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## The Moderating Role of Firm Size on the Relationship between Professional Ethics and Audit Quality: An Empirical Study of Big Four and Non-Big Four Public Accounting Firms

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### Abstract

This study aims to provide empirical evidence of the influence of professional ethics on the quality of audits, specifically examining how this relationship is influenced by the size of the public accounting company. The study focuses on the impact of Professional Ethics, as the sole independent variable, on audit quality in both Big Four and Non-Big Four Public Accounting Firms in 2017. The population being examined consists of Public Accounting Firms, including both those designated as Big Four and those designated as Non-Big Four. By employing purposive sampling, a total of 115 questionnaires were obtained, and 113 of these were successfully disseminated to the intended participants. The chosen data analysis method is Structural Equation Modelling (SEM), specifically utilising the Partial Least Square (PLS) methodology. The study's findings provide strong evidence that professional ethics have a beneficial impact on the quality of audits. Furthermore, the analysis of the moderating impact of the size of public accounting firms demonstrates a statistically significant reduction in the correlation between professional ethics and audit quality. These findings emphasise the complex interactions within the field of auditing, emphasising the subtle influence of professional ethics and the size of the firm on the outcomes of audit quality.

This study provides significant findings about professional ethics and audit quality in the setting of public accounting firms. The study enhances our understanding of the various elements that influence audit quality results by examining how company size affects these outcomes. This knowledge may be applied to both theoretical frameworks and practical implementations in the auditing profession.

Keywords: Professional Ethics, Audit Quality, Public Accounting Firm Size

### Introduction

Annual reports are extremely important sources of information for shareholders and investors, as they provide them with important information that assists them in making decisions regarding investments. In addition, regulators make use of this information in order to put into effect supervisory actions that are designed to protect the interests of stakeholders (POJK Number: 29/POJK.04/2016). Yearly financial reports are a significant factor in determining the possibility that auditors would report and identify potential violations within a client's accounting system (Abu-Nassar & Rutherford, 1996; DeFond & Zhang, 2014). These authors acknowledge the significance of yearly financial reports. The ability of auditors to maintain the intellectual integrity of engagement-related procedures is contingent upon their ability to operate independently and technically without interference (Christensen et al., 2016; Sarwoko & Agoes, 2014).

Despite the significance of annual financial reports, there are still instances of public accounting-related problems that continue to occur. These problems frequently involve violations of regulations and audit failures that fail to detect fraudulent actions, which can result in legal penalties. Notably, the accounting fraud case that occurred at British Telecom in 2017 highlighted the long-term repercussions of auditor supervision. This was due to the fact that the failure of Price Waterhouse Coopers to discover the crime, which had been privatised 33 years earlier, was brought to light mostly through whistleblowing (Abbot et al., 2016; Chan et al., 1993; Pierce & Sweeney, 2004).

In this context, the purpose of this research is to investigate the influence of professional ethics on audit quality, with a particular emphasis on the manner in which the size of the public accounting firm moderates the influence of professional ethics. The purpose of this empirical study is to shed light on the complex relationships that exist between professional ethics, audit quality, and company size (Abbot et al., 2016). The study investigates both Big Four and Non-Big Four public accounting companies based on their respective practices. We hope that by investigating this connection, we will be able to make a contribution to the current body of research and fill the knowledge gap concerning the complex interaction that exists between these aspects in the field of public accounting (Abbot et al., 2016; Francis, 2004; Kueppers & Sullivan, 2010).

### **Literature Review and Theoretical Framework**

Stewardship theory elucidates a managerial strategy in which executives are less motivated by external targets established by auditors and are more motivated by a collective pursuit of the organization's broader goals (Hill & Jones, 1992; Lehrer & Segal, 2020; Preston & Sapienza, 1990). This idea, which has its origins in sociology and psychology, proposes that leaders, when they are positioned as stewards, demonstrate intrinsic incentive to align their decision-making with the fundamental principles of the organisation (Davis et al., 1997; Lehrer & Segal, 2020; Stoney & Winstanley, 2001). This framework for making decisions, which is based on stewardship, encourages a sense of duty and accountability among leaders, thereby guaranteeing that their activities contribute to the accomplishment of the core objectives of the group. Because of this, the implementation of stewardship theory in auditing endeavours is intended to improve the transparency and accountability of audited financial reports to the general public, which in turn strengthens the assurance of audit quality and integrity (Adams, 1994; Hill & Jones, 1992; Richard Baker & Owsen, 2002).

