An Empirical Study of the Impact of Adoption of IFRS on the Financial Activities of Companies in India

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Reliable, consistent and uniform financial reporting is important part of good corporate governance practices worldwide in order to enhance the credibility of the businesses in the eyes of investors to take informed investment decisions. Today with increasing globalization and integration of capital markets, it has become mandatory for companies to adopt a single language of financial reporting, i.e. IFRS (International Financial Reporting Standards). More than 100 countries have adopted IFRS and many others have given their consent to adopt IFRS in the near future. India is also in line to converge with IFRS. This paper investigates the impact of IFRS adoption on financial activities of Indian companies by using a sample of ten companies for five years, 2010-11 to 2014-15. This paper empirically studies four most important areas of financial activity, i.e., financial risks, investment activities, operating activities and debt covenants. In this paper statistical significance of each area is calculated and results discussed.

Keyword: IFRS; Globalization; Convergence; International Accounting Standards Board (IASB); Financial Activities; Debt Covenants; Investment etc.

I. INTRODUCTION

The magical phenomenon of globalization has made the world a global village. Activities of corporate and investors are not limited by any geographical boundaries. In the last few years, increasing globalization and integration of capital markets have made it mandatory to harmonize accounting standards across the globe. Investors require financial reporting which can give consistent comparability across countries. In an era of increasing globalization, it is imperative to have a single language of financial reporting.

IFRS is developed by the International Accounting Standards Board (IASB), which operates under the oversight of the IFRS Foundation. The goal of the IASB and the IFRS Foundation is to develop a single set of global financial reporting standards that bring transparency, accountability and efficiency to financial markets around the world. Those standards serve the public interest by fostering trust, growth, and long-term financial stability in the global economy.

Therefore, International Financial Reporting Standards (IFRS) have gained momentum all around the globe. International reporting convergence is becoming a recent and important topic for regulators, professional bodies, global investors, government and all other stakeholders who use the financial information of public companies.

In the year 2002 the European Union compelled the listed companies in Europe to adopt IFRS for consolidated financial statements, this came as a major breakthrough for IFRS. The effect of IFRS adoption was noticeable by the year 2005 when more than 8,000 companies across 30 countries, including UK, France, Spain, Germany, among others, adopted IFRS.

By 2005, along with Europe, IFRS was mandatory in many countries in Asia, Africa and Latin America. In addition, countries like Australia, Hong Kong, New Zealand, Philippines and Singapore also synchronized their national accounting standards to IFRS.

In terms of size of capital market, the US and Japan are the major exceptions as they still require their entities to prepare financial statements as per their national accounting standards. Though, many multinationals in the US are using IFRS for their foreign consolidation (Iwata, 2010).

Companies in India are also raising capital from foreign countries and are involved in diversification, investment and cross-border mergers. Funds are moving across borders of many countries. If companies report as per the rules prescribed by the local regulatory bodies, investors would have to study the accounting standards across various countries before investing.

Though, adoption of IFRS is believed to lead to an increase in transparency, comparability and quality of financial reporting, thereby benefitting investors. However, the fundamental economic differences within each country may hamper the comparison between countries with huge economic differences. Convergence to IFRS would give Indian companies access to international capital markets without going through the unwieldy process of conversion to the relevant Generally Accepted Accounting Principles (GAAP) and subsequent processes.

Indian companies are currently following Generally Accepted Accounting Principle, issued by the Institute of Chartered
Accountants of India (ICAI) and Ministry of Corporate Affairs (MCA), Government of India. The core group of MCA had recommended convergence to IFRS in a phased manner starting from April 2012.

This paper attempts to study the impact of IFRS adoption on the financial activities of Indian companies. The financial activities considered in this study are: financial risks, investment activities, operating activities and impact on debt covenants. Though there are similarities between Indian GAAP and IFRS, there still exist significant differences which may have significant financial impact.

