





“Determinants of external auditor selection and firm performance from a commercial bank manager’s perspective: Evidence from Vietnam”

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DETERMINANTS OF EXTERNAL AUDITOR SELECTION AND FIRM PERFORMANCE FROM A COMMERCIAL BANK MANAGER'S PERSPECTIVE: EVIDENCE FROM VIETNAM

Abstract

Financial statements of Vietnamese commercial banks must be audited annually by an auditing firm according to the Government's regulations. This study identifies factors associated with firm performance and external audit selection. The decision to choose an auditing firm is considered an intermediate variable to determine the degree of impact of some factors on the performance of commercial banks. This study was conducted by interviewing 265 managers holding high positions as CEOs and CFOs at 30 commercial banks in Vietnam. The non-probability sampling method was applied. The survey was produced using Google Forms and sent directly to participants. Structural Equation Modeling (SEM) is applied to test hypotheses. The results show that except for the complexity of a firm, the factors such as legal environment, audit fees, audit firm size and reputation, bank governance, audit experience, and relationship positively impact external auditor selection. Besides, external auditor selection significantly affects firm performance. This study's conclusions from the viewpoints of bank managers open the door to promising and timely future research. It is necessary to deepen and broaden academic understanding of the ideas and determining elements influencing external auditor selection and firm performance. More research is needed to fully comprehend this problem and move towards a policy solution.

Keywords

external auditor choice, commercial bank, firm performance, Vietnam, SEM

JEL Classification

M42, L25, G21

INTRODUCTION

Commercial banks are important financial institutions for the economy. Their functions include credit intermediaries, payment intermediaries, and money creation. Therefore, commercial banks' business activities and financial performance affect several economic subjects. Additionally, their financial reports are of interest to many investors, managers, and policymakers. Commercial banks have become the subject of annual independently audited financial statements (The National Assembly, 2011; The Vietnamese Government, 2014).

The growth and improvement of the world economy and business performance depend on auditing. Auditors provide their assessment of the financial statement reasonableness. Financial statement users need assurance that the information in the financial statements is relevant and reliable. Therefore, the banking industry must have solid public confidence in the required financial and public investment (Huang et al., 2015). Public trust depends on banks' financial statements (Sim



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et al., 2016). The reliability of the audited financial statements is guaranteed by applicable auditing and ethical standards. It requires the preparation of adequate planning, compliance with professionalism, objectivity, independence, and close supervision of external auditors. Therefore, external auditors play an essential role in the success of the banking industry (Chen, 2016).

On the one hand, the speed of globalization and economic integration creates favorable conditions for developing countries. On the other hand, this phenomenon also makes competition in economic sectors more intense, and banks are still in the game. Besides, financial market fluctuations have increased financial risks in commercial banks. Most Vietnamese commercial banks are small in size, with limited financial capacity, management capacity, and technological level compared to foreign banks (Ngo, 2010), so competitive pressures are shallow. Moreover, the Vietnamese banking system faces many problems, such as poor asset quality, high resolution of non-performing loans (NPLs), liquidity difficulties, and low profitability (SVB, 2022). Vietnamese commercial banks should find solutions to improve business efficiency and develop in this context. Therefore, auditing is an effective tool to check and evaluate the suitability and performance of commercial banks. Using external auditor choices is a need for management efficiency and an inevitable trend in credit institutions in Vietnam.

1. LITERATURE REVIEW

In this part, a number of available studies related to external audit choice, firm performance, and other variables will be presented.

Currently, many domestic and foreign studies are investigating whether to use audit services and what criteria affect the selection of an audit firm.

Hay and Davis (2004) confirmed that factors “size represented by revenue or total assets,” “separation between ownership and management,” and “debt structure” affect the choice of voluntary audit services. In addition, firms tend to choose the Big Four audit firms when the business is significant, and the revenue and debt ratio are high. Matonti et al. (2016) focus on non-listed Italian firms, whether they choose a high-level or local auditing firm. The results show that large-scale companies often select a quality auditing company. In addition, a company’s complexity also positively influences the choice of a reputable audit firm. Van (2018) studies the characteristics of enterprises that affect Vietnamese enterprises’ choice of auditing firms. They are

- enterprise size;
- ratio of receivables and inventories;
- ratio of liabilities to total assets;
- ratio of net profit (ROA);
- foreign ownership ratio in the enterprise;
- dummy variable indicating only one enterprise with subsidiaries.