Agency theory, on the other hand, provides insights into the dynamics of the relationship between shareholders (principals) and managers (agents). The principle-agent relationship is one in which the principal gives the agent power to make decisions on behalf of the principal, and the agent then acts as the principal's authorised representative (Adams, 1994; Hiebl, 2015; Richard Baker & Owsen, 2002). When operating under this model, the agent takes on the role of a decision-maker, carrying out tasks in accordance with the goals set forth by the principal. Agency theory places an emphasis on the inherent conflicts of interest that may occur between agents and principals as a result of mismatched incentives, information asymmetry, and opportunistic behaviours (Adams, 1994; Fan & Wong, 2005; Ward & Filatotchev, 2010). As a consequence of this, the use of agency theory in auditing contexts highlights the significance of monitoring and motivating managerial activities in order to reduce agency costs and guarantee that they are aligned with shareholder interests. The purpose of this research is to provide a comprehensive understanding of the mechanisms that influence managerial decision-making and its implications for financial reporting transparency and accountability. This will be accomplished by examining the interaction between stewardship theory and agency theory within the context of audit quality (Adams, 1994; Gul et al., 2002; Tillema & ter Bogt, 2016).

### **Methodology**

This investigation makes use of an Explanatory Research design, with the objective of determining the causal linkages that exist between the variables. In order to collect data, a questionnaire-based approach is utilised, and both formative and reflective aspects are incorporated into the process. Each variable is evaluated using a Likert scale

that ranges from 1 to 5 (where 1 indicates strong disagreement, 2 indicates disagreement, 3 indicates doubt, 4 indicates agreement, and 5 indicates strong agreement) (Albaum, 1997; Joshi et al., 2015).

The population consists of independent auditors who are employed in public accounting companies in Indonesia. These firms include both Big Four and Non-Big Four organisations. Specifically, firms that are linked with the Indonesian public accounting firm and have the designation of "Firm Accountant, Public Foreign" (WHY) or are referred to as "Organisation Auditing Foreign" (OAA) are included in this category. The selection of a sample that most accurately reflects the population is accomplished by the utilisation of a method known as purposive sampling (Palinkas et al., 2015).

For the purpose of data collection, a questionnaire will be administered to the selected public accounting firms. This questionnaire will be carried out with the assistance of a Google Form link that will be sent out via email. From the beginning of November to the end of December 2020, the data gathering period will last for a total of two months. Once the data has been collected, it will be ready for analysis (Sabet & Zhang, 2015; Zumitzavan & Michie, 2015).

In order to analyse the data, the Structural Equation Modelling (SEM) technique is utilised, and the Partial Least Squares (PLS) methodology is utilised. There is a two-step procedure involved in this, which includes the evaluation of the Measurement Model (also known as the Outer Model) and the Structural Model (also known as the Inner Model). Construct validity (also known as convergent and discriminant validity) and internal consistency (also known as composite reliability) are taken into consideration during the evaluation of the Measurement Model (Chin et al., 2008; Weston & Gore, 2006). In the analysis of the structural model, the primary focus is on identifying the significance values, constructs, and R-square values, with the dependent construct being the primary focus of attention. T-tests are used in conjunction with the Stone-Geisser Q-square test in order to evaluate the significance level of coefficients on the structural route. This test is used to determine the predictive relevance of some variables. In addition, the reflective measurement model features convergent validity, which is investigated by means of correlation analysis of item scores, which is carried out with the assistance of Smart PLS software (Cepeda-Carrion et al., 2019; Doloi et al., 2011; Sohn et al., 2007).

In general, the R-square value of the dependent latent variable is the primary criterion that is utilised in order to evaluate the efficacy of the PLS model. In the context of public accounting firms, this all-encompassing technique guarantees a thorough study and interpretation of the findings of the research, thereby shedding light on the connections that exist between professional ethics, audit quality, and the moderating influence of firm size (Dirsmith et al., 1997; Felix William L. et al., 2001).

## **Results and Discussion**

The research sample consists of auditors from both Big Four and Non-Big Four public accounting companies in Indonesia. More precisely, the individuals included in the study were selected from public accounting companies that partnered with well-known organisations including Pricewaterhouse Coopers, Ernst & Young Global, KPMG International, and Deloitte Touche Tohmatsu. There were 34 auditors selected from firms linked with Pricewaterhouse Coopers, and 26 auditors chosen from collaborators of Ernst and Young Global. In addition, there were 24 auditors from firms affiliated with KPMG International and 31 auditors from firms affiliated with Deloitte Touche Tohmatsu, for a total sample size of 115 auditors.

The participants in this study comprised numerous responsibilities within the audited organisations, including leaders, managers, supervisors, junior accountants, and

senior accountants. The investigation involved the active participation of 112 auditors, who contributed unique insights and data for analysis. After undergoing data cleaning and validation procedures, a total of 108 full datasets were determined to be appropriate for subsequent processing and analysis.

The presence of auditors from various organisations and jobs guarantees a broad viewpoint on how professional ethics impact audit quality, especially in relation to distinct organisational structures and practices. The research intends to get detailed insights into how firm size influences the relationship between professional ethics and audit quality in the Indonesian setting. This will contribute to a better knowledge of auditing procedures.