II. LITERATURE REVIEW

Various studies have been done in the field of IFRS across the globe. Proponents of IFRS often claim that IFRS adoption leads to greater and higher-quality disclosures. When compared with local accounting standards in most countries, IFRS is considered as being more fair-value-oriented, reducing accounting flexibility allowed for the issuers of financial statements, and incorporating the effects of economic events on firm performance into financial statements in a timely manner (Coopers & Lybrand 1993; Dumontier & Raffournier 1998; GAAP 2000).

Regulators and investors have commonly expressed the view that more the transparency and higher the quality in accounting, lower is the cost of capital for adopting companies (Levitt, 1998; IASB, 2002). The lower cost of capital is based on the theory that higher information quality lowers the estimation risk of future returns (Barry & Brown, 1985) and this lowers the information asymmetries between managers and investors that lower the choices of adverse selection, thus increasing liquidity and ultimately lowering the required rate of return (Diamond & Verrecchia, 1991).

In one of the major work on studying economic consequences due to mandatory IFRS reporting Daske et al. (2008) with a sample of 26 countries for a period from 2001 to 2005 found that, on an average, market liquidity increases around the time of introduction of IFRS.

Implementation of IFRS has indicated decrease in cost of capital and increase in equity valuation. There are varied opinions among researchers regarding the impact of IFRS on earnings management (Van Tendeloo and Vanstraelen 2008; and Zéghal et al., 2011).

Lantto and Sahlstrom (2009) in their study examine the impact of IFRS adoption on key financial ratios using Finland as the sample country. The results clearly show that the adoption of IFRS changes the magnitude of the key accounting ratios.

In another study using financial ratios based on profitability, activity, liquidity and solvency, Padtova and Vochozka (2011) compare the informative value of financial statements of CEZ Inc. drawn up under IFRS and Czech accounting standards for 2004 and 2005. Financial statements prepared under Czech accounting standards showed the company healthier than financial statements drawn under IFRS. Therefore changing the magnitudes of the key accounting ratios of Finnish companies by considerably increasing the profitability ratios and gearing ratio

Aisbitt (2006) and Cordazzo (2008) showed that IFRS adoption will have a greater impact on net income than on shareholder’s equity. Some studies could not identify a clear pattern for increased earnings after IFRS adoption (Iaruga et al., 2007). The change in profit is independent of firm size or nominal profit (Perramon and Amat, 2006).

Kamath and Desai (2014) in their study The Impact of IFRS Adoption on the Financial Activities of Companies in India An Empirical Study, categorized the financial activities into financial risk, investment activities, operating activities and debt covenant. And with the help of ratios suggested that investment activities and operating activities showed improvement, whereas financial risk and debt covenant showed no difference.

However, IFRS adoption has not led to any improvement in the earnings management in India (Rudra and Bhattacharjee, 2011). However, IFRS is fair value based and is more transparent than Indian GAAP, which is conservative (Swamynathan and Sindhu, 2011).

However, in contrast, Ferrer et al. (2011) investigate how liquidity and leverage ratios exert significant effect on the degree of compliance with IFRS disclosures as measured by disclosure indexes constructed from Balance Sheets and Income Statements of 100 publicly listed companies in Philippines. The study says that liquidity and financial leverage have no effect on IFRS when expressed in terms of Balance Sheet and Income Statement indices.

From the above literature review, it is apparent that very few of the research has directly been able to relate the impact on economic activities like investments, financial risks, operations, debt covenant and other key financial functions by the adoption of International Financial Reporting Standards by Indian companies and difference between IFRS and Indian GAAP. Basically IFRS adoption is viewed as a commitment to better disclosure, which may have various impacts on Indian companies, which is required to be researched and thus check the impact on economic activities after adoption of IFRS by Indian companies.

III. OBJECTIVES AND FORMULATION OF HYPOTHESES

The Objective of the present study is:

- To ascertain the impact of IFRS adoption on financial activities of select Indian companies.
Financial activities can be best covered by parameters like financial risks, investing activities, operating activities and debt covenants of Indian companies.

Based on the extensive literature review and the objective mentioned above, the following hypotheses were formulated:

1. **H₀**: There is no improvement in financial risk after adoption of IFRS.
   **H₁**: There is improvement in financial risk after adoption of IFRS.

