FACTORS INFLUENCING THE AUDITOR'S GOING – CONCERN OPINION DECISION

Thuy Thi Ha – Truc Anh Thi Nguyen – Trieu Thi Nguyen

Abstract

This study aims to find out the relationship between financial ratios, non-financial information such as firm size; audit firm; Going - concern Opinion in Previous Year and auditors' opinion on audit report. This paper used 133 samples of (VN133) listed companies on Vietnam stock market for four years from 2011 to 2014. The questionaries are used for collection the important information that relate to types of auditors' opinion and all variables used in the models were determined with reference to auditor subjects. In addition, we examined the financial statements, auditors' opinion and financial statements notes for listed companies in Vietnam that received a qualified audit report and for those that received an unqualified audit report. By using Binary logistic models in this paper, the result shows that Going - concern Opinion in Previous Year; financial leverage ratio and earnings before tax (EBT) ratio are factors that affect to auditors' opinions on audit.

Key words: Auditor's Going – Concern Opinion; Financial statements; Qualified audit report; Unqualified audit report

JEL Code: M41; M42

Introduction

The issue of auditor independence is of serious concern to regulators, investors, creditors and the general public. The Auditing Standards Board (ASB) recently attempted to eliminate the subject –to opinion, including those issued for going concern uncertainties. Financial satemnet users expressed strong opposition to this move, partly because they believed that auditors are privy to inside information. The research described in this paper was designed to examine the relationship between the going concern opinion and publicly available information. Binary Logistic was used to test models of going concern opinion decision in this study.

(Reynolds and francis, 2000), in an investigation of the effect of client size on big 5 auditor's reporting decisions at the office level, find that (a) larger clients of big 5 auditors

have lower levels of accruals (scaled by total assets) compared to otherwise similar smaller clients and potentially financial distressed larger clients of Big 5 auditors are more likely to receive a going concern opinion. (Mutchler, 1985) used the multivariate analysis method using data of financial ratios and non-financial variables to predict the auditors' opinion on the going concern operation assumption. (Mutchler, 1986) continued the research on this model with extended variables including variables of firm scale and type of audit firms. The research results showed that for small-scaled firms with financial distress, the audit firms which were not the Big Eight did not issue opinions on the going concern assumption.

Dopuch (Dopuch et al, 1987) find that the most important variable in predicting auditors' opinions under the probability model comprised variables of corporate profit assumption for the current year, change in corporate profit minus the sector average profit and Debt/Asset financial ratios. (Spathis et al, 2003) showed that financial variable with the best qualification to discriminate the opinions of auditors included ratios of profit/asset; sales/asset and floating capital/asset. Non-financial variable capable of discriminating opinions of auditord was information about firm litigation.

In Vietnam, there are some individual studies related to auditors' opinion (Nguyen.T. Tu, 2012; Bui.T.Thuy, 2014; Nguyen.T.P.Hong and co-author, 2015). However, at present, there are very few impirical studies examine which factors will effect auditors' opnion. In addition, with new Vietnamese Audit Standard No 200 in 2014 that effect more audit firms and auditors when they conduct audit progress.

The remarkableness of this study is shown by the use of statistical analysis techniques in Binary Logistic regression model to build the auditors'opinion in financial statements of listed companies (VN133) in Vietnam. This method was not previously used the authors for their studies of the same type. The results achieved by this study will provide auditors with additional support tools in issuing the auditing opinions.

With this goal, following this introduction, section 1 will present about data and research methodology. The results of the study will present in section 2. Finally, this article gave some conclusions.

1 Data and research methodology

1.1 Choice of the variables.

This study focuses on examining the impact extent of both financial variables and non-financial variables on the auditors' opinion in financial statements of listed companies (VN133) in Vietnam. The variables used in this study include financial ratios, solvency, profitability; operability and nonfinancial variables such as firm size; audit firms size and the previous year's auditing opinions.

1.1.1 Independent variables are non-financial indicators.

❖ **Firm size**

Variable of firm size was used as a non-financial variable by Muchler to build prediction model for the auditors' opinions regarding going concern assumption. (Muchler, 1986) pointed out two reasons related to firm size which were, first: the firms which received the auditors' opinions related to the going concern assumption, had smaller size than those received the auditors' opinions unrelated to the going concern assumption; Second: firms audited by Non-Big Eight had smaller size than those audited by Big Eight.

