

# EFFECTS OF EXPERIENCE YEARS, GENDER OF AUDITORS AND AUDIT FIRM SIZE ON FIRM' DISCRETIONARY ACCRUAL MANAGEMENT: EVIDENCE FROM VIETNAM

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## **ABSTRACT**

The objective of this study is to examine the effects of audit firm size and auditor characteristics on firms' discretionary accruals management of companies listed on Ho Chi Minh Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX). The results show that the gender of auditors affect discretionary accruals (DA). Female auditors approve DA at a lower value than male auditors. Number of experience years of auditors also affects restriction of DA. When the number of experience years of auditors increases, the magnitude of DA decreases, which means the quality of information on financial statements (FS) is higher. This study also reveals that the magnitude of DA is significantly lower amongst companies engaging a Big-4 specialist audit firm relative to companies using the audit services of a Non-Big-4 specialist.

**Keywords:** Audit firm size; gender; audit quality; discretionary accruals; Vietnam.

## **1. Introduction**

Information is always regarded as a kind of valuable “property” to all investors on the stock market. Getting information quickly and accurately will be a huge advantage when investing in the market. The theory of asymmetric information indicates that management tends to provide information which gives them advantage, other subjects cannot access to the original information, so they likely make wrong decisions. Asymmetric information on the stock market occurs when one or more investors own private information or more public information about a company. Therefore, it leads to a phenomenon of concealing adverse

information, exaggerating beneficial information or providing different investor groups with information in an unfair way.

The results of previous studies (e.g., Rusmin, 2010; Yasar, 2013) considered a number of factors (e.g., size, age) affecting profits adjustment of management under their own intentions. Adjustment of company profits could be detrimental to involved parties such as investors. Auditing is created to reduce asymmetric information and ensure reliable and usable information of profits in the period, the role of auditors is to detect and minimize adjustment that management tends to implement to achieve the desired profits level during their audit. In Vietnam, some

research studies on profits adjustment of management have been conducted. However, the empirical research on this topic is still limited. Based on the audited financial statements of 63 companies listed on both exchanges of stock markets in Vietnam during 5 years from 2009 to 2013, this research is to test the relationship between audit firm size, auditors' characteristics and DA (the proxy for earnings management) in the model of DeAngelo (1986) and improved by Friedlan (1994).

## 2. Literature Review and Hypothesis Development

### 2.1. Discretionary Accruals (DA)

According to Schipper (1989), adjustment of profits (through discretionary accruals) is a process of performing deliberate steps within the framework of accounting principles widely accepted to bring an expected level of reported profits. In other words, it is purposeful interference in the process of providing financial information to the outside in order to gain personal benefits. Healy and Wahlen (1999) believed that adjustment of profits was a behavior of management to judge the preparation of financial statements and implementation of transaction to change the financial statements in order to deceive the related interested parties or affect the contracts with results depending on reported data. In his research, Scott (1997) thought that adjustment of profits was related to the fact that financial statements applied accounting treatment as expected through the choice of accounting methods within the framework of accounting standards in order to bring benefits to management or to increase the market value of company.

Profits in the period of company can be divided into two categories which are "cash profits" and "accrual profits". Cash profits are formed from revenues and expenses that enterprises collect and actually spend during the period. Accrual profits from revenues and expenses are recorded at the time of transaction, regardless of the time of actual collection or expenditure. Reports on business

results are made based on the accrual basis. Cash flow statements are made on the basis of money. The differences between earnings in the statements of business operation and cash flow in the cash flow statements create accounting variables which are called accrual accounts.

$$\text{Total accrual} = \text{Profit after tax} - \text{Net cash flow from production and business operations}$$

