"Impact of auditor characteristics on audit judgment performance in Vietnam"

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IMPACT OF AUDITOR CHARACTERISTICS ON AUDIT JUDGMENT PERFORMANCE IN VIETNAM

Abstract

Vietnam is a rapidly developing economy with a unique set of audit challenges. This study focuses on independent auditors in Vietnam to determine the impact and influence of the representative factors of auditor characteristics, such as knowledge, experience, ability, and working motivation, on the auditors' judgment. The study chose 407 auditors (juniors, seniors, managers, and partners) who worked at 86 Big 4 and non-Big 4 firms in Vietnam in 2023. Respondents were selected at random, and data were collected through the distribution of questionnaires. The study used structural equation modeling (SEM) and path analysis to examine the relationship between knowledge, experience, problem-solving ability, working motivation, and auditors' judgment performance. The findings, derived from normalized weights, indicate that knowledge has the most significant positive influence (0.330), followed by auditor experience (0.237), and lastly, problem-solving ability (0.151). The results also show that knowledge has a partially mediating role (in the form of support) in the relationship between experience and problem-solving ability to auditors' judgment performance. The correlation relationships in the model are all statistically significant at a 95% confidence level ($p = 0.000 < 0.05$). This study contributes to refining the factors influencing auditors' judgment performance, thereby supporting auditors, regulators, and policymakers in enhancing audit quality.

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INTRODUCTION

Professional judgment in financial statement auditing is an important factor in the auditing process. Bonner and Lewis (1990) stressed that the quality of the auditor's judgment determines the overall quality of the audit. In financial statement auditing, professional judgment is a key factor for correctly assessing the reasonableness of items in the financial statements. Because financial information can be subjective or complex (such as estimates of provisions, valuation of assets, determination of financial risks, etc.), auditors must use professional judgment to ensure that these items reflect fairly the financial situation of the company. Especially in the context of Vietnam's increasingly deep integration with international standards, professional judgment helps auditors strictly comply with international auditing standards (ISA) and Vietnamese legal regulations. This ensures the transparency of financial statements, thereby enhancing the trust of the public and investors. In addition, during the audit process, auditors may encounter unforeseen situations or situations that are not clearly regulated in auditing standards. Professional judgment helps auditors flexibly make reasonable decisions based on specific situations to solve complex problems and maintain objectivity and independence in their work. The use of professional judgment helps auditors assess and manage

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audit risks, thereby determining the scope of audit work and appropriate testing methods. Especially in large auditing firms, with the complexity of audited entities, the application of professional judgment helps minimize the possibility of missing material misstatements. Professional judgment in auditing is not only an important skill but also the basis for the professional development of auditors. Through the process of working and experiencing, auditors must improve their ability to analyze, evaluate, and make decisions in complex situations. It contributes to the quality of auditing services and enhances the capacity of the auditing industry.

Auditing firms in Vietnam have begun to apply many modern methods and techniques, complying with international auditing standards to improve service quality. However, there are still some problems that need to be solved. One of the major difficulties is the shortage of highly qualified human resources, especially auditors capable of applying professional judgment in complex situations. In addition, due to the rapid changes in the legal and economic environment, auditors sometimes have difficulty applying professional judgment consistently and correctly in all situations. Furthermore, some auditing firms have not paid enough attention to training and developing professional judgment skills for auditors, leading to the possibility of errors or a lack of objectivity in audit conclusions. These factors require the auditing industry in Vietnam to take measures to improve the quality of human resources and train professional judgment skills to improve the current situation.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The first studies on judgment in auditing were published in the early 1970s (Trotman et al., 2011). Since then, this area has become an important research topic, attracting the attention of many scholars. Since the early days, the main focus of audit judgment studies has been on assessing the judgment performance of auditors and the factors that determine their judgment performance (Libby & Lewis, 1977, 1982; Libby, 1995). However, the definition of judgment performance is unclear (Libby, 1995). Solomon and Trotman (2003) describe judgments as subjective assessments that are preliminary steps before taking action. Meanwhile, Bonner (1999) defines judgments as cognitive processes in which individuals form ideas, opinions, or estimates about an object, event, or phenomenon. These mental activities influence individuals, helping them make predictions about future events. According to R. Ashton and A. Ashton (1995), judgment performance refers to the perspective of effectiveness and efficiency in an expected-utility-maximizing decision-making process based on professional judgment. A judgment is considered to have high performance when the auditor can make a reasonable, accurate, and reliable decision based on the available audit evidence, in the context of time, information, and professional pressure constraints. According to Solomon and Shields (1995), judgment performance can be evaluated based on accuracy, consistency, consensus, and decision process. However, most auditing studies have not relied on judgment accuracy because there is no unambiguous external criterion. Instead, they have relied on the correspondence of a judgment to surrogate external criteria (e.g., statistical models such as Bayesian probability, professional standards) and on alternative judgment evaluation criteria, including consensus (i.e., alignment among individuals) and consistency (i.e., stability of judgments across repeated assessments by the same individual).