❖ **Audit firms**

Previous studies classified audit firms into types such as Big Eight and Non-Big Eight in the study of (Muchler, 1986); Big Five and Non-Big Five in the study by (Reynolds and Francis, 2001). In this study, the audit firms are divided into two groups, Big 4 and Non-Big 4.

❖ **Going - concern Opinion in Previous Year**

(Muchler, 1985) stated that firms received an unqualified opinion decision in the first year related to going concern operation were more likely to receive the similar opinion decision for the current year. In this study, the variable of the Going - concern Opinion in Previous Year is expected to be in the same direction with that of the current year.

Fig.2: Independent variables are non-financial indicators.
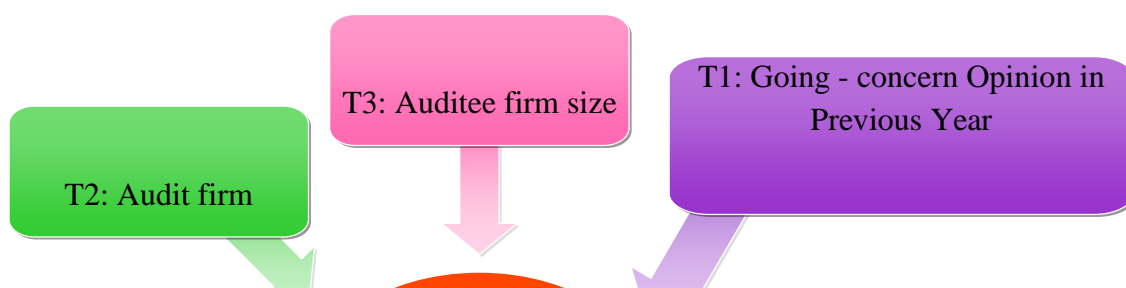
Source: The model proposed by author

1.1.2 Independent variables are financial ratios.

❖ **Financial structure analysis.**

Selected variables to analyze the impact of the financial structure on the auditors'opinion is dept/asset ratio. (Gaganis et al, 2007) showed that, the companies received unqualified opinion decision often had a high ratio of self-financing; (Muchler, 1985) used dept/asset ratio in combination with a number of other financial ratios to produce predicting results of the auditors'opinions with an accuracy of 82%. (Dopuch et al, 1987) pointed out that the dept/asset ratio is one of the most important contributors to the prediction of auditors'opinions.

❖ **Solvency analysis**

This study selected two ratios, quick solvency ratio and current solvency ratio as independent variables. Previous studies (Muchler, 1985); (Spathis et al, 2003) proved that the solvency ratio affected the opinions of the auditors. Based on the results of previous studies, the solvency ratio is expected to be proportionate to qualified opinions of the auditors.

❖ **Profitability analysis**

Ratios were chosen to represent variables of profitability analysis comprised ratio of pre-tax profit/net revenue and the ratio of EBIT/net revenue. One of the ratios which is the ratio of pretax profit/net revenue were previously studied and proved that it affected the auditors' opinion (Pinches et al, 1973); (Spathis et al, 2003); (Gaganis et al, 2007); (Mutchler, 1986).

Based on the results from previous studies, variable of profitability ratio is expected to be proportionate to unqualified opinion decision of the auditors.

❖ **Operability analysis**

This study used two ratios: ratio of revenue/asset and inventory turnover ratio as independent variables included in the study. (Spathis et al, 2003) demonstrated that ratios had an important contribution to the auditors' opinion, while the ratio of receivables/revenue and ratio of receivables/inventories had little impact on the auditors'opinion decision.

