

Auditing financial statements in insurance enterprises: The case of Vietnam

Thi Mai Anh Nguyen^a and Thi Tam Le^{b*}

^aHanoi University of Natural Resources and Environment, Vietnam

^bThuyloi University, 175 Tay Son, Dong Da, Ha Noi, Vietnam

CHRONICLE

ABSTRACT

Article history:

Received: October 2, 2018

Received in revised format: November 15, 2018

Accepted: November 22, 2018

Available online:

November 22, 2018

Keywords:

Audit quality of financial statements

Audit procedures

Audit techniques

Insurance enterprises

Risk - based approaches

This study is conducted to study the implementation of the audit techniques and procedures executed by auditors using risk-based approach. The study also determines factors affecting audit quality of financial statements in Vietnamese insurance enterprises. Quantitative method is used in the study where questionnaires are sent to 250 independent auditors and 186 valid questionnaires are encrypted, declared and entered into SPSS software version 22.0. The results show that in audit techniques, except for document testing and verification technique, there were significant differences in application level of material testing, observation, interview, calculation and analysis techniques between big 4 firms and non-big 4 firms. The analysis also confirms that the most significant difference was between the two audit groups. In audit procedures, while control testing is not performed singly, detailed testing can be performed alone at all three assurance levels and the analysis is performed alone in the assurance level of 1. It is possible to combine them in these procedures with the assurance level of 2 and 3. On the other hand, the combination of these three procedures is only guaranteed at level 3. The results of the factor analysis and regression model test demonstrate that there were six factors influencing the audit quality of financial statements in insurance enterprises; namely audit method, auditors' quality, awareness of auditors and director board, characteristics of insurance enterprises, legal environment and position of the audit firm. In particular, audit method and auditors' quality are the strongest factors.

© 2019 by the authors; licensee Growing Science, Canada

1. Introduction

One of the primary objectives of any business units is devoted to reach higher profitability, however, insurance enterprises have many characteristics different from the normal business activities. Their products are risks which are invisible and unexpected. There is a reverse accounting cycle that the insurance companies collect premium first and pays compensations after the insured events. Their idle capital is usually invested in financial activities, business processes appear complicated legal relationships and their operation scale is broad and geographically dispersed. The characteristics of insurance enterprises determine the content and techniques and procedures for auditing financial statements. However, there are a few studies in the world and more specifically in Vietnam focusing on auditing financial statements in insurance enterprises. On the other hand, due to the stringent requirements of

* Corresponding author. Tel. +84-984537282
E-mail address: lethitam@tlu.edu.vn (T. T. Le)

the integration and the increasing demand on auditing, Vietnamese audit firms are facing significant amount of pressures on the workload and time of audit completion. It also requires further efforts to improve the audit quality in general and the audit quality of financial statements in insurance enterprises in particular.

The study is conducted to deal with two main objectives. The first objective is to examine the application level of audit techniques and procedures in financial statements by risk-based approaches in Vietnamese insurance enterprises. The second objective is to detect the factors affecting audit quality of financial statements in Vietnamese insurance enterprises.

2. Research overview

Since the financial crisis together with the scandal of many major corporations around the world, auditing and accounting professional associations have recognized and made changes in auditing sector. One of those changes is the conversion of traditional approaches to risk-based approach. The risk-based approach was adopted by a number of large audit firms in the late 1990s. Bell et al. (1997) was the first to try to perform an investigation through practical understanding of the audit process in KPMG. According to Bell et al. (1997), instead of performing a traditional approach based on examining operations and balances on the financial statements, auditors explored the business strategy of the client, predicted the risks and their responses to the risks, and determined the effects of risks on material misstatement in the financial statements. As a result, auditors can design the audit procedures to handle the identified risks. Salterio and Weirich (2002) examine the differences between traditional audit approach and risk-based approach. The approach requires auditors to have wise understanding of customers, expertise and analysis skills. Griffiths (2005) states that risk-based audit approach does not come from control procedures, but it based on the objectives of the organization and the risks that affect the objectives. The approach help to evaluate control activities to manage those risks. Knechel (2007) also supports that through comprehensive understanding of the customer's business environment, auditors identify the risks leading to material misstatement in the financial statements. Then it allocates human resources to focus on higher risk areas and help auditing activities more effectively. Besides, Adam (2012) analyzes the necessary requirements to identify business risk factors into the audit model and suggests a model, which has three steps: business risk assessment, audit evidence collection, and feedback loop. Prinsloo (2008) sums up previous studies on audit approaches and concludes that the risk-based audit approach is an indispensable trend in the audit development process to provide reasonable assurance to the audited entity, comply with all professional rules, and narrow the audit expectation gap. Mentz (2014) builds the quantitative model of audit procedures to address the risk of material misstatement by three assurance levels which can be seen in Table 1.

Table 1
Combined model of audit testing and the assurance level

Audit testing	The assurance level of 3 (high)						The assurance level of 2 (medium)				The assurance level of 1 (low)				
	Combination of substantive analytical procedures and control testing			Performing substantive analytical procedures alone			Combination of substantive analytical procedures and control testing		Performing substantive analytical procedures alone		Performing substantive analytical procedures alone				
Control testing	2	2	1	1	1	0	0	0	1	1	0	0	0	0	0
Analysis procedure	1	0	2	1	0	2	1	0	1	0	2	1	0	1	0
Detail testing	0	1	0	1	2	1	2	3	0	1	0	1	2	0	1
Total assurance level	3	3	3	3	3	3	3	3	2	2	2	2	2	1	1
% assurance level	95%						86%				63%				
% audit risk	5%						14%				37%				

Source: Mentz (2014)

If transactions, account balance or disclosure are critical and make risks of material misstatement at database, the assurance level will be the highest by 3. If transactions, account balance or disclosure are critical but are not likely to make risks of material misstatement at the database, the level of assurance is

on average and equal to 2. If account balance or disclosure not important and is not likely to make risks of material misstatement at the database, the level of assurance is by 1. In addition, changing in auditing approach will make the changes about scale, scope of audit techniques and procedures (Dinh, 2016). According to Bell et al. (1997), business risk identification is the basis to design audit procedures by increasing substantive analytical procedures for irregular operations and only performing tests of controls for regular operations. Cullinan and Sutton (2002) also note that in the risk - based approach, analysis technique is strengthened and promoted throughout the audit process.

In Vietnam, the risk-based approach has gained more attention since Ministry of Finance issued new audit standards in 2014. As a new approach, there are a few authors in Vietnam studying the audit of financial statements by risk-based approach. On the other hand, many audit firms in Vietnam have not applied the approach for all customers. Typically, this approach receives popularly in listed enterprises and insurance enterprises do not use this method more frequently. Therefore, the first research objective is to examine auditors to perform audit techniques and procedures in auditing financial statements of the insurance enterprises by risk-based approach.

Along with the development of auditing sector in general, auditing activities in Vietnam were also developed. Clients and audiences using the auditing results are more aware of the role and effect of the audits in the market economy. As a result, it is necessary for audit firms to improve audit quality and enhance their image. Accordingly, the research on audit quality has become a topic which has received much attention in Vietnam. However, only some researches have examined the factors affecting the audit quality through quantitative research. Moreover, there is no study relating to audit financial statements in Vietnamese insurance enterprises. Therefore, besides the audit techniques and procedures, this study also considers the factors affecting the audit quality of financial statements in insurance enterprises. In the auditing field, the audit quality of financial statements consists of professional quality and service quality (Duff, 2004). Professional quality emphasizes that auditors comply with standards during auditing process and detect and report material misstatements on financial statements (Aldihizer et al., 1995; Krishnan & Schauer, 2000; DeAngelo, 1981; Palmrose, 1988). In terms of a service perspective, the audit quality of the financial statement expresses the satisfaction level of users about objectivity and reliability in audit opinions, about content and format of auditors' reports (FRC, 2008, Duff, 2004; Boon et al., 2007). The items of the audit quality in financial statements are developed from the previous researches such as (1) Content and format of auditors' reports are clear and understandable; (2) Audit opinions are objective and reliable (3) Audited financial statements do not have any misleading materials; (4) Insurance enterprises are satisfied with the audit services.

Independent auditing and insurance businesses are the sectors that have a great influence on the socio-economic situation of a country. Therefore, these two sectors are strongly controlled by the legal system and inspection activities of state agencies. Moreover, many studies such as Martar (2012); Phan (2015), Defond and Zhang (2014), Do and Trung (2016), Bui (2014) also show that the legal environment has a strong impact on both auditors' ethical behavior and audit quality. The first hypothesis is developed:

H1: The legal environment has a positive relationship with the audit quality of financial statements in Vietnamese insurance enterprises.

The business position is considered as an invaluable asset which represents the competitive strength and plays an extremely important role for the success of an enterprise. In the auditing field, the position of audit firms is reflected in the scale, reputation and audit fees. The previous researches confirm that the scale, reputation and prestige of audit firms affect the audit quality (Defond & Zhang, 2014; Kenchel, 2007; DeAngelo, 1981). Besides due to the typical characteristics of the sector, insurance enterprises are often audited by large-size and reputable auditing firms. The second hypothesis is suggested:

H2: The position of audit firms has a positive relationship with the audit quality of financial statements in Vietnamese insurance enterprises.

Auditing is a highly specialized and influential profession that requires auditors to comply professional

standards. The finding is supported by Carcello et al. (1992) and Boon et al. (2007) that awareness and attitude of auditors and director board including independence, cautious attitude and professional skepticism have a strong influence on the audit quality of financial statements. Insurance enterprises are public interest entities and many stakeholders are interested in auditing results. Therefore, auditors raise the compliance with the professional standards and the board of directors pay special attention to quality control and improve the service quality when auditing financial statements of customers. This leads to the development for the third hypothesis:

H3: The awareness of auditors and director board has a positive relationship with the audit quality of financial statements in Vietnamese insurance enterprises.

Previous studies have also found that the quality of human resources has a great impact on the audit quality. Richard and Jason (2006) state that auditors' quality is to represent the capacity and experience in the audits. Tuukka (2012) and Moroney (2007) comment that experienced auditors will perform audit procedures, collect and process audit evidences more efficiently than less experienced auditors. Moreover, auditors who have deep knowledge of customers' expertise field will increase their abilities to detect risks (Sarwoko & Sukrisno, 2014; Granberg & Hoglund, 2011; Low, 2004). According to Boon et al. (2007), auditors with professional qualification and experience will make customers satisfy with audit results. With fastidious customers such as insurance enterprises, the quality of auditors becomes increasingly important that requires not only auditors with professional qualification but also extensive experience and knowledge of insurance sector. Therefore, we proposed the fourth hypothesis as follows:

H4: The auditors' quality has a positive relationship with the audit quality of financial statements in Vietnamese insurance enterprises.

According to ISA 300, a pre-designed audit program will help auditors arrange and organize working steps more logically. Audit techniques and procedures are considered the factors significantly impacting on time, cost and effectiveness of audits (Dinh, 2016). In addition, in the era of information technology, auditors must have much knowledge of technology to design audit procedures in insurance enterprises with high demand for computing. Therefore the finding shows that audit method influences on the audit quality of the financial statements. This leads to the fifth hypothesis:

H5: Audit method has a positive relationship with the audit quality of financial statements in Vietnamese insurance enterprises.

Customer characteristics are also factors that affect decision making, audit procedures and audit quality. In particular, the items including management characteristics, business characteristics, accounting characteristics, characteristics of internal control are mostly mentioned in the existing literature. According to Messier et al. (2014), Tuukka (2012), Krishnan et al. (2000), the integrity and management capacity of director board significantly influence on the risk assessments, the design of audit procedures and the number of audit evidence collected. When there are more complicated business lines, there is a bigger potential of errors in business activities and there is a more potential of frauds on financial statements. As a results, auditors must design and use more audit techniques. This is supported by Malaescu & Sutton (2013); Munro & Stewart (2009) that auditors will reduce the substantive analytical procedures and increase tests of controls if they believe in internal control system of customers. This leads to the development of the sixth hypothesis:

H6: The characteristics of insurance enterprises have positive relationships with the audit quality of financial statements in Vietnamese insurance enterprises.

3. Research methodology

Business activities of insurance enterprises are quite typical, their products are risky business. These characteristics require audit firms auditing financial statements in the insurance enterprises to be large and highly reputable. Although the number of audit firms in Vietnam is about 150, only 10 audit firms

are eligible to audit financial statements at insurance enterprises. There are 4 big four firms and 6 non big four firms. The study is conducted to deal with two objectives. The first objective is to examine the differences in the techniques and procedures of auditing financial statements in Vietnam insurance enterprises between two groups of audit firms. The second is to investigate the factors influencing the audit quality of financial statements in Vietnam insurance enterprises. In order to achieve the above objectives, the quantitative method through survey questionnaire was adopted. The questionnaire is divided into three sections. The first section requests the respondents to complete demographic profile. The objective of this section is intended to gather information related to the background of the respondents such as gender, experience years, position and educational background. The second section includes 14 questions related to techniques and procedures for auditing financial statements of insurance enterprises. Of which, 7 questions represent audit techniques recognized in the ISA 500 (material testing, document testing, observation, calculation, interview and analysis technique), 7 remaining questions indicate audit procedures which are inherited by the study of Mentz (2014). The final section deals with the factors impacting on the audit quality of financial statements. Therefore, the questions are designed using five-point Likert scale from 1 as “totally disagreeable” to 5 as “totally agreeable”. The items of independent variables and dependent variables are developed from the previous studies which can be seen in Table 2.

Table 2
The items of independent variables and dependent variable

Sources	Independent variables	Code
Phan (2015), Bui (2014)	1. Legal environment	LE
	1.1. The legal provisions on auditing and accounting in insurance sector are complete and comprehensive	LE1
	1.2. Frequency of inspection and control by the authorities	LE2
Defond & Zhang (2014), Kenchel (2007), DeANGELO (1981)	1.3. Measures and punishments for violations	LE3
	2. The position of audit firms	PF
	2.1. The reputation of audit firms	PF4
Carcello et al. (1992), Boon et al. (2007) Duff (2004)	2.2. The sale of audit firms	PF5
	2.3. Cost of audit firms	PF6
	3. Awareness of auditors and director board	AA
Richard & Jason (2006) Tuukka (2012), Moroney (2007) Sarwoko & Sukrisno (2014)	3.1. Awareness of compliance with professional standards	AA7
	3.2. Awareness of improvement the control activities of audit quality	AA8
	3.3. Awareness of improvement quality of audit services	AA9
Phan (2015); Bui (2014); PCAOB (2014)	4. Auditors' quality	AQ
	4.1. Ability of auditors	AQ10
	4.2. Experience of auditors	AQ11
Messier et al. (2014), Tuukka (2012) Bui (2014)	4.3. Knowledge of auditors in insurance sector	AQ12
	5. Audit method	AM
	5.1. The audit program of financial statements is designed appropriately	AM13
	5.2. Audit techniques are applied flexibly	AM14
Malaescu & Sutton (2013); Munro & Stewart (2009)	5.3. Audit procedures are implemented fully	AM15
	5.4. There has the support of information technology in auditing financial statements	AM16
	6. Characteristics of insurance enterprises	CI
	6.1. Integrity of director board	CI17
	6.2. Management capacity of director board	CI18
DeANGELO (1981) Duff (2004)	6.3. Complexity in business characteristics	CI19
	6.4. Complexity in transaction processing	CI20
	6.5. Quality of internal control and internal audit	CI21
	Dependent variable	Code
FRC (2008)	Audit quality of financial statements	FS
	Content and format of auditors' reports is clear and understandable	FS1
DeANGELO (1981) Duff (2004)	Audit opinions is objective and reliable	FS2
	Financial statements after audited are no longer material misstatements	FS3
	Insurance enterprises satisfy with the audit service	FS4

According to Hair et al. (2006), in exploratory factor analysis, the ratio between items and factors is by 5. With total 21 items, minimum sample scale is 105 items in this study. By Tabachnick and Fidell (2007), regression analysis achieves the best results when minimum scale is $n = 8p + 50$ where n is the minimum scale and p is the number of independent factors in the model. This study has a 6 independent factors so that the minimum size must be 98 observations. To respond the requests and ensure for the

research results, we select a sample size of 250 respondents. Survey questionnaires are sent to respondents by manual and online from 2015 to 2016. Respondents are auditors working in audit firms who have audited financial statements in insurance enterprises. 186 auditors responded validly including 100 auditors from big four firms and 86 auditors from non-big four firms, making the response rate as 74.4%. Valid questionnaires were encoded, declared, and entered into SPSS software version 22.0. From this software, the data continues to be processed through the following tools such as descriptive statistics, independent samples T-Test, reliability testing; factor analysis, correlation analysis and regression analysis. Descriptive statistics is performed to calculate the frequency and percentage of background of target respondents and the assurance level of audit procedures as well as mean, mode, min and max values of items. The independent samples T-Test is used to determine whether there is statistically significant different in audit techniques between big four firms and non-big four firms. Then, the analysis tools are performed to examine the factors influencing the audit quality of financial statements in insurance enterprises.

4. Results and Discussion

Background of respondents

Table 3 shows general information of respondents. The number of females surveyed are higher than the number of males. This is also consistent with the professional characteristics of auditing in Vietnam.

Table 3

The characteristics of the sample

	Background	Frequency	Percentage (%)
1. Gender	Female	107	57,5
	Male	79	42,5
2. Position	Junior	17	9,1
	Senior	103	55,4
	Manager	66	35,5
3. Years of experience	Less than 5 years	94	50,5
	From 5 years to 10 years	84	45,2
	More than 10 years	8	4,3
4. Education level	College	0	0
	University	165	88,7
	Post – graduate	21	11,3

About the working position, senior occupies the highest rate (55.4%), followed by the managers (35.5%) and juniors (9.1%). In experience years, the number of people working less than 5 years is 50.5%; from 5 to 10 years owning 45.2% and more than 10 years accounting for 4.3%. University level possesses the highest rate of 88.7%, the post-graduate level of 11.3%, and college level of zero. This is also perfectly suitable to a complex and specific industry such as auditing which requires high professional qualifications.

Auditing Techniques

Table 4 and Table 5 show the results of audit techniques between Big Four firms and Non Big Four firms. Auditors of two groups perform a combination of techniques including material testing, document testing, observation, interview, analysis, calculation and verification when auditing the financial statements in insurance enterprises (see in Table 4). The exception of documentation and verification techniques, the remaining techniques differ in the level of application between the two groups (see in Table 5). Document testing is the most commonly used when auditing financial statements by two audit groups because this technique has the highest mean value (see in Table 4). This popularity is rooted in the characteristics of document testing technique that is relevant to verify and test the information. Besides, the technique is simple and convenient in the collection of audit evidences. Verification technique: In insurance enterprises, there are many complex legal relationships with insurance buyers and beneficiaries. Therefore, these objects are strictly controlled by functional departments such as department of insurance policy, department of insurance fee, management department and policy monitoring

department. Accordingly, mistakes are rarely occurred in the existing database. This also explains why this technique is used at the medium level by the two audit groups. Based on Table 4, the mean score of verification technique for non-big four (mean =3,14) is higher compared with the mean score of big four firm (mean = 3,10). The result of the independent samples T – Test in Table 5 also indicates no significant difference in verification technique between the two audit groups. In Table 5, there are less significant differences for the application level of material technique, observation technique and calculation technique between the two groups. For the big four firms, the mean score for the three techniques in Table 4 respectively are 2.87, 2.95 and 3.95. Therefore, the application level of these techniques in turn are ranked the seventh, sixth and third. While with non-big four firms, the mean score for the three techniques are 3.11, 2.60 and 4.25, respectively and the application level of these techniques in turn are ranked the fourth, seventh and second. The application level of interview technique yields a significant difference between the two groups (see in Table 5). This technique is ranked the fourth in big four firms while it is ranked the sixth in non-big four firms (in Table 4). It is explained that big four firms apply more the interview technique in stage of finding out internal control system in insurance enterprises. In contrast, non-big four firms apply fewer techniques but focus on detailed testing about transactions, balances and explanatory information. Specially, the result of the independent samples T – Test in Table 5 shows that the most significant difference in the application level of analysis technique exists between the two groups. The mean score for analysis technique is higher required by the auditors in the big four (4,16) compared with mean score by auditors in the Non Big Four (3.08). This technique is much applied by auditors in the big four firms with ranking the second while it is less applied in the non-big four firm with ranking the fifth.

Table 4

The application level of audit techniques between the two groups

Auditing technique	Big Four			Non Big Four		
	Rank	Mean	Std. Deviation	Rank	Mean	Std. Deviation
Material testing	7	2,87	.518	4	3,11	.605
Document testing	1	4,32	.730	1	4,47	.754
Observation	6	2,95	.472	7	2,60	.811
Interview	4	3,65	.537	6	3,02	.624
Verification	5	3,10	.495	3	3,14	.646
Calculation	3	3,95	.809	2	4,25	.678
Analysis	2	4,16	.556	5	3,08	.546

Table 5

The independent samples T – Test of audit techniques between two groups

Auditing techniques	Levene's Test	t-test for Equality of Means		Mean Difference	Results
		Equal variances assumed	Equal variances not assumed		
Document testing	.418	.173		-.149	No difference
Verification	.002		.582	-.047	
Material testing	.212	.005		-.235	Difference but less significant
Observation	.000		.001		
Calculation	.984	.007		-.302	Significant difference
Interview	.167	.000		.626	
Analysis	.325	.000		1.071	

Audit procedures

Table 6 shows the results about the application level of audit procedures by auditors. Whether the risk assessment of material misstatement is low or high, auditors do not perform tests of controls alone. It is explained that internal control of insurance enterprises do not guarantee absolutely about the validity to detect, prevent and handle all errors in financial statements. Besides, the implementation of detailed testing alone appears at all three levels. This result is supported by previous study (Mentz, 2014). 19.5% of auditors reflect that the implementation of the single analysis procedure is at the assurance level of 1. This result is different from Mentz's study (Mentz, 2014). According to Mentz (2014), auditors can perform the single analysis procedure at the assurance level of 2. The combination of control testing and analytical procedure; of control testing and detailed testing; of analytical procedure and detailed testing are implemented at all three assurance levels. At the level by 1, auditors perform the combination of control testing and analytical procedures with the highest rate (34.4%) while at the level by 2,

implementing the combination of analytical procedure and detailed testing is ranked as the highest (40.9%). In addition, the combination of analytical procedure and detailed testing is the highest (23.1%) at the assurance level of 3. There are 83 auditors performing the combination of control testing, analytical procedure and detailed testing at the assurance level of 3 (accounting for 44.6%) and there is no auditor to perform this procedure at the level of 1 and 2. These results are similar to Mentz (2014).

Table 6

The assurance level of audit procedures

Audit procedures	The assurance level by 1		The assurance level by 2		The assurance level by 3	
	Quantity	Percentage (%)	Quantity	Percentage (%)	Quantity	Percentage (%)
Implementation of single control testing	0	0	0	0	0	0
Implementation of single analytical procedure	36	19,5	0	0	0	0
Implementation of single detailed testing	51	27,4	22	11,8	23	12,4
Combination of control testing and analytical procedure	64	34,4	43	23,1	12	6,5
Combination of control testing and detailed testing	20	10,8	45	24,4	25	13,4
Combination of analytical procedure and detailed testing	15	8,1	76	40,9	43	23,1
Combination of control testing, analytical procedure and detailed testing	0	0	0	0	83	44,6

Factors influencing audit quality of financial statements

In Table 7, the items have mean values ranging from 3.48 to 4.27. Besides, mean and mode values of all items are equal to 4, excepting item MT2 by 3. Through descriptive statistics, we realize that most auditors agree that all factors affect the audit quality of financial statements in insurance enterprises. Skewness and Kurtosis coefficients are in [-1; 1] so that all items have standard distribution.

Table 7

Descriptive statistics of variables

Items	Mean	Mode	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum
LE1	3.88	4	0.74	-0.131	-0.468	2	5
LE2	3.84	4	0.702	-0.428	0.358	2	5
LE3	3.87	4	0.724	-0.232	-0.16	2	5
PF4	4.04	4	0.554	0.019	0.301	3	5
PF5	3.97	4	0.5292	-0.036	0.621	3	5
PF6	3.48	4	0.667	-0.362	-0.244	2	5
AA7	4.15	4	0.637	-0.132	-0.572	3	5
AA8	4.04	4	0.656	-0.044	-0.655	3	5
AA9	4.24	4	0.631	-0.233	-0.621	3	5
AQ10	4.26	4	0.622	-0.241	-0.607	3	5
AQ11	4.27	4	0.618	-0.244	-0.603	3	5
AQ12	4.18	4	0.646	-0.185	-0.651	3	5
AM13	4.02	4	0.611	-0.008	-0.279	3	5
AM14	4.17	4	0.529	0.156	0.18	3	5
AM15	4.18	4	0.526	0.178	0.15	3	5
AM16	4.08	4	0.578	-0.001	-0.016	3	5
CI17	4.15	4	0.724	-0.228	-1.065	3	5
CI18	4.06	4	0.683	-0.075	-0.84	3	5
CI19	3.95	4	0.676	-0.154	-0.213	2	5
CI20	4.02	4	0.606	-0.009	-0.238	3	5
CI21	3.92	4	0.689	-0.095	-0.378	2	5
FS1	4.18	4	0.519	0.218	0.169	3	5
FS2	4.12	4	0.51	0.197	-0.591	3	5
FS3	4.19	4	0.545	0.091	-0.066	3	5
FS4	3.97	4	0.628	0.019	0.43	3	5

To evaluate the reliability of items, we test the Cronbach's Alpha and Corrected Item-Total Correlation coefficients. The results in Table 8 show that Cronbach's Alpha coefficients of all items in independent variables are greater than 0.6. Excepting item VT6, the remaining 20 items have Corrected Item-Total Correlation coefficient greater than 0.3. Therefore, variable VT6 is deleted from the model. Moreover, the reliability testing for dependent variable shows that the Cronbach Alpha coefficient is greater than 0.6 and Corrected Item-Total Correlation coefficient is greater than 0.3 (see Table 8). It is concluded that observational variables have the high reliability and enough condition for the exploratory factor analysis.

Table 8
Reliability testing

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
LE Factors: Cronbach's Alpha = .881		
LE1	.783	.818
LE2	.732	.862
LE3	.792	.809
PF Factors (step 1): Cronbach's Alpha = .664		
PF4	.536	.492
PF5	.654	.348
PF6	.294	.839
PF Factors (step 2): Cronbach's Alpha = .839		
PF4	.724	
PF5	.724	
AA Factors: Cronbach's Alpha = .848		
AA7	.808	.698
AA8	.694	.810
AA9	.653	.847
AQ Factors: Cronbach's Alpha = .858		
AQ10	.684	.846
AQ11	.735	.799
AQ12	.781	.755
AM Factors: Cronbach's Alpha = .840		
AM13	.622	.824
AM14	.754	.765
AM15	.572	.839
AM16	.762	.756
CI Factors: Cronbach's Alpha = .828		
CI17	.734	.759
CI18	.634	.791
CI19	.572	.808
CI20	.549	.814
CI21	.634	.791
FS Factors: Cronbach's Alpha = .843		
FS1	.706	.791
FS2	.669	.806
FS3	.640	.818
FS4	.714	.788

Table 9
Factor analysis to independent variables

	Components					
	1	2	3	4	5	6
CI17	0.859					
CI18	0.77					
CI20	0.729					
CI21	0.704					
CI19	0.676					
AM14		0.854				
AM16		0.843				
AM13		0.778				
AM15		0.724				
LE1			0.895			
LE3			0.877			
LE2			0.849			
AA7				0.91		
AA8				0.847		
AA9				0.81		
AQ11					0.819	
AQ12					0.798	
AQ10					0.783	
PF5						0.918
PF4						0.907
KMO	0.772					
Bartlett's Test of Sphericity	Sig. = 0.000					
Total variance extracted	73.80%					
Initial Eigenvalues	1.126					

Table 10

Factor analysis for dependent variable

	Component 1
FS4	0.849
FS1	0.844
FS2	0.819
FS3	0.794
KMO	0.816
Bartlett's Test of Spheriaty	Sig. = 0.000
Total variance extracted	68.35%

Table 9 and Table 10 show the results of exploratory factor analysis. For the independent variables, KMO coefficient is equal to 0.772 (>0.5); the significance level of the Bartlett test is by 0.000 (Sig. < 0.05); The explanation variance is of 73.797% ($> 50\%$), Eigenvalues are greater than 1, all 20 observations have load factors greater than 0.5 and observation variables form six factors. Dependent variable has the KMO coefficient by 0.816, Sig of Bartlett test by 0.000, the explanation variance of 68.352% ($>50\%$), load factors greater than 0.5, and observation variables form a factor. The results of Table 11 show the correlation coefficient between the independent variables and dependent variable with the lowest level by 0.273 and the highest level by 0.729 and sig value less than 0.05. Thus, the dependent variable is strongly correlated with independent variables. On the other hand, in Table 12, the VIF variance coefficients of independent variables are less than 2. Thus, there is no multi-collinearity between independent variables.

Table 11

Correlation between the dependent variable and independent variables

		FS	LE	PF	AA	AQ	AM	CI
FS	Pearson Correlation	1	.422**	.273**	.543**	.729**	.602**	.477**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	186	186	186	186	186	186	186
LE	Pearson Correlation	.422**	1	.045	.076	.373**	.244**	.234**
	Sig. (2-tailed)	.000		.539	.301	.000	.001	.001
	N	186	186	186	186	186	186	186
PF	Pearson Correlation	.273**	.045	1	.184*	.127	.135	.029**
	Sig. (2-tailed)	.000	.539		.012	.084	.065	.697
	N	186	186	186	186	186	186	186
AA	Pearson Correlation	.543**	.076	.184*	1	.334**	.196**	.178**
	Sig. (2-tailed)	.000	.301	.012		.000	.007	.015
	N	186	186	186	186	186	186	186
AQ	Pearson Correlation	.729**	.373**	.127	.334**	1	.415**	.431**
	Sig. (2-tailed)	.000	.000	.084	.000		.000	.000
	N	186	186	186	186	186	186	186
AM	Pearson Correlation	.602**	.244**	.135	.196**	.415**	1	.191**
	Sig. (2-tailed)	.000	.001	.065	.007	.000		.009
	N	186	186	186	186	186	186	186
CI	Pearson Correlation	.477**	.234**	.029	.178*	.431**	.191**	1**
	Sig. (2-tailed)	.000	.001	.697	.015	.000	.009	
	N	186	186	186	186	186	186	186

To examine the relationship between independent variables and dependent variables, we perform the regression model testing by using the Stepwise method. In particular, the sixth model is the best model with adjusted R^2 coefficient by 0.778 and Sig of F test less than 0.05 (see Table 12). Therefore, the independent variables in the model explain 77.8% of the change about the audit quality of a financial statements in the insurance enterprises.

Table 12
Results of regression model testing (model 6)

	B	Std. Error	Beta	t	Sig.	VIF
(Constant)	-.820	.215		-3.816	.000	
AQ	.292	.036	.356	8.030	.000	1.640
AM	.307	.038	.311	8.083	.000	1.237
AA	.243	.030	.299	8.025	.000	1.163
CI	.152	.034	.174	4.502	.000	1.241
LE	.101	.026	.145	3.831	.000	1.189
PF	.108	.032	.119	3.362	.001	1.049
R Square	.786		F=10.9331	Sig (F)	.000	
Adjusted R Square	.778		Durbin-Watson		1.875	

It is found that six hypotheses including H1, H2, H3, H4, H5, H6 are accepted and the regression equation is as follows:

$$FS = - 0.820 + 0.292AQ + 0.307AM + 0.243AA + 0.152CI + 0.101LE + 0.108PF$$

5. Conclusion

First, the study has indicated that both big four and non-big four firms were well aware of audit techniques and procedures and they applied these techniques and procedures in auditing financial statements to obtain appropriate audit evidences. Document testing technique has still been used most commonly. At the same time, according to the research results, the implementation of risk-based approach has created the necessary changes on the application level of audit techniques and procedures as well as differences between the two audit groups. There were different form of material testing, observation, interview, calculation and analysis techniques. Of which, interview and analysis techniques have maintained the most significantly difference between the two groups. Secondly, while control testing was not performed alone, the analysis procedure has been implemented alone at the assurance level by 1 and the detailed testing can be performed alone at all three assurance levels. It is possible to combine two procedures at the assurance level of 2 and 3. On the other hand, the combination of these three procedures is only at the level 3. Finally, the results have determined that all six factors impacting on audit quality of financial statements. As a result, audit method is ranked first, followed by quality of auditors, awareness of auditors and director board, the characteristics of insurance enterprises, the position of audit firms and the least important factor is legal environment. Therefore, in order to improve audit quality of the financial statements in insurance enterprises, solutions not only focus on completing the audit process of the financial statements by auditors, but also need to be linked with the audit firms, state functional agencies and insurance enterprises.

References

- Vitalis, A. M. (2012). *Business risk and audit risk: An integrated model with experimental boundary test* (Doctoral dissertation, The University of Wisconsin-Madison).
- Aldhizer III, G. R., Miller, J. R., & Moraglio, J. F. (1995). Common attributes of quality audits. *Journal of Accountancy*, 179(1), 61-68.
- Bell, T.B, Marrs, F.O., Solomon, I., Thomas, H. (1997). *Auditing organizations through a strategic-systems lens: The KPMG Business Measurement Process*. KPMG Peat Marwick LLP.
- Boon, K., McKinnon, J., & Ross, P. (2008). Audit service quality in compulsory audit tendering: Preparer perceptions and satisfaction. *Accounting Research Journal*, 21(2), 93-122.
- Bui, T.T. (2014). *Research factors influencing to audit quality of financial statements in enterprises on Vietnamese stock market*. Doctoral Thesis. National Economics University.
- Carcello, J. V., Hermanson, R. H., & McGrath, N. T. (1992). Audit quality attributes: The perceptions of audit partners, preparers, and financial statement users. *Auditing*, 11(1), 1-15.
- Cullinan, C. P., & Sutton, S. G. (2002). Defrauding the public interest: a critical examination of reengineered audit processes and the likelihood of detecting fraud. *Critical Perspectives on Accounting*, 13(3), 297-310.
- DeAngelo, L. E. (1981). Auditor independence, 'low balling', and disclosure regulation. *Journal of accounting and Economics*, 3(2), 113-127.

- DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3), 275-326.
- Dinh, T.T.H. (2015). Application of audit methodologies in financial statement audit conducted by audit firm in Vietnam. Doctoral Thesis, Academy of finance.
- Do, H., & Trung, N.S. (2016). The factors affect the quality of financial statements audit in Vietnam businesses. *Asian Social Science*, 12(1), 172-186.
- Duff, A. (2004). *Dimensions of audit quality*. The Institute of Chartered Accountants of Scotland.
- Griffiths, P. (2005). *Risk-based Auditing*. Gower E-book.
- Financial Reporting Council (FRC) (2008). *The audit quality framework*. Available at: <http://www.frc.org.uk/Our-Work/Publications/FRC-Board/The-Audit-Quality-Framework-%281%29.aspx>.
- Granberg, L., & Hoglund, L. (2011). The auditor's way to acquire knowledge about a company's environment. Master Thesis, Kristianstad University.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis 7th Edition* Pearson Prentice Hall.
- Knechel, W. R. (2007). The business risk audit: Origins, obstacles and opportunities. *Accounting, Organizations and Society*, 32(4-5), 383-408.
- Low, K.Y. (2004). The effects of industry specialization on audit risk assessments and audit-planning decisions. *The Accounting Review*, 79(1), 201-219.
- Malaescu, I., & Sutton, G.S. (2013). *The Reliance of External Auditors on Internal Audit's Use of Continuous Audit*. Doctoral Thesis. University of Central Florida.
- Martar, S. (2012). *The Impact of Legal Responsibility of External Auditors on Auditing Quality and Investment Level*. Department of Economics of Finance, Brunel University.
- Mentz, M. (2014). *Audit evidence enables the auditor to express an opinion on the financial statements to address the risk that the auditor may express*. Doctoral Thesis. University of South Africa.
- Messier, S.A., Bernardi, R.A., & Bernard, J.J. (2014). Review of the impact of client trustworthiness on the audit decision-making Process. *Journal of Forensic & Investigative Accounting*, 6, 222-247.
- Moroney, R. (2007). Does industry expertise improve the efficiency of audit judgment?. *Auditing: A Journal of Practice & Theory*, 26(2), 69-94.
- Munro, L., & Stewart, J. (2009). External auditors' reliance on internal audit: the impact of sourcing arrangements and consulting activities. *Discussion papers accounting, University Griffith*.
- Palmrose, Z.V. (1988). An Analysis of Auditor Litigation and Audit Service Quality. *The Accounting Review*, 63(1), 55-73.
- Phan, V.D. (2015). *The factors affecting Audit quality of Audit Firms in Vietnam oriented to strengthen competitive capability in international integration conditions*. Doctoral Thesis. University of Economics Ho Chi Minh City.
- Prinsloo, J. (2008). *The development and evaluation of risk-based audit approaches*. Magister in accounting. University of the Free State.
- Richard, C.H., & Jason, L.D. (2006). *Employee Theft and Staff Dishonesty*. The handbook of security, 9, 203-228.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. (5th ed.). Boston, MA: Allyn & Bacon/Pearson Education.
- Tuukka, J. (2012). *Factors Influencing Auditors' Information Usage: Experience, Risk, Task Structure and Information Reliability*. ACTA Wasaensia No 272. Universitas Wasaensis.
- Salterio, S. E., & Weirich, T.R. (2002). A primer on the strategic-systems approach to auditing. University of Waterloo working paper.
- Sarwoko, I., & Sukrisno, A. (2014). An empirical analysis of auditor's industry specialization, auditor's independence and audit procedures on audit quality: Evidence from Indonesia. *Procedia-Social and Behavioral Sciences*, 66, 271-181.