Libby and Luft (1993) determined that judgment performance is influenced by multiple factors. Judgment performance should be considered as more than one factor, in which auditor characteristics (e.g., knowledge, experience, problem-solving ability, or motivation) should be considered.

Many prior publications in the field of auditing indicate that the quality of auditors' judgment increases with their experience (Alissa et al., 2014). Most of the earliest studies, such as Libby and Frederick (1990), Bonner (1990), and Bonner and Lewis (1990), show that experience has a positive effect on auditors' judgment. Empirical research by Smith et al. (2016) on predicting inventory

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obsolescence for a hypothetical customer shows that there is a difference in information choice between experienced and less experienced auditors. Aida (2021) shows that experience has a positive impact on auditors' judgment, and the findings of Saputra and Kawisana (2021) are similar. Henrizi et al. (2021) support the conclusion that experienced auditors may tend to be less prone to judgmental bias than less experienced auditors. Harahap and Parinduri (2022) confirm that auditor experience has a positive impact on audit judgment performance.

Other studies have shown that problem-solving ability is positively related to various performance achievements, including its relationship with auditors' performance in making judgments (e.g., Bonner & Lewis, 1990; Wu et al., 2017). Each different type of judgment task requires a different auditor's problem-solving ability, which positively influences the auditor's judgment (Libby & Tan, 1994). For the higher complexity task, higher accountability will improve performance only when subjects have both high knowledge and high problem-solving ability (Tan & Kao, 1999). Problem-solving only directly affects audit judgment performance for unstructured tests (ratio and income judgment tasks) (DeZoort & Salterio, 2001). It is also useful in the judgment of both accounting students and experienced auditors (Bierstaker & Wright, 2001).

In addition, to effectively carry out audit tasks, auditors must acquire knowledge through academic training programs (educational institutions), professional development programs (industry associations) (Knechel & Payne, 2001), and hands-on experience (Waller & Felix, 1984). This knowledge spans general concepts, industry-specific insights, and specialized expertise.

In the 1980s, audit expertise emerged as a key factor influencing auditors' judgment. Waller and Felix (1984) identified three critical aspects of knowledge: content, structure, and acquisition methods. Since auditors perform various tasks throughout the audit process, their knowledge requirements vary accordingly (Gibbins, 1984). Mala and Chand (2015) noted that the analysis by Frederick and Libby (1986) was the first to explore the relationship between auditors' knowledge and their ability to assess internal controls and detect errors impacting audit judgment.

Most of these studies confirm that knowledge positively influences auditors' performance. Pawitra and Suhartini (2019) found that auditors' expertise enhances the quality of audit judgments. Nelson (1993) compared experienced auditors, accounting students, and non-accounting students to examine how knowledge and experience influence financial reporting accuracy using ratio analysis. The findings revealed that differences in accounting knowledge affected ratio analysis performance, suggesting that novice auditors could improve their effectiveness by strengthening their understanding of fundamental accounting principles and error detection.

Recently, many studies have shown a positive impact of personal motivation on audit judgment performance (e.g., personal motivation created from monetary incentives increases effort and thereby increases work performance) (Bonner & Sprinkle, 2002). Monetized incentives and feedback from superiors and customers create positive efforts and form good audit judgment performance (Mohd-Sanusi & Mohd-Iskandar, 2007). Intrinsic and extrinsic motivation both have a positive impact on task performance, and auditors who are highly intrinsically motivated analyze information more thoroughly and demand more pertinent evidence before drawing conclusions compared to other auditors (Kadous & Zhou, 2019). The internal motivation of auditors for the work counteracts the directional influence of external incentives on their audit judgment performance (Zhou, 2018).

In Vietnam, auditing activities have been formed and developed over the past 30 years. This activity has positively contributed to the economic development and health of the Vietnamese financial system. The legal environment for auditing activities in Vietnam is constantly being improved according to the practical conditions of Vietnam and international practices, creating favorable conditions for the formation and development of the system of auditing enterprises as well as financial statement auditing activities. In particular, to be consistent with developed countries in the world, since January 1, 2014, the Ministry of Finance has issued the Vietnamese Auditing