Total accrual variables (TA) include two parts: nondiscretionary accruals, which cannot be adjusted by subjective will of the management (NDA) and discretionary accruals, which are in subjective will of the management, also known as abnormal accruals (DA):  $TA = DA + NDA$ . According to DeAngelo (1986), nondiscretionary accruals (NDA) do not change in time and the average of discretionary accruals by 0 in estimated period. Thus, DA is a suitable measure to evaluate the earnings management. To control changes in business operations of enterprises, Friedlan (1994) improved DeAngelo's model by dividing variables of his model to revenues:

$$DA_t = TA_t / \text{Revenue}_t - TA_{t-1} / \text{Revenue}_{t-1}$$

DA value of each company can bear positive or negative value depending on the motivation of management in the period, whether they want to inflate ( $DA > 0$ ) or conceal real profits ( $DA < 0$ ) made during the period. Therefore, we have to use the absolute value of DA. On the side of profits adjustment, this research complies with the legal framework and applies flexibly, cleverly gaps in accounting standards to rearrange financial statements under purpose, rather than illegal actions of management during period expected to inflate ( $DA > 0$ ) or conceal real profits ( $DA < 0$ ) made during the period. Thus, researchers use the absolute value of DA as a dependent variable.

### 2.2. Audit firm size (Size) and discretionary accruals

Experimental research of Becker et al (1998) compared the value of discretionary accruals of companies audited by Big 6 and

ones audited by other audit firms from 1989 to 1992. Discretionary accruals were estimated based on the model of Jones (1991). Research results showed that companies audited by other audit firms had values of discretionary accruals which were from 1.5% to 2.1% of total assets and higher than companies audited by Big 6.

Francis et al (1999) guessed that companies with high discretionary accruals were typically more aggressive and had the opportunity to perform profits adjustment and had the reason to hire Big 6 audit firms to ensure that their financial statements were reliable. The results showed that companies with high discretionary accruals are more likely to hire Big 6 audit firms. However, the research also showed that companies audited by Big 6 had higher accrual rate but the value of discretionary accruals were lower. This discovery is consistent with Big 6 audit firms restricting accrual application.

Experimental research of Elder and Zhou (2002) tested the relationship between audit quality (measured by audit firm size and intra-industry specialization level) and earnings management (measured by discretionary accruals) of companies with the first time to issue shares to public. The results showed that companies with the first time to issue shares to public audited by Big 5 had lower adjustment level than ones audited by other audit firms. Rusmin (2010) carried out experimental research in Singapore concluded that Big 4 audit firms restricted discretionary accruals in companies they audited.

Experimental research of Yasar (2013) about the relationship between audit firm size and earnings management was measured through discretionary accruals. The results showed no significant difference in discretionary accruals between companies audited by Big 4 and ones audited by other firms.

Overall, all research showed that audit firm size affects discretionary accruals. Companies audited by big audit firms (Big4) were expected to have the absolute value of

Overall, all research studies showed that audit firm size affects discretionary accruals lower than ones audited by the remaining audit firms (not Big4). Therefore, the hypothesis was made as follows:

*Hypothesis H1: Big 4 audit firms accept discretionary accruals lower than other audit firms which are not Big4.*

### **2.3. Gender of auditors (Gender) and discretionary accruals**

There were numerous studies on gender difference affecting aspects of personal behaviors and they all noted that majority of women do not like risk and are less gullible than men. The results were similar when the samples were selected in the fields of accounting and finance such as the research of Dwyer et al (2002), Roxas & Stoneback (2004), Watson & McNaughton (2007); and most showed that women are less gullible in financial issue than men.

Some other researchers believed that there was no difference of gender in moral issue (Ford & Richardson, 1994), while others said that women behave ethically than men. Women were observed to be more ethical in business context, so Roxas and Stoneback (2004) noted that women do not agree with ethical violations in general. Some other researchers also showed that women do not agree with ethical violations to receive bonuses in workplace such as Bernardi & Arnol (1997).

These researches led to identification that female auditors seem to have more effort in planning the audit as well as in detecting and preventing profits adjustment. The researchers expected that companies audited by female auditors would have discretionary accruals lower than ones audited by male auditors. Therefore, the hypothesis was made as follows:

*Hypothesis H2: Female auditors accept discretionary accruals rarely than male auditors.*

### **2.4. Experience years of auditors (AGE) and discretionary accruals**

The previous research studies showed

that motivation of management as well as workers changes with age. Some research studies showed that companies with executives close to retirement often cut costs of research and development (R&D) and funding for investment, procurement and upgrading of fixed assets (Dechow and Sloan, 1991; Barker and Mueller, 2002). In auditing, Sundgren and Svanstrom (2010) studied the impact of a number of auditors' characteristics and audit quality, research results showed that old auditors have fewer comments on continuous operation assumptions than young auditors; in other words, the age of auditors is negatively correlated with the quality of audit. This research was conducted in listed companies whose financial statements were interested and widely used with many risks for auditors. Thus, experience is an important factor to help auditors minimize risks when performing audit for listed companies. Therefore, the hypothesis was set out as follows:

*Hypothesis H3: Number of experience years of an auditor (AGE) affects discretionary accruals negatively.*

### **3. Methodology and model**

#### **3.1. Research model**

The estimation method fixed effects (FE) and random effects (RE) were employed to analyze the data. To choose the appropriate estimation method between FE and RE, researchers use Hausmans test. Based on previous researches, this research recommends the following model:

$$|DA| = \alpha + \beta_1 AGE + \beta_2 SIZE + \beta_3 GENDER + \varepsilon$$

In which:

- DA: Dependent variable, which is discretionary accruals, according to DeAngelo Model (1986).

- AGE: Number of experience years of an auditor from the time of being granted professional certificate of auditor to the time of performing an audit for a company.

- SIZE: Dummy variable equals a value of 1 if it is audited by Big4 Company and a value of 0 if it is audited by other auditing

firm(s). GENDER: Dummy variable equals a value of 0 if the auditor's gender is male, a value of 1 if the auditor's gender is female.

-  $\varepsilon$  : Random error

#### **3.2. Research data**

The data used in the research is secondary data including 315 observations collected from financial statements audited by 63 companies listed on Vietnam Stock Market on both exchanges HCMC (HOSE-40 companies) and Ha Noi (HNX-23 companies) within 5 years from 2009 to 2013. For variables of gender and experience years of auditors, research studies from the list of certified auditors, published in the website of Vietnam Association of Certified Public Auditors (VACPA). The selected companies are ones with business and production, trading or service activities which are not intermediary financial institutions such as banks, insurance companies and securities firms. The reason is that the research above is not used to study discretionary accruals at banks or financial institutions aforementioned due to different features of business activities and different application of accounting standards to the presentation and publication of financial figures.

### **4. Results**

#### **4.1. Results of descriptive statistics**

According to the results of descriptive statistics, among 315 observations, 42.5% of auditors were male, 57.5% of them were female. Auditors with the number of experience years as 5 years and over accounted for 71.1% and ones with less than 5 years accounted for 28.9%. The average number of experience years was 6.879 years, in which the average number of experience years of male auditors was approximately 6.71 years and female auditors was 7 years. The number of companies choosing Big 4 audit firms accounted for 18.4% and the remaining achieved 81.6%. Table 1 shows the descriptive statistics of average value, standard deviation, minimum value and maximum value of variables.

**Table 1**

Descriptive statistics

Value	Age	DA
Mean	6.879	0.149
Maximum	13	1
Minimum	2	0
Median	7	0
Mode	2	0
Standard Deviation	3.318	0.144
Valid N	315	315

**4.2. Regression results**

The research uses Eview software to analyze data. Regression results based on data of balance sheet are shown in Table 2. With the results estimated by the method of FE and RE shows p-value = 0.000 less than 5% of significant level, so the model has statistical significance. To choose the method appropriate to research data, Hausman test is performed. With Hausman test, the results show that P-value is 0.8554, greater than 5% of significant level, so RE estimation method is more suitable than FE method. Therefore, researchers will use the estimated results based on RE for analysis.

The estimated results based on RE show that all three elements - audit firm size, gender of auditors, number of experience years of auditors affect the earnings management through discretionary accruals at significant level of 1%. All three variables of the research have correlation inverse with variable of discretionary accruals. Hence, the hypothesis are accepted (Table 2).