Fig.1: **Independent variables are financial indicators.**
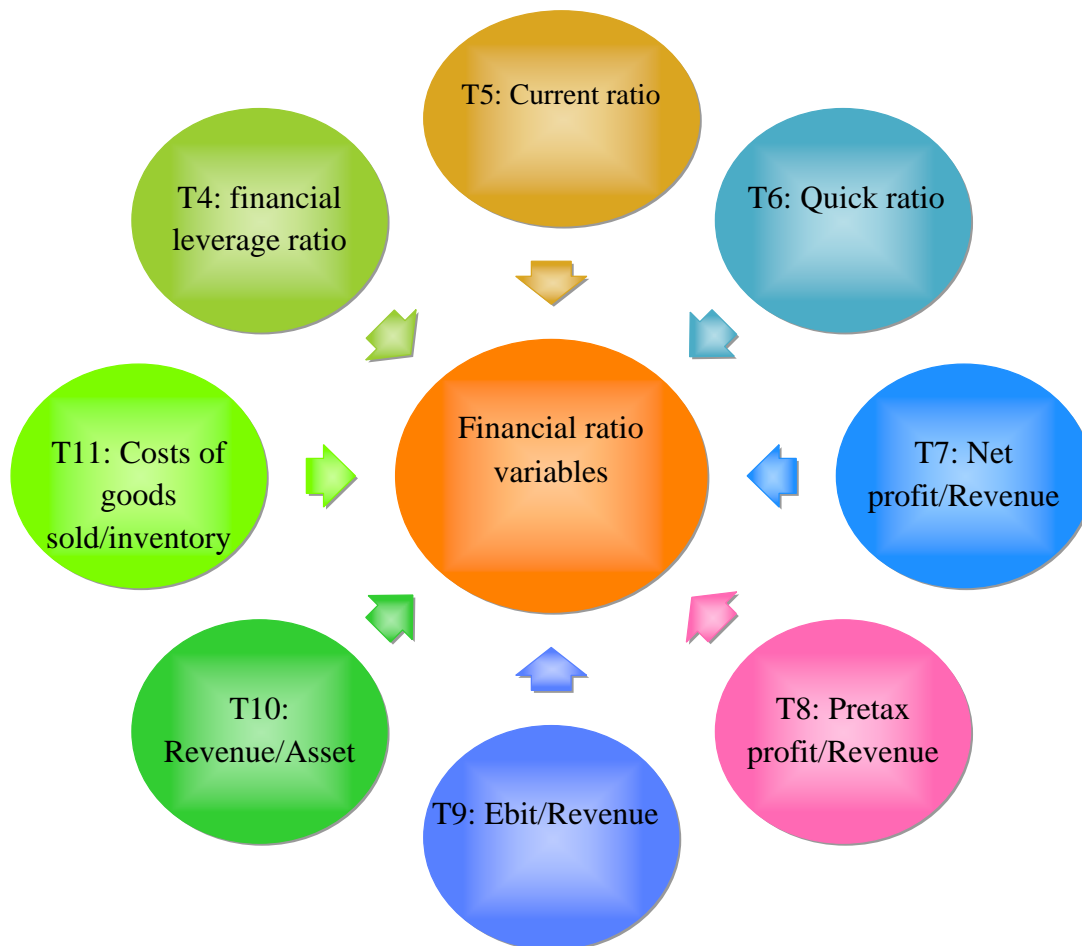
Source: The model proposed by author

1.2   Research methodology.

1.2.1   Sampling.

This study limits the scope of the sample in 133 listed companies (VN133) published on http://www.hsx.vn for four years from 2011 to 2014. Which of 133 qualified firms the author conducted a random sampling of 133 opinion decisions of the auditors including 30 qualified opinion decisions and 103 unqualified opinion decisions. Compared with the samples used for the analysis of previous studies, we found that there were research model using samples of over 100 firms as (Mutchler, 1985) used a sample selection for primary analysis of of 238 firms and a testing sample of 84 firms. However, there were studies using a sample selection of less than 100 firms as (Spathis et al, 2003) with 76 Greek companies. Thus, number of samples selected in this study were large enough to be generalized.

1.2.2   Method of testing the relationship between independent variables and dependent variables.

The research methods were previously used such as multivariate analysis method in the study of (Mutchler, 1985); UTADIS multicriteria classification method, multivariate analysis method and Logit method in the research by (Spthis et al, 2003). Several previous studies demonstrated that modern statistical methods had more accurate predictability than traditional statistical methods as (Spathis,2003) and Zonpounidis & (Doumpos, 1999); However, due to the relatively strict requirements of modern statistical methods in which it was required to invest a lot of time in the choice of samples and analysis. In addition, depending on the characteristics of independent variables as well as dependent variables used in the study, an appropriate research method could only be selected.

This study used the Binary Logistic method to exam the relationship between some factors and auditors' opinion . Binary Logistic analysis model requires that dependent variables must be qualitative ones with only two characteristics. Besides, independent variables can be qualitative or quantitative variables. It can be considered that all requirements of Binary Logistic analysis model are satisfied by variables used in this analysis. Therefore, traditional statistical method is used in the hope of obtaining significant results.

2   Research findings

2.1 Binary Logistic regression models for the selected variables.

After testing the relationship between independent variables and dependent variables by using an appropriate method, the author used Bianry Logistic regression model to process selected variables and produce the auditors' opinion. The Binary Logistic function model was below:

$$Log_e[\frac{p_i}{1-p_i}] = B_0 + B_1T_1 + B_2T_2 + B_3T_4 + B_4T_6 + B_5T_7 + B_6T_8 + B_7T_9$$

Of which:

P_i: The probability of event occurrence y=1 (the probability of receiving unqualified opinion decision)

B_i: The estimated coefficient for the iᵗʰ independent variable

T_1: Variable of Going - Concern Opinion in the Previous Year

T_2: Variable of the audit firm

T_4: Variable of financial leverage ratio

T_6: Variable of fast ratio

T_7: Variable of earning after tax on revenue ratio

T_8: Variable of earnings before tax on revenue ratio

T_9: Variable of EBIT on revenur ratio

Coefficient B_i the regression equation showed significance when variable Ti increase by 1 unit, the log of ratio (P_i /1-P_i) will increase proportionately to B_i unit. In addition, if coefficient B_i has positive sign, independent variables T_i will increase the possibility in which y receives a value of 1, that mean increasing the likelihood of receiving unqualified opinions of the audit if B_i has negative sign, it will reduce this likelihood.

2.2 Results of Binary Logistic model with originally selected variables.

Based on seven independent variables selected by the results of testing the relationship between independent variables and dependent variables mentioned above, these independent variables were handled through Binary Logistic model. Results of predictability of the auditors' opinion decision of these variables through Binary Logistic model was shown Tab.s 2.1 through 2.4

Tab.2.1: Results of chi-squared test of the match of the model.

		Chi-square	df	Sig.
Step 1	Step	95.512	7	.000
	Block	95.512	7	.000
	Model	95.512	7	.000

Sources: Author's Calculation

Tab.2.2: Results of testing the general match of the model according to the quantity -2LL.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	46.495[a]	.512	.781

Sources: Author's Calculation

Hypothesis testing results of general match in Tab.2.1 has Sig. = 0.000 so we can completely reject the hypothesis H_0: $B_1 = B_2 = B_3 = B_4 = B_5 = B_6 = B_7 = 0$, this meand that the linear relationship synthesis of all coefficients in the model, except for the constant is really significant in explaining the dependent variable, the auditors' opinion decision.

Tab.2.2 shows the value of -2LL = 46.495 is not so high, which represents a pretty good match of the overall model.

Tab.2.3: Classification of the auditors' opinion decision predicted from the model.

	Description	Prediction Tab.

		The auditors' opinion decision		Accuracy percentage
		Qualified	Unqualified	
The auditors' opinion decision	Qualified	26	4	86.7
	Unqualified	4	99	96.1
	Prediction percentage			94.0

Sources: Author's Calculation

Tab.2.4: Wald testing for the significance of overall regression coefficients

	B	S.E.	Wald	df	Sig.	Exp(B)
T1	2.614	.830	18.935	1	.000	37.099
T2	1.788	1.728	1.071	1	.301	5.979
T4	-5.889	2.772	4.514	1	.034	.003
T6	1.756	1.342	1.712	1	.191	5.789
T7	60.520	26.561	5.192	1	.023	1.922E26
T8	-44.165	20.099	4.828	1	.028	.000
T9	.710	1.543	.212	1	.646	2.033
Constant	.793	2.329	.116	1	.733	2.211

Sources: Author's Calculation

The results from Tab.2.3 and Tab.2.4 show that the average prediction accuracy of seven independent variables combined in this model reaches 94% and the prediction model has only four variables including variable of Going - Concern Opinion in the Previous Year (T1); variable of financial leverage ratio (T4); variable of net profit/revenue ratio (T7) and variable of pretax profit/revenue ratio (T8).