The study confirms that there is a difference in the choice of the auditing firm in Big4 among companies listed on the Chi Minh City Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX).

The concept of business effectiveness differs from the concept of organizational effectiveness. According to Venkatraman and Ramanujam (1986), business effectiveness represents the most prominent organization. Organizational effectiveness includes all aspects of an organization’s performance (Cameron, 1986). Business performance is a subset of organizational performance that consists of operating and financial results.

According to Simon (1976), the business performance of enterprises is the value they receive from investing in enterprises, including both financial and non-financial value. Another concept introduced by Lebas and Euske (2006) includes three contents of business performance, which are

- 1) information about the achievement of objectives and results based on the amount of information from financial indicators and non-financial;
- 2) requiring evaluation and interpretation of information; and
- 3) using causal models to illustrate future results as a result of current actions.

Siminica et al. (2008) reinforce that an efficient business can maximize its time to generate profits. Contrary to some views that efficiency/outcomes are profitability, productivity, growth, and competitiveness, Bartoli and Blatrix (2015) claim that the efficiency of enterprises can be achieved by examining and evaluating the productivity and quality of work. In addition, customer satisfaction is a part of firm performance, resulting from customer and stakeholder perspectives (Selvam et al., 2016). Selvam et al. (2016) claim this can create a competitive environment for businesses to protect customers' interests in the long run. Banker et al. (2000) argue that firm performance results from nonfinancial and financial performance. Additionally, non-financial customer satisfaction measurements provide additional data not included in historical financial metrics and significantly impact future financial performance.

Legal factors affecting the organization of audit work include legal regulations and inspection and supervision of state agencies and trade associations (Phường, 2022). In Vietnam, there have been no specific regulations and guidelines, but a system of legal documents affecting the organization, methods, and human resources on how to organize the audit of financial statements. Legal regulations include the Law on Independent Auditing, Professional Standards and Professional Ethics, and other relevant legal regulations. These regulations affect the organization of audit of financial statements of audit firms in specific aspects. Yen (2017) shows that four factors that affect a financial statement audit are ranked in descending order: auditing firm, auditor, customer characteristics, and audit environment. The audit firm factor plays the most crucial role in influencing the quality of audit financial statements.

The audit fee is a fee that the client pays to an independent audit firm to perform the audit. This issue is legal and recognized by the state and professional associations. At the same time, information users also support the legitimacy of the current audit fee system based on the user-paying principle (Dogui et al., 2014). The audit fee will affect the audit quality, which is confirmed by several studies. Defond and Jiambalvo (1993) believe that high audit fees will create additional value for auditors to detect management errors or unusual errors in financial

statements, thereby creating better audit quality. Audit fees may vary depending on risk transfer, the complexity of the service, the level of expertise, and other advice (Listya & Sukrisno, 2014).

Some researchers believe lowering costs (mainly due to the initial year audit fee discount) will affect audit quality. Lowballing can lead to the reduction of estimated time and cost for the audit. This creates pressures and difficulties for the auditors to detect material misstatements because they fear losing customers. Linda Elizabeth DeAngelo (1981) established a first-year audit fee model (start-up cost) with costs incurred by switching audit firms. This model shows that a discount in the first-year audit pricing could create advantages. First, auditors can raise future audit fees due to audit technology and transaction costs of switching auditors. In addition, the need to obtain a discount for the first year to get extra profits creates a close economic relationship with a customer. This financial relationship can reduce the auditor's independence, and when the freedom is declined, it will reduce the audit quality. Besides, auditing firms should offer an initial audit fee discount (Craswell & Francis, 1999).

Large audit firms often have higher reputations than small ones, so the reputation costs of small firms are significantly less than those of large firms (Hogan, 1997). Audit firms with a higher reputation will provide more accurate audit reports to maintain and enhance their reputation. Audit firm reputation, size, and fee affect audit quality (Pham et al., 2017). Based on the capital theory, audit firms with a high reputation generally have more accurate reporting (Teoh & Wong, 1993; Lennox, 1999). This theory suggests that higher reputation audit firms may require higher audit fees because of their audit reports' market value (Lindberg, 2001).