Table 1  
Research Sample

<b>No.</b>	<b>Information</b>	<b>Total</b>	<b>Percentage</b>
1	Total questionnaires distributed	115	100%
2	Total questionnaires not returned	3	3%
3	Total questionnaires that can be processed	112	97%
4	Total questionnaires that cannot be processed	4	4%

Source: Data processed 2021

### **Respondent Description**

Research respondents are auditors who work in Indonesia's "Big Four" public accounting firms. The following is a description of the understanding of information from respondents to this research based on gender, education level, age, length of service and position.

Table 2  
Test Results Description by Gender

	<b>Frequency</b>	<b>Percentage</b>	<b>Valid Percentage</b>	<b>Comulative Percentage</b>
Valid Male	70	64,8	64,8	64,8
	38	35,2	35,2	35,2
Female				
Total	108	100	100	100

Source: Data processed, 2021

Table 2 displays the demographic breakdown of the participants, consisting of a total sample size of 108 individuals. Out of the participants, about 64.8% are male, making up the bulk of the surveyed population. Out of the total respondents, 35.2% which is equivalent to 38 individuals, are female. The gender distribution of the sample reveals a modest male majority within the examined cohort, offering valuable insight into its makeup. The demographic information provides important context for comprehending the attributes of the study participants and can influence later analyses and interpretations of the research results.

Table 3  
Respondents According to Age

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
< 25	10	9,2	9,2	9,2
25 - 35	51	47,2	47,2	47,2
> 36	47	43,5	43,5	43,5
Total	108	100	100	100

Source: Data processed 2021

Table 3 displays a demographic analysis of individuals working in public accounting companies, highlighting significant patterns in the distribution of age. The data reveals that 47.2% of the whole sample, which is comparable to 51 persons, falls within the age range of 25 to 35 years. After the specified age range, individuals under the age of 25 make up a smaller but still significant fraction, accounting for 9.2% of the sample, which amounts to a total of 10 people. In contrast, those who are 36 years or older constitute the remaining 43.5% of the participants, totaling 47 persons. This distribution provides useful insights into the demographic composition of the questioned population by highlighting the predominant age groups among the workforce of public accounting firms.

Table 4  
Description Test Results According to Education Level

	<b>Frequency</b>	<b>Percentage</b>	<b>Valid Percentage</b>	<b>Cumulative Percentage</b>
Valid D3	2	1,8	1,8	1,8
S1	58	53,7	53,7	53,7
S2	30	27,7	27,7	27,7
S3	18	16,6	16,6	16,6
Total	108	100	100	100

Source: Data processed 2021

The information provided in Table 4 highlights significant patterns in the educational profiles of the participants. Significantly, the largest percentage of participants, totaling 58 persons or 53.7%, had a Bachelor's Degree (S1) as their most recent educational attainment. The finding indicates that the questioned population is largely composed of individuals with undergraduate credentials. Conversely, a smaller proportion of participants, specifically 2 persons or 1.8%, possessed a Diploma III (D3) level of schooling, suggesting that this educational achievement was less common within the sample.

In addition, the analysis reveals that 30 respondents, accounting for 27.7% of the total, indicated that they have a Master's Degree (S2), indicating a significant number of individuals with advanced degrees in the dataset. Additionally, 18 respondents, comprising 16.6% of the sample, stated having attained the highest level of education marked as Doctorate degree (S3). This distribution of respondents across various educational levels provides insights into the range of educational backgrounds among the surveyed population, with strong representation from both undergraduate and postgraduate educational streams.

Table 5  
Description Test Results According to Position

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percentage</b>	<b>Cumulative Percentage</b>
Valid Leader	0	0	0	0
Manager	2	1,8	1,8	1,8
Supervisor	4	3,7	3,7	3,7
Senior Accountant	60	55,5	55,5	55,5
Yunior Accountant	42	42	42	42
Total	110	100	100	100

Source: Data processed 2021

Table 5 presents a summary of the distribution of respondents according to their individual employment positions in the surveyed sample. Out of the total number of respondents, 60 persons or 55.5% of them were senior accountants. This shows a large representation of experienced professionals within the studied group. Out of the total sample, 42 respondents, which makes up 42% of the sample, were junior accountants. This indicates a significant number of entry-level professionals participating in the study.

In addition, the data indicates that a lesser percentage of respondents hold supervisory responsibilities, with only 4 individuals or 3.7% of the sample falling into this category. This implies that there are just a few participants who have mid-level management positions, which could reflect that the examined organisations have a hierarchical structure. In addition, the managerial level is comprised of only 2 individuals or 1.8% of the total responses, suggesting a limited representation of senior leadership among the participants polled.

