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Does IFRs Influence Earnings Management? Evidence from India

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Abstract

The issue of earnings management has always been a concern for the reliability of published accounting reports. Previous studies have shown that accounting standards add value to accounting information in the developed economy, but, remained silent about its benefits in the context of emerging economies. Although researchers earlier classified India as one of the countries with high levels of earnings management in the world, there were very few studies on earnings management in India with no inferences on influences of accounting standards on earnings management. With this background, India, being an emerging market, provides a unique opportunity to examine whether adoption of international standards, is associated with reduced earnings management, which is the objective of this study. For the purpose of analysis, regression model is used in this firm-level study. The results contradict most of the previous findings based on developed countries by indicating that firms adopting international standards (i.e., International Financial Reporting Standards or IFRS) are more likely to smooth earnings compared to non-adopting firms. These findings could prompt the regulators to think about the effectiveness of IFRS in reducing opportunistic earnings management in an emerging economy, like India, especially, when the Indian accounting standards are undergoing substantial changes with the convergence of IFRS in a phased manner.

Keywords: Earnings Management, International Financial Reporting Standards or IFRS, India.

1. Introduction

The recent flourish of corporate accounting discredit has had a significant influence on the way the corporate leaders and professional accountants are being viewed .The level of business ethics is under severe attack and the accounting profession under extreme inspection. It seems like every day the media is reporting new revelations of corporate dishonesty or accounting fraud. It is not surprising that a crisis of assurance currently exists between shareholders, professional accountants and enterprises. One issue that has come to the forefront of recent debate regarding unethical behavior is that of earnings management or more expressively "opportunistic" earnings management. This issue has generated a great deal of talk and argument. However, earnings management is not always alleged as wrong. Arguments supporting it have also been made. Many believe that there is a good side of earnings management and that it "can be a device to convey inside information to the market, enabling share price to better reflect the firm's future prospects" (Scott, 2003, p.385). The accounting profession has also accepted that not all earnings management techniques are deceptive.

However, the current accepted idea among accountants, regulators and standard setters is that, more often than not, earnings management is detrimental. It deceives investors and reduces the dependability of financial reporting. Thus a clearer understanding of earnings management is vital before any persistent discussion of the subject. Mulford and Comiskey (2002) defined earnings management as "the active manipulation of earnings toward a predetermined target" (p.51). Healy and Whalen (1998) offer a much more detailed definition, stating that: "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers". Finally, the Assurance Handbook defines earnings management to include "the recording of accounting entries, without any event to justify the accounting or the failure to record or correctly record transactions for the purpose of altering results" (Assurance Handbook, 2003). The common subject about the above definitions is one of altering results.

The issue of earnings management has always been an anxiety for the reliability of published accounting reports. Indication from the academic literature has shown that the practice of earnings management is quite extensive among publicly traded firms (Barth et al. 2008; Burgstahler and Dichev, 1997). In emerging markets, like India due to their relatively weak legal enforcement capabilities, earnings management issue is more universally practiced (e.g., Jian and Wong, 2004).

Not surprisingly, earnings management has recently been a well-pursued research topic in the emerging market literature like India. Many reasons have been offered for why management engages in this behavior. Some of them blame GAAP (i.e., Generally Accepted Accounting Principles), citing that they are inherently faulty and enable earnings to be managed dishonorably. Thus standard setters and the accounting profession are critically concerned about the practice of earnings management and the unfavorable consequence it has on financial reporting. However, there is relatively little empirical evidence on whether the adoption of international standards by Indian companies as compared to local GAAP has been helpful in enhancement of the quality of accounting information, including any reduction in the level of earnings management.

In this study, we wish to investigate whether Indian companies adopting international standards (i.e., International Financial Reporting Standards or IFRS) have higher earnings quality compared to non adopting companies and are less likely to smooth earnings and engage in earnings management with an improvement of reporting quality.

The rest of the paper is developed as follows. Section 2 outlines the literature survey; Section 3 talks about the research objective and hypothesis; Section 4 describes the data and methodology. Section 5 discusses the results; a brief conclusion follows in section 6.

2. Literature Review

There have been comparatively few studies on earnings management practices in India, at least as compared to the number of studies, which have examined similar practices in China. Some recent articles have examined the presence of earnings management in Indian firms and banks.

Chipalkatti and Rishi (2007) in their paper report that low profitability banks in India adopted earnings management techniques to under provide their loan loss provisions and understate their gross nonperforming assets in order to boost earnings and capital adequacy norms .The paper examines the behavior of Indian Banks in the context of tighter regulatory standards that become effective after 1999 .The results showed that “weak” Indian Banks camouflaged the magnitude of their gross nonperforming assets in the post 1999 period .