Many studies found various findings on the relationship between the size of an audit firm, the audit capacity, and the audit quality. Researchers support the difference in actual quality and argue that the audit firm size affects the auditor's competence. Large audit firms will be considered to have better audit capacity. They may receive higher audit fees than smaller audit firms. Thus, large audit firms have the potential to attract auditors with high skills, knowledge, and experience, thereby

performing audits more effectively (DeAngelo, 1981; Nichols & Smith, 1983; White et al., 1988).

Several findings from researchers confirm the advantages of a large audit firm:

- 1) More effective auditing due to a higher reputation (DeAngelo, 1981);
- 2) Audit quality is reflected in the quantity and level of audit procedures performed by auditors and audit firms, which means audit quality belongs to large-scale auditing firms (Dopuch & Simunic, 1982);
- 3) Big Eight audit firms are less prone to litigation than non-Big Eight audit firms (Palmrose, 1988);
- 4) There are more working papers and more efficiency in smaller audit firms (Deis Jr & Giroux, 1992);
- 5) There is higher compliance and quality of information disclosure in large-scale non-Big Five auditing firms than that in small-sized non-Big Five audit firms. There is also better detection of customer continuity issues (Krishnan & Schauer, 2000);
- 6) Big Six audit firms are more likely than other audit firms to express an opinion on going concerns (Mutchler et al., 1997).

Researchers support that audit quality is not affected by audit firm size. In addition, there is no significant difference in audit fee prices between Big Eight and non-Big Eight audit firms (Simunic, 1980). According to Nichols and Smith (1983), transitioning from a small-scale audit firm to a Big Eight audit firm does not create additional client stock benefits. However, there is a difference in perceived audit quality, specifically:

- 1) The audit fee at Big Eight is higher than that at non-Big Eight firms (Francis & Simon, 1987; Palmrose, 1988);
- 2) Clients using audit services of Big Eight firms have higher stock prices (Menon & Williams, 1991);

- 3) Information related to Big Eight audit firms is more reliable than information about non-Big Eight audit firms (Jang & Lin, 1993).

Corporate governance is how financial providers apply to ensure corporations receive a return on their investment (Shleifer & Vishny, 1997). Corporate governance is a collection of interactions between a company's board of directors, shareholders, and others (OECD, 2004). It offers the framework for establishing a company's goals and the means to achieve them and monitors performance. Moreover, from a broader perspective, Gourevitch and Shinn (2005) defined corporate governance as the structure of corporate power that lies at the critical societal issues.

Related to banking activities, corporate governance is defined as a bank's business and affairs governed by the board of directors and senior management (BIS, 2009). These activities are setting goals, running a bank's day-to-day operations, and meeting the accountability obligations to shareholders' and stakeholders' interests. They help to empower the management of resources and assets and foster positive stakeholder relationships. In summary, corporate governance is a technique for creating value, transparency, and satisfying stakeholders, through management systems, processes, and operating practices.

Regarding corporate governance and external audit, some researchers contend that the presence of an exceptionally high-quality auditor is not necessary if the corporate governance structure is sound. For instance, in Australia, the chairman and chief executive officer positions are frequently evaluated separately (Arthur et al., 1993), which is considered a suitable corporate governance mechanism. The need for the best auditors is reportedly reduced because the chairman of the company, if not the person in charge of it, has a greater capacity to supervise and take shareholders' interests into account. However, there might be compelling reasons to combine the CEO and Chairman roles, such as the need for swift and sound decision-making (Daily & Dalton, 1997).

Karaibrahimoğlu (2013) examined the influence of corporate governance on the selection of independent external auditors in companies in Turkey.

Corporate governance practices are managed with board independence, the board size, executive duality, audit committee size, and institutional ownership. They control the firm size, leverage, and profitability. In addition, Ianniello et al. (2013) conducted an empirical investigation into how the company's internal governance is reflected in the independence of the board of directors, the CEO duality, and board size, affecting the selection of external auditors at 667 listed companies in Italy during the period 2007–2010. Although the findings from the studies show a positive and significant influence on board size and firm size, CEO duality significantly negatively affects the choice of Big Four audit firms.

The percentage of non-executive members on the board or audit committee is another common indicator of the quality of corporate governance. Business decision-makers with experience are frequently found in executive positions. A significant portion of these individuals (those with the greatest reputations) serving on the board or audit committee is regarded as an effective corporate governance mechanism (Fama & Jensen, 1983; Ricardo-Campbell, 1983). A firm with a high level of dispersed ownership may need more high-quality independent auditors than a firm with concentrated ownership (Demsetz & Lehn, 1985; Fama & Jensen, 1983).