To summarise, the distribution of participants among different employment titles offers valuable information on the makeup of the surveyed group. It reveals a significant number of senior and junior accountants, but there are relatively fewer individuals in supervisory and managerial positions. This analysis provides significant context for comprehending the viewpoints and encounters of professionals at various hierarchical positions within the examined organisations.

Table 6  
Description Test Results According to Work Period

	<b>Frequency</b>	<b>Percentage</b>	<b>Valid Percentage</b>	<b>Cumulative Percentage</b>
Valid < 1 year	14	12,9	12,9	12,9
1-3 year	40	37	37	37
>3 year	54	50	50	50
Total	110	100	100	100

Source: Data processed 2021

The data displayed in Table 6 demonstrates a notable level of proficiency among the individuals assessed in the domain of auditing. Significantly, a considerable proportion of participants, including 50% or 54 persons, indicated that they have over three years of expertise in auditing. This demonstrates a comprehensive understanding and expertise acquired over a prolonged duration in the field. In addition, the data demonstrates that 40 participants, accounting for approximately 37% of the entire sample, had gained experience as auditors for a period of one to three years. This level



of experience indicates a significant number of persons who have recently joined the auditing profession and are actively making valuable contributions in their roles.

Furthermore, the data reveals that 14 respondents, accounting for approximately 12.9% of the sample, had less than one year of experience as auditors. Although they are fewer in number, this particular group of participants consists of persons who are relatively inexperienced in the profession, possibly at the beginning of their auditing careers. Although they have a short period of time in their positions, these individuals enhance the range of experiences within the surveyed group, providing valuable perspectives from different phases of their professional growth.

Generally, the way respondents' experience levels are distributed highlights the extensive and diverse expertise that exists within the auditing industry. The dataset is enriched and the analysis and interpretation of the study benefit from the varied spectrum of experiences, which includes seasoned practitioners with vast backgrounds and developing professionals in the early stages of their careers.

### **Description of Professional Ethics Variables**

The study provides the collective replies of respondents throughout the full sample on the variable of Professional Ethics across multiple statement items. The average score obtained from the evaluations of respondents on Professional Ethics is 3.75, which falls within the range of 3.4 to 4.2. The positioning of auditors, especially those associated with Big Four public accounting firms, indicates a clear consensus on the importance of professional ethics in promoting an independent stance that is essential for maintaining high audit quality.

An analysis of the respondents' answers indicates a dominant tendency towards agreement, with 19.74% strongly agreeing and 41.62% agreeing with statements related to Professional Ethics. Notably, 32.78% remain undecided, while a minority express dissatisfaction (4.94%) or strong disagreement (0.07%) with the offered assertions throughout the 8-item variable of Professional Ethics.

When examining specific components of Professional Ethics, the characteristic of integrity stands out as very significant, with the greatest proportion of agreement at 48.6%. The respondents strongly agree on the significance of audit reports that include comprehensive findings, definitive evaluations, and helpful recommendations (EP9). Conversely, statements such as EP14, recognising the value of auditor experience in the audit industry, and EP20, addressing probable pseudo-rotational auditor changes due to professional assignment limits, got lower agreement percentages at 31.8%.

This extensive examination not only emphasises the current attitudes towards Professional Ethics among auditors but also emphasises the subtle viewpoints within this field. These findings offer essential understanding into the beliefs and priorities of auditors, specifically in relation to upholding ethical standards and guaranteeing the honesty of audit procedures in public accounting firms.

### **Description of Public Accounting Firm Size Variables**

The overall opinions of participants from the entire sample about the variable of Public Accounting Firm Size demonstrate a subtle and detailed perspective. The grand mean score garnered from respondents' ratings of this variable sits at 3.73, falling within the interval of 3.4 to 4.2. This score reflects a broad propensity towards agreement. Respondents from Big Four public accounting companies demonstrate the highest level of agreement, indicating a widespread opinion that larger public accounting firms that perform company audits provide audits of superior quality.

Upon further examination of the responses, the cumulative distribution unveils a range of viewpoints. Significantly, 15.53% of the participants express strong agreement, whilst 45.8% agree, and 35.62% are undecided. Conversely, only 3.13% express dissent, with no respondents strongly disagreeing. This distribution shows the complexity of beliefs about the impact of Public Accounting Firm Size on audit quality.

Additional examination reveals distinct facets of the variable representing the size of the public accounting firm. Significantly, the respondents exhibit a substantial degree of consensus (57.0%) with the Integrity aspect, underscoring the significance of auditors upholding autonomy during audit tasks (UKAP1). Conversely, the lowest agreement score (40.2%) belongs to UKAP 3, showing a reduced consensus regarding the Auditor's adherence to appropriate auditing standards throughout general audit services. The different replies highlight the complex nature of how people perceive the impact of the size of public accounting firms on audit quality and adherence to professional norms.

