

Does Size Reflect Earnings Management : Evidence from India

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ABSTRACT

Present study endeavors to identify whether there exists any positive relation between the size of the firm and the practice of earnings management in the Indian listed companies. For the purpose of study, a total of 186 non-finance companies were selected out of S & P BSE 500 companies. The period of study is between 2012 – 2016. The ADA model of earnings management is used. Hausman test was applied in order to decide fixed effect model and random effect model. The results indicate that there exists negative association of size of the firms on earnings quality but the impact is insignificant.

Introduction

Earnings Management by companies is a common phenomenon and can be observed in companies across the world. The companies for a multiple of reasons, have the pressure exceed the benchmark of earnings as what the market estimates and establishes. Consistency in maintaining the benchmark earnings or in exceeding the benchmark earnings enables companies to not only enjoy a high reputation but also ensures premium in their valuations thereby minimizing cost of capital. (SEBI, 2013; Kasznik and McNichols, 2002). It has been observed that when the companies fail to earn their stipulated benchmarks in earnings, they become more prone to severe stock losses (Skinner and Sloan, 2002).

Needless to say that in tandem, it affects the compensation that the executives expect (Matsunaga and Park, 2001). As a result, it becomes quite obvious many a times that managers of the companies may use their discretion to manage earnings so that they can meet or beat current-year market estimates. There could be different motives again for managing earnings. The intention can be considered 'positive' (Chaney and Lewis, 1995), if the figures reported are to provide private information to the market about the prospects of the company (Tucker and Zarowin, 2006) (earning informativeness). (Cahan et al., 2008) quote this as 'efficient manipulation'. There could however be 'opportunistic manipulation' too, if the managers are seen resorting to earnings management with the intention of pursuing their individual goals like better compensations. In this case, there exist strong chances of inferior quality information on earnings of the company and a greater information risk becomes quite evident (Bhattacharya et al., 2003)

Healy and Wahlen (1999) had stated three major motives of earnings management: (a) The expectations of capital market and the firm valuation (b) contracts in terms of accounting numbers, and (c) any government regulation. These three motivations trigger the earnings management in firms during multiple events like seasoned equity offerings (Rangan, 1998; and Teoh et al., 1998), during IPOs (Aharony et al., 1993; and Teoh et al., 1998); (Wu, 1997) management buyout (DeAngelo, 1986), takeovers (Christie and Zimmerman, 1994).

Earnings management often involves information asymmetry (Rao, Dandale 2008). The accruals in a company could be non-discretionary accruals and discretionary accruals. Non-discretionary accruals are the accounting adjustments by a firm as per the mandatory requirements by the accounting standard-

setting bodies, discretionary accruals on the other hand are the adjustments to cash flows as per the intention of managers. This has become an interesting area of study since last 4 decades to understand the discretionary accrual management by various firms with various intents. A large number of factors affect the discretionary accruals as observed in a lot of studies viz. corporate governance structure, Big 5 Auditors, government rules and regulations, size of the firm, corporate events and many more.

The present study endeavors to study whether there is any positive association between size of the firm and earnings management in Indian firms. For the purpose S & P BSE 500 listed stocks were selected and out of them 186 non – finance companies could finally be selected for the purpose of study. This study over the period 2012- 2016.

Literature Review

Based on the literature, different researches have observed different relations when it came to study how the size of a firm may affect the reported earnings of a firm. Generally, it is understood that large firms should not be involved much in earnings management for a multiple of reasons. (Ali et.al., 2015) The firms that are large in size definitely have more funds which could be employed in technology or in expertise which may lead in generating timely financial information to public. Therefore, in order to not only maintain their reputation but also the cost in the existence of financial analyst, the large sized firms should manage their earnings less as compared to small sized firms. Moreover, the internal control system and the auditors team are more qualified in larger firms making the control system more effective thereby requiring less earnings management in case of larger firms as against smaller firms. The reliability of such firms' financial statements is definitely more to public when compared with smaller firms. (Warfield, Wild et al., 1995). Even the external audit of large firms is carried by big 6 firms which are the most qualified and competent pool of auditors and this should generally prevent earnings management (Francis, et.al., 1999). The authors also mentioned that big accounting firms definitely are quality differentiators when it comes to controlling opportunistic and aggressive earnings management and this is true for both national and international firms.

There are however contrast results too. Shu and Chiang (2014) in their study to find out the relation between a firm's size and its use of discretionary accruals to manage reported earnings found a positive relationship. (Teoh, et. al, 1998) also found large firms using discretionary accruals when placing seasoned equity offerings while on the other hand, smaller firms were found more to rely upon timing the seasoned equity offering.

(Abed et. Al., 2012) in their study found that the agency problem was expected to be more with the increase in the size of the firm thereby indicating greater chances of earnings management in larger firms.

