

Factors affecting the quality of earnings with emphasis on type of opinion

Ebrahim Anvari*, Bahram Kian Mehr

Department of Management, Faculty of Financial Management, Persian Gulf International Branch, Islamic Azad University, Khorramshahr, Iran

Abstract: Changes to normative profit for financial assessment ensure the continuation of activity and efficiency of the economic unit. Auditing is a supervisory tool over financial performance. The aim of this research is to review the factors affecting the quality of earnings with emphasis on type of auditor's opinion among companies admitted into the Tehran Stock Exchange. Earnings quality was reviewed using two standards, volume of accruals and quality of accruals. Auditor's opinion has been defined as acceptable, conditional, no opinion and reprobate. To test the hypothesis and review the relation between auditor's type of opinion and quality of earnings, data from 84 companies in the TSE were used as sample for the period of 2008-2012. Combined data analysis and multi variable regression model were used to analyse the data. The Chi-Hoffman test was used to estimate appropriate models of hypothesis test in combined data. According to some results, with the shifting of audit reports toward acceptable pinioning the quality of earnings with the volume of accruals have seen an increase in the companies under study.

Key words: *Quality of earnings; Discretionary accruals; Auditor's opinion; Audit report*

1. Introduction

Accounting information (including disclosure of accounting) plays many roles in capital markets of the developed countries. Accounting information provides shareholders and creditors the possibility of assessing potential investment opportunities. This information also provides the knowhow of supervising the method by which granted capital is used. Profit as one of the basic elements of financial statements, is used as a criteria to evaluate one of the forecast indexes of financial performance, continuation of activity and efficiency of the economic unit. Profit also is one of the forecast indexes of share returns and future cash flow. Changing profit accruals by managers means that profit information will not be reflected in shares section. Therefore, this has always been a mystery for researchers as to when can profit best meet expectations and forecast of financial statements' users (Benish and Nicole, 2005).

The main objective of independent audit is the quality of reflecting results of activities and financial situation of economic institutions in financial statements. The aim of this research is therefore the effect of auditor's type of opinion on quality of earnings of companies in the Tehran SE. On this basis, after stating the theoretical basis and reviewing the background of researches conducted, methodology is discussed in section three. The variables are defined in section four, and the results have been analyzed after modeling.

2. Theoretical basis

The final product of financial accounting for users inside the organization is the financial statement. The objectives of financial reporting include classified and summarized information regarding financial situation, performance and flexibility of the commercial unit.

Although the accrual concept of profit as a fundamental assessment is faced with criticism however, from information point of view, it reflects accounting activity (Beaver, 1979). Considering the theories of efficient market, results of empirical research state that accounting profit has information content and load (Ball and Brown, 1968).

Calculating the accounting profit has always been emphasized by the professional accountants and financial analysts as a single measurement of performance or information which is included in its calculation. For example, in the statement number one of the "Financial Accounting Standards Board", it has been stated that the Centre of the financial reporting attention is the information relating to profit unit which is secured by profit criteria and its components.

Despite the usefulness of knowledge of various methods of calculating net profit of the economic unit to secure various objectives, acceptance of a comprehensive concept for profit is also very important for reporting purposes inside the organization. In any case, accurate analysis of various concepts and aims of net profit shows that a single concept of profit cannot equally cater for various objectives (Hendrickson and van Breda

* Corresponding Au thor.

1992). The main objective in reporting profit is to secure useful information for those interested in financial reports. However, explaining more specific objectives is also essential for better profit reporting. One of the basic objectives which is considered as the most important by all users of financial reporting, is distinguishing between investment and profit as part of the descriptive process of accounting.

Distinct objectives of profit reporting includes the below items:

1. The use of profit as a criterion for measuring efficiency.
2. Using historical sources of profit to forecast the company's future and the dividend it will pay out (future distributable dividend).
3. Using of profit as a criterion for measuring achievements and also as an indication of management's future decision.

Also, in addition to the above objectives, other objectives of the profit reporting include using profit as a source for recognizing tax, review of products' prices of units which are subject to pricing and finally, evaluation and judging regarding the resource allocation by the economists.

Various concepts of profit on two structural and semantic levels are reviewed as below:

- A) Profit concept at structural level: profit accountants consider accounting as a criterion for explaining real world events (economical profit) but, rules and basics of accounting are usually based on theories which may not be related to phenomenon of the real world or behavioral effects. The reported profit by companies is therefore the final product of using various accounting methods which reflects companies' activities. Some researchers believe that users of profit report should note that accounting profit is understandable and useable only when the method of measuring and operational rules related to it are also clear.
- B) Profit concept at semantic level (communication with economic realities): at this level, profit is an economic concept whose maximization under certain conditions of market structure, demand for goods and incoming cost items will be discussed. Profit is considered here as efficiency criteria.