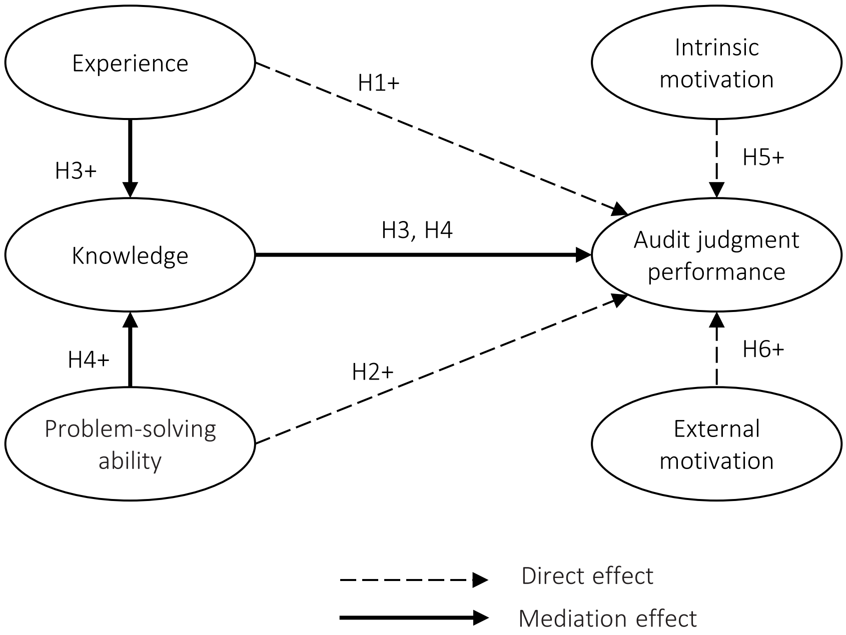

Figure 1. Conceptual model

Standards System (VSA) with a risk-based approach. The risk-based approach allows auditing firms to optimize resources, minimize audit risks, and enhance the value and reliability of audit reports (Le et al., 2022). In this modern approach, professional judgment becomes one of the issues of particular concern in auditing financial statements in Vietnam. According to VSA 200, professional judgment needs to be exercised throughout the entire audit process, and risk assessment is more closely linked to professional judgment than precise measurement. However, in addition to the successes achieved, independent auditing activities in Vietnam have not yet created complete trust for parties using audit results, and service quality is uneven among auditing firms. The number of suspended and warned auditors is still high. Based on data from the State Securities Commission's annual reports for 2021 and 2022 (SSC, 2021, 2022), in 2021, the Commission declined to approve 17 auditors and issued warnings to 10 others. In 2022, it suspended two auditors, rejected the approval of eight, and issued warnings to four. These figures highlight an urgent need to enhance audit quality in Vietnam, particularly the quality of professional judgment exercised by auditing firms.

Therefore, this study aims to identify and measure the factors of auditor characteristics affecting audit judgment performance in audit firms in Vietnam. This is an important basis for developing solutions to improve the quality of judgment and the quality of financial statement audits in Vietnam.

Figure 1 presents a conceptual model of audit judgment performance, developed based on prior conceptual assessments of auditing judgment performance, decision-making, and psychosocial literature. This model incorporates six hypotheses, as outlined below:

H1: Auditing experience positively influences audit judgment performance.

H2: Problem-solving ability positively influences audit judgment performance.

H3: Knowledge mediates the relationship between experience and audit judgment performance.

H4: Knowledge mediates the relationship between problem-solving ability and audit judgment performance.

H5: Intrinsic motivation positively influences audit judgment performance.

H6: External motivation positively influences audit judgment performance.

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2. METHODOLOGY

First, the study uses qualitative research methods to build and adjust the scale of variables to suit the Vietnamese market. Then, quantitative research methods are applied to collect and analyze selected sample data. A structural equation model (SEM) uses SmartPLS 4.0 software to analyze the data. In this analysis, SEM variables are categorized into latent and observed variables. Experience, knowledge, problem-solving ability, intrinsic motivation, extrinsic motivation, and audit judgment performance are the latent variables.

2.1. Variable measurements

Experience includes what the auditor experiences related to the task (Libby, 1995). The study applied a combination of the experience scale of Putria and Mardijuwonob (2020) and Kuntari et al. (2017) to measure experience in two aspects: the auditor's perception through the time working as an auditor and the auditor's perception through the number of actual audits performed.

Knowledge is information stored in memory that helps in perception or thinking. Bonner and Lewis (1990) believe that knowledge is the main factor that forms the professionalism of auditors and there are at least three types of implicit knowledge that determine the professional ability of auditors: general knowledge in the fields of economics, accounting, auditing; specialized knowledge or specific client knowledge; and specialized knowledge about some auditing tasks. The study applied both knowledge scales of Nguyen (2023) and Choo (1996).

Problem-solving ability is the ability to complete the tasks of encoding, retrieving, and analyzing information that contributes to solving an audit problem (Libby, 1995). These studies measured problem-solving ability according to Bierstaker and Wright's (2001) evidence.

Intrinsic motivation refers to the internal drive to participate in an activity mainly for the enjoyment and satisfaction derived from the activity itself (Kadous & Zhou, 2019). The study inherited the intrinsic motivation scale of Amabile et al. (1994) and adapted it from Kadous and Zhou (2019).

External motivation is the drive to engage in an activity mainly due to its external outcomes (Ryan & Deci, 2000). These external rewards and consequences may include financial incentives, penalties, recognition, and performance evaluations. The study inherited the external motivation scale of Kadous and Zhou (2019).

According to Choo (1995), there are two perspectives in measuring the auditor's judgment performance. One is to evaluate the audit judgment performance based on each specific audit task and the other is to evaluate the audit judgment performance based on the auditor's perception of the overall performance of the judgment tasks. In this study, audit judgment performance is measured based on the auditor's perception of the overall performance of the judgment tasks performed. The scale was adopted from Choo (1995) and Libby (1995) and modified with eight observed variables.