Several studies confirm that the choice of an audit firm is a human preference. Specifically, the opportunity to experience an auditor's quality influences that auditor's choice in subsequent auditing (Houghton & Jubb, 2003). Companies in Indonesia are also looking for auditors with specific experience to audit their firms. While private companies prefer auditors with audit experience in the same industry, public companies require auditors to have audit experience in the public sectors. As a result, a company considers audit experience when choosing its auditors (Qomariyah, 2019).

According to Addams and Allred (2002), clients should have considerable confidence in the technical expertise of the audit firm's partners, managers, and professional staff, because this trust will not ultimately motivate customers to choose new auditors. Professional knowledge helps auditors identify loopholes and unique industry problems – this

activity significantly influences companies' decisions in choosing audit firms (Chaney et al., 1997). Rahman et al. (2014) show that the experience factor is the second most important factor affecting external auditors' selection at Bangladesh banks. The direct experience is the period of actual contact of the auditor with the business industry and gives the auditor an advantage in doing his job.

In addition, if there is a good relationship between the director and the audit firm, it can be used to “market” the audit firm to other boards of which the director is a member. This is consistent with auditing firms' attitude towards what is known as “relationship marketing” (Iyer & Day, 1998) – or the development of trusting interpersonal bonds between people. Jubb (2000) shows that this strategy appears to be effective, particularly for some traditional audit firms.

Sun and Cui (2014) state that a firm's complexity is the number of business divisions and foreign transactions. The complexity of conducting audits of large companies is characterized by heavy transactions, large IT systems, large branch networks, and other activities (Soyemi, 2020).

As examples of organizational complexity, Knechel et al. (2008) cite asset, operational, financial, and transactional complexity. In a small business, the owner or manager can direct supervision to control the activities. Nevertheless, as a business expands, it becomes more complex and challenging to manage (Kinney & McDaniel, 1989). More and more subordinates, places, and activities can reduce overall efficiency in the organization and give rise to moral hazard issues between managers/owners and subordinates. For example, subordinates may appropriate wealth from the company by hiding or stealing, indicating the need to develop internal control systems. Therefore, complex organizations are more likely to choose higher-quality auditors (Abdel-Khalik, 1993; Hay & Davis, 2004; Simunic & Stein, 1987).

Organizational complexity increases a company's need for an auditor (Liu & Lai, 2012). There is a significant information asymmetry between complex companies and outside investors as a result of the reduced transparency of a company's operations and information to investors (Liu & Lai, 2012). In

addition, information complexity arises due to geographical dispersion, high audit costs, different legal systems, and cultural and language differences (Bushman et al., 2004; Denis et al., 2002; Duru & Reeb, 2002). According to Liu and Lai (2012), the choice of external auditors is positively correlated with organizational complexity. The relationship between organizational complexity and firm value is moderated by auditor selection.

In summary, previous research supports the linkages between external auditor choice and firm performance, as well as between external auditor choice and other variables (e.g., legal environment, audit fee, or audit reputation and size). However, little has been done to explore the relationship of these factors in the context of Vietnam.

2. AIMS AND HYPOTHESES

This study aims to investigate the factors that influence managers' perceptions of external auditor choice and firm performance, as well as the association between these two variables. The scope of the study was conducted for 30 commercial banks in a total of 50 banks operating in Vietnam.

Previous empirical studies show that factors affected the selection of external auditors, com-

bined with expert consultation to suit the specific context of banks in Vietnam; a research model consists of two parts: (1) independent factors affecting the selection of external auditors and (2) the choice of external auditors affects the performance of commercial banks in Vietnam.

Based on previous studies, the following hypotheses were proposed:

H₁: Legal environment has a positive influence on external auditor choice.

H₂: Audit fees have a positive impact on external auditor choice.

H₃: Audit reputation and size has a positive effect on external auditor choice.

H₄: Corporate governance has a positive effect on external auditor choice.

H₅: Experience and relationships have a positive impact on external auditor choice.

H₆: Complexity of a firm has a positive effect on external auditor choice.

H₇: External auditor choice has a positive influence on bank performance.

