

Application of Earnings Quality Assessment Model on Infosys And TCS

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ABSTRACT

The paper discusses the concept of earnings quality, the factors which effect the quality of earnings in an organization and applies the Bellovary J.L, Giacommino D.E, and Arkers M D (2005), earnings quality assessment model on the financials of TCS and Infosys for a period of 5 years. The paper also highlights the areas where these models can be customized for better results.

Keywords: Earnings, EQA , Revenue recognition, Cash flow, Profitability

Introduction

Earnings quality refers to the ability of reported earnings to reflect the company's true earnings, as well as the usefulness of reported earnings to predict future earnings. Earnings quality also refers to the consistency and lack of variability in reported earnings in one period. Quality of earnings encompasses the underlying economic performance of a firm as captured by the GAAP practices. Quality of earnings means what is the confidence that a stakeholder has in the stated financials of the company.

As per Healey, P.M., Wahlen, J M., (1999) earnings can include Revenues, Operating Income , Net Income and the Forecasted earnings. There are various differences in calculating these earnings measures and often one cannot rely only on the Income statement for the data needs. This makes earnings quality assessment challenging.

Of the eight models only the Lev Thiagarajan and Empirical Research Partners models have been empirically tested for evidence of usefulness related to quality of earnings. Lev and Thiagarajan's findings confirm that their fundamental (earnings) quality score correlates to earnings persistence and growth, and that subsequent growth is higher in high quality-scoring groups. Empirical Research Partners model is based in part on methodology developed and tested by Piotroski, whose findings indicate a positive relationship between scores based on the model and future profitability.

In this paper Earnings Quality Assessment (EQA) is applied on two prominent Indian Information technology companies viz Infosys and TCS. This gains special significance especially after the SATYAM scam and the resultant apprehension on the stated figures of the earnings quality of IT majors in India.

Objectives of the Study

Main objectives of the study are :

- To critically examine the Earning Quality Assessment model (EQA Model)
- To study application of EQA to two IT companies Infosys and TCS and to find the results thereto.

Earning Quality Assessment Model

The Bellovary J.L, Giacommino D.E, Arkers M D (2005) EQA consists of a model that uses 20 criteria that impact earnings quality applied as a "rolling evaluation" of all periods presented in the financial statements. The EQA is more comprehensive than the similar models available in the literature. The EQA evaluator assigns a point value ranging from 1 to 5 for each of the 20 criteria, with a possible total of 100 points. A score of 1 indicates a negative effect on earnings quality and a score of 5 indicates a very positive effect on earnings quality. EQA scores, then, can range from 20 to 100.

While the EQA evaluator needs to use

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professional judgment in assigning scores to each of the criteria, the guidelines written below can be used.

Criteria	Score
1. Revenue recognition issues (Shifts of revenues to other periods: low EQA score of 1.)	1-5
2. Gross margin/sales ratio (High and improving relative to industry: high EQA score of 5.)	1-5
3. Operating earnings/sales (High and improving relative to industry: high score.)	1-5
4. Earnings variability (Great variability: low score.)	1-5
5. Cash flow from operations exceeds net income (Greater difference: high score.)	1-5
6. Expense recognition issues (Shifts of expenses to other periods: low score.)	1-5
7. Operating leases (Greater occurrence and amount: low score.)	1-5
8. R&D (Decreasing R&D: low score.)	1-5
9. Pension expenses and gains (Consider trend and industry. Greater occurrence and amount: low score.)	1-5
9. Employee stock option expense (Pro forma and large impact on EPS: low score.)	1-5
10. Gain (loss) from asset sales/sales (Incidence is negative. Look at trend and industry.)	1-5
11. Acquisitions/dispositions (Evaluate soundness relative to goals.)	1-5
12. Discontinued operations (Consider trend and industry. Greater occurrence and amount: low score.)	1-5
13. Ongoing restructuring charges (Consider trend and industry. Greater occurrence and amount low score.)	1-5
14. One-time items (Consider trend and industry. Greater occurrence and amount: low score.)	1-5
15. Extraordinary items (Consider trend and industry. Greater occurrence and amount: low score.)	1-5
16. Accounting changes (Consider trend and industry. Greater occurrence and amount: low score.)	1-5
17. Reverses prior charges/provisions (Consider trend and industry. Greater occurrence and amount: low score.)	1-5
18. Tax-rate percentage (High variance from statutory rate and high variance: low score.)	1-5
19. Share buyback/issuance (Examine degree and trend. High incidence: low score.)	1-5
20. Total possible rating	1-5

Exhibit 1. Application of EQA on INFOSYS and the resultant scores.

