Determinants of Earning Management: A Study of Selected Indian Listed Companies

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Abstract

The definition of earnings changes periodically. In all economic declarations, earnings are assumed to be a significant one. Moreover, earnings are nothing but the representation of a company's involvement in value-added activities. Earning are the signals which help to direct resource allocation in capital markets. We use results of 399 Indian listed companies' up-to-the period of 2018, for the analysis of the same we tested Regression Analysis in the entire study. The entire study designates that this, overvaluation had a positive and remarkable link with rising in succeeding earning .which lead company's management to allow valuation mistakes to enjoy the advantages of increasing earn organization though not obligatory accrual's manipulations. When tread marketplace will over the values.

Key Words: *Regression analysis, t-test, Mcap*

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Introduction:

The system of double-entry bookkeeping used by Venetian merchants was first described by Luca Aioli in the year 1494 in his "Summa de Arithmetical, Geometric, Proportion at Proportionality." Unquestionably, industry information had been recorded by industries plus administrations for years the Venetians. Nevertheless, the aioli was the first to define the method of deductions and acknowledgments in papers plus journals which is still the foundation of current accounting structures. Accounting techniques are used to generate financial reports that possibly represent an exaggeratedly progressive image of an organization's commerce undertakings plus monetary situation. Earnings organization uses the pluses of applications of accounting rules and it's legitimately flexibility through which companies can identify revenue and sustain expenditures.

In accounting, pay the organization to be the presentation of calculatedly manipulating The procedure of financial reporting to gain some personal benefit. The modification of financial reports to deceive investors about the company's primary the performance or to "manipulate predetermined outcomes which can be influenced by reported accounting statistics betook a part of earning management.

Earnings management takes place when leaders exercise their discretions over accounting affiliates, with or without boundaries. Such discretions possibly either maximizing the firm value or opportunistic.

"Earning management is the artistic use of multiple accounting skills to make visually better financial statements."

Earn organization be captivating benefits of the relaxation inside the selection of secretarial management in the direction of indicating the manager's confidential in order on prospect money movements.

"Earning management is selecting an accounting action that is either devious (exploiting the efficacy of management only) or economically well-organized."

"Earning management is the use of different accounting techniques to make financial statements look better".

Earning management is the mode from two words.

Earning +Management

Earning: Earning is the profit of a company

Higher earning: Higher share price - which attracts investors.

Lower earning: Lower share price - investors do not wish to invest in this type of company.

So, management of the company has to adopt certain techniques to achieve a pre-determine target of earning that is earning management. Suppose the company wants a 20% return on capital employed but actually, the company's return is 16% then management use some techniques to increase return from 16% to 20% return on capital employed.

Review of Literature:

Jorge Farinha et al (2007) conducted a study on "Dividends and earnings quality." Large sample data was taken and data was taken from the 40,000 firms in the U.S. market for the period 1987-2003. To measure the relationship between Dividends and Earnings A quality hypothesis test was used. In this study, Earnings quality was used as the independent variable and Dividend was used as the dependent variable.

Rihab Guidara et al. (2014) examined on, "earn organization approximately investigate plus Development Manipulation". The aim of the study was to investigate the impact of research and development investment (R&D) on managers' behavior and tries to evaluate R&D effect on earnings management. Data was collected from the 302 companies from the time period of 2007 to 2011. Modified Jones model was employed to find total accruals. The correlation was used as a statistical tool. They found that R&D favors both incentive and ability for managers' earnings management.

Mamta Mishra et al. (2016) conducted a study on, "earn organization practice inside Indian Companies". Data was taken from 130 listed Indian companies during the period of 2013-2015 To measure earnings management practices Modified Jones model (1995) was used to estimate discretionary accruals (DA). The study revealed that the presence of higher earnings manipulation in the consumer durable and energy sectors. Large-cap companies are found to show a lower level of earnings management as compared to the small-cap firms.

Sunder ram Karimi et al. (2016) conducted a study on, "The opportunistic earn organization during initial public offerings evidence as of India a sample of 150books build IPOs 2001-2006 the Indian context to examine the relationship between the quality of earning of the IPO firms plus extended word earn plus market place presentation.

Hamed and several (2017) conducted the study on "the role of ownership in the earning quality evidence from listed firms of Tehran stock exchange" earning quality has increasingly attracted attention. 80 firm was selected as the study size plus their information was collected, the learn scope 2010 to 2014. The result of learning exposed so organization possession plus business possession has an effect on the earn excellence of TSE scheduled firm.

Research Gap:

The research gap means the uncovered area of the particular field where further research is possible. It can be defined as a further possibility of research work in a particular area. The research gap is identified from the review of the literature of the particular field and related area in which the researcher worked. From the above study, it is said that so many researchers have undertaken research work on earnings management. Some of the researchers have done their research in foreign countries in selected sectors but In India sector-wise research is still in the growing stage.

Based on the gaps identified, the researcher has undertaken this study on Determinants of earnings management of Indian companies and through this study, an effort is made to identify measure and evaluate the earnings management practices of the Indian Corporate. In the past research of manipulation or fraud detection, one of the different companies of different sectors using various models is not found so this is exhaustive study companies of using models of earnings management.

Research Methodology:

It is a blueprint for the research study. How the researcher is going ahead in the research process objectively and scientifically

Objectives of the Study:

- To examine the determinants affecting the earnings management of a company
- To examine the applicability of BENEISH model for measuring the company's earning management
- To analyze the difference between M-score results and actual results in order to identify the manipulating and non-manipulating companies
- To examine the impact of various variables (DSRI, GMI, AQI, SGI, DEPI, SGAI, LVGI, TATA, MCAP) of BENEISH model on the company's earning management.

Research Design:

The present study has used descriptive research design. This research study describes the characteristics of the financial aspect of a different company.

Sample Size:

In order to test the hypotheses formulated, 399 Indian listed companies (from Capitaline software) have been selected as a sample by simple random sampling method in the research study.

Data Collection Methods:

The secondary data for the study have been collected from various sources like information, companies' websites, NSE websites, journals, Capitoline. And analysis has been done from the secondary source of information.

Tools and Techniques Used:

The following statistical tests have been applied for testing the hypotheses:

1) BENEISH model

2) Independent sample t-test (To check performance of banish model)

3) Discriminate analysis (Used to develop new model by introducing one more MCap variable in identifying possible manipulation)

Hypothesis to be checked:

H_0 (1): There is no significant relationship between DSRI and Earning Management by companies

H_0 (1): There is no significant relationship between GMI and Earning Management by companies

H_0 (1): There is no significant relationship between AQI and Earning Management by companies

H_0 (1): There is no significant relationship between SGI and Earning Management by companies

H_0 (1): There is no significant relationship between DEPI and Earning Management by companies

H_0 (1): There is no significant relationship between SGAI and Earning Management by companies

H_0 (1): There is no significant relationship between LVGI and Earning Management by companies

H_0 (1): There is no significant relationship between TATA and Earning Management by companies

H_0 (1): There is no significant relationship between MCap and Earning Management by companies

Where,

DSRI = Days Sales in Receivables Index

GMI = Gross Margin Index

AQI = Asset Quality Index

SGI = Sales Growth Index

DEPI = Depreciation Index

SGAI = Sales General and Administrative Expense Index

LVGI = Leverage Index

TATA = Total Accruals to Total Assets

MCap = Market Capitalizations

Present be by various model plus descript changeable and identify result or actual companies M-score data. This therapy has been a deal result to perform the Beneish model .the Beneish model is an arithmetical model so as to use monetary ratios intended with secretarial data of the exact company in arranging based on probable manipulate checking. The Beneish m-score was shaped by professor messodz score, other than optimized to detect earnings manipulation rather than bankruptcy. This is the connection to the original m achieve for earning manipulation.

It is clearly depict that out of 399 only 161 companies rightly identifying manipulators or non-manipulator companies through M-score. These observations need to check for whether actual results are significantly different than M-score results or not. This analysis has been performed using the t-test.

Results and Interpretations:

Table 1: Independent t-test to check M-score success

		Levine's Test for Equality of Variances		t-test for equality of mean		
		F	Sig.	T	Sig. (2-tailed)	Mean Diff.
M-Score Result	Equal variances assumed	1386.727	.000*	23.049	.000	.59649
	Equal variances not assumed			23.049	.000	.59649*

Note: * significant at 5 per cent

As shown in Table 1, Levee's test shows that there is a significant difference between the variance of the two samples. Hence, the second line with equal variance not assumed robust t-test used for further interpretation. Independent t-test result is also significant ($p<0.05$). Hence, there is significant difference between identification of manipulator and non-manipulator companies through M-score and actual manipulator or non-manipulator companies.

Discussion:

Independent t-test with positive mean difference indicates that there is less number of manipulator companies than predicted by M-Score. It required developing new model with the same independent variables in the Indian context. However in next section one more Beneish model is redesign in Indian context with adding one more independent variable namely Market capitalization.

Results and Interpretation:

For check above hypothesis discriminate analysis has been performed between nine independent variables DSRI, GMI, AQI, SGI, DEPI, SGAI, LVGI, TATAT, Mcap and dependent variable manipulator (coded as 1) or non-manipulator (coded as 0) classification of companies. It can be concluding from the table that the model is significant. Also, Eigenvalue and table indicate that all independent variables together explain 100 percent of the variation in earning manipulations.

Table 2: Result of classification model for earning manipulations

Wilks' Lambda	Chi-square	Df	Sig.
.616	190.353	9	.000

Note: * significant at 5 percent

Table 3: Wilks' Lambda for earning manipulations

Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
0.624	100.0	100.0	0.620

Table 4: Functions at Group Cancroids for earning manipulation

Actual	Function
	1
0	.150
1	-4.133

Unstandardized canonical discriminate

Functions evaluated at group means

Hence, the modified model score can be calculated as follow:

$$\mathrm{EM\ Score} = -0.005 * \mathrm{DSRI} + 0.813 * \mathrm{GMI} + 0.515 * \mathrm{AQI} - 0.013 * \mathrm{SGI} + 0.013 * \mathrm{DEPI} - 0.541 * \mathrm{SGAI} - 0.116 * \mathrm{LVGI} + 0.367 * \mathrm{TATA} - 0.02\mathrm{Mcap}$$

Now, as shown in table 4 and above equation, EM score less than -4.133 will indicates a possible case of earning manipulation. At the same time, score higher than 0.150 will confirmation of no earning manipulation in the company.

Discussion:

The research study had established a new relationship between all eight independent variables of banish model and earning manipulation for NSE listed companies. Also, in the future one can use this model to identify a possible case of earning manipulation in the company to take preventive steps before it hurts stakeholder of respective companies

Implication of research study:

The research study has been beneficial to various companies for determining their financial performance and also helpful to the future research scholar for further research. This research study is helpful to design appropriate policies to have proper management of the company’s earning. Companies can make use of the model for assessing their performance on various financial indicators. But the research on this topic at India level is far from adequate and requires further attention. Consequently, this study is humble attempts in the direction of plug this hole through identifying the determinants of earning management.

Summary:

This research study concluded that determinants of earnings management and financial variables are assessed by using the Beneish model or Mcap include earnings management in the research study. In order to detect deception and from the companies Banish model was employed. This clearly indicates that most of the companies are manipulating or not manipulating financial statements analysis. EM score less than -4.133 will indicate possible cases of earning manipulation. Besides this, a higher score than 0.150 will be an indicator of no earning manipulation in the company.

Conclusion:

Thus from this study, It is concluded that all company-wise and overall descriptive statistics reveals that out of all independent variable size has the least value and depending on value. Most of the companies are manipulating financial statements in the majority of the years. As stakeholders are not aware of Earnings management in India so companies are manipulating financial statements to arrive at the desired level of profit. The year-wise comparison done reveals that model companies are manipulating using various techniques. Only not manipulate financial statements in overall results.

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