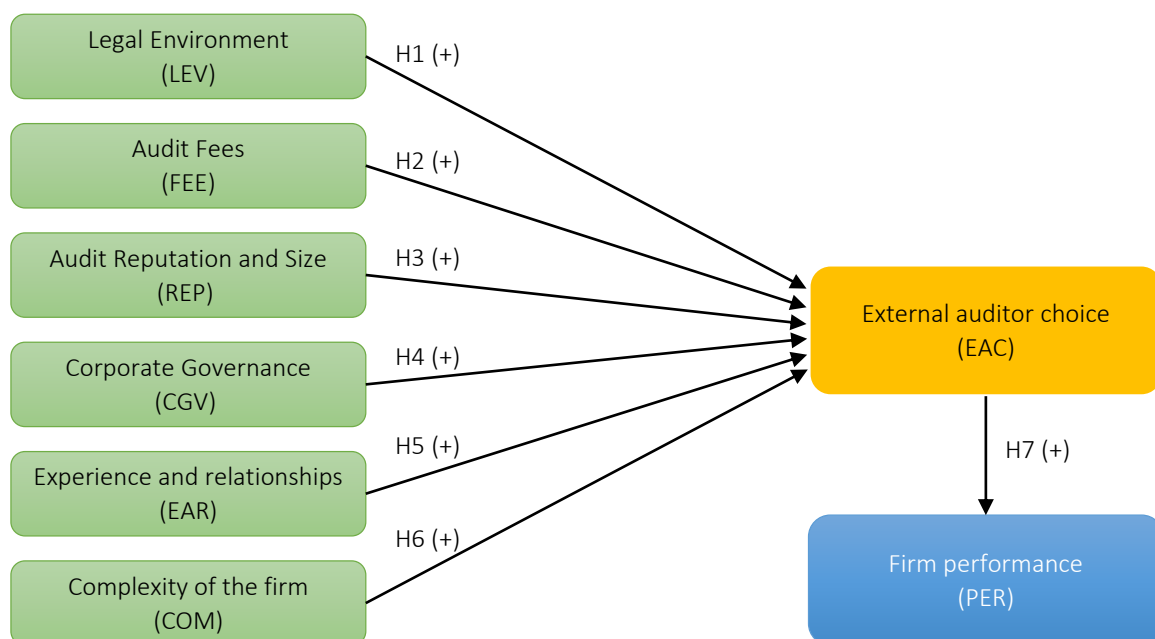


Figure 1. Conceptual research model for commercial banks in Vietnam

Table 1. General information of the research data sample

Characteristics	Frequency	Percentage
Gender	N = 265	100
Male	111	41.9
Female	154	58.1
Age	N = 265	100
Under 35 years	96	36.2
From 46 to 55 years	88	33.2
Over 56 years	81	30.6

3. RESEARCH METHODOLOGY

This cross-sectional study was processed in Vietnam from March 2022 to August 2022. The following part will present in detail the method applied in this study.

There are 265 managers involved in the survey. They hold high positions, such as CEOs or CFOs at 30 commercial banks in Vietnam. Due to the high roles of participants, the convenience sampling technique was applied. An online Google form was created and sent directly to respondents.

Table 1 shows the demographic results of 265 managers participating in the survey. Regarding gender, 111 people were male (41.9%), and 154 were female (58.1%). There were 96 people under 35 years old (36.2%), 88 people from 46 to

55 years old (33.2%), and 81 people over 56 years old (30.6%).

Based on the proposed model, a systematic approach to synthesize the factors affecting the selection of external auditors and the bank's performance was used. These scales are adjusted and supplemented to suit the actual characteristics of Vietnamese commercial banks. The questionnaire includes two parts. The first included the demographic questions; the second consisted of 35 questions based on previous studies. The questionnaire used a 5-point Likert scale (1: Totally disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Totally agree).

The influencing factors and developed hypotheses from the background theory and previous research combined with the current practice in Vietnamese banks were summarized in Table 2. Table 2 shows the scale of variables in the study.