The scale of latent variables was adjusted to suit the Vietnamese environment by the opinions of experts in qualitative research. The variable scale results are displayed in Table 1. All questionnaire items are assessed using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 1. Measurement scale

Items	Measures	Sources
	Scale 1: Knowledge (KNO)	
KNO1	General business knowledge relates to understanding the economic operation	Nguyen (2023)
KNO2	General business knowledge relates to understanding business activities in a variety of business situations	
KNO3	Technical knowledge relates to a general understanding of accounting	
KNO4	Technical knowledge relates to a general understanding of auditing	
KNO5	Technical knowledge relates to particular audit functions, procedures, techniques, and issues	
KNO6	Specialized knowledge relates to specific audit clients	
KNO7	Specialized knowledge relates to certain industries in specialized areas	

Table 1 (cont.). Measurement scale

Items	Measures	Sources
KNO8	Auditors have a solid knowledge of audit support tools in the information technology environment	Experts' recommendations
KNO9	Knowledge of distinctiveness to identify events and signs that raise/reduce suspicion about an audit issue	Choo (1996)
KNO10	Knowledge contingency to handle events and situations arising in auditing practice	
KNO11	Knowledge of abstractness to obtain common handling actions for typical cases in auditing	
Scale 2: Experience (EXP)		
EXP1	Conducting audits over three years will improve auditing judgment	Putria and Mardijuwonob (2020)
EXP2	The longer one works as an auditor, the better they become at detecting errors in the examination object	
EXP3	Auditing many clients helps improve auditing judgment	
EXP4	Holding diverse prior positions enhances an auditor's experience	Experts' recommendations
EXP5	An auditor team with job-hopping experience gains a broader and more diverse skill set	Putria and Mardijuwonob (2020)
EXP6	Participating in training programs and professional courses enhances auditing judgment	Experts' recommendations
EXP7	Attending scientific conferences on auditing will enrich my experience as an auditor	
EXP8	Having audited many clients in the same field, it becomes better to audit	
Scale 3: Problem-solving ability (ABI)		
ABI1	I can identify the issue that needs to be considered	Bierstaker and Wright (2001)
ABI2	My solution has effectively utilized resources (i.e., the easiest or least wasteful solution)	
ABI3	My solution removed the problem in the auditing	
ABI4	Supervisors stated that I would perform the specified action as required	
ABI5	My solution is presented clearly and comprehensively	
Scale 4: Intrinsic motivation (INM)		
INM1	I take pleasure in understanding a client's business	Kadous and Zhou (2019)
INM2	I feel satisfied when resolving complex audit challenges	
INM3	My job offers opportunities to enhance my analytical skills	
INM4	Curiosity drives much of my actions and decisions	
INM5	I strive to discover my full potential in my work	
INM6	I appreciate the daily challenges my job presents	
INM7	Regardless of the project's outcome, I am satisfied if I have gained new experience	
Scale 5: External motivation (EXM)		
EXM1	I am driven by the financial rewards my job offers	Kadous and Zhou (2019)
EXM2	I am driven by my personal promotion goals	
EXM3	I am driven by the recognition I receive from others	
EXM4	I prefer handling audit tasks that follow clearly defined procedures	
EXM5	I am driven by future career opportunities beyond audit firms	
EXM6	I strive to impress my audit team members with my work	
Scale 6: Audit judgment performance (AUJ)		
AUJ1	The degree to which my audit judgments align with those of my peers	Choo (1995)
AUJ2	The degree to which my audit judgments remain consistent over time	
AUJ3	The degree to which my audit judgments align with the actual outcomes	
AUJ4	Judgments are formulated in compliance with professional standards	Libby (1995)
AUJ5	Judgments received customer approval	Experts' recommendations
AUJ6	The time it takes to make a judgment minimized	Libby (1995)
AUJ7	The cost of a judgment is minimized	
AUJ8	Auditor's audit judgments are approved by a government professional agency	Experts' recommendations

2.2. Participants and data collection procedures

According to data published by the Ministry of Finance on its official website, as of December 1, 2023, Vietnam had approximately 2,579 CPA-certified practicing accountants working at 210 audit firms (Ministry of Finance, 2023). The study focuses on auditors currently employed at these firms. A survey involving 407 auditors was conducted between March and November 2023 to collect relevant data for the analysis.

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A random sample of 86 audit firms from key central cities in Vietnam, including Da Nang, Ho Chi Minh City, and Hanoi, was chosen for this study. These regions represent approximately 70% of the country's audit market. The sample includes both Big 4 and non-Big 4 audit firms. Partners or managers of the selected firms were approached to assess their willingness to involve middle and lower-level audit staff in the research.