Shen and Chih (2005) in an international comparison also reported presence of high level of earnings management in Indian bank. The paper affirmed that banks in more than two-thirds of the 48 countries sampled are found to have managed their earnings. The relationship between return and risk is positive for high earnings banks, but is negative for low earnings banks. The paper concluded that stronger protection of investors and greater transparency in accounting disclosure can reduce banks’ incentives to manage earnings. It is seen that stronger enforcement of laws can counter intuitively result in stronger earnings management. However, this effect appears in low-income countries only, and not in high-income countries.

Sarkar, Sarkar and Sen (2006) in their studies of earnings management in private sector in India report that firms with high quality governance mechanisms, such as independent board of directors are associated with low levels of earnings management. They investigated the impact of board characteristics on opportunistic earnings management in the context of a large emerging economy, India. While the role of company boards in earnings management has been examined in developed markets setting, particularly the US and UK, understanding their effectiveness in emerging markets like India is particularly important due to differences that exist in the structure of business organizations across these markets. Using a sample of 500 large Indian firms, they analyzed the effect of board independence on earnings management as has been the focus of most existing studies, and extend the existing literature by including characteristics of directors that proxy for the "quality" of both inside and outside directors that are likely to impinge on the effectiveness of boards in curbing earnings manipulation. The results indicated that it is not board independence per se, but rather board quality that is important for earnings management. The results showed that diligent boards are associated with lower earnings manipulation. With respect to inside directors, the results indicated that CEO-duality and presence of controlling shareholders on the board increases earnings management.

Previous studies have also shown that accounting standards add value to accounting information in the developed economy (Hung and Subramanyam, 2004; Bartov et al., 2004). However, it is uncertain whether such benefits also apply to developing or emerging economies. Despite the increasing importance of the earnings management problem in emerging markets, like India, there is relatively little empirical evidence to show whether international accounting standards improve the quality of accounting information provided by firms that have adopted them and whether such adoption reduce the level of earnings management.

The notion that different accounting standards are associated with different levels of earnings quality is evidenced in previous studies. By systematically modelling the effects of tightening accounting standards, Ewert and Wagenhofer (2005) conclude that higher earnings quality can be achieved by having stricter accounting standards that limit the number of accounting choices and prescribe clearer rules. In particular, their results confirm that tighter accounting standards increase earnings quality measured by the variability of reported earnings and the association between reported earnings and market price reactions.

Goncharov and Zimmermann (2007) investigated whether the level of earnings management differs between consolidated accounts of German companies prepared under three different accounting standards; German GAAP, IAS (i.e., International Accounting Standards) and US GAAP. Their findings show that the level of earnings management for firms that report their results under US GAAP is significantly lower, while the level of earnings management under German GAAP and IAS is roughly equal. Based on the evidence, they conclude that the different accounting choices embedded in different accounting standards influence the level of earnings management.

Using a broad sample, Barth, Landsman and Lang (2008) examine the accounting quality of firms in 21 countries that adopted IAS between the year 1994 and 2003. The study compares several accounting quality metrics for firms that apply IAS to those for a matched sample of firms that do not. The results of the study shows that companies applying IAS exhibit higher accounting quality in terms of less income smoothing, less management of earnings towards a target, more timely recognition of losses, and higher association of accounting information with share prices and returns. In addition, those firms also display an improvement in accounting quality between the pre and post IAS adoption periods.

However, Thomas Jeanjeana and Herve Stolowya (2008), in their study analyzed whether the mandatory introduction of IFRS standards had an impact on earnings quality, and more precisely on earnings management and came to conclusion that frequency of earnings management did not decline after the introduction of IFRS or International Financial Rporting Standard. In fact it increased in France and remained stable in the UK and in Australia. However, these three countries belong to different legal traditions: whereas France is a code-law country, Australia and the UK are common-law countries. Also, the importance of equity markets is high in Australia and the UK but less pronounced in France (Leuz et al., 2003). Taken together, these findings suggest that the switch to IFRS was not a major vector of improvement in terms of earnings quality.

None of the previous studies in India, however, examined whether IFRS or local GAAP proves to be more effective in preventing earnings management of managers in public companies though they have located the presence of earnings management in Indian firms. Though India belongs to the legal traditions of common law countries, the equity markets in India are developing and illiquid and hence it would provide a momentum to the findings of our study.

3. Research Objective

It is still an open question as to whether the adoption of international standards or IFRS improves the quality of accounting information, thereby reducing the level of earnings management. The emerging market in India provides a unique opportunity for US to examine these questions. In spite of authors classified India as one of the countries that engage in the highest levels of earnings management in the world there were very few studies on earnings management in India with no inferences on influences of accounting standards on earning management. In this way our proposed study seems to be unique and contribute to the society.

In this study, we propose to investigate whether the firms in India adopting international standards or IFRS is associated with reduced level of earnings management and thus have better reported earnings than non adapting firms

We hypothesize that,

H_1 : Firms in India that adopt International Standards are less likely to be engaged in earnings management than firms that adopt local GAAP.