Table 2. Dimensions and scales

Symbol	Scales	Sources
Legal Environment		
LEG1	Legal regulations precisely guide organizations to audit financial statements	Kwon et al. (2007), Leuz et al. (2003), Porta et al. (1998)
LEG2	The State stipulates specific requirements in audit content	
LEG3	The state legal system protects the interests of the audited bank	
LEG4	The state legal system provides severe legal punishment for the opportunistic behavior of the parties involved in the audit	
LEG5	There are full legal provisions in the audit of financial statements	
Audit Fees		
FEE1	The audit fee is comparable to the bank's financial capacity.	Oxera Consulting Ltd (2006), McMeeking et al. (2007), Stefaniak et al. (2009)
FEE2	Audit fees are affected by the complexity of the bank's organizational structure	
FEE3	The state legal system protects the interests of the audited bank	
FEE4	The state legal system provides severe legal punishment for the opportunistic behavior of the parties involved in the audit	
FEE5	Audit fees are affected by the amount of work required in the audit process	
Audit Reputation and Size		
REP1	The number of years of operation of the audit firm	DeAngelo (1981), Watts and Zimmerman (1986), Lennox (1999), Ali and Aulia (2015)
REP2	The number of companies audited	
REP3	How many people work for the audit firm	
REP4	Profits are generated from audits	
REP5	The known reputation of the audit firm	
REP6	The known reputation of the audit firm	

Table 2. Dimensions and scales

Corporate Governance		
CGV1	The choice of external auditors is influenced by the size of the board of directors	Eisenberg et al. (1998), Singh and Davidson III (2003), Franks et al. (2001)
CGV2	The selection of external auditors is influenced by the proportion of independent BOD members to all other BOD members	
CGV3	The size of the supervisory board affects the selection of external auditors	
CGV4	Board qualifications affect the selection of external auditors	
Audit firm experience and relationships		
EAR1	A reputable audit firm has more experience	Cohen et al. (2010), Addams and Allred (2002), Addams and Davis (1994)
EAR2	A reputable audit firm has more solid technical expertise	
EAR3	The number of years of working experience in accounting, auditing, or finance	
EAR4	Previous work experience provides valuable information relevant to audit firm selection decisions	
The complexity of a firm		
COM1	The number of employees and wages paid to employees	Hay and Davis (2004), Abdel-Khalik (1993), Stice (1991), Hay et al. (2006), Kinney Jr and McDaniel (1989)
COM2	The complexity of assets and transactions (ratio of inventory and accounts receivable to total assets)	
COM3	Parent companies, subsidiaries, or jointly controlled Entities are more complex	
COM4	The rapid growth of activities increases the complexity and risk of an organization	
External auditor choice		
DAB1	External auditing firms have audited the bank	Knechel et al. (2008), Broye and Weill (2008), DeFond (1992), Chow (1982)
DAB2	Based on the audit firm's characteristics, an external audit firm is chosen	
DAB3	The enterprise's internal situation is taken into account when choosing an external audit firm	
Firm performance		
PER1	Increase ROA	Turley and Zaman (2004), Khalid et al. (2018), Najihah et al. (2020)
PER2	Increase ROE	
PER3	Increase profits	
PER4	Increase satisfaction for objects of interest	
PER5	Increase the reputation of the bank	

4. DATA ANALYSIS

SPSS software (version 25) and AMOS (version 26) were applied for data analysis. The reliability of the measurement scales is evaluated by the Cronbach Alpha, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) to determine the quality of the construction scale.

According to Nunnally and Bernstein (1994), a scale has good reliability when Cronbach Alpha varies in the range [0.70-0.80], and ≥ 0.60 means an acceptable scale. Factor loading represents the correlation between the original variable (items) and the factor. According to Hair (2009), factor loading factor > 0.5 is practically meaningful. Thus, any variable having a factor loading factor less than 0.5 will be eliminated. In addition, EFA was performed with KMO, Bartlett test, and Average Variance Extracted (AVE) to determine a representative scale system. If the Bartlett test has $p < 5\%$, hypothesis H0 will be rejected, and the variables are unrelated. To use EFA, the KMO should be greater than 0.50

(Hair, 2009). Besides, as a rule of thumb and for adequate convergent, an AVE of at least 0.50 is highly recommended.

Confirmatory factor analysis (CFA) allows to test the theoretical framework of the measurement scales. This study uses degrees of freedom (CMIN/df), the CFI index, and the Tucker index to measure the model's goodness of fit. & Lewis (TLI) and the RMSEA index. The model is suitable when the chi-squared test has $p > 0.05$ if the model has the GFI, TLI, and CFI values ≥ 0.9 (Bentler & Bonett, 1980); CMIN/df ≤ 2 or ≤ 3 (McIver & Carmines, 1981) show that the model is consistent or compatible with data. Hair (2009) states that RMSEA ≤ 0.08 and RMR ≤ 0.09 are satisfactory.