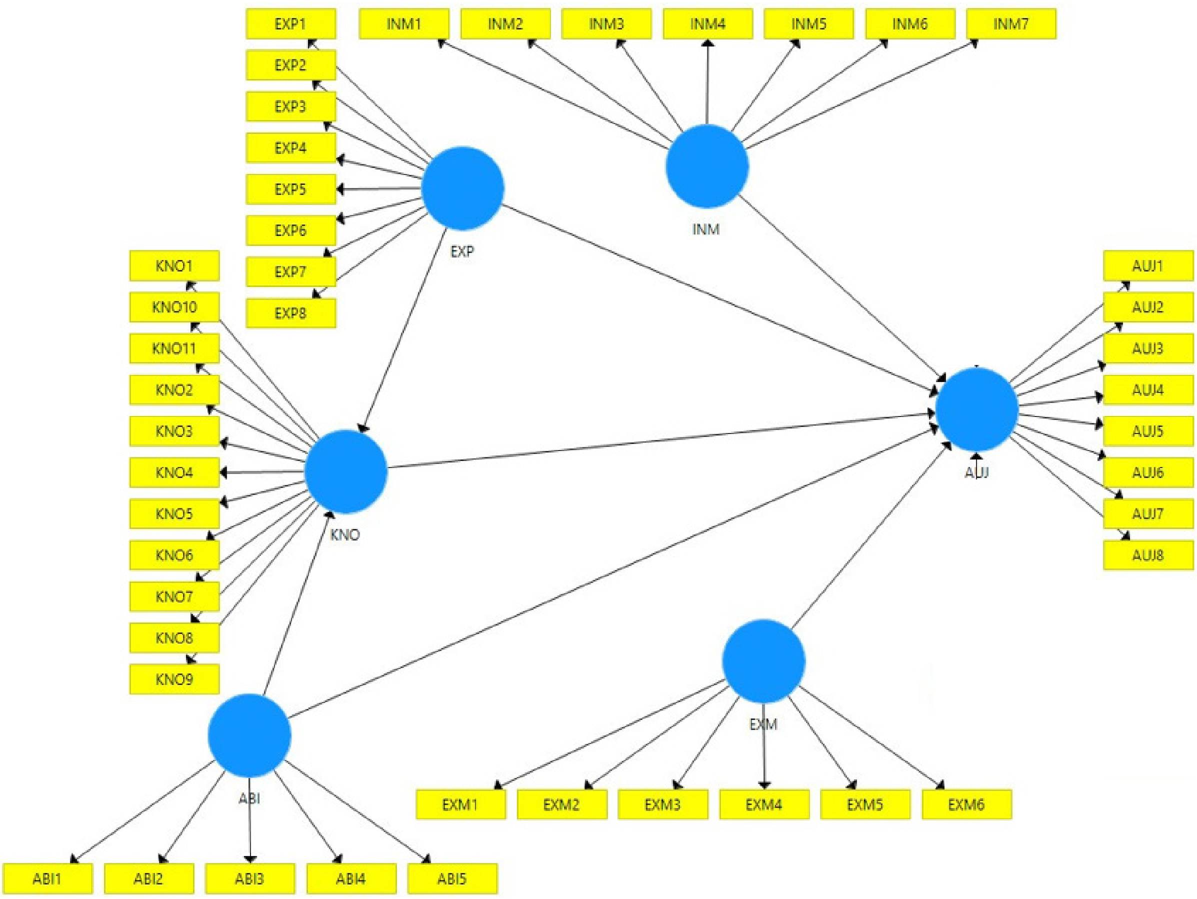
A total of 800 research instruments were distributed to companies interested in the study, with 412 successfully collected. However, five were unusable due to incomplete information, leaving 407 valid responses, representing a 51% response rate. The participants included 78 juniors, 186 seniors, 69 managers, 45 directors, and 29 partners. Most respondents were male (53.8%), university graduates (78.1%), and 80.8% held a Certified Public Accountant (CPA) qualification. Additionally, 84.3% were employed at non-Big 4 firms.

3. RESULTS

3.1. Assessing measurement model quality

PLS-SEM algorithm and bootstrapping analysis were used to evaluate the measurement model with such factors: item quality, scale reliability, convergent validity, and discriminant validity.

In this research model, measuring latent variables is a reflective measurement (Figure 2). Hair et al. (2016) recommend assessing item quality is accepted and good when outer loading items ≥ 0.7. Cronbach's alpha and composite reliability were used to assess scale reliability, with values from 0.6 to 0.7 being an acceptable level for exploratory research, and the optimal level being from 0.7 to 0.9 (Nunnally & Bernstein, 1994).



Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

Figure 2. Measurement model

Table 2. Measurement model quality

Source: SmartPLS 4 output.

No.	Latent variable	Items deleted	Cronbach's Alpha	Composite reliability (CR)	AVE	Final conclusion
1	KNO	–	0.923	0.934	0.564	Good quality
2	EXP	Remove EXP4	0.935	0.948	0.721	Good quality
3	ABI	–	0.884	0.916	0.685	Good quality
4	INM	Remove INM4, INM7	0.919	0.939	0.757	Good quality
5	EXM	–	0.904	0.926	0.676	Good quality
6	AUJ	–	0.930	0.943	0.673	Good quality

Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance; AVE: Average Variance Extracted; CR: Composite Reliability.

Table 3. HTMT ratio of correlations

Source: SmartPLS 4 output.