**Table 2**

The estimated results based on RE and FE

Independent variable	Dependent variable (DA)	
	FE	RE
AGE	-0,0087***	-0,0084***
SIZE	-0,0720*	-0,0666***
GENDER	-0,0368*	-0,0445***
Constant	0,2429	0,2446
P-value	0,000	0,000
Durbin-Watson	2,068	1,669

Notes: \*\*\* Significant at 1% level, Significant at 5% level \* Significant at 10% level

**4.3. Discussion of results**

- Number of experience years of auditors

The regression results in Table 2 show that variable AGE affects negatively variable DA. These results show that the number of experience years of auditors affects the restriction of discretionary accruals; particularly, when the number of experience years of auditors increases, the magnitude of discretionary accruals decreases, meaning the quality of information in financial statements is more reliable. The results are also consistent with the research of Dechow and Sloan (1991), Barker and Mueller (2002). Because the more years of experience auditors have, the easier they can discover errors in financial statements and the less DA they accept than auditors with less experienced. Moreover, the more practicing years auditors have, the more importance of professional ethics auditors are aware of, so they will be more cautious in carrying out audit of financial statements to guarantee the occupational prestige

- Audit firm size

According to the results in Table 2, variable SIZE affects negatively variable DA. This shows that the value of discretionary accruals of companies audited by Big 4 is lower than the value of discretionary accruals of companies audited by other audit firms which are not Big 4. Thus, Big 4 audit firms restrict discretionary accruals in enterprises they audit, which means Big 4 audit firms will restrict the application of accruals. These results are similar to the results of previous studies such as ones of Becker et al (1998), Francis and colleagues (1999), Elder and Zhou (2002), Rusmin (2010). In fact, the audit firms of Bigv4 are able to gather a lot of qualified and much experienced auditors. On the other hand, the audit firms of Bigv4 have clients of various business fields, thus auditors may have many opportunities to expose to the reality and that the audit firms of Bigv4 can detect and less accept DA against the audit firms other than Big 4

- Gender of auditors

The results in Table 2 also show that variable GENDER affects negatively variable DA. This shows that female auditors accept discretionary accruals at a value lower than male auditors, which means female auditors have more effort in planning audit as well as in detecting and preventing the discretionary accruals. These results are similar to the previous studies on the role of female auditors in professional audit being paid much attention to in recent period. This research is also consistent with the research results of Ittonen and Peni (2012) believing that female auditors prefer fewer risks than male colleagues in professional judgment, and female auditors are less affected by clients' explanations which cannot be evaluated than male auditors.

### **5. Conclusion and Recommendations**

In this research, writers evaluate the relationship between audit firm size, gender as well as number of experience years of auditors and earnings management measured through discretionary accruals in 63 companies listed on Vietnam Stock Market, HOSE and HNX, during 2009-2013. The research results show that all three variables - gender of auditors, the number of experience years of auditors and audit firm size affects the earnings management through discretionary accruals. Female auditors accept discretionary accruals at a value lower than male auditors. When the number of experience years of auditors increases, the magnitude of discretionary accruals decreases, which means the quality of information in financial statements is high. The research also finds that the relationship between audit firm size and discretionary accruals, which means Big 4 audit firms restrict discretionary accruals in the companies they audited.

With these results, writers have some recommendations for companies when selecting audit firms: need to recognize audit firm size, gender, number of experience years of auditors contributing to make up a part of

auditing quality, thereby provide users of financial statements with more reliable information. For investors, audit reports are one of the channels used to assess the quality of information in financial statements published by companies. The development of stock market leads to a large increase of investors participating in the market. Thus, the audit results of public companies, listed companies will attract a large number of investors. The research results also provide investors with some suggestions to consider earnings management by calculating discretionary accruals and comparing changes over the years in order to detect abnormalities. This is a way for investors to evaluate risks and make some initial comments on the enterprises audited. Besides, the research results are also a suggestion for investors to access information in the audited financial statements. Investors can use information such as gender of auditors, number of experience years of auditors as a reference to make some initial comments when accessing provided financial information.

In addition, this research also has many important implications in the field of auditing. First, audit and profits adjustment are theoretically considered as important issues in Vietnam, where there are still very limited research. The research finds and quantifies three factors including audit firm size, gender, number of experience years affecting discretionary accruals. All these three factors help companies and investors identify and evaluate their impact on earnings management to make timely decisions. Second, the research enriches scientific treasure of profits adjustment using Vietnamese data. In addition, the research also opens other avenues of investigation such as adding variable opinion of auditors, using data from all companies on both exchanges, expanding the number of research years, using other models to estimate DA in order to study better about profits adjustment in companies listed on Vietnam Stock Market■

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