2. **H₀**: There is no increase in investment activities after adoption of IFRS.
   **H₁**: There is increase in investment activities after adoption of IFRS.

3. **H₀**: There is no increase in operating activities after adoption of IFRS.
   **H₁**: There is increase in operating activities after adoption of IFRS.

4. **H₀**: There is no change in the debt covenants of the company after adoption of IFRS.
   **H₁**: There is change in the debt covenants of the company after adoption of IFRS.

### IV. RESEARCH METHODOLOGY

The study is quantitative in nature. It attempts to calculate the impact of IFRS adoption on the financial activities of the sample companies. The scope of the study is restricted to listed companies in India which have published their financial statements under both Indian GAAP and IFRS GAAP for five financial years, 2010-11 to 2014-15. Though IFRS is not mandatory in India, some companies are complying with IFRS, either voluntarily or because of the requirement of regulatory authorities outside India (Gupta, 2012).

The final sample consists of ten listed companies - Infosys, Wipro, TCS, Dr. Reddy Laboratories, Sterlite, Rolta India Ltd., Glen Pharma, Dabur India Ltd., Bharti Airtel, Tata Motor. This study has taken variables same as by Kamath and Desai (2014) in their paper to study financial activities. The financial activities considered for analysis are: financial risks, investing activities, operating activities and debt covenants. Data was collected for the following parameters measuring the financial activities considered in this study for all the ten sample companies for a period from 2010-11 to 2014-15.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Financial Activity</th>
<th>Parameters</th>
<th>Variables</th>
<th>Formula Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Financial Risks (Kamath and Desai, 2014)</td>
<td>Liquidity</td>
<td>Quick Ratio</td>
<td>(Current Assets -Inventory) / Current Liabilities (Lantto and Shalström, 2009; and Padrtova and Vochozka, 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Profitability</td>
<td>Return on Equity</td>
<td>Net Income/ Share holders Funds (Lantto and Shalström, 2009; and Padrtova and Vochozka, 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leverage</td>
<td>Debt to Equity Ratio</td>
<td>Total Debt/Total Equity (Lantto and Shalström, 2009; and Padrtova and Vochozka, 2011)</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>Investing Activities (Kamath and Desai, 2014)</td>
<td>Investment in Fixed Assets</td>
<td>Gross value of Fixed Assets</td>
<td>log (Addition to Investment) (Aubert and Grudnitski, 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investment in Cash flow</td>
<td>As given in Cash Flow Statement</td>
<td>log (Cash from investing Activities) (Aubert and Grudnitski, 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Return on Assets</td>
<td>Ratio Between Net Income and gross total assets</td>
<td>Net Income/Total assets (Kabir et al., 2010; and Padrtova and Vochozka, 2011)</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>Operating Activities (Kamath and Desai, 2014)</td>
<td>Operational Risks</td>
<td>Fixed Asset Turnover ratio</td>
<td>Sales/Net fixed assets (Byard et al., 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sales growth</td>
<td>Growth in sales</td>
<td>In (Sales of current year/sales of previous year) (Aubert and Grudnitski, 2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash from operations</td>
<td>As given in cash flow statement</td>
<td>Log (Cash flow from operating activities) (Aubert and Grudnitski, 2011; and Padrtova and Vochozka, 2011)</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>Debt Covenants (Kamath and Desai, 2014)</td>
<td>Debt to capital ratio</td>
<td>Ratio between debt and capital</td>
<td>Total debt/total capital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debt to EBITDA</td>
<td>Ratio between debt and EBITDA</td>
<td>Total debt/EBITDA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest coverage ratio</td>
<td>Ratio between operating profit and interest</td>
<td>Operating profit/interest</td>
</tr>
</tbody>
</table>
Data was obtained from the annual reports of the respective sample companies, money control website and official websites of various regulatory authorities. All the financial variables were measured using profit and loss accounts, balance sheets and cash flow statements of the sample companies. The above mentioned 4 hypothesis were tested using independent sample t-test for two sample means differences at 5% level of significance.