Burgstahler and Dichev (1997) assessed how earnings management varies across firm size. They concluded that earnings management is basically done to avoid losses, irrespective of the size of the firm. However, the magnitude of the use of earnings management was found greater in large and medium sized firms as compared with small firms. (Francis, et.al , 1999) studied the role of big six auditors in the credible reporting of accruals and mentioned in their study that high-accrual firms have greater scope for aggressive and/or opportunistic earnings management and therefore they have an incentive to hire a Big 6 auditor to provide assurance that reported earnings are credible. This also indicates that large firms may have bigger need to manage their earnings. However, their study also revealed that even though firms with Big 6 auditors have higher levels of total accruals, these companies also have lesser amount of estimated discretionary accruals in comparison to the companies with non-Big 6 auditors.

Gray and Clarke (2004) note that larger firms are more likely to avoid managing earnings through discretionary accruals. Their argument is since they have more resources and as they earn higher profits, it becomes quite unlikely that they manage their earnings through discretionary accruals.

However, there are studies which have found no significant impact of firm's size on earnings management.

Bassiouny (2016) did a study on listed companies of Egypt and found firm's size to be insignificant to determine the firm's level of earnings management. (Llukani, 2013) also researched on firms of diverse sizes in Albania to identify if the size is a significant determinant of earnings management but he found his results did not vary significantly.

On the other hand, Charfeddine, Riahi and Omri(2013) found out that firm size is positively related to discretionary accruals such that larger firms are more likely to engage in using discretionary accruals as opposed to smaller firms.

There had been many contradictory studies when it came to compare size of a firm vis-a-vis the practice of earnings management and a lot of studies have controlled for the factor firm size to understand earnings management in firms. Hasan (2011).

It has remained quite controversial therefore and a good number of studies are available quoting two opposite points of opinions and results. Studies made by Xie et al. (2003), Abdul Rahman and Ali (2006) have clearly established a negative relationship i.e they confirm that big firms have well-structured internal control systems, they can afford more competent auditors (Big 5 or Big 6) and overall enjoy good reputation and these reasons ensure that they are able to avoid earnings management. On the other hand the smaller companies have less control from authority and therefore the managers have more proximity to get engaged in earnings management (Abed et al, 2012).

Moses (1987) however have hypothesized a negative association between firm size and earnings management and had found a positive relation between size and earnings management. They argued that the larger companies face more capital market pressure, have more bargaining power, thereby are more likely to manage earnings than are their counterparts of small firms.

3 Hypothesis Development

After review of related literature, following research hypothesis was developed:

H0. There is no significant relation between size and earnings management of firm.

Log of total assets is taken as a proxy of assets size and absolute value of discretionary accruals was considered as a measure of earnings management.

4.1 Data

Sample of 186 companies is considered out of the 500 companies listed on the S & P BSE 500 stock exchange. Non-Financial companies were considered for the purpose of this study. Remaining companies are not considered as they belong to financial services sector and due to non-availability of data for all the years of study. Prowess and Ace Equity databases are used to collect the data. Earning Quality measure is estimated for a period of 5 years from 2012-2016 using ten year rolling period which makes 930 firm year observations.

4.2 Research Methodology

To test the hypotheses, the study has used Equation 1 while ADA which is a measure of earnings management is determined using equation 2.

$$EQ_{i,t} = a_0 + a_1 SIZE_{i,t} + \epsilon_{i,t} \tag{1}$$

For testing hypotheses which is mentioned in equation 1, earnings management is regressed on size of the firm. Size of the firm is measured using log of total assets.

The study has used ADA as proxy of earnings management which are absolute value of discretionary accruals (ADA). This was proposed by Jones (1991) and later on was modified by Kothari *et. al.*(2005) and was considered by several other studies in the past (Cheng *et. al.*, 2013). ROA was also added as independent variable by Kothari *et. al.* (2005).

The ADA model of earnings management is determined as follows:

$$TACC_{i,t} = \beta_0 + \beta_1 (\Delta Sales_{i,t} - \Delta AR_{i,t}) + \beta_2 PPE_{i,t} + \beta_3 ROA_{i,t} + \epsilon_{i,t} \tag{2}$$

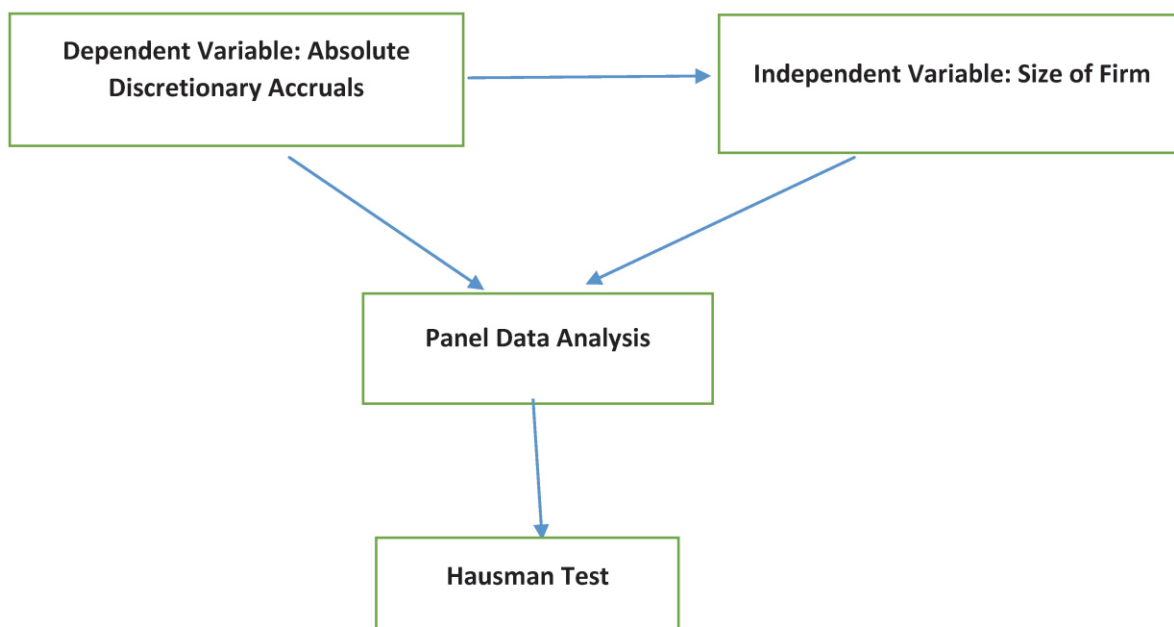
- Where, TACC : total accruals
- Δ Sales: change in sales
- Δ AR: change in accounts receivable
- PPE: change in gross plant, property and equipment
- ROA: return on assets
- ϵ : error term

Where, TACC is determined by using the formula given below:

$$TACC = \Delta CA - \Delta Cash - \Delta CL + \Delta DCL - \Delta Dep$$

In which CA is value of current assets, CL is value of current liabilities, DCL is the change in debt included in current liabilities (i.e., current maturities of long-term debt and Dep is Value of depreciation and amortization.

Absolute residuals calculated in equation 2 is the ADA measure of earnings management. All the variables are deflated by total assets at the beginning of the year.



This study has employed panel data analysis. Hausman test was applied to decide fixed effect model and random effect model. Hausman test suggests that chi2 value is 0.56, which was not significant at 5% level of significance ($p = .4528$). Output of Hausman test is given in Table 1. It implied that null hypothesis is accepted. It indicated that Random Effects Model is preferred over the Fixed Effects Model for the available data set.

5. Results

On examining the 930 firm-year observations in Table 1, it was found that size is negative but insignificantly impacting the earnings management of firm. This suggests that earnings management is insignificantly affected by size of the firm. Companies having larger asset base are managing their earnings less and small sized companies are found to have higher earnings management.

This may signify that small sized companies may prefer to report higher earnings.

Table 1
Output of Multiple Regression

EQ	Coefficient	Std. Err.	p-value
Size	-0.0004748	0.000941	0.614
Constant	0.0309175	0.007987	0

6. Findings and Conclusion

The purpose of the study was to explore the effect of firm size on earnings management of firm. In the study, dependent variable is earnings quality whereas the independent variable is firm size. As shown in the regression Table 1. Firm size was determined taking log value of total assets. Discretionary accruals represent the quality of earnings. Model proposed by Kothari et. al. (2005) is used to estimate the discretionary accruals as it was widely accepted in literature. The data was collected from Ace Equity and Prowess of 186 firms out of 500 companies listed on S & P BSE 500. Five year's data is used in the study to determine the impact of firm size on earnings quality using panel data technique.

The results indicate that there is a negative association of firm size on earnings quality of the firm but the impact is insignificant. This study indicates that firm which have larger asset base may have lower earnings quality but it is insignificant.

Other stakeholders like financial managers and investors may get benefitted from this study to take rational decisions. The results are in contrast to a lot many studies like Barton and Simko (2002) interpreted through their research that large firms do face pressures from investors and analysts, thereby get engaged in earnings management. Myers and Skinner (2007) also stated that large firms refrain from showing their actual income. Nelson et al. (2002) explained the fact that the earning managed by the large firms is ignored by the auditors. The size had a significant impact in their studies. However, it has emerged as insignificant in present study.

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