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STUDY OF THE EFFECTS OF FINANCIAL AND NON-FINANCIAL VARIABLES ON CONDITIONAL AUDIT REPORTS

Seydeh liyla atifeh ¹, Hassan Taher Shams ^{*2}

1- Department of Management, College of Accounting, Khomein Branch, Islamic Azad University, Khomein, Iran.

2*- Professor Assistant, Department of Accounting, Khomein Branch, Islamic Azad University, Khomein, Iran.

*Corresponding author: *Hassan Taher Shams (E-mail: TahershMs600@gmail.com)*

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ABSTRACT

The goal of this research is studying the relation between current ratio, Return of Asset (ROA) rate, accounts receivable (AR) to assets ratio, Return on Equity (ROE) rate, company size, and inventory to asset ratio with conditional audit reports. The statistical society of this research is the listed companies in Tehran Stock Exchange, from which 79 companies were selected for 2007 to 2013. Logistic regression model was used to study correlation between dependent and independent variables, and Z test was used to study the significance of regression coefficients. The results show that there is no significant relation between current ratio, ROA rate, company size, and inventory to asset ratio with conditional audit reports. Also, there is a negative and significant relation between ROE rate and conditional audit reports, and there is a positive and significant relation between AR to assets ratio and conditional audit reports.

Keywords: Conditional audit report, current ratio, ROA rate, ROE rate, company size.

INTRODUCTION

Scandals due to bankruptcy of large American companies such as Enron and WorldCom concluded to claims against large audit institutions. These scandals increased up to where the audit company for Enron Co. was condemned to dissolution and interruption of its business. Formation of such conditions noticed quality, among others, to audit institutions, because audit quality encourages auditors to fulfill their responsibilities against their masters and society more desirable.

In fact, the important subject for auditors is anticipating the period that they should work on their projects. Obviously, knowing this can bring stability for audit projects and makes it possible to continue audit activities, rather than acceptance or rejection of such projects. Proper planning for allocating resources causes anticipating audit duration and decreasing finished prices of goods and services. On the other hand, it increases audit report quality. One of the items to achieve this situation is reflected information in financial statements and other related resources. Indeed, these data are used by different

groups such as investors, agents, managers, financial consultants, analyzers, creditors, and government. Sometimes auditors also use these analytical methods to discover forgeries. However, regarding the information content of financial statements one can say that auditors can use such data in other cases such as audit planning and determining quality control index. This research tries to introduce useful information for audits to make decisions in these areas. In fact, it studies the effects of financial and non-financial variables on conditional audit reports.

On the other hand, economy entered a new step after emerging new technologies and making economic relations more complex, thus small companies turned to large multi-national companies. This expanded monetary markets. Competition in different areas including audit persuaded institutions to follow strategies to increase their efficiencies. One of such strategies is identifying and analyzing the factors affecting audit opinions in a certain confidence level. By view of financial information users, especially stockholders, audit is useful when auditors examine

activity continuance, errors in financial statements, and illegal actions. On the other hand, auditors encounter time and cost limitations and resources cannot be allocated without useful information. Therefore, one of the factors that can help auditors to have qualitative and efficient activities is enough information for the existing dilemmas in the financial statements of their masters. Thus, this research examines some factors such as company size, current ratio, ROA rate, AR to assets ratio, ROE rate, company size, and inventory to asset ratio with conditional audit reports.

RESEARCH HISTORY

Kabajeh et al. (2012) studied information content of audit reports on decisions of loaners and views of managers. Their results show that audit reports have not suitable content for banks and managers, but audit reports are not neutral against their decisions completely.

Lin et al. (2011) suggested that incorrect information by companies was due to lack of financial outcomes in conditional audit reports. In other words, disregard of investors, creditors, and other users of financial information against conditional audit reports causes companies offer incorrect information.

Gaganis et al. (2007) evaluated specifications of business agencies for their relations with opinions of auditors. They concluded that gross profit, size, profitability, current ratio, asset circulation productivity, industry and audit institutions were the most important factors for auditor's opinion type.

Pasiouras et al. (2007) redacted a decision support system for auditors' opinions by some of financial ratios. Their results showed that immediate ratio had most effect on auditors' opinions.

Butler et al. (2004) used logistic regression to anticipate opinions. This research was the only one that studied debit to unexpected earnings ratio in the final model.

Spathis et al. (2003) studied the factors for anticipation of conditional audit opinion. They concluded that items of financial statements can anticipate conditional opinions.

Ireland (2003) studied the determinant factors in audit reports in bourse and non-bourse companies. The results showed that companies with low cash and high financial risk are more subjected to receive conditional audit reports.

Willenburg et al. (2001) studied the relation between types of audit opinions by some if financial ratios for activity continuation of the agency. The suggested

that net earnings to total assets ratio and inventory circulation in the final model were most important.

Amini et al. (2011) studied the effective factors on issuing conditional audit reports. Their results show that post-tax earnings to sale ratio was most related, and after that, current ratio, total debt to total assets ratio, company size, conditional audit report of last year, AR to total assets ratio, inventory circulation frequency, immediate ratio, and type of audit institution were most related with issuing conditional audit reports.

Ahmadpur et al. (2010) studied the effects of financial and non-financial variables on conditional reports. Their results showed that inventory circulation frequency, debt to asset ratio, and AR to total assets ratio significantly affected conditional audit reports.

ASSUMPTIONS

The assumptions of this research are:

Assumption 1: There is significant relation between current ratio and conditional audit opinions.

Assumption 2: There is significant relation between ROA rate and conditional audit opinions.

Assumption 3: There is significant relation between AR and conditional audit opinions.

Assumption 4: There is significant relation between ROE rate and conditional audit opinions.

Assumption 5: There is significant relation between company size and conditional audit opinions.

Assumption 6: There is significant relation between inventory to asset ratio and conditional audit opinions.

METHODOLOGY

This research is an applied one by goal. Data was gathered by library method. The statistical society of this research was all listed companies in Tehran Stock Exchange, from which 79 companies were selected for 2007 to 2013. EVIEWS6 was used for data analysis and t Test was used to evaluate the assumptions. The following model was used to test the assumptions:

$V_1 = \alpha_0 + \alpha_1 CR_{it} + \varepsilon_{it}$	for assumption 1
$V_1 = \alpha_0 + \alpha_1 ROA_{it} + \varepsilon_{it}$	for assumption 2
$V_1 = \alpha_0 + \alpha_1 DCL_{it} + \varepsilon_{it}$	for assumption 3
$V_1 = \alpha_0 + \alpha_1 ROE_{it} + \varepsilon_{it}$	for assumption 4
$V_1 = \alpha_0 + \alpha_1 Lnassets_{it} + \varepsilon_{it}$	for assumption 5
$V_1 = \alpha_0 + \alpha_1 IA_{it} + \varepsilon_{it}$	for assumption 6

In which,

V_1 : Audit report

CR_{it} : Current ratio of company i for period t

ROA_{it} : Return of Assets rate of company i for period t

DCL_{it} : AR to assets ratio of company i for period t

ROE_{it} : Return on Equity rate of company i for period t

$Lnassets_{it}$: Size of company i for period t

IA_{it} : Inventory to asset ratio of company i for period t

In this research, audit report is the dependent variable, which is obtained from notes of financial statements; namely, 1 is considered if the issued audit report is conditional, and 0 is considered if it is unconditional.

The independent variables are:

1. Current ratio: Current assets to current debts ratio:

$$CR_{it} = \frac{CA_{it}}{CL_{it}} \quad (1)$$

In which,

CR : Current ratio of company i for period t

CA : Current assets of company i for period t

CL : Current liabilities of company i for period t

2. Return of asset (ROA) rate: It is obtained from eq. (2) (Shahalizadeh, 2013):

$$ROA_{it} = NI_{it}/TA_{it} \times 100 \quad (2)$$

In which,

ROA_{it} : ROE rate of company i for period t

NI_{it} : Net profit of company i for period t

TA_{it} : Total assets of company i for period t

3. AR to assets ratio: It is obtained by eq. (3):

$$RA_{it} = AR_{it}/TA_{it} \quad (3)$$

In which,

RA_{it} : AR to assets ratio of company i for period t

AR_{it} : AR of company i for period t

TA_{it} : Total assets of company i for period t

4. Return on equity (ROE): It is obtained by eq. (4):

$$ROE_{it} = \frac{NetIncome}{ShareholdersEquity} \times 100 \quad (4)$$

In which,

ROE_{it} : ROE of company i for period t

$NetIncome$: Net earnings

$ShareholdersEquity$: Equity

5. Company size: Here, logarithm of sum of assets was used (Shahalizadeh, 2013):

$$IA = Inventory/TotalAssets \quad (5)$$

In which,

IA : Inventory to asset ratio

$Inventory$: Inventory

$TotalAssets$: Total assets

DATA ANALYSIS

Descriptive statistics

To analyze data, firstly we calculate the descriptive statistics (Table 1):

Table 1. Descriptive statistics of research variables

	Audit report	ROE rate	ROA rate	Size	Inventory to asset	AR	Current ratio
Average	0.645455	0.12093	0.123628	13.42316	0.226401	0.230184	0.344274
Median	1.000000	29.69382	0.103566	13.38940	0.214031	0.208649	1.210439
Max.	1.000000	553.7714	0.630867	18.98630	0.677652	0.997267	10.84974
Min.	0.000000	-358.860	0.286549	0.797349	0.000000	0.000000	0.222000
SD	0.478617	42.19468	0.121989	0.418588	0.15182	0.188965	0.793508
Skewness	0.608119	2.637724	0.693577	0.598839	0.665822	1.115867	4.157324
Kurtosis	0.396809	52.14495	0.924965	4.199941	3.416960	4.712853	34.22514
Observations	990	990	990	990	990	990	990

Regarding to Table 1, which shows the equilibrium and gravity center point of distribution and is a good index for indicating center of data, audit report variable is equal to 0.645455. Its median, 1, indicates

normality of this variable. SD is one of the most important dispersion parameters, which is 0.478617 for audit report. The skewness factor is negative and

near zero, which indicates a normal distribution. Also, all variables have positive kurtoses.

Analysis of assumptions

Analysis of assumption 1

There is significant relation between current ratio and conditional audit opinions. The test results are shown in Table 2.

Table: 2. Test results for assumption 1

Variable	Estimated	SD	t statistic	t test probability
β_0	0.39598	0.141744	2.466403	0.0134
CR	0.188412	0.096015	1.962323	0.0497
Mc-Faden factor	0.03312	LR statistic LR probability	4.264566 0.038915	

Table 2 shows that t test probability for fixed and variable current ratios are less than 5%; thus the estimated factor for this variable is significant. Mc-Faden factor indicates description power of independent variables.

LR statistical probability indicates that total model is significant. Since current ratio to conditional audit report variable remains in the model, then there is a significant relation between current ratio and conditional audit reports.

Analysis of assumption 2

There is significant relation between ROA rate and conditional audit opinions. The test results are shown in Table 3.

Table: 3. Test results for assumption 2

Variable	Estimated	SD	t statistic	t test probability
β_0	0.719409	0.095983	7.475147	0.0000
CR	-0.957633	0.542527	-1.765133	0.0775
Mc-Faden factor	0.02419	LR statistic LR probability	-3.114445	

Table 3 shows that t test probability for ROA rate to conditional audit reports is more than 5%; thus the estimated factor of this variable is not significant. Therefore, assumption 2 is rejected by confidence of 95%.

LR statistical probability indicates that total model is not significant. Then there is no significant relation between ROA rate and conditional audit reports.

Analysis of assumption 3

There is significant relation between AR ratio and conditional audit opinions. The test results are shown in Table 4.

Table: 4. Test results for assumption 3

Variable	Estimated	SD	t statistic	t test probability
β_0	0.591731	0.105725	5.596900	0.0000
CR	0.032115	0.357792	0.089760	0.9282
Mc-Faden factor	0.00006	LR statistic LR probability	0.008062 0.928455	

Table 4 shows that t test probability for ROA rate to conditional audit reports is more than 5%; thus the estimated factor of this variable is not significant. Therefore, assumption 3 is rejected by confidence of 95%. LR statistical probability indicates that total model is not significant. Then there is no significant relation between AR ratio and conditional audit reports.

Analysis of assumption 4

There is significant relation between ROE rate and conditional audit opinions. The test results are shown in Table 5.

Table: 5. Test results for assumption 4

Variable	Estimated	SD	t statistic	t test probability
β_0	0.3799320	0.091621	8.724247	0.0000
CR	-0.006257	0.001937	-3.229608	0.0012
Mc-Faden factor	0.10038	LR statistic LR probability	12.92361 0.000324	

Table 5 shows that t test probability for ROE rate to conditional audit reports is less than 5%; thus the estimated factor of this variable is significant. Mc-Faden factor indicates description power of independent variables. LR statistical probability indicates that total model is significant. Then there is a significant relation between ROE rate and conditional audit reports.

Analysis of assumption 5

There is significant relation between company size and conditional audit opinions. The test results are shown in Table 6.

Table: 6. Test results for assumption 5

Variable	Estimated	SD	t statistic	t test probability
β_0	1.292315	0.637254	0.027942	0.0426
CR	-0.051471	0.047010	-1.094907	0.2736
Mc-Faden factor	0.000930	LR statistic LR probability	1.196767 0.273969	

Table 6 shows that t test probability for company size to conditional audit reports is more than 5%; thus the estimated factor of this variable is not significant. Therefore, assumption 5 is rejected by confidence of 95%. LR statistical probability indicates that total model is not significant. Then there is no significant relation between company size and conditional audit reports.

Analysis of assumption 6

There is significant relation between inventory to asset ratio and conditional audit opinions. The test results are shown in Table 7.

Table: 7. Test results for assumption 6

Variable	Estimated	SD	t statistic	t test probability
β_0	0.819529	0.131171	6.247813	0.0000
CR	-0.963115	0.488885	-1.970022	0.0488
Mc-Faden factor	LR statistic		3.375019	
	LR		0.049019	
	probability			

Table 7 shows that t test probability for fixed and variable factors of inventory to asset ratio to conditional audit reports is less than 5%; thus the estimated factor for this variable is significant. Mc-Faden factor indicates description power of independent variables. LR statistical probability indicates that total model is significant. Then there is a significant relation between inventory to asset ratio and conditional audit reports.

CONCLUSION

The goal of this research is studying the relation between current ratio, Return of Asset (ROA) rate, accounts receivable (AR) to assets ratio, Return on Equity (ROE) rate, company size, and inventory to asset ratio with conditional audit reports. Regarding to the results, there are no significant relations between current ratio, Return on Equity (ROE) rate, company size, and inventory to asset ratio with conditional audit reports. But there are significant relations between Return of Asset (ROA) rate with conditional audit reports.

There was no relation between current ratio and conditional audit reports by assumption 1, which is compatible with the results of Menon& Schwarz (1987), Bell & Tabor (1991), and Spathis et al. (2003). There was no relation between ROA rate and conditional audit reports by assumption 2. Also, there was a positive and significant relation between AR to assets ratio and conditional audit reports by assumption 3, which is compatible with the results of Spathis et al. (2003), but conflicts with the results

of Dopouch et al. (1987) and Monroe & The (1993). There was a negative and significant relation between ROE rate and conditional audit reports by assumption 4. Also, there was no relation between company size and conditional audit reports by assumption 5, which is compatible with the results of Ireland (2004), Hudaib& Cook (2005), and Spathis et al. (2003), but conflicts with the results of Craswell et al. (2002). Finally, in the last assumption, there was no relation between inventory to asset ratio and conditional audit reports.

According to the results, it was found that current ratio does not affect condition audit reports. Thus, economic agencies must fulfill actions to preserve this ratio in a reasonable level. Also, rather than auditors, managers are recommended to control the items of this ratio, because this ratio is subject to fraud and mistake due to its mobile nature. Also, it was found that AR to assets ratio affected conditional audit report. This originates from two subjects. First, in many cases there are annual AR in financial statements. Second, determination of reserve for doubtful claims requires judgment of auditors. Therefore, managers are recommended to redact a logical credit policy and be careful in collecting AR. The results of such researches in planning step cause identification of existing dilemmas in financial statements and helps auditors for precise planning. It is recommended to research about the effects of factors such as inventory circulation period, legal claims, management, and efficiency ratio on conditional audit reports for future studies.

REFERENCES

- Ahmadpur, Ahmad; Taherabadi, Ali Asghar; Abassi, Sho'aib (2010), "Effect of financial and non-financial variables on conditional auditor's opinions", Quarterly of Bourse, No. 9, pp. 97-114.
- Amini, Peyman; Mohammadi, Kamran; Abassi, Sho'aib (1390), "Study of the effective factors on conditional audit reports", Quarterly of Management, 4(4), pp. 25-39.
- Shahalizadeh, Bitia (2013), "Study of relative efficiency of adjusted Du point ratio for anticipation of profitability in each steps of company life cycle", The Second Conference of Modern National Management, Shiraz, Iran.
- Bell, T.; Tabor, R. (2002), "Empirical analysis of audit uncertainty qualifications", Journal of Accounting Research, 29, 350-370.
- Butler, Andrew J.; Willenborg, M. (2004), "An empirical analysis of auditor reporting and its association with abnormal accruals", Journal of Accounting and Economics, Vol. 37, pp. 139-165.
- Craswell, J. Stocks; Laughton (2002), "Auditor independence and fee dependence", Journal of Accounting and Economics, Vol. 33, pp. 253-275.
- Dopouch, N.; Holthausen, R.; Leftwich, R. (1987), "Predicting audit qualifications with financial and market variables", Accounting Review, 62(3), pp. 431-454.

- Gaganis, Ch.;Pasiouras, f.;Douplos, M. (2007), "Probabilistic neural networks for identification of qualified audit opinions", *Expert Systems with Applications*, Vol.32, pp.114-124.
- Hudaib, M.; Cooke, T.E. (2005), "The impact of managing director changes and financial distress on audit qualification and auditor switching", *Journal of Business Finance & Accounting*, 32(9&10), pp. 1170-1210.
- Ireland, J. (2003), "An empirical investigation of determinants of audit reports in the UK", *Journal of Business Finance & Accounting*, 30(7&8), pp. 975-1015.
- Menon, K.; Schwartz, K.B. (1987), "An Empirical Investigation of Audit Qualification Decisions in the Presence of Going-Concern Uncertainties", *Contemporary Accounting Research* (Spring), pp. 302-15.
- Monroe, G.;The, S. (1993), "Predicting Uncertainty Audit Qualifications in Australia Using Publicly Available Information", *Accounting and Finance*, Vol. 33, No. 2, pp. 79-106.
- Pasiouras, F.;Gaganis, Ch.;Zopounidis, C. (2007), "Multicriteria decisionsupport methodologies for auditing decisions: The case of qualified audit reports in the UK", *European Journal of Operational Research*, Vol.180, pp.1317-1330.
- Spathis, Ch.;Douplos, M.;Zopounidis, C. (2003), "Using clientperformance measures to identify pre-engagement factors associated withqualified audit reports in Greece", *The International Journal of Accounting*, 38, pp. 267-284.
- Willenbun, M., McKeown J.C.(2001), "Going-concern initial publicofferings", *Journal of Accounting and Economics*, Vol. 30, pp. 279-313.