V. DATA ANALYSIS AND DISCUSSION

Hypothesis (1) H₀: There is no improvement in financial risk after adoption of IFRS. (Table 2)

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUICK RATIO</td>
<td>-1.620</td>
<td>98</td>
<td>.108</td>
<td>-.45800000</td>
<td>.28272697</td>
<td>-1.01906246</td>
<td>.10306246</td>
</tr>
<tr>
<td>RETURN ON EQUITY</td>
<td>1.077</td>
<td>98</td>
<td>.284</td>
<td>3.95920000</td>
<td>3.67590763</td>
<td>-3.3551906</td>
<td>11.25391906</td>
</tr>
<tr>
<td>DEBT EQUITY RATIO</td>
<td>3.413</td>
<td>97</td>
<td>.001</td>
<td>.46753469</td>
<td>.13697623</td>
<td>.19567480</td>
<td>.73939459</td>
</tr>
<tr>
<td>FINANCIAL RISK</td>
<td>1.091</td>
<td>98</td>
<td>.278</td>
<td>3.97460</td>
<td>3.64195</td>
<td>-3.25272</td>
<td>11.20192</td>
</tr>
</tbody>
</table>

In Hypothesis 1, the impact of IFRS on the financial risk is calculated. In the study financial risk is represented by Quick ratio, ROE (Profitability) and Debt Equity ratio (Leverage). It highlights parameters calculated under Indian GAAP, IFRS, and difference between the two accounting regimes along with p-values. The p-value value at 5% significance level is 0.108 which concludes that there is no significant difference in the quick ratio (liquidity) calculated under Indian GAAP financials and IFRS financials. Again, p-value at 5% significance level is 0.284 shows no significant difference between average ROE (profitability) calculated under Indian GAAP and IFRS-based financials. But, p-value of debt equity ratio at 5% significance level is 0.001 shows difference between the debt-equity ratios (leverage) calculated based on Indian GAAP and IFRS financials. Further, combined p-value at 5% level of significance of all the three variables i.e. quick ratio, ROI and debt equity ratio is 0.278, therefore null hypothesis is accepted, and there is no significant difference in financial risk of the company under the two regimes.

Hypothesis (2) H₀: There is no increase in investment activities after adoption of IFRS (Table 3)

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVESTMENT IN FIXED ASSET</td>
<td>2.564</td>
<td>97</td>
<td>.012</td>
<td>.74275112</td>
<td>.28973795</td>
<td>.16770149</td>
</tr>
<tr>
<td>RETURN ON ASSET</td>
<td>.360</td>
<td>97</td>
<td>.720</td>
<td>12.99771837</td>
<td>36.09104913</td>
<td>-58.63302366</td>
</tr>
<tr>
<td>CASHFLOW FROM INVESTMENTS</td>
<td>-2.489</td>
<td>97</td>
<td>.015</td>
<td>-2.80094526</td>
<td>1.12537784</td>
<td>-5.03450876</td>
</tr>
<tr>
<td>INVESTMENT ACTIVITIES</td>
<td>.185</td>
<td>98</td>
<td>.854</td>
<td>6.71831</td>
<td>36.29091</td>
<td>-65.29981</td>
</tr>
</tbody>
</table>
As per the table above, Hypothesis 2 studies the impact of IFRS adoption on the investment activities of Indian companies. Variables used to study the Investments of the company are Investment in Fixed Assets, Cash flow arising out of Investment Activities and Return on Asset.

The table 3 presents the impact of IFRS on investment activities. The p-value at 5% significance level is 0.012 and 0.015 of investment in fixed assets and cash flow arising out of investment activities respectively, showing statistically significant difference in investment in fixed assets and cash flow from investments calculated under IFRS-based financials and Indian GAAP-based financials. Further, there is no significant difference in the ROA calculated under the two regimes is also observed as the p-value at 5% significance level is 0.720.

Therefore, at 5% significance level, statistical analysis accepts the null of Hypothesis 2. Thus, there is statistical evidence that investment activities have no significant difference after IFRS adoption.