Variable	ABI	AUJ	EXM	EXP	INM
AUJ	0.456	–	–	–	–
EXM	0.077	0.419	–	–	–
EXP	0.301	0.500	0.105	–	–
INM	0.293	0.559	0.364	0.335	–
KNO	0.264	0.725	0.434	0.286	0.491

Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

After the satisfactory scale reliability, the study tested the convergent and discriminant validity. Convergent validity of reflective measurement is accepted if the Average Variance Extracted – AVE ≥ 0.5 (Hock & Ringle, 2010). Discriminant validity of reflective measurement was assessed using the HTMT criterion. Henseler et al. (2015) suggested that if the HTMT index of a pair of factors is below 0.85, discriminant validity is accepted and good.

Table 2 shows that the scale of variables meets the requirements, except for EXP4, INM4, and INM7, which have outer loading < 0.7, so they were eliminated. After eliminating EXP4, INM4, and INM7, the rerun results show that scale reliability meets the requirements. Table 3 shows that the HTMT coefficient values of a pair of factors are below 0.85. Therefore, all variables of the measurement model achieve discriminant validity.

3.2. Effect of auditor characteristics on audit judgment performance

Multicollinearity tests were performed before analyzing the effects of all variables. The variance inflation factor (VIF) obtained from SmartPLS 4 was used to assess multicollinearity. In the non-collinear model, the VIF values for both latent and observed variables were below 3 (Hair et al., 2016). As shown in Table 4, no multicollinearity issues were detected, and there was no perfect correlation among independent variables. Therefore, the data are suitable for variable analysis.

Table 4. Collinearity of latent variables

Independent variables	KNO	AUJ
Knowledge (KNO)	–	1.721
Experience (EXP)	1.082	1.210
Problem-solving ability (ABI)	1.082	1.200
Intrinsic motivation (INM)	–	1.457
External motivation (EXM)	–	1.268

3.3. Test of the structural model

The relationship between the research variables in the proposed model is tested through the path coefficient (β) and their significance level, which is evaluated based on a *t*-value greater than 1.65, 1.96, and 2.57 corresponding to the significance level of 10%, 5%, and 1%, respectively (Hair et al., 2016). When there are many research variables with the same path coefficient, the significance level of the research variable in the model is determined based on the significance level of the path coefficient. Accordingly, the research variable corresponding to the path coefficient with a higher *t*-value will have a higher significance level and a higher importance level in the research model.

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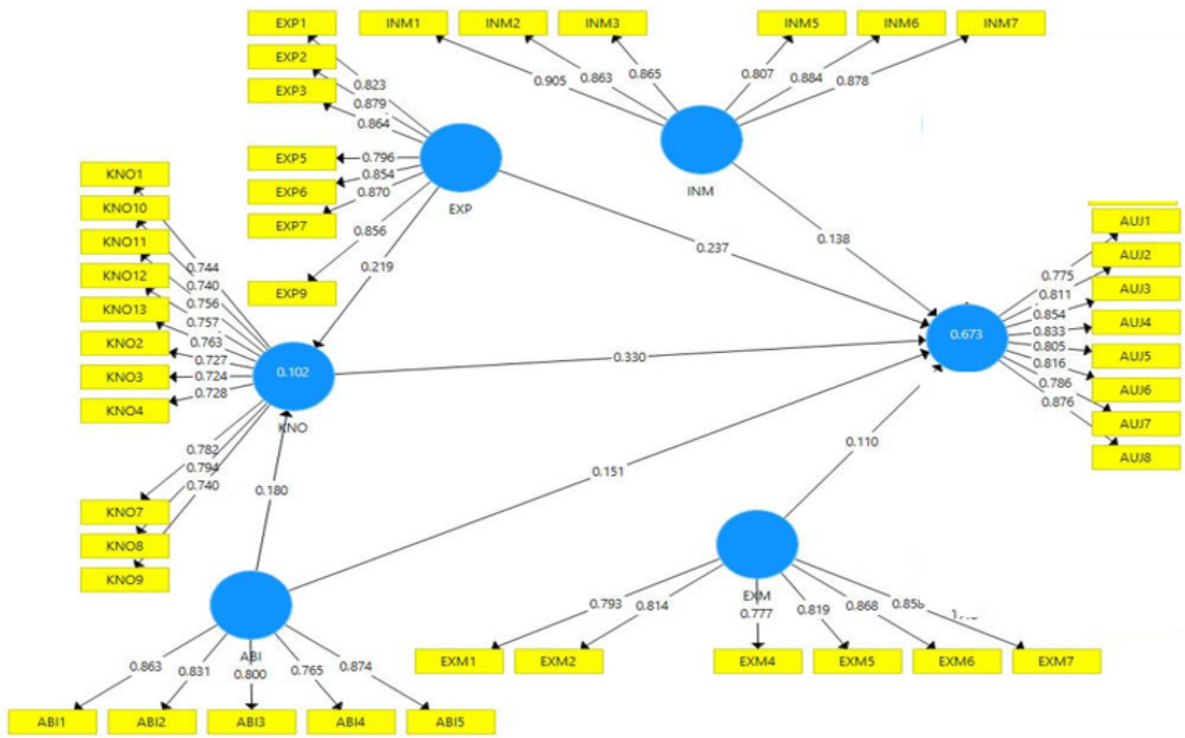
Source: SmartPLS 4 output.



Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

Figure 3. Bootstrapping analysis for the structural model

Bootstrap analysis was performed to evaluate the structural model. Through bootstrapping with 5,000 samples, the path coefficients of the structural model are shown in Figures 3 and Tables 5, 6, 7, and 8.

Table 5 explains that the direct effects of the independent variables on the dependent variables are significant with p-values less than the significance level of 0.05 (≤ 0.05). Five variables affect audit judgment performance: experience, problem-solving ability, knowledge, intrinsic motivation, and extrinsic motivation. The standardized impact coefficients of these five variables are 0.237, 0.151, 0.330, 0.138, and 0.110, respectively. Thus, the impact of these variables on audit judgment performance, in order from strong to weak, is knowledge > experience > problem-solving ability > intrinsic motivation > extrinsic motivation.

Table 5. Direct effects of the independent on the dependent variable

Source: SmartPLS 4 output.

Independent variables	Dependent variable					
	KNO			AUJ		
	β	t-value	p-value	β	t-value	p-value
EXP	0.219	4.502	0.000	0.237	8.590	0.000
ABI	0.180	4.361	0.000	0.151	4.086	0.000
KNO	–	–	–	0.330	9.526	0.000
INM	–	–	–	0.138	3.234	0.001
EXM	–	–	–	0.110	3.446	0.001

Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

Table 6. Direct hypotheses testing

Source: SmartPLS 4 output.

Hypothesis		Coef	t-value	p-values	Result
H1 (+)	EXP → AUJ	0.237	8.590	0.000	Accept
H2 (+)	ABI → AUJ	0.151	4.086	0.000	Accept
H5 (+)	INM → AUJ	0.138	3.234	0.001	Accept
H6 (+)	EXM → AUJ	0.110	3.446	0.001	Accept

Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

Table 6 shows the hypotheses tested. Factors such as experience, problem-solving ability, intrinsic motivation, and extrinsic motivation significantly improve audit judgment performance.

Tables 7 and 8 show that both direct and indirect effects of experience on audit judgment performance and problem-solving ability on audit judgment performance are significant with p-values < 0.05. Therefore, it can be concluded that knowledge plays the role of a partial mediator, supporting the relationship between experience and audit judgment performance, problem-solving ability, and audit judgment performance.

4. DISCUSSION

The evaluation of the structural model indicates that the latent variables in the research model are free from multicollinearity. The hypotheses testing results confirm that all proposed hypotheses are supported and aligned with the predictions and the perspective of attribution theory.

The first and second hypotheses are supported, indicating a positive relationship between experience, problem-solving ability, and audit judgment performance. As auditors gain more experience, their ability to address complex issues improves, enabling them to predict and detect problems more effectively. This, in turn, enhances the quality of audit judgments.

The role of experience is based on the assumption that repeatedly performing tasks provides auditors with opportunities to refine their skills, enhance productivity, and effectively overcome challenges. Auditor experience refers to an auditor's ability to learn from past audit engagements and examinations. This experience is shaped by factors

Table 7. The mediating role of KNO

Source: SmartPLS 4 output.

Effects	Relationship	Path Coefficients	t-values	p-values
The mediating role of KNO in the relationship between EXP and AUJ				
Direct Effects	EXP → AUJ	0.237	8.590	0.000
Total Indirect Effects	EXP → AUJ	0.072	4.291	0.000
Specific Indirect Effects	EXP → KNO → AUJ	0.072	4.291	0.000
Total Effects	EXP → AUJ	0.309	10.407	0.000
The mediating role of KNO in the relationship between ABI and AUJ				
Direct Effects	ABI → AUJ	0.151	4.086	0.000
Total Indirect Effects	ABI → AUJ	0.059	4.291	0.000
Specific Indirect Effects	ABI → KNO → AUJ	0.059	4.063	0.000
Total Effects	ABI → AUJ	0.211	5.134	0.000

Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

Table 8. Testing mediating effects

Source: SmartPLS 4 output.

Hypotheses	Relationship	Direct Effects	p-values	Indirect Effects	p-values	Result
H3	EXP → KNO → AUJ	0.237	0.000	0.072	0.000	Partial intermediary
H4	ABI → KNO → AUJ	0.151	0.000	0.059	0.000	Partial intermediary

Note: EXP: Experience; ABI: Problem-solving ability; KNO: Knowledge; INM: Intrinsic motivation; EXM: Extrinsic motivation; AUJ: Audit judgment performance.

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such as the duration of time spent in the profession, the number of audit tasks completed, and exposure to diverse companies. These elements contribute positively to an auditor's expertise in the audit field. This finding aligns with Libby and Tan (1994), Lehmann and Norman (2006), Smith et al. (2016), Saputra and Kawisana (2021), Aida (2021), Henrizi et al. (2021), and Harahap and Parinduri (2022), who confirm that auditor experience has a positive and significant impact on audit judgment.