4. Data and Methodology

4.1 Sample

The BSE 100 companies constitute the universe of the study. Out of these 100 companies the sample for our analysis consists of 67 private sector companies exclusive of the banking and financial sector and covers the financial year 2010. These companies accounted for more than 90 percent of market capitalization as on March 2010. The data for our analysis is sourced from the Prowess database created by the Center for Monitoring the Indian economy (CMIE).

4.2. Empirical Model and Variables

We examine the effect of following IFRS on earnings management using the following model, derived from the existing literature, *Opportunistic earnings management = f (IFRS, control variables) + error*

4.2.1 Dependent Variable: Opportunistic Earnings Management (DA)

Consistent with the previous literature, we use discretionary accruals as a measure of opportunistic earnings management. Discretionary accruals *(DA)* are calculated as the *absolute value of residuals* in the following cross-sectional regression model developed by Jones (1991) and modified by Dechow, Sloan and Sweeney (1995):

$$TACCR_{it} / Assets_{i,t-1} = a(1/Assets_{i,t-1}) + b(\Delta REV_{it} - \Delta REC_{it}) / Assets_{i,t-1} + c(PPE_{it} / Assets_{i,t-1}) + e_{it}$$

where, $TACCR_{it}$ is the total accruals for firm i in year t, $Assets_{i,t-1}$ is total assets for firm i in year t-1, ΔREV_{it} is measured by revenues in year t less revenues in year t-1 for firm i, ΔREC_{it} is measured by receivables in year t less receivables in year t-1 for firm i, PPE_{it} is the gross property, plant, and equipment for firm i in year t and e_{it} is the error term for firm i in year t. Total accruals are calculated by deducting the cash flows from operations (CFO) from net income (NI).

As in the literature, we consider the absolute measure of discretionary accruals as a proxy for the extent of opportunistic earnings management. High absolute value of discretionary accruals indicates low earnings quality.

4.2.2 Independent Variable: Adoption of IFRS

In order to analyze the role of adopting international accounting standards or IFRS in earnings management, we use a dummy variable, *IFRS*, which equals one if a firm follows IFRS along with local GAAP, and zero if it does not follow IFRS. As discussed earlier, adoption of international accounting standards or IFRS can potentially have both positive and negative effects on earnings quality. However, as per our stated hypothesis we predict a negative relationship between adoption of IFRS and opportunistic earnings management.

4.2.3 Control Variables

Although, we are investigating how adoption of IFRS can influence the extent of earnings management, there are other firm level factors that can influence earnings management and which require to be controlled for in the estimations. On the basis of earlier studies we consider financial leverage *(D/E),* firm's size *(size),* Market-to-book ratios (*M/B)*, and equity holdings by foreign institutional investors *(FII)* in a firm as the control variables.

The list of variables and their definitions are summarized in Table 1.

Table 1. List of Variables and Definitions

Variable Name	Definition
DA	Absolute Discretionary Accruals calculated using modified Jones model by Dechow et al.(1995)
IFRS	Dummy Variable. Equals one if a firm follows IFRS, and zero otherwise
Size	Log of market capitalisation
D/E	Financial leverage. Calculated as total borrowing divided by total equity
M/B	Market to book value ratio. Market value of equity divided by book value of equity
FII	Foreign institutional investors' share. Percentage of common stock owned by foreign institutional investors.

5. Empirical Results

5.1 Summary Statistics

As mentioned in Section 3.1, our sample consists of the 67 large firms in terms of Market capitalisation that trade in the Bombay Stock Exchange, accounting for about 90 percent of the market capitalization. Summary measures of variables of interest are presented in Table 2.

Table 2. Summary Statistics

Variable	Mean	Minimum	Maximum
DA	0.483	0.006	2.229
IFRS	0.328	0	1
FII	18.204	0.91	57.44
Size	9.891	8.375	12.704
D/E	0.511	0	3.27
M/B	5.192	0.7	32.95

Opportunistic earnings management is captured by the amount of discretionary accruals a firm recognizes. We notice that the mean value of discretionary accruals for the sample is quite high, about 48 percent of the lagged total assets. The value of discretionary accruals ranges from a minimum of 0.6 percent to a maximum of 223 percent of lagged total assets. Firm size is measured as a log of market capitalisation and has a mean value of 9.89, varying from a minimum of 8.37 to a maximum of 12.7. The mean value of leverage (measured as total borrowing to total equity) is 0.51, with a maximum value of 3.27. The mean market to book value ratio is 5.19. While the firms in our sample represent those with the largest market capitalisation in the Indian stock market, the descriptive values in Table 2 validate that there is reasonable variation in the basic firm characteristics which made it representative of the population.