2.3   Results of Bianary Logistic regression model with remaining variables.

Based on the results of four remaining variables with regression coefficients satisfying significance level Sig. smaller than 0.05, the researcher continued selecting these variables to run Binary Logistic regression model again with the hope that all selected variables would fulfill the conditions of the regression model to be able to predict auditor's opinion. Results of the implementation of the Binary Logistic regression model for four remaining variables are shown in Tab.2.5 through 2.8.

Tab.2.5: Chi-square testing on the match of the model

		Chi-square	Df	Sig.
Step 1	Step	91.682	4	.000
	Block	91.682	4	.000
	Model	91.682	4	.000

Sources: Author's Calculation

Tab.2.6: Testing the general match of the model according to quantity -2LL

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	50.325[a]	.498	.759

Sources: Author's Calculation

It can be seen from the value of the indicator shown -2LL in Tab.2.6 that there is an adjustment compared with the initial results with seven independent variables. When there are only four independent variables in the model, the value of the indicator -2LL increased from 46.495 upto 50.325. However, this value is not so high, so it still shows a good match with the overall model.

Tab.2.7: Classification of the auditors' opinion decision predicted from the model

	Prediction results

Description		The auditors' opinion decision		Accuracy percentage
		Qualified	Unqualified	
The auditors' opinion decision	Qualified	26	4	86.7
	Unqualified	4	99	96.1
Prediction percentage				94.0

Sources: Author's Calculation

Tab.2.8: Wald testing for the significance of overall regression coefficients

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	T1	2.867	.801	22.308	1	.000	47.821
	T4	-7.428	2.466	9.076	1	.003	.001
	T7	54.532	25.276	4.655	1	.031	4.818E23
	T8	38.166	18.877	4.088	1	.043	.000
	Constant	2.184	1.619	2.868	1	.049	24.139

Sources: Author's Calculation

Tab.2.7 shows that case number and percentage of correct prediction for each type of auditors' opinion decision remains compared to when there were seven independent variables in the model. Thus, the regression coefficients of four remaining independent variables are statistically significant and the model is well used based on the testing results of the general match of the model. From regression coefficients, the equation is set as follows

$$Log_e[\frac{P(Y=1)}{P(Y=0)}] = 3,184 + 3,867T_1 - 7,428T_4 + 54,532T_7 - 38,166T_8$$

Conclusion

By using the Binary Logistic analysis method to handle independent variables including financial ratios and non-financial variables collected from audited financial statements of listed firms in Vietnam stock market during the 2011 – 2014 period, this study built the auditors' opinion based on the following four factors:

First, the firms in the previous year receiving unqualified opinion decision are more likely to receive a similar opinion decision for the current year.

Second, the firms with higher debt meaning that high financial leverage ratio would have lower possibility to receive unqualified opinion decision.

Third, firms with higher ratio of earning after tax on revenue are more likely to receive unqualified opinion decision.

Fourth, firms with higher ratio of earning before tax on revenue are more unlikely to receive unqualified opinion decision.

This study was designed to test the extent to which the going – concern opinion could be predicted using only publicly available information. This possibility only raises further questions, including whether the opinion is used as a signal of other more broader issues in the evaluation of business risk. To test the overall fuction of qualified opinions will require additional studies in corporating more controls.

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Contact

Thuy Thi Ha

Faculty of Accounting, Ton Duc Thang University

19 Nguyen Huu Tho, Tan Phong Ward, Dist.7, Ho Chi Minh City, Vietnam

Email: hathithuy@tdt.edu.vn

Truc Anh Thi Nguyen

Faculty of Accounting, Ton Duc Thang University, Viet Nam.

19 Nguyen Huu Tho, Tan Phong Ward, Dist.7, Ho Chi Minh City, Vietnam

Email: nguyenthitrucanh@tdt.edu.vn

Trieu Thi Nguyen

Faculty of Accounting, Ton Duc Thang University, Viet Nam.

19 Nguyen Huu Tho, Tan Phong Ward, Dist.7, Ho Chi Minh City, Vietnam

Email: nguyenthitrieu@tdt.edu.vn