### **Description of Audit Quality Variables**

The replies obtained from the full sample regarding the variable of audit quality provide significant insights. The auditors employed in Big Four public accounting firms generally agree on the importance of audit quality, as indicated by a grand mean score of 3.65 within the range of 3.4 to 4.2. Audit quality refers to the auditor's expertise in detecting and accurately reporting any irregularities in a client's accounting system.

Regarding the overall responses, most of the participants express a positive attitude towards audit quality, with 17.00% highly agreeing and 39.66% agreeing with the given assertions. Nevertheless, a large proportion of respondents, amounting to 35.20%, have not yet made a decision, whilst a lesser percentage of 7.95% express disagreement, and a negligible 0.13% strongly disagree.

The replies reveal a diverse variety of perspectives among auditors regarding different factors of audit quality. The statement item KA7, which relates to the probable legal consequences of erroneous decision-making during audits, received the greatest degree of agreement, reaching 55.1%. In contrast, the statement item KA13, which emphasises the auditors' specialised analytical skills, obtained the lowest agreement score of 28.0%.

These findings emphasise the intricate viewpoints held by auditors regarding the complex and diverse characteristics of audit quality. While some parts are commonly recognised and accepted, others may require additional scrutiny and assessment within the framework of professional practice.

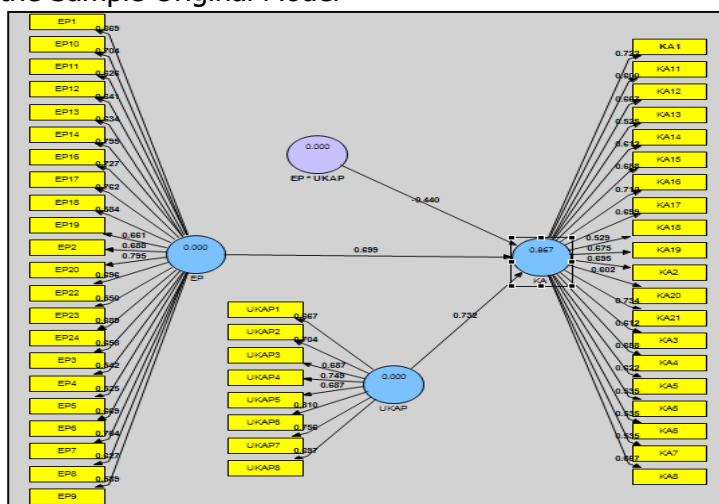
### **Data Quality Testing**

#### **Measurement Model (Outer Model)**

##### **a. Convergent Validity**

Convergent validity is seen according to the correlation between the item score/component score and the construct score.

Figure 1  
Outer Value of the Sample Original Model



Source: Data processed 2021

The examination of the Average Variance Extracted (AVE) values in Figure 1 provides significant insights into the outer model of the original sample, clarifying the associations between constructs and variables. The examination notably identifies three indicators, namely Ep 15, Ep 21, and Ka 10, that have factor loading levels below the threshold of 0.50. This observation suggests a notable decrease in the reliability of these indicators, indicating possible concerns regarding their precision in measurement.

Factor loading values below 0.50 indicate that the indicators may not accurately represent their corresponding constructs in the model. As a result, including them in the analysis could add unwanted interference or prejudice, which could potentially undermine the overall accuracy and dependability of the findings. These indicators are considered flawed because they fail to adequately capture the underlying constructs they are meant to measure.

It is crucial to address the deficiencies of these indicators in order to guarantee the integrity and precision of the study. Possible courses of action involve reassessing the measurement instrument to improve or substitute the flawed indicators, conducting additional data collection to enhance the current sample, or investigating alternative modelling techniques to minimise the influence of inaccurate indicators on the overall analysis. To improve the accuracy and reliability of the estimation results, it is important to address these concerns. This will enable more precise and dependable conclusions about the relationships between constructs and variables in the research model.

**b. Discriminant Validity**

The model has good discriminant validity if the score at the root of the AVE is greater than the correlation score between other constructs and constructs with other constructs in a model, which can be seen in table A and table B below:

Table 7  
AVE and Community

VARIABLE	AVE	Community	Square Root Ave
Professional ethics	0,79	0,79	0,88

Audit Quality	0,81	0,81	0,90
Size of Public Accounting Firm	0,84	0,84	0,91

Source: Data processed 2021

Table 8  
Latent Variable Correlations

<b>VARIABLE</b>	<b>Professional Ethics</b>	<b>Audit Quality</b>	<b>Size of Public Accounting Firm</b>
Professional ethics	<b>0,88</b>		
Audit Quality	0,87	<b>0,90</b>	
Size of Public Accounting Firm	0,83	0,89	<b>0,91</b>

Source: Data processed 2021

The data in Table 7 demonstrates that the communality values for each variable exceed the criterion of 0.05. In addition, the AVE (average variance extracted) values above the threshold of 0.5. These findings indicate that the observed variables are accurately represented by their corresponding underlying constructs and provide a significant contribution to the overall measurement model.