5.2 IFRS Adoption and Earnings Management

The core research question in this paper is to assess whether adoption of IFRS leads to lower opportunistic earnings management or higher earnings quality in Indian context. As per our hypothesis we expect that adoption of international accounting standards leads to lower earnings management.

Table 3. Effect of IFRS Adoption on Earnings Management

Explanatory Variables	Model 1	Model 2
Intercept	-0.096 (0.821)	0.107 (0.797)
IFRS	0.104 * (0.146)	0.106 * (0.123)
FII	0.001 (0.79)	0.000 (0.934)
Size	0.013 (0.75)	-0.003 (0.931)
M/B	0.065 *** (0.001)	0.066 *** (0.000)
D/E	0.111 (0.349)	0.086 (0.469)
No. of Observations	67	67
R^2	0.48	0.5
F	2.98	3.04

Notes: P-values in parenthesis. ***, **, * denote the co-efficient is significant at the 1 percent, 5 percent, and 10 percent level respectively

We use the value of discretionary accruals to measure the amount of opportunistic earnings management. We consider 2 separate regression models to examine the effect of adopting IFRS on the discretionary accruals. In model 1, we examine the said impact by using discretionary accruals on the basis of modified Jones model (1995), whereas, in model 2, the same has been examined by using discretionary accruals on the basis of Jones model (1991). From the results of model 1 in Table 3, we find that with the adoption of IFRS, earnings management increases, significantly (p-value 0.146). This is opposite to our expectation. This can be due to, as suggested by Ball (2006), who points out several issues that may limit the success of IFRS adoption. The main concern is the greater use of fair value accounting under IFRS. Ball argues that when capital markets are not liquid as in the emerging markets, managers can influence quoted prices. When fair values are estimated using valuation models, the results can be noisy; and worse, managers can influence the estimation through their choices on models and parameters.

Our investigation on the impact of adoption of IFRS on earnings management by firms in the emerging market of India showed similar inferences. The result of my study indicates that firms adopting IFRS were unable to control earnings management and thereby, improve earning quality. Overall, our results are consistent with the argument made by several studies (e.g., Ball 2006; Leuz and Wysocki 2008) that IFRS may not be superior or even effective in countries that do not have appropriate capital market paradigms and institutional infrastructures to support IFRS reporting rules.

5.3 Effect of Control Variables

We talk about the effects of the control variables on earnings management in this section. Firms with high market to book ratio, show significantly greater opportunistic earnings management. The size does not have any significant effect on the discretionary accruals. All of these results are confirming the previous literature. However, although debt-equity ratio increases opportunistic earnings management as expected on the basis of earlier studies, the result is not significant. We are also unable to find out any significant impact of foreign institutional ownership on opportunistic earnings management.

5.4 Robustness Checks

We test for robustness by using the Jones approach (1991) to measure the discretionary accruals, instead of using the modified Jones approach, as suggested by Dechow et al. (1995) in model 2. In the Jones model (1991) the discretionary accruals are estimated without adjusting for change in receivables. Our results remain almost unaffected with the use of this alternative measure of earnings management. Here also the adoption of IFRS shows a significant positive relation with the opportunistic earnings management (p-value 0.123).

Finally, to make sure that our results were not driven by properties of the data, standard errors of all coefficients have been calculated using White's correction for heteroskedasticity. Hence, the test statistics used to infer the significance of the coefficients are consistent.

6. Conclusion

From our findings we can conclude that, just focusing on accounting standards alone is misleading and incomplete. It is generally accepted that the quality of IFRS is higher than most domestic accounting standards (e.g., Leuz and Verrecchia 2000; Ashbaugh and Pincus 2001; Leuz 2003; Barth et al. 2008) and that is why we expected accounting quality to be higher after the adoption of IFRS. But, we found that although accounting standards may control earnings management in some cases, it does not necessarily mean that a country with high-quality accounting standards will also have high-quality reported financial information and thus low earnings management. Previous studies, like, Tendenloo and Vanstraelen (2005) analyses the effect on earnings management of German firms that have adopted IFRS voluntarily, and provided evidence that only for firms audited by Big-4, earning management decreases significantly. They conclude that mere adoption of IFRS is not sufficient to guarantee a better quality of accounting information. Christensen *et al.* (2008) investigate the impact of incentives on accounting quality changes around IFRS adoption by German firms. They found that improvements in accounting quality are confined only to the firms applying

IFRS voluntarily. Hence, we can say that other than high-quality accounting standards, security laws, legal enforcement, and investor protection might be more fundamental institutions in determining the quality of reported financial information.

While our study includes an empirical investigation of any association between adoption of IFRS and earnings management, it is undertaken in the context of the emerging market of India. As a country-specific study, the conclusions from our study are probably difficult to extrapolate to other countries exhibiting different socio-economic and socio-political characteristics. This constitutes a constraint of my proposed study.

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