Criteria in INFOSYS EQA	2008	2007	2006	2005	2004	Overall Score
Revenue recognition issues(Rs. Cr)	15648	13149	9028	6860	4760.89	5
Gross margin/sales ratio (%)	43.28	44.65	45.87	46.72	47.59	3
Operating earnings/sales (%)	31.72	32.13	33.11	33.89	33.26	3
Earnings variability (Net Income) (Rs. Cr)	4470	3777	2421	1859	1243.47	5
Cash flow from operations exceeds net income(Rs. Cr)	-654	-510	-184	-500	390.5	1
Expense recognition issues (Rs. Cr)	10685	8924	6039	4535	3177.24	5
Operating leases (Rs. Cr.)	50	47	34	34	38.88	3
R&D/ Revenue (%)	1.3	1.3	1.13	1.03	0.94	4
Pension expenses and gains (Provident Fund Contibtion) (Rs. Cr.)	184	156	95	87	4.64	5
Employee stock option expenses (Pro forma)	13	12	40	115	12.9	3
Gain from asset sales	0	0	0	1.00	0.04	5
Acquisitions/dispositions(Rs. Cr)	127	635	31	63	83	2
Discontinued operations	0	0	0	0	0	5
Ongoing restructuring charges	0	0	0	0	0	5
One-time items (Special Dividend)	1144	0	830	0	666.41	2
Extraordinary items (Rs Cr)	0	0	0	0	0	5
Accounting changes	N/A	N/A	N/A	N/A	N/A	5
Reverses prior charges/provisions	N/A	N/A	N/A	N/A	N/A	5
Tax-rate percentage(%)	15.46	9.98	5.58	6.17	9.42	4
Share buyback/issuance (Bonus shares by capitalization of General Reserves)	0	148	3	101.97	0.74	2
(Includes shares issued on conversion of options)						74

Source : Annual Reports of INFOSYS

EQA performance of INFOSYS

Infosys has performed well on the criteria of revenue recognition which is good for an IT company. It has also performed well on earnings variability parameter, expense recognition parameter, pension expenses parameter, gain from asset sale criteria, discontinued operations criteria, on going restructuring charges criteria, accounting changes

and extraordinary items criteria. However Infosys can do better on its Cash flows and one time items. The overall score of Infosys comes to 74 (See Exhibit 1).

EQA performance of TCS

TCS, just like Infosys has also performed well on the revenue recognition criteria. It had done well on

Exhibit 2. Application of EQA on TCS and the resultant scores.

Criteria in TCS EQA	2008	2007	2006	2005	Overall Score
Revenue recognition issues(Rs. Cr)	18533.72	14939.97	11214.86	8027.59	5
Gross margin/sales ratio (%)					
Operating earnings/sales (%)	29.49	30.24	29.75	31.82	3
Earnings variability (Net Income) (Rs. Cr)	4508.76	3757.29	2716.87	1831.42	5
Cash flow from operations exceeds net income(Rs. Cr)	-680.85	-206.03	-372.45	147.57	1
Expense recognition issues (Rs. Cr)	13513.61	10639	7946.59	5568.54	5
Operating leases (Rs. Cr.)	176.46	204.64	47.96	25.23	1
R&D/ Revenue (%)	0.2	0.22	0.28	0.26	1
Pension expenses and gains (Provident Fund Contibtion) (Rs. Cr.)	192.41	94.81	102.77	82.55	3
Employee stock option expenses (Pro forma)	0	0	0	186.65	2
Loss from asset sales	0.36	0.51	4.49	10.4	2
Acquisitions/dispositions(Rs. Cr)	156.84	180.41	658.06	45.1	2
Discontinued operations	N/A	N/A	N/A	N/A	5
Ongoing restructuring charges	N/A	N/A	N/A	N/A	5
One-time items (Special Dividend)	N/A	N/A	N/A	N/A	5
Exceptional items (Rs Cr)	N/A	N/A	N/A	N/A	5
Accounting changes	N/A	N/A	N/A	N/A	5
Reverses prior charges/provisions	N/A	N/A	N/A	N/A	5
Tax-rate percentage(%)	15.83	9.75	10.49	10.44	3
Share buyback/issuance (Bonus shares by capitalization of General Reserves)	0	48.93	0	9.11	3
(Includes shares issued on conversion of options)					66

Source : Annual Reports of TCS

the earnings variability parameter and expense recognition parameter. Certain items are not applicable to TCS and thus the resultant score is high such as discontinued operations, on going restructuring, one time items, exceptional items, and accounting changes. The overall score of TCS comes to 66 (See Exhibit 2).

Insight regarding the challenges for these two companies:

1. Focus on Research and Development should be more
2. Cash flow is less than the Net Income in both the companies
3. Slow pace of acquisitions and large amount bonus share issuance from capitalization of the reserves.

Conclusion

Infosys has performed better in the EQA model score. However the score for both the companies is respectable. This is reassuring since both happen to be the iconic Indian IT companies. Both companies display a reasonably conservative accounting policy that results in prudent assessment of a company's financial status and income measurement. Both companies have a pre tax income stream which is from recurring main line of business. For both Infosys and TCS, the sales are converted to cash within a time frame which is at par with the industry average and there is a lack of dependence on tax rates. All this points towards sound earnings quality in these firms. Also the earnings are not at the mercy of currency gains. Further the earnings are stable and consistent.

For best results, the EQA model should be applied by unbiased professionals on a multi period data pertaining to the relevant companies. In the present study the application of the EQA Model was on 5 years data (2004-08). Further improvement can be done in the form of applying the model in a rolling fashion. Overall score from each year can be compared to find out any significant changes.

Overall, both the firms have good earnings quality. They are conservative, they follow reasonable and justifiable assumptions, and do not have volatility in their earnings. Both Infosys and TCS, in the given time period, have reasonable earnings quality.

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