Furthermore, as shown in Table 8, the fundamental value of the constructs surpasses the correlation scores among constructs, confirming the model's strength and suitability. This indicates that the elements in the estimation have robust internal consistency and show adequate discriminant validity. In summary, these results highlight the dependability and accuracy of the measurement model, demonstrating its ability to correctly evaluate the connections between variables according to the predetermined standards.

### **Evaluating Validity and Reliability**

To ensure the strength and reliability of the study constructs, a thorough assessment is conducted to enforce rigorous and accurate measurement standards. Validity is a vital factor in assuring the accuracy of construct measurement among these criteria. The assessment of validity is conducted with great attention to detail by calculating the Average Variance Extracted (AVE) values for each concept. AVE values greater than 0.50 are considered a standard for good validity, indicating that the constructs effectively capture the variability in the dataset. This thorough validity review ensures that the constructs accurately and faithfully capture the desired phenomena.

Moreover, the measurement of construct dependability forms another crucial part of the evaluation process. This is assessed by using both Cronbach's Alpha and Composite Reliability values. Constructs are considered dependable if their Cronbach's Alpha is more than 0.60 and their Composite Reliability is over 0.70. These predefined limits represent the degree of reliability and durability of the measurements contained inside the concepts. The reliability criteria used in the study confirm the effectiveness of the measurement instrument, which increases trust in the accuracy of the research results.

The research ensures the accuracy and consistency of its findings by following strict criteria for assessing validity and reliability. The careful approach employed in this study not only increases the credibility of the research but also strengthens the trustworthiness of its findings. By adhering to strict measurement criteria, the research maintains the integrity of its conclusions, guaranteeing their relevance and usefulness in shaping future discussions and decision-making.

Table 9

Cronbachs Alpha, Composite Reliability dan Average Variance Extracted

<b>VARIABLE</b>	<b>AVE</b>	<b>Cronbachs Alpha</b>	<b>Composite Reliability</b>	<b>Criteria</b>
Professional ethics	0,79	0,94	0,95	Good
Audit Quality	0,81	0,92	0,93	Good
Size of Public Accounting Firm	0,84	0,87	0,90	Good

Source: Data processed 2021

Table 9 clearly shows that all the constructs examined in the study meet the established criteria for validity and reliability. Specifically, the constructs display Cronbach's Alpha scores over 0.70, suggestive of good internal consistency among the items assessing each construct. This suggests that the items within each construct consistently assess the same underlying notion, hence improving the reliability of the derived measurements.

Moreover, the composite reliability scores for all constructs exceed the threshold of 0.80, confirming the reliability of the constructs in accurately capturing the intended phenomena. Composite reliability assesses the degree to which the individual components of a construct contribute to its overall reliability. A number above 0.80 indicates a high level of reliability and consistency in the assessment.

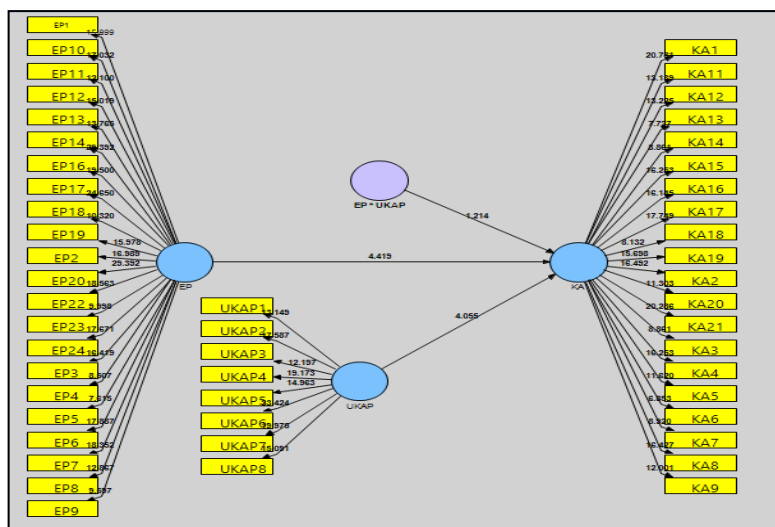
Furthermore, the constructions' Average Variance Extracted (AVE) values surpass the threshold of 0.50, aligning with the suggested criteria. AVE quantifies the extent to which the variance accounted for by the items of a construct is greater than the variance caused by measurement error. AVE values greater than 0.50 imply that the constructs explain a larger proportion of the variance in the observed variables compared to the measurement error. This finding provides more support for the construct validity.