The high problem-solving ability of auditors helps in the additional effort to retrieve and apply problem-solving skills to the task. The auditor's problem-solving ability is determined by the ability to identify problems that need to be solved, to effectively use available resources, and to avoid negative consequences in the future. This ability is about selecting and referring to relevant information, building a way of doing things, and providing specific and complete solutions to that problem. This result supported Libby and Tan (1994), DeZoort and Salterio (2001), and Bierstaker and Wright (2001), who stated that problem-solving ability is useful in the judgment of auditors.

Hypotheses 5 and 6 are accepted with the finding that both intrinsic and extrinsic motivation have a positive relationship with audit judgment performance. However, intrinsic motivation has a stronger impact on audit judgment. This result demonstrated the positive influence of intrinsic motivation, reflected in the degree of interest in learning about the client's business, judgment toward a novel and challenging task, exploring one's own limits, and enjoying choosing jobs that offer opportunities to improve analytical skills.

In addition, positive external influences, such as monetary incentives, promotion, and recognition, also promote the auditor's judgment performance. Auditors can also make better judgments with audit assignments with clearly specified processes and future career opportunities outside audit firms.

These findings are consistent with those of Zhou (2018) and Kadous and Zhou (2019). According to Kadous and Zhou (2019), intrinsic motivation plays a more significant role in enhancing judgment on complex tasks than traditional extrinsic incentives. Additionally, Zhou (2018) highlights that an auditor's intrinsic motivation helps counterbalance the directional effects of external incentives on audit judgment performance. Auditors with high intrinsic motivation, who prioritize the inherent value of audit tasks, can reduce the distorting impact of external incentives, leading to more objective and effective audit judgments.

The partial mediating role of knowledge in the relationship between experience and problem-solving in audit judgment performance is also accepted through the findings of hypotheses 3 and 4. This result shows that experience and problem-solving abilities provide positive learning opportunities and increase knowledge. At the same time, knowledge plays an important role in shaping audit judgment performance. In this relationship, knowledge strongly influences audit judgment performance, followed by experience and problem-solving ability. This result is supported by Libby and Tan (1994), Lehmann and Norman (2006), Agoglia et al. (2009), and Hammersley (2011).

Experience influences the auditor's knowledge, affecting judgment, and experience creates opportunities for knowledge-based learning (Libby & Tan, 1994; Agoglia et al., 2009). More experienced individuals are better equipped to handle complex problems than those with less experience due to their well-developed knowledge structures, which lead to improved judgment (Lehmann & Norman, 2006). Problem-solving ability is a crucial factor in decision-making, particularly in auditing. Auditors with extensive financial expertise can mediate the relationship between problem-solving ability and audit judgment performance (Libby & Tan, 1994). To effectively detect and respond to fraud risk factors, auditors must possess sufficient knowledge, which is developed through both problem-solving ability and experience (Hammersley, 2011).

In addition, the results of this study are consistent with attribution theory developed by Fritz Heider, who argues that a person's behavior is determined by a combination of factors that come from within a person, such as the ability to or effort and external factors such as difficulty at work or luck (Weiner, 2010). So, with the intrinsic abilities, namely experience, problem-solving ability, and knowledge in carrying out tasks, auditors can produce a quality audit judgment. In addition, according to this theory, knowledge can act as a mediator in the relationship between experience and problem-solving ability. Experience and problem-solving abilities provide opportunities for learning to improve knowledge, helping the auditor to make appropriate judgments. Simultaneously, this shows that personal motivation is an intrinsic factor that controls the will and positively affects the auditor's behavior in the judgment process. Highly intrinsically motivated auditors process information at a deeper level and require more relevant evidence before reaching conclusions than other auditors (Kadous & Zhou, 2019).

CONCLUSION

The study aimed to determine factors affecting audit judgment performance in Vietnam. Empirical findings show the positive impact of the independent auditor's experience, problem-solving ability, knowledge, and intrinsic and extrinsic motivation on audit judgment performance. At the same time, it also shows the level of positive impact of the different factors. The knowledge factor was identified as having the highest impact, followed by experience and problem-solving ability, and finally, intrinsic motivation and extrinsic motivation. Research findings show that knowledge partially mediates (in the form of support) the relationship between experience and problem-solving ability in the audit judgment performance of independent auditors. The experience from participating in the audit supports the auditor's knowledge in audit judgment performance, and auditors with good problem-solving ability can help accumulate knowledge.

This study has limitations. In addition to the variables used in this research model, many other research variables can be used to see their effect on audit judgment performance. The study is restricted to considering the direct and indirect effects of the independent on the dependent variable, which is audit judgment performance. In addition, sampling carried out according to the conventional method employed in this study may result in findings that do not reflect the overall condition of the population. The answers of each responding auditor may be misleading because the auditor did not read the sentence correctly and did not evaluate themselves.

Further studies are advised to increase the number of selected samples and use disaggregation and probability sampling techniques to obtain research findings with a higher degree of generalizability. Further researchers are expected to add other variables, such as auditor independence, professional skepticism, level of competition, audit fees, and legal regulations. Future research should also consider more costs and time for conducting empirical research to further improve the data collection.

AUTHOR CONTRIBUTIONS

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