3. Accruals

Accruals express the difference between accounting profit and its cash component (cash flow from operations), namely that large positive accruals reflect increase of reported profit in relation to cash flow created by company. This difference is the result of accounting constraints which are to be identified during income and cost (revenue realization and matching principle). In other words, the difference between cash flow schedules and cognition schedule is accounting transactions. But, a definition which would describe the nature of

accruals would be items which are created but which are not yet due (Taymoury, 2007).

4. Audit quality

Most empirical researches have defined accounting quality from the point of view of audit risk. Audit risk is when the auditor, does not unknowingly modify his opinion on financial statements which have significant mistake or distortion. De Angelo (1981) has defined audit quality as market deduction of possibility of auditor's ability to discover and report transgression in the client's accounting system.

When quality of auditing is high, auditors will limit management's unreasonable choices of accounting methods and prevent incorrect presentation of the company's finances. But, when quality of audit is low, not only the auditor does not place any limitations for the manager, he may even provide him with consultation as to how to avoid the Generally Accepted Accounting Principles and assist managers to provide false financial situation of company. Discretionary accruals are known as reflection of managements authority and estimation and their scrutiny is considered as very difficult such that, the lower the discretionary accruals, the higher accounting quality.

5. Research literature

Chen et al. (2005), in their quality of auditing and profit management research for the Taiwanese Stock Exchange companies, by selecting 4 major audit companies as quality auditors and comparing profit in companies audited by these 4 and companies audited by others, reviewed the link between audit quality and profit management in the stages before and after the public offering of shares. According to results obtained, such companies conducted profit management and there was a significant correlation between profit management and audit quality. In other words, the higher the audit quality the lower profit management will be.

According to research by Francis and Michelle (2005), managers of the companies with higher accruals are inclined to use auditors of higher quality to ensure their non-participation in profit management opportunities, and auditors of larger size are most probably ignored by those clients who are inclined to change the accruals.

Ferdinand et al. (2009) reviewed the effect of auditor's period of tenure and specialty in audit industry on quality of earnings. According to results, in case of lower expertise in audit industry, the correlation between longer auditor's tenure and quality of higher profit has been stronger.

According to Lai's research (2011), companies with higher investment opportunities had higher discretionary accruals; but this link became weaker when their audit was conducted by the five large audit companies.

Hasas Yeganeh and Khaleqi (2004) reviewed the expectation distance between auditors and users of the role of independent auditors' accrediting. According to results, there was a significant difference between auditors and users' expectation distance of independent auditors' accrediting.

Ebrahim KurdLor and Seyedi (2008) reviewed the effect of type of audit institute (audit organization and other institutions) and the type of audit opinion in audit report on discretionary accruals in their research of 71 TSE companies, they found out that there is a link between audit institute and discretionary accruals. Moradi and Poorhosseini (2009) reviewed the link between financial and non-financial features and time period for conducting audit. By reviewing 152 companies for a period between 1998 and 2006, they concluded that there is a link between size, debt ratio to equity profitability, type of opinion, company's age and time of conducting and finalising audit activities.

Hasas Yeganeh, Bolou and Farokhinejad (2010) researched 88 companies admitted into the TSE and reviewed the link between type of audit report and discretionary accruals, and according to their conclusion, there is a link between the two.

Mahdavi and Jamalianpoor (2010) reviewed the effective factors on speed of financial reporting. They deduced that companies with various speeds of reporting have different financial/non-financial ratios. The speed of financial reporting has also been different in various industries. The average speed of financial reporting has increased during research years. Most financial/non-financial ratios have had a significant statistical correlation with financial reporting speed. Also, results of the research indicated that we can obtain significance models for forecasting financial reporting speed using financial and non-financial ratios. Bani Mahd (2010) reviewed the effective factors on the type of auditors' opinion in his research on 56 TSE companies between 2001 and 2007. Research findings indicate that issuance of acceptable audit report is more effected by factors such as manager performance, change of ownership, private auditing, opinion option, change from one private auditors to another private auditor and the size of company which has been audited.