Overall, the continuous fulfillment of these requirements across all constructs highlights the robustness and validity of the measuring approach applied in the study. These findings instill trust in the dependability of the data obtained and the validity of the constructs studied, affirming the suitability of the approach utilised for evaluating the research hypotheses.

### **Structural Model (*Inner Model*)**

The inner model (inner relation or structural model) shows the relationship between exogenous latent variables and endogenous variables based on substance theory:

Figure 2  
SPSS Inner Model or Structural Model Value



Source: Data processed 2021

The Q-Square calculation results are obtained using a particular method designed to measure the predictive significance of a structural equation model. The formula  $Q^2_v = 1 - (1 - R^2_1)(1 - R^2_2) \dots (1 - R^2_p)$  integrates the R-square values of endogenous variables in the model equations. Every R-square term signifies the percentage of variance that is accounted for by the corresponding endogenous variable. The Q2 score, which measures predictive accuracy inside the model, ranges from 0 to 1. Higher values approaching 1 indicate a greater level of accuracy. Hence, a Q2 score approaching 1 implies that the model's predictions strongly correspond to the observed data, demonstrating the model's robustness and reliability in its capacity to explain.

Q2 essentially functions as a crucial metric similar to the overall coefficient of determination in route analysis. The statement refers to the model's overall capacity to explain the observed fluctuations in the endogenous variables. Therefore, a higher Q2 score indicates a greater ability to predict, increasing confidence in the model's effectiveness in revealing the connections between the variables being studied. The Q2 assessment offers vital insights into the overall performance and validity of the structural equation model. It helps researchers evaluate the dependability and usefulness of their analytical framework.

Table 10  
R-square value

VARIABLE	R Squares
Professional ethics	
Audit Quality	0,87
Size of Public Accounting Firm	

Source: Data processed 2021

The data reported in Table 10 provide insights into the structural model, specifically emphasising sub-1, which clarifies the link between variables. The R-square score of 0.87 suggests that a substantial percentage, around 87%, of the variation in the Audit Quality variable may be ascribed to the combined influence of Professional Ethics and

the Size of the Public Accounting Firm. This significant percentage emphasises the significance of these factors in influencing the standard of audits carried out within public accounting companies. Nevertheless, it is essential to recognise that over 13% of the variability in Audit Quality remains unaccounted for by the variables examined. This implies that there are more relevant elements that affect the quality of audits, apart from Professional Ethics and Firm Size, that were not examined in this study.

Going ahead, it is crucial to evaluate the efficacy of the model in accurately capturing and elucidating the observed data. Assessing the adequacy of the model's observations offers useful information into its overall effectiveness. Through careful examination of the observation scores generated by the model, researchers can determine the degree to which the model accurately depicts the real-world occurrences being studied. This assessment assists in measuring the dependability and accuracy of the model's forecasts, increasing assurance in its usefulness for comprehending and examining the dynamics of audit quality in public accounting organisations. Hence, it is crucial to evaluate the model's observations thoroughly, in addition to evaluating the R-square score, in order to draw reliable conclusions and implications from the study's findings. The Q-Square calculation is as follows:

$$Q^2 = 1 - (1 - 0,87) = 0,87.$$

The Q-square value obtained was 0.87, indicating a high level of predictive significance in the model. The Q-square is a metric that ranges from 0 to 1 and is used to evaluate the predictive capability of the model. A higher Q-square value indicates a stronger predictive capacity of the model for outcomes beyond the sample data it was built on. The Q-square value of 0.87 in this case indicates a strong level of predictive accuracy, indicating that the model successfully captures and explains the variations in the dependant variable.

The strong Q-square result highlights the effectiveness of the model in predicting outcomes and guiding decision-making processes. By attaining a result near to the upper limit of 1, the model displays its trustworthiness in extrapolating trends and patterns from the observed data to hypothetical future scenarios. Therefore, stakeholders may trust the insights produced by the model to direct strategic activities and interventions, with confidence in its capacity to provide precise predictions with a fair degree of error.

Achieving a Q-square score of 0.87 indicates that the model is highly accurate in predicting future outcomes, which gives confidence in its ability to foresee beyond the available data. As a fundamental component of the analytical framework, this strong Q-square result reinforces the model's effectiveness in unearthing important insights and aiding informed decision-making processes in the context of the study area.

### HYPOTHESIS TEST

Test results using bootstrapping from PLSI analysis are as follows:

Table 11  
Result For Inner Weights

Relationship	Original Sample	Sample Mean	STDEV	T-Statistics ( O/STERR )	P value	Description
<b>EP -&gt; KA</b>	0,67	0,69	0,15	4,38	1,96	Accepted

<b>EP</b>	*						
<b>UKAP</b>	->	-0,35	-0,38	0,30	1,18	1,96	Rejected
<b>KA</b>							

Source: Data processed 2021

The examination of the initial hypothesis demonstrates a substantial and favourable correlation between Professional Ethics (EP) and Audit Quality (KA), as evidenced by the path coefficient of 0.67 and a computed t value of 4.38. Significantly, multiple connections display calculated t-scores beyond the crucial value of 1.96, with the highest score reaching 4.48. This disparity strengthens the statistical significance of the observed correlation, hence confirming the adoption of the Professional Ethics hypothesis. The results highlight the crucial importance of ethical behaviour in improving the quality of audits, in line with the expectations of the initial premise.