Hypothesis (3) H0: There is no increase in operating activities after adoption of IFRS. (Table 4)

Hypothesis 3 analyzes the impact of IFRS adoption on the Operational Activities of Indian Companies. Variables taken to study operational activities of the company are Growth in Sales, Cash from Operating activities and Operational Risks (Fixed Asset Turnover Ratio).

The table 4 presents the impact on operational activities. The p-value at 5% significance level is 0.560 and 0.074 respectively show that there is no difference between fixed asset turnover and sales growth rate calculated under Indian GAAP and IFRS financials. However at 5% level of significance, it is observed that there is statistical difference in the cash from operating activities under Indian GAAP and IFRS financials (p-value 0.009). Therefore, at the p-value of 0.130 we accept the null Hypothesis 3. Thus, there is no statistical evidence to prove that there is significant increase in the operating activities due to IFRS adoption.

Hypothesis (4) H0: There is no change in the debt covenants of the company after adoption of IFRS. (Table 5)

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIXED ASSET TURNOVER RATIO</td>
<td>-0.560</td>
<td>97</td>
<td>.560</td>
<td>-20.155510</td>
<td>34420125</td>
</tr>
<tr>
<td>SALES GROWTH</td>
<td>1.808</td>
<td>97</td>
<td>.074</td>
<td>.49053540</td>
<td>.27134611</td>
</tr>
<tr>
<td>CASH FLOW FROM OPERATIONS</td>
<td>2.670</td>
<td>97</td>
<td>.099</td>
<td>1.46659857</td>
<td>.54924000</td>
</tr>
<tr>
<td>OPERATING ACTIVITIES</td>
<td>1.527</td>
<td>98</td>
<td>.130</td>
<td>1.33580</td>
<td>.87493</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBT TO TOTAL CAPITAL</td>
<td>3.413</td>
<td>97</td>
<td>.001</td>
<td>.13576852</td>
<td>.03977996</td>
</tr>
<tr>
<td>DEBT TO EBDITA</td>
<td>-.872</td>
<td>97</td>
<td>.385</td>
<td>-1.51674025</td>
<td>1.73912396</td>
</tr>
<tr>
<td>INTEREST COVERAGE RATIO</td>
<td>-.604</td>
<td>97</td>
<td>.547</td>
<td>-21.44466122</td>
<td>35.49882522</td>
</tr>
<tr>
<td>DEBT COVENANT</td>
<td>-.686</td>
<td>98</td>
<td>.494</td>
<td>-24.04156</td>
<td>35.0465</td>
</tr>
</tbody>
</table>
Hypothesis 4 studies the impact of IFRS adoption on the debt covenants of Indian companies. Variables used to study Debt covenants are Debt to Capital Ratio, Debt to EBITDA and Interest Coverage Ratio.

The table 5 presents the impact of IFRS on debt covenants. It is observed that as the difference in the absolute value, there is statistically significant difference in the debt-to-total capital ratio calculated under Indian GAAP and IFRS financials. The results also reveal that at a p-value of 0.385 and 0.547 respectively at 5% level significance there is no statistical evidence to prove the difference in debt to EBITDA and interest coverage ratio multiple under the two accounting regimes. Therefore the Hypothesis 4 is also accepted at p-value of 0.494 at 5% significance level, and proves that adoption of IFRS does not show any significant difference on debt covenant under the two regimes.

VI. CONCLUSION

The paper empirically tested the impact of IFRS adoption on the financial activities of a sample of ten Indian listed companies. The results reveal that there is no significant improvement in financial risk, investment activities, operating activities and debt covenant. In other words, there is no significant change in financial activities due to adoption of IFRS. However, some variables taken to study like debt equity ratio used to study financial risk, investment in fixed asset and cashflow from investment activities used to study investment activities, cashflow from operations used to study operation activities and debt to total capital used to study debt covenant showed changes with the adoption of IFRS. But when studied collectively to see the impact of adoption of IFRS on financial activities, no significant difference was observed between the two regimes. However, the project has certain limitations. It has been done only on ten companies, which are listed for a limited period of five years, i.e., 2010-11 to 2014-15, and the implication of IFRS on non-accounting areas has also not been considered.

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