5. RESULTS

This part presents the results of the model validity, followed by SEM analysis.

The goodness of fit with the given data: Chi-square/df = 1.306 (< 2), TLI = 0.972 (> 0.9),

Table 3. Reliability and validity statistics

Source: SPSS output, 2022.

	Constructs	Symbol	Mean	Alpha	C.R	AVE
1	Legal Environment	LEG	3.57	0.90	0.88	0.60
2	Experience and relationships	EAR	3.70	0.89	0.89	0.67
3	Audit Reputation and Size	REP	4.21	0.89	0.93	0.74
4	Complexity of the firm	COM	3.56	0.85	0.85	0.61
5	Corporate Governance	CGV	3.97	0.90	0.88	0.66
6	Audit Fees	FEE	4.22	0.89	0.92	0.71
7	External auditor choice	EAC	3.94	0.83	0.93	0.79
8	Firm performance	PER	4.49	0.94	0.90	0.65

Notes: 1. Model fit: Chi-square/df = 1.306, TLI = 0.972, CFI = 0.975, $p = 0.000$ and RMSEA = 0.034. CR: Composite Reliability; AVE: Average Variance Extracted.

CFI = 0.975 (> 0.9), and RMSEA = 0.034 (< 0.8). All observed variables of size are significantly related at the 0.000 level.

Table 3 shows that Cronbach's alpha for all elements ranges from 0.83 to 0.94, meaning the questions used in this study are suitable for research. All other indicators are above average, with the highest AVE value coming from the external audit at 0.79, and all other indicators are above 0.6. Composite reliabilities are above 0.8. Each indicator has a sufficient level of convergence and discrimination validity.

Table 4 presents the correlation matrix between the research variables, convergence, and discriminant values. Correlations between the measured variables are reported in the lower triangle of the diagonal; these values are not greater than 0.8. The square root of the AVE is written in bold numbers on the diagonal, indicating constructs achieving discriminant validity.

The research hypotheses were tested, and the effects were evaluated using the linear structural model (SEM) analysis method. The findings of the hypothesis test indicate that a firm's complexity

Table 4. Discriminant reliability

Source: SPSS output, 2022.

Constructs	1	2	3	4	5	6	7	8
1 LEG	0.77	–	–	–	–	–	–	–
2 EAR	0.138*	0.81	–	–	–	–	–	–
3 REP	0.213*	0.262*	0.86	–	–	–	–	–
4 COM	0.367**	0.347**	0.314**	0.78	–	–	–	–
5 CGV	0.139*	0.131*	0.273**	0.348**	0.81	–	–	–
6 FEE	0.263*	0.233*	0.268*	0.340**	0.327	0.84	–	–
7 EAC	0.269**	0.374**	0.255**	0.261**	0.168**	0.216**	0.88	–
8 PER	0.311**	0.199**	0.314**	0.382**	0.275**	0.351**	0.583**	0.80

Notes: * $p < 0.05$, ** $p < 0.01$; The bold and italic figures are the square root of AVE for the constructs.

Table 5. Structural equation modeling analysis results

Source: AMOS output, 2022.

Path	Hypothesis	Path coefficient	S.E.	C.R.	P	Decision on Hypothesis
LEG → EAC	H1	.184	.033	5.650	***	Supported
FEE → EAC	H2	.210	.033	6.290	***	Supported
REP → EAC	H3	.121	.030	3.975	***	Supported
CGV → EAC	H4	.106	.033	3.508	***	Supported
EAR → EAC	H5	.142	.027	5.358	***	Supported
COM → EAC	H6	.019	.026	.744	.457	Not Supported
EAC → PER	H7	1.029	.107	9.603	***	Supported

Notes: *** Correlation is significant at the 0.01 level. Model fit: Chi-square/df = 1.547, TLI = 0.951, CFI = 0.954, $p = 0.000$ and RMSEA = 0.046.

Table 6. Summary of effect decomposition

Source: SPSS output, 2022.