In contrast, the analysis of the second hypothesis reveals a divergent result about the moderating impact of Public Accounting Firm Size on Audit Quality (KA). The correlation coefficient between Professional Ethics (EP) and Audit Quality (KA) is -0.35, with a corresponding t-value of 1.18. Nevertheless, the computed t value is lower than the crucial threshold of 1.96, indicating that the observed association is not statistically significant. The theory suggesting a negative correlation between the number of public accounting firms and the quality of audits has been disproven. These findings suggest that the size of a company does not have a substantial impact on the relationship between professional ethics and audit quality, which goes against the initial predictions of the second hypothesis.

## Research Discussion

### The Influence of Professional Ethics on Audit Quality

The results of testing the initial hypothesis (H1) indicate that Professional Ethics has a beneficial effect on Audit Quality. The regression coefficient of 4.38 in Table 19 exceeds the necessary t-value of 1.96 ( $4.38 > 1.96$ ), suggesting statistical significance. This result clearly establishes a positive correlation between Professional Ethics and Audit Quality, hence confirming the acceptance of the initial premise. Therefore, this study emphasises the crucial need of practitioners following the Public Accountant Code of Ethics in their professional service endeavours (Apostolou & Thibadoux, 2003; Benston & Hartgraves, 2002).

The necessity of maintaining ethical norms becomes apparent in view of significant ethical violations that have had a widespread impact. For example, the well-known Enron financial crisis, which included auditor Arthur Andersen, serves as a clear warning of the repercussions of ethical failures. Moreover, the WorldCom scandal in 2001, the Kimia Farma incident in 2002, the Telkom case in 2002, and the HealthSouth Corporation scandal in 2003 serve as clear examples of the negative consequences that arise from ethical violations within the auditing profession. The persistent significance of ethical integrity in audit methods is further shown by recent incidents such as the Bernard L. Madoff Investment fraud in 2008, Satyam Computer Services in 2009, and Lehman Brothers in 2010 (Sarwoko & Agoes, 2014).

The repeated occurrence of these ethical infractions acts as a warning, emphasising the crucial need of cultivating a shared comprehension between auditors and clients regarding the underlying purpose and goals of audits. Examples such as PT. Sunprima Nusantara Finance from 2012 to 2016, British Telecom in 2017, and PT. Garuda Indonesia in 2018 are powerful reminders of the possible outcomes of ethical carelessness in the auditing profession. This research highlights the need of adhering to



ethical principles as a fundamental aspect of preserving the integrity and credibility of audit methods, especially in the midst of constantly changing complications in the business environment (Mironeasa & Codină, 2013).

### **The Influence of Public Accounting Firm Size as a Moderating Effect on the Relationship between Professional Ethics and Audit Quality**

The results of testing the second hypothesis (H2) indicate that public accounting companies play a moderating role in the association between professional ethics and audit quality. According to Table 19, the regression coefficient is 1.18, which is lower than the essential t-value of 1.96 ( $1.18 < 1.96$ ). The result indicates an adverse impact, which results in the dismissal of the second hypothesis. This research establishes that public accounting companies, while acting as moderators, have a detrimental effect on audit quality. This phenomena indicates a failure to satisfy the required professional standards of auditors in both large and non-large public accounting companies, especially in terms of complying with the code of ethics established in the public accounting profession (Sarwoko & Agoes, 2014).

The government, through the Ministry of Finance and the Financial Services Authority, has implemented regulatory measures against public accountants and the public accounting firm Tanubrata, Sutanto, Fahmi, Bambang, and partners due to their breach of ethical standards in relation to the financial statements of PT Garuda Indonesia for the fiscal year 2018. Both entities were charged under Article 69 of Law No. VII.G.7, which relates to the requirement for issuers and companies to present and disclose financial reports to the public, and the interpretation of financial accounting standards. PT Garuda Indonesia was fined IDR 1 billion, as mandated by Financial Services Authority Regulation No. 29/POJK.04/2016, which pertains to reporting requirements for issuers or public businesses. In addition, auditors from the public accounting firm Tanubrata, Sutanto, Fahmi, Bambang, and their colleagues were punished with sanctions, such as the suspension of their registration certificates, due to their participation in the aforesaid offences (Rusmanto & Waworuntu, 2015).

### **Conclusion**

This study explores the complex interplay between professional ethics and audit quality, specifically investