



A PAPER ON LINE ITEM ANALYSIS OF QUALITY EARNINGS IN AUTOMOBILE INDUSTRY

B. Sudheer Kumar*, Dr. V. Mallikaruna, Dr. N. Kumara Swamy*** & N. Lakshmi******

* Research Scholar at VTU Belgaum & Assistant Professor, Department of MBA, Vaagdevi Institute of Technology & Science, Proddatur, Kadapa, Andhra Pradesh

** Professor, Department of MBA, Sri Sai Institute of IT and Management, Kadapa, Andhra Pradesh

*** Dean for Department of Research & Development, Madanapalli Institute of Technology & Science, Madanapalli, Chittoor, Andhra Pradesh

**** Student of MBA, Vaagdevi Institute of Technology & Science, Proddatur, Kadapa, Andhra Pradesh

Abstract:

In present business scenarios often the organizations publicize the financial accounting statement and the financial reports for the purpose of the making the information available to all the people that are interested in the organizations financial condition. Also these reports are used by the investors, creditor, share holders etc for making many decisions, so the organizations try to manipulate these accounting reports and financial statements to show artificial profits to them. Because of these manipulations in the financial statements it increases its earnings that will in turn increase their share price and hides the firm's true financial status. When any investor goes for investment he sacrifices his present benefits for the sake of future profits. Any investment made is to earn profits by accepting some sort of risk and financial reporting is to provide information about impact of economic events and financial operations on firm's status and performance for user's decision making. Financial analysts, corporate executives, investors and individuals who participate in capital market for their financial and investment decisions attract most of their attention to net profit figure. In the present situations, public confidence in financial reporting was faced with problems because of undermine its credibility. Increased number of fraud that was accompanied with the bankruptcy of large companies created concerns about the health of earnings quality. In recent years, following the bankruptcy of some large companies in the world, researchers and financial analysts, in addition to existing practices.

Index Terms: Calculation of DA, Revenue and DA, Contingent Liabilities and DA & Shareholder's Equity and DA

1. Introduction:

In the wake of highly publicized financial frauds and failures and accounting manipulations, the emphasis on earnings quality has renewed. That is why investors and creditors from all over the world are turning toward the assessment of the earnings quality of the individual company in which they are trying to invest. There are many way through which the organizations are manipulating the financial statements, they use certain approaches that help a firm to hide the true conditions. The investors need to assess the extent to which a firm's reported earnings are free from mistake or manipulation, so they should have an idea about the possible approaches and ways the firms use to manipulate profits. They are:

- ✓ Recording revenue too soon or of questionable quality,
- ✓ Recording fictitious revenue,
- ✓ Boosting income with one-time gains,

- ✓ Shifting current expense to a different period,
- ✓ Failing to record or improperly reducing liabilities,
- ✓ Shifting current revenue to a later period, and
- ✓ Shifting future expenses to the current period as a special charge.

Need of the Study:

The need for the earning quality method arises out of the increasing complexity of business transactions and a desire for more accurate financial information. First, we need to define what we mean when we say "quality", as earnings quality means different things to different users of financial statements. For example, regulators would view earnings quality as being high if the accounting had adhere to generally accepted accounting principles (GAAP), as GAAP is used by regulators to help ensure high quality in financial statements. Those businesses that generate revenue but not cash are not engaging in profitable activities. When you invest, make sure your company is taking its earnings to the bank. The earning quality is said to be low when the abnormal earnings are very high. Earning quality and abnormal usually has the inverse proportional relationship between them.

Objectives of the Study:

- ✓ To determine the relationship between revenue and quality of earnings
- ✓ To determine the contingencies and quality earnings
- ✓ To determine relationship between the share holders equity and quality of earnings

Literature Survey:

Earning Management:

Arthur Levitt, Former Chairman of the Sec, Noted:

Flexibility in accounting allows it to keep pace with business innovations, abuses business innovations. Abuses such as earnings management occur when people exploit this pliancy. Trickery is employed to obscure actual financial volatility. This in turn, masks the true consequences of management's decisions. (Levitt, 1998). Accounting researchers have adopted a similar definition of earnings management. For example: 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 impudently contractual outcomes that depend on reported accounting numbers.(Healy and Wahlen, 1999) Common to these definitions is the following feature: earnings management induces an intentional bias in financial reports.

Incentives for Earnings Management:

While information relevant for valuing companies is provided through various channels (e.g., analysts research, business press, government statistics, management communications, etc.), company-issued financial reports constitute the primary source of information. Under US GAAP, Financial reporting should provide information that is useful to present and potential investors and creditors and other users in assessing the amounts, timing, and uncertainty of prospective net cash inflows to the related enterprise. (SFAC No. 1, para. 37) It is interesting to note that this is precisely the information that one would need to calculate the value of an enterprise. Thus, in setting accounting principles, the FASB appears to be emphasizing the valuation role of accounting information over other uses. The use of accounting information in valuation generates capital market incentives to manage earnings. Managers may manipulate earnings to improve market participants' perception of the firm's risk and performance. For example, extant research indicates that investors use benchmarks such as previous

year earnings or analysts' forecasts in evaluating performance, thus motivating firm's to overstate earnings to meet or beat these targets (e.g., Burgstahler and Dichev, 1997). Anecdotal and empirical evidence suggests that investors prefer smooth earnings and persistent patterns of increasing earnings over volatile ones (e.g., Dechow and Dichev, 2002; Tucker and Zarowin, 2006). This may induce firm's to smooth earnings over-time. Firms might also manage earnings to change investor perception of "core" vs. "one-time" earnings (e.g., McVay, 2006), or they may take a "big bath" charge (e.g., overstate estimated liabilities such as accrued restructuring costs or write-down assets) hoping that investors will treat it as a one-time item, and use the charge to reduce future recurring expenses (e.g., reversal of estimated liabilities, lower depreciation).⁴ While incentives to overstate earnings are common, they are likely to be particularly strong when firm's engage in capital-raising activities or M&A transactions (e.g., Teoh et al., 1998a; Erickson and Wang, 1999). In such cases, a temporary increase in price has lasting implications since it may cause an increase in issue price (in IPOs, SEOs or mergers), or allow firm's to borrow at lower interest rates. In contrast, managers may be inclined to understate earnings when they engage in a management buyout, hoping that such manipulation will reduce the transaction price.

2. Methodology:

Collection of the Data:

In this study, secondary data was used to achieve the designated Objectives. The secondary data is from various websites, magazines, journals and financial newspapers.

The collected parameters are Revenue, debt, assets, book value and cash flow from operations, fixed assets, expenses and employee cost. The analysis was made based on secondary data, published papers and expert opinion.

Data Analysis Procedure:

For the study certain approaches are used to assess the quality of earnings, intellectual capital and stock returns.

- ✓ Calculation of quality earnings

DA_{it} = Quality of earnings is calculated through the following formula

DA_{i,t} is discretionary accrual that is a proxy of earnings quality

$$\frac{TA_{i,t}}{A_{i,t-1}} = \lambda_1 \left(\frac{1}{A_{i,t-1}} \right) + \lambda_2 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \lambda_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t}$$

Here the equation is in the form of $y = a + x_1b + x_2c + x_3d$, through applying the regression analysis to the above equation we can get DA value. The regression analysis can be applied by the software that is analysis tool pak, after applying regression to the above equation the resulted x_1 - intercept, x_2 - intercept, x_3 - intercept should be substituted in the DA formula to get the value of DA.

Calculation of intellectual capital (VAIC)

Value Added Intellectual Coefficient (VAIC) Calculation

Value Added (VA)

VA = OUT - IN , OUT = Revenues

IN = Expenses

Human Capital Coefficient (HCE)

HCE = VA/HC , HC = Employee cost

Structural Capital Coefficient (SCE)

SCE = SC/VA , SC = VA-HC

SC = Structural cost

Capital Employed Efficiency (CEE)

CEE = VA/CA , CA = Book-value of net assets

Value Added Intellectual Coefficient (VAIC)

VAIC = HCE+SCE+ CEE

Caluculation of stock returns (R)

STOCK RETURNS (R) = $(P_1 - P_0) / P_0 * 100$

Here, P₁ = Closin price

P₀ = Opening price

Caluculation of Leverage ratio and size

LEV_{IT} = Debt/Totsal Assets , SIZE_{IT} = Total assets in millions

3. Data Analysis and Interpretations:

Assessment of Earnings Quality for Selected Companies:

Table 1: Values of DA of Mahindra & Mahindra

YEAR	DA
2006	282.47768
2007	292.4880662
2008	249.5084157
2009	193.6807168
2010	611.3465726
2011	628.0075826
2012	574.5923547
2013	578.9517554
2014	523.2082692
2015	454.7122225
<i>Regression Statistics</i>	
Multiple R	0.72934933
R Square	0.531950446
Adjusted R Square	0.398222002
Standard Error	5.121392702
Observations	10

ANOVA	df	SS	MS	F	Significance F
Regression	2	208.6668874	104.3334437	3.977840688	0.070148991
Residual	7	183.6006425	26.22866321		
Total	9	392.2675299			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	24.84886157	9.985356459	2.488530246	0.041686169	1.237245531	48.46047761	1.237245531	48.46047761
X Variable 1	-38.22343402	24.15291423	-1.58255992	0.157537075	-95.33600074	18.8891327	-95.33600074	18.8891327
X Variable 2	0.000217029	0.000374157	0.580048919	0.5800646	-0.0006	0.00110177	-0.0006	0.00110177

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Observation	Predicted Y	Residuals	Standard Residuals
1	2.67097	-0.7067	-0.969
2	2.33185	0.05539	0.0759
3	2.14651	0.38689	0.5303
4	1.95862	-0.0204	-0.028
5	1.6523	-1.3662	-1.872
6	1.74082	0.33155	0.4544
7	1.83586	-0.6432	-0.882
8	2.11659	0.60254	0.8258
9	2.17787	0.2002	0.2744
10	1.82559	1.15991	1.5897

Interpretation:

In the above table the DA values of the 10 companies in Textile industry are mentioned. It shows the best quality earnings and the least quality earnings of the company. For investor to acquire the better results regarding their investment they should consider the firm with high earning quality. The investment made in the firms with low earning quality are not suitable for the small investors they are only suitable for speculator.

The company may get instant result when involving manipulated earnings in financial reports, but the investors go to invest in these companies only if it represent high quality in their earnings due this the firm gets better results in long term.

Note: - I can mention one sample calculation of earning quality of selected industries and remaining as usual same as above example.

Relation B/W Revenue and DA for Ashok Layland Company:

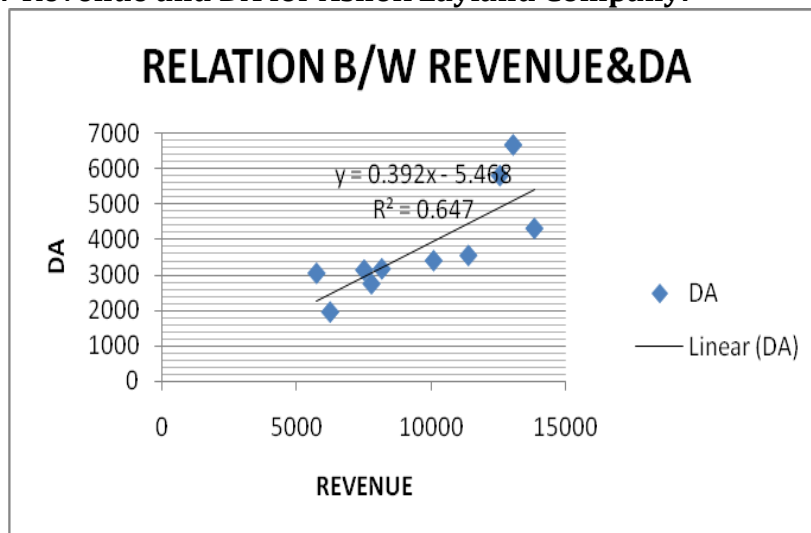


Figure 1: Relations between Revenue and DA for Ashok Layland Company

Year	Revenue	DA
2006	5737.15	3043.072376
2007	7508.88	3132.067421
2008	8165.15	3166.627023
2009	6241.11	1951.131539

2010	7777.37	2749.965573
2011	11386.78	3544.408238
2012	13050.95	6656.273658
2013	12561.13	5791.371261
2014	10091.75	3398.550286
2015	13840.2	4305.692062

Table 2: Relations between Revenue and DA for Ashok Layland Company

Interpretation:

From the above table as the revenue increases the DA value is also increases. In the year 2015 the revenue is high and in 2006 the revenue is in negative.

Note: - I can mention one sample calculation of earning quality of selected industries and remaining as usual same as above example.

Relation Between Shareholders Equity and DA for TVS Company:-

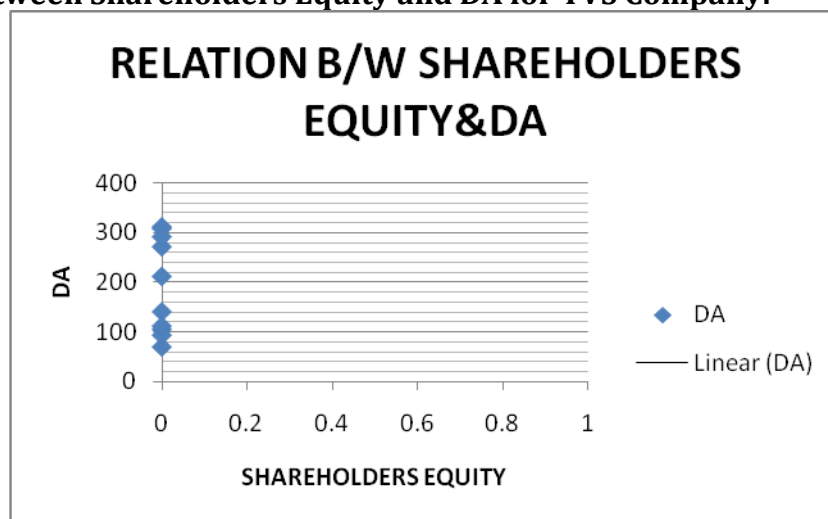


Figure 2: Relationship b/w Shareholders equity and DA of TVS company

Year	Total Assets	Total Liabilities	Shareholders' Equity	DA
2006	1151.16	1151.16	0	141.1825557
2007	1442.83	1442.83	0	105.4729263
2008	1487.92	1487.92	0	70.2485878
2009	1719.11	1719.11	0	94.03832567
2010	1868.67	1868.67	0	112.3069948
2011	1632.84	1632.84	0	312.3024591
2012	1884.76	1884.76	0	309.1696115
2013	1770.53	1770.53	0	212.4662539
2014	1891.16	1891.16	0	272.2482494
2015	2564.1	2564.1	0	292.4292809

Table 3: Relation Between Shareholders Equity And Da For Tvs Company

Interpretation:

From the above table as the shareholders equity is same for all years DA value is change. In the year 2009 the DA is high and in 2010 the DA is low.

Note: - I can mention one sample calculation of earning quality of selected industries and remaining as usual same as above example.

Relation B/W Contingency and DA for Tata Motors Company: -

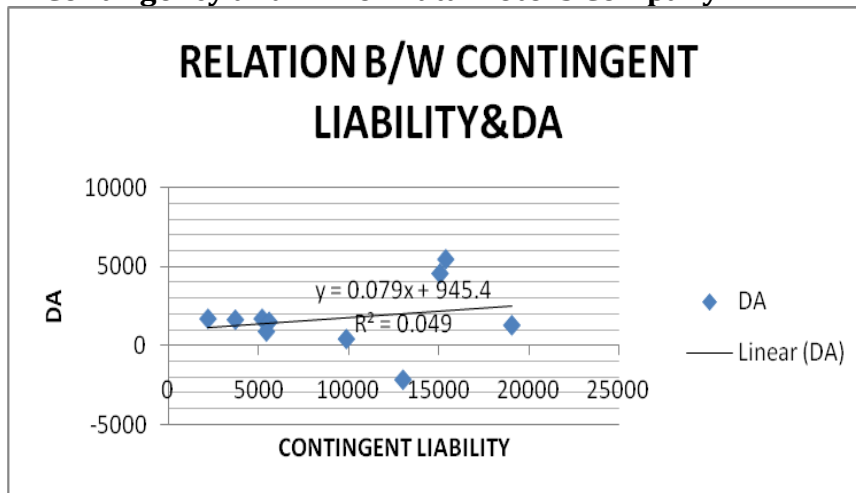


Figure 3: Relationship b/w Contingency and DA of Tata Motors Company

Year	Contingent Liabilities	DA
2006	2185.63	1696.299463
2007	5196.07	1694.543167
2008	5590.83	1502.34871
2009	5433.07	889.8435305
2010	3708.33	1634.981873
2011	19084.08	1286.129613
2012	15413.62	5439.451662
2013	15090.21	4546.862147
2014	13036.73	-2149.199638
2015	9882.65	422.4635684

Interpretation:

From the above table as the contingency is high in the year 2014 and DA value is high in 2012. In the year 2009 the contingency is low and in 2010 the DA is low.

4. Findings:

- ✓ Through present study on quality earnings, it was found that various earnings quality proxy's which represent the quality of earnings position in the organization.
- ✓ The quality earnings from a company to company vary according to the parameters they depend on. In the study the quality earnings often are high in personal care industry and leather industry.
- ✓ The results of present investigation show that intellectual capital has positive impact on earnings quality, because relationship between VAIC values and DA is linear and inversely proportional and its lead to conclude that intellectual capital has a positive role in best financial practices and reporting.
- ✓ Earnings with high accruals suggesting low-quality earnings are associated with poor stock returns in that relative year.
- ✓ The Human capital efficiency (HCE) and Capital employed efficiency (CEE) both have a positive relation with the VAIC whereas Structural capital efficiency (SCE) has a inverse relationship with VAIC because the employed capital is not properly used for the operating a structure that makes the intellectuals become efficient.
- ✓ The components of the DA that are VAIC, LEV_{IT} (leverage), SIZE_{IT} (total assets) combine shows a little effect on the majority of the companies however

individual components especially VAIC has predominant influence on the quality earnings.

5. Conclusion:

The Study Quality Earnings is useful for the purpose of the investors and any person who are depending on the company's financial statement. It provides the investors a perception on the firms' financial position in real, rather than that reported by the firm itself. The investors suffer when the investment is made only based on the reported earnings shown by the company due to the manipulations done. So through the study the earnings quality of the 10 companies from 6 industries are considered. The Quality earnings topic arose from the wake of many situations in the present scenario which are representing the manipulations in the reported earnings to promote the companies' shares. It is revealed in the study done that most of the companies try to manipulate the reported earnings at least to a certain extent by adding abnormal earnings to the companies true earnings. In this paper, we discuss the issue of earnings quality and the related concept of earnings managements, focusing on the key line-items of the financial statements. For each component of the financial statements, we summarized the specific issues applicable to that line-item, discuss implications for earnings quality, evaluated the susceptibility of the item to management manipulation, and discuss potential red flags. The red flags and the specific issues discuss for the individual line items should provide a useful framework for further fundamental and contextual analysis for both academic researchers and practitioners. As evident from our discussion and analysis, different line-items can be manipulated to varying degrees, and consequently involve different levels of "implied quality." Conducting analysis involving financial aggregates (e.g., focusing on earnings or net cash flow) is bound to contaminate and distort the information contained in the underlying accounting data. It behooves those conducting capital markets and accounting research to pay close attention to the accounting issues applicable to individual line items. Doing so will undoubtedly improve the quality of the research.

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