.971	-3.12	-3.829	-1.97	-3.12	-3.829
ECOt	statistic value	-0.396	-4.095	-3.836	-0.723	-4.612	-4.311	-5.327	-5.049	-4.70	-11.27	-10.53	-9.298
	critical value	-1.978	-3.144	-3.875	-1.968	-3.098	-3.791	-1.978	-3.175	-3.933	-1.971	-3.12	-3.829
POLt	statistic value	-1.416	-2.267	-2.147	-1.647	-3.244	-2.045	-3.138	-3.215	-3.132	-3.163	-3.462	-3.594
	critical value	-1.968	-3.098	-3.829	-1.968	-3.099	-3.791	-1.97	-3.12	-3.829	-1.97	-3.12	-3.829
TECt	statistic value	-0.519	-1.021	-2.96	-0.576	-1.128	-2.16	-2.871	-3.286	-3.116	-2.841	-3.344	-3.068
	critical value												

critical value	-1.968	-3.099	-3.829	-1.968	-3.099	-3.791	-1.971	-3.145	-3.875	-1.971	-3.12	-3.829
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Source: Based on Eview.7 program outputs.

Based on table (01), we observe from all tests such as Augmented-Dickey-Fuller (ADF), Phillips-Peron (PP) that all-time series are not stationary in level, because the statistic value < critical value in level or (the majority Prob: P-value > 5%), meaning that variables $INDAS01_t$, ECO_t , POL_t , and TEC_t is not stationary in level, and become stationary after first differenced, this means: $INDAS01_t, ECO_t, POL_t, TEC_t \sim I(1)$.

4.4. Lag Order Selection Test

The results are given as follows:-

Table 02: Summary Results of Lag Order Selection Test

VAR Lag Order Selection Criteria

Endogenous variables: INDAS01 ECO POL TEC

Exogenous variables: C

Date: 11/03/20 Time: 08:45

Sample: 2006 2020

Included observations: 13

Lag	LogL	LR	FPE	AIC	SC	HQ
0	38.20735	NA	6.10e-08	-5.262669	-5.088838	-5.298399
1	77.89466	48.84593*	1.88e-09	-8.906871	-8.037718	-9.085521
2	117.5209	24.38540	1.51e-10*	-12.54168*	-10.97721*	-12.86325*

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Source: Based on Eview.7 program outputs.

From table (02), we observe from all Criteria such as Schwarz, Akaike, and Hannan Quinn that Optimal Lag Order Selection is $p = 1$.

4.5. Cointegration Test

The results of this test are:-

Table 03: Summary Results of Cointegration Test

Date: 11/03/20 Time: 09:00

Sample (adjusted): 2008 2020

Included observations: 13 after adjustments

Trend assumption: Linear deterministic trend

Series: INDAS01 ECO POL TEC

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.997986	103.8912	47.85613	0.0000
At most 1	0.584900	23.19400	29.79707	0.2367
At most 2	0.521437	11.76393	15.49471	0.1686
At most 3	0.154604	2.183358	3.841466	0.1395

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.997986	80.69722	27.58434	0.0000
At most 1	0.584900	11.43007	21.13162	0.6044
At most 2	0.521437	9.580574	14.26460	0.2410
At most 3	0.154604	2.183358	3.841466	0.1395

*Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Based on Eview.7 program outputs.

Based on table (03), the cointegration test is aims to accept at least one causal relationship between: $INDAS01_t$, ECO_t , POL_t , and TEC_t , because the P-value in both test (Trace test, Max-eigenvalue test) less than 5%: $Prob = (0.000, 0.000, 0.0001) \leq 5\%$, therefore, , we refuse H_0 (H_0 : No Cointegration) and accepted H_1 , in other words, there is a long term dynamic relationship between ECO_t , POL_t , TEC_t , and the Indian financial reporting environment after adoption of IFRS in period 2006-2020, or all the variables such as $INDAS01_t$, ECO_t , POL_t and TEC_t have long run associationchip.

4.6. Empirical Models

Table (04) summarizes the results of the estimation models as follows:-

Table 04: Results of Regression Models

Long run CointEq1						
	INDAS01 (-1)	ECO (-1)	POL (-1)	TEC (-1)	C	
Coefficient	1.00000	2.3507	-0.7368	0.68199	-13.263	
Std. Error	-	0.3099	0.1757	0.13537	-	
t- statistic	-	7.5834	-4.19289	5.038	-	
Error Correction (Short run)						
	Coefficient	Std. Error	t- statistic	Prob (t)	R-squared	F- statistic
CointEq1	-0.446	0.1395	-3.1964	0.0077	0.4598	10.217
C	-0.04489	0.0499	-0.8981	0.3868		
Wald test						
Test Statistic		Value	Df	Prob	H0	
Chi-square C(2)		-0.8981	2	0.3691	C(4)=C(5)=0	

Source: Based on Eview.7 program outputs.

Based on table (04), we can representation the results of relationship between the quality of the Indian financial reporting environment after adopting IFRS and Indian institutional environment as follows:-

Long run:-

$$e_{t-1} = INDAS01_{t-1} + 2.3507 ECO_{t-1} - 7.7368 POL_{t-1} + 0.682 TEC_{t-1} - 13.263$$

Short run:-

$$\Delta \text{INDAS01}_t = -0.446 e_{t-1} - 0.04489$$

From this model we can see that the Speed of adjustments towards long run equilibrium is negative and significant: $C(1) = -0.446$ and $P\text{-value} = 0.0077 < 5\%$, for that, we can confirm the long causality from the three independent variables such as ECO_t , POL_t , TEC_t to INDAS01_t , meaning that, ECO_t , POL_t , TEC_t have influence on the dependent variable INDAS01_t in the long run. In other words, there is long run causality running from ECO_t , POL_t and TEC_t to INDAS01_t . In the long term the Indian financial reporting environment need 2.24 years ($1 \div 0.446 = 2.24$) to return of the point equilibrium, which is evidence of the strength relationship between INDAS01_t and ECO_t , POL_t , TEC_t . While making sure of the stability of the residual series in order to use Serial Correlation LM test as follows:-

Table 05: Summary Results of Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.542028	Prob. F(1,11)	0.4770
Obs*R-squared	0.657457	Prob. Chi-Square(1)	0.4175

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 11/03/20 **Time:** 13:02

Sample: 2007 2020

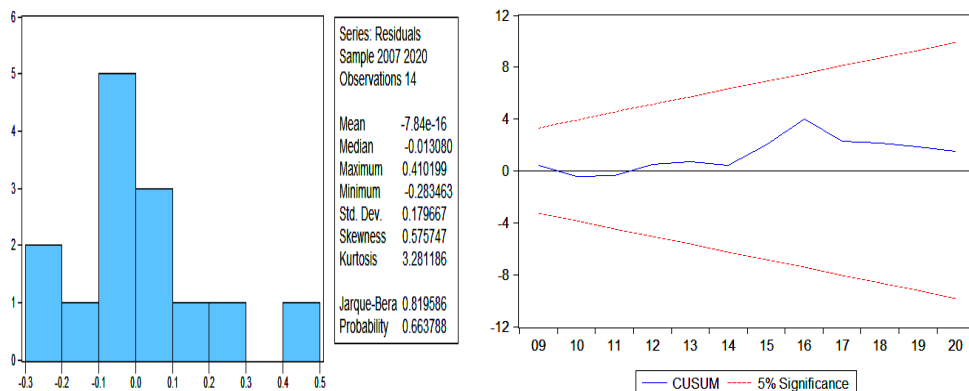
Included observations: 14

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.036785	0.150791	0.243949	0.8118
C(2)	0.001091	0.050982	0.021397	0.9833
RESID(-1)	-0.230973	0.313726	-0.736226	0.4770
R-squared	0.046961	Mean dependent var	-7.84E-16	
Adjusted R-squared	-0.126319	S.D. dependent var	0.179667	
S.E. of regression	0.190677	Akaike info criterion	-0.289063	
Sum squared resid	0.399934	Schwarz criterion	-0.152123	
Log likelihood	5.023444	Hannan-Quinn criter.	-0.301740	
F-statistic	0.271014	Durbin-Watson stat	2.091659	
Prob(F-statistic)	0.767552			

Source: Based on Eview.7 program outputs.

From table (05) we find that Prob chi-Square large than 5 % ($0.4175 > 5\%$), thus, there is no Serial Correlation. And to ensure the stability of the residual series in order by using normality test and Recursive Estimates (OLS only) test as follows:-

Figure 05: Graphical representation of the residuals

Source: data were processed using Eview.7

From the graphs, we conclude that the model is dynamically stable and normally distributed, because Prob Jarque-Bera more than 5 %: $0.663 > 5\%$, in addition to other statistical results.

CONCLUSION

With the growth of Indian Economy and increasing integration with the global economies, it would be imperative for Indian companies to adopt IFRS for their financial reporting. The overhaul of Indian GAAP into Ind AS promises to bring about positive changes for the Indian business environment. Convergence to IFRS will greatly enhance the transparency of Indian companies which will surely help them to project themselves in global map, which will help Indian companies benchmark their performance with global counterparts. The transparency of IFRS implementation will be useful for overall industry and business Indian. Ind AS is a good way for Indian entities to smooth out their earnings from Indian GAAP to something similar to IFRS. However, the ICAI will have to make adequate investments and build infrastructure for awareness and training program, and Taxation laws should address the treatment of tax liabilities after convergence from Indian GAAP to IFRS. And if IFRS will be mandatory then SMEs Indian face difficulties in various aspects like financial planning, tax planning etc. Also, converging or converting to new accounting principles always involves some degree of financial and resource cost. Businesses and their advisors will have to learn new terminology and accounting techniques and make changes to their accounting system. It is well within the realm of possibility that one day; India has the capacity

and the resources to completely adopt IFRS in its business environment.

Last empirical results clearly to confirm a main hypothesis that the adoption of IFRS has improved the Indian financial reporting environment during the period 2006-2020, our evidence suggests that the increase in on the Indian financial reporting environment by adopting IFRS is more likely a result of improved institutional environment quality as well; we find that IFRS adoption has a significantly greater effect on Indian financial reporting environment.

Limitations of the Study and Outline for Further Research

As any other study of this kind of research, it is subject to a number of limitations. This study was conducted in the Indian Economy, Therefore, caution is required in generalizing the results to other countries, and more research should be undertaken in other developing economies. Future research could expand the framework of this study, as more data becomes available in future, to raise further explanation of the models and to reveal more generalized findings in Indian economy or other.

Note:-

1- For simplicity, this study uses the term IFRS to refer to both IFRS issued by the International Accounting Standards Board (IASB) and International Accounting Standards (IAS) issued by IASC (the predecessor of IASB).

2- “Accounting quality” can be defined as the extent to which the financial statement information reflects the underlying economic situation.

3- Table 06: List of basic terms:-

Terms	Explanation of the term
Ind-AS	Indian accounting standards adapted from IFRS
I.C.A.I.	Institute of Chartered Accountants of India
I.C.W.A.	Institute of Cost and Works Accountants of India
NACAS	National Advisory Committee on Accounting Standards
MCA	the Ministry of Corporate Affairs
RBI	the Reserve Bank of India
IRDA	Insurance Regulatory and Development Authority
SEBI	the Securities and Exchange Board of India

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