Dependent Variable	Type of effect	COM	EAR	CGV	REP	FEE	LEG	EAC
PER	Direct effect	–	–	–	–	–	–	1.029*
	Indirect effect	.028	.200*	.148*	.156*	.268*	.232*	–
	Total effect	.028	.200*	.148*	.156*	.268*	.232*	1.029*

Note: Significance level: * $p < 0.05$.

does not significantly influence the choice of the external audit firm. Legal environment, audit fees, audit size and reputation, corporate governance, experience, and relationships of managers and accountants positively affect external auditor choice. Accordingly, the audit fee (FEE) is the factor that has the most decisive influence on the selection of external auditors (EAC). Besides, the results also show that the appointment of external auditors (EAC) positively affects the performance (PER) of commercial banks in Vietnam.

Table 6 shows the direct influence of EAC on PER and the indirect effect of factors (EAR, CGV, REP, FEE, LEG) on PER, respectively. Thus, it can be affirmed that EAC is essential and contributes to improving the PER of the enterprise.

6. DISCUSSION AND IMPLICATIONS

By using the SEM technique, this study aims to examine the connections between a company's choice of the external auditor and its performance. Five factors to external auditor choice include legal environment, audit fees, audit firm size and reputation, corporate governance, experience, and the relationship between managers and accountants. Besides, external auditor choice positively affects firm performance.

The finding confirms that the audit fee substantially impacts external auditor choice. This result ties nicely with previous studies wherein a premium audit fee belongs to Big Four firms (Bhattacharya & Banerjee, 2020). Besides, Ho and Kang (2013) demonstrated that compared to non-family firms, family firms experienced lower audit fees and lower demand for external auditing services. However, more empirical research is needed to demonstrate a connection between audit fees and the choice

of auditor (Haniffa & Cooke, 2002). The finding confirms that the legal environment positively impacts external auditor choice. Choi et al. (2004) came to a similar conclusion. Besides, corporate governance positively affects auditor selection, which aligns with previous studies (Jiraporn, 2007; Leung & Cheng, 2014; Mahdavi et al., 2011). This study confirms that audit firm size affects external auditor selection. This is consistent with what has been found in a previous study (DeAngelo, 1981). Moreover, the moderating impact of firm size on the selection of auditors is examined by Septiana and Khafid (2019) in relation to the size of the board of independent commissaries and leverage. The research shows that external auditor selection has a direct effect on the firm performance of a bank. Thus, to choose a suitable external audit company to improve athletic performance, banks need to focus on factors such as cost management and internal review of companies.

This study brings several implications for bank management and auditors. First, fee directly influences choice when commercial banks consider selecting external audit firms. Bank managers always consider benefits and costs when choosing auditors. Thus, managers of audit firms should offer a reasonable fee to ensure that it applies to a banks' financial capacity and is commensurate with the demand. However, bank managers should notice that the quality of audits will be challenging to ensure with low fees, and the banks' financial statements after the audit will be unreliable. Second, banks are subject to statutory audits. Thus, managers should carefully apply legal regulations when selecting auditors to improve bank performance. They should consider an audit firm with a high reputation to provide a better service and minimize the problems related to resource use. Since corporate governance and auditor selection are positively and significantly correlated, banks with more executive board members

and better boards of directors are more likely to choose external auditing firms.

The findings of this study should be carefully considered with several limitations. First, using the SEM model, the findings could not demonstrate causation; the study could reveal factors associated with external auditor selection and firm performance. Second, the questionnaire was collected

over some time, so it is hard to draw a generality in Vietnamese banks. Finally, this is a cross-sectional study, so it can only give a conclusion about the relationship of variables. Therefore, future studies might be longitudinal to figure out trends and changes. Besides, it could detect the relationship between variables from different perspectives, such as auditors, investors, or other financial institutes' managers.

CONCLUSION

This study explores the determining factors of firm performance and external audit selection through the lens of managers of 30 commercial banks in Vietnam. Based on quantitative research methods, the study supports the hypothesis that external auditor selection affects firm performance in Vietnamese commercial banks. In addition, the finding also confirms that legal environment, audit fees, audit reputation and size, corporate governance, and experience and relationships of audit firms affect external auditor selection. The results are the basis for suggesting solutions for bank managers to have an objective view of external audit selection. They should consider the positive relationship between audit fees and audit quality, choosing a firm with a high reputation and experience to ensure audit quality. Regarding audit firms, managers should carefully identify their potential customers and suggest suitable policies to approach and provide services.

AUTHOR CONTRIBUTIONS

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