6. Methodology

Methods used to review the research subject, are empirical and semi empirical methods, and the present research is considered as a semi empirical research because of using direct data of companies under study from the information bank at the Tehran Stock Exchange. Time domain of present research is from 2008 to 2010 and the statistical population includes companies in TSE at the beginning of 2008 to end of 2012 which have preserved their membership throughout this period.

7. Definition of data

This research's sampling was targeted stages (elimination). The total number of companies in the Tehran Stock Exchange was 446. During this period, companies who failed to maintain their membership of the Exchange, lack of access to variables, their end of financial year was not 19th. March, or were investment or insurance companies, were eliminated from research.

The number of companies in the sample reached 84 after eliminating those which did not qualify including car and parts industry 11, basic metals 10, cement 15, food producers 7, machinery and equipment 12, chemical products 14, pharmaceuticals 9, cartons and packaging 6.

8. Results and modeling

Dependent variable of the research, quality of earnings and independent variable, namely type of audit opinion for 84 sample companies during 2008 to 2012, were classified in Excel software. The quality and volume of discretionary accruals were used for measuring quality of earnings. Statistical description of data is a step toward assessing the governing model on them and a basis to explain the link between variables used. Therefore, before testing the hypothesis, descriptive statistics of variables in research are in Table 1. Five control variables were also used in regression model whose descriptive statistics are provided too.

9. Diagnostic test in combined data

The number of observations for this research have been 84 (companies) for a 5 years period. In other words, the dependent and independent variables' relationship in this research on the one hand, and among 84 companies on the other, was reviewed between 2008 and 2012 and for this purpose the combined data was used for analysis.

In using combined data, various models were used to test the hypothesis. These models include methods such as fixed effect, random effect model and pooled data model. There are also various tests to determine a model type proportionate to research data, such as Hoffman and Chi Tests.

To test the research hypothesis and review the relation between type of auditor's opinion and quality of earnings indexes, regression models (1) and (2) are used:

$$TACC_{it} = \beta_0 + \beta_1 \text{Audit Opinion}_{it} + \beta_2 \text{Audit Size}_{it} + \beta_3 \text{OCF}_{it} + \beta_4 \text{Firm Size}_{it} + \beta_5 \text{Leverage}_{it} + \beta_6 \text{ROA}_{it} \quad (1)$$

$$DACC_{it} = \beta_0 + \beta_1 \text{Audit Opinion}_{it} + \beta_2 \text{Audit Size}_{it} + \beta_3 \text{CoI}_{it} + \beta_4 \text{Firm Size}_{it} + \beta_5 \text{Leverage}_{it} + \beta_6 \text{ROA}_{it} \quad (2)$$

In the above relation, "TACC_{it}" is dependent variable (volume of accruals) and "Audit Opinion_{it}" auditor's opinion sign of independent variable and "Audit Size_{it}" the size of audit institute and "Firm Size_{it}" company size, control variable and "Leverage_{it}" is financial leverage and "ROA_{it}" is

assets' returns. Hoffman (Chi) bound F test was used to select a suitable method for forecasting these models in various time scales and periods of combined data. In Chi test, if the Chi statistic is result of significance test, the null hypothesis is rejected and fixed effect model¹ (panel data) is accepted. If the said statistic is insignificant, the method of pooled data to test the research hypothesis. In Hoffman's test, if the statistic obtained is from significance test, null hypothesis is

rejected too and the fixed effect model is accepted. In case of statistic being insignificant, the random effect model is used to test the hypothesis. Hoffman and Chi test results are in Table 1.

According to Table 1 and the results of the Chi test in the first and second models of the research, null hypothesis based on similarity of intercept in all periods is approved. Therefore, we must use pool data model. In this method, all data is gathered and the ordinary least square is used.

Table 1: Chi test results

Result of test	Test statistic (p-value)	Test	Model tested
Hoffman test Panel data	0/7030 (0/5902)	Chi test	Model (1)
Hoffman test Panel data	0/8496 (0/4944)	Chi test	Model (2)

Source: Researcher's calculations

After selecting a suitable model for testing the hypothesis, the link between dependent and independent variables are reviewed via models (1) and (2) using pooled data method.

10. Hypothesis testing

Results of model estimation relating to 1st hypothesis by pooled data model, is in Table 2. According to F test, the 1st model is generally significant. Plus, adjusted coefficient of determination from test of first model is 0.92. This figure shows that about 92% of dependent variable

changes, namely the volume of accruals is due to independent variable changes in model.

According to 1st model test results, based on information in Table (2), the further audit opinion in sample companies moves toward acceptable, the more reduction in the volume of accruals in companies under study. Reduction of accruals volume in a company means increase in profit. Therefore, it is concluded that acceptable reports are in companies with better quality of profit and the further the type of audit report moves toward reprobate opinion or no opinion, accruals increase and consequently the quality of profit is reduced.

Table 2: Results regression models (1)

Description	Constant coefficient	Audit Opinion	Audit Size	OCF	Firm Size	Leverage	ROA
Coefficient	-10.4440	3.3555	-0.3439	-4.9800	1.6282	-10.4294	13.5677
t-static	-1.4390	3.0598	-0.2322	-17.0564	1.4799	-7.6516	2.3592
p-value	0.1509	0.0024	0.8165	0.0000	0.1396	0.0000	0.0188
R ² =0.93	Adjusted R ² =0.9269	F-static 69.9790	F(p value) 0.0000				

The link between auditor opinion and quality of accruals was reviewed in the second model of research. In this hypothesis, accruals dependent variable was as index for quality of profit and

independent variable was type of auditor opinion. Results relating to estimation of second hypothesis model are in Table 3.

Table 3: Results regression models (2)

Description	Constant coefficient	Audit Opinion	Audit Size	OCF	Firm Size	Leverage	ROA
Coefficient	-1.7410	-0.0551	0.0731	1.5409	0.1175	0.9125	-0.2390
t-static	-5.7831	-1.2124	1.1902	0.1270	2.5749	16.1399	-1.0021
p-value	0.0000	0.2260	0.2346	0.8989	0.0104	0.0000	0.3168
R ² =0.8307	Adjusted R ² =0.8250	F-static 107.9926	F(p value) 0.0000				

Adjusted coefficient of determination from first model was 0.83. This figure shows that about 83% of changes to dependent variable, namely quality of

accruals, is due to changes in independent variable in the model. Results of test of the second model of research, according to information in Table (3)

represent a lack of connection between type of auditor comment in sample companies and current accruals (criterion of accruals quality) in companies under study.

References

- Ball and Brown. 1968. Differential information and the small firm effect. *The Journal of Financial and Quantitative Analysis* 20 (Dec): 407-422.
- Bani Mahd, Bahman 2011. Review of effective factors on auditor's acceptable comment. *Stock Exchange Quarterly* no, 13, pp 59-88
- Beaver William H. 1979. The Nature of Income Measurement, *the Accounting Review* (January 1979), PP 38-46.
- Beneish , M.D .Nichols ,M . 2005 The Relation between Accruals and the Probability of Earnings Manipulation, *the accounting review*, Vol.77, No.4, pp.543-576.
- Chen,K. Chan,L. Jegadeesh , N. Lakinishok, J. 2004 . earnings quality and stock returns working paper university of Illinois at urbana -champaign-department of finance ,p.50 .
- De Angelo. 1981. Auditor size and audit quality. *Journal of Accounting and Economics*, vol 3(3), 183-189.
- Ebrahimi Kurdlor, A.. Seyedi, s. A. 2008. Role of independent auditors in reduction of Discretionary Accruals. *Auditing and Accounting Reviews*. No. 54 3-16 Eskandari, Jamsjid 2009. *Intermediate Accounting* 1. 8th Edition. Golrokh Publications, Tehran.
- Ferdinand A.Gul, Judy Tsui and Charles J.PChen. (2009), Agency costs and audit Pricing: evidence on discretionary accruals. www.ssrn.com
- Francis, J. and Micheal, S. 2005. A test of audit pricing in the small-client segment of the US market. *The Accounting Review*, Vol. 62 No.1, pp. 145-57.
- Hasas Yeganeh, Yahya, Bolo, Q. and F. Farokhinejad 2010. Relation between Discretionary Accruals and Auditor's Report. *Audit Knowledge Magazine* No. 3, pp.6-22.
- Hendriksen, E. S. and M. F. Van Breda. 1992, *Accounting Theory*, Irwin.
- Lai, K. 2011. Was audit quality of Laventhol and Horwath poor?. *Journal of Accounting and Public Policy*. 27, 217-237.
- Mahdavi, M. and Jamalianpoor, R. 2010. Review of the link between Company Value with Inflation Rate in Tehran Stock Exchange during 1994-2004. *Economic Reviews* 4(3), 45-60.
- Taymoury, A. 2007. Review of link between profitability and Share Returns in TSE Companies. *Auditing and Accounting Reviews*, No. 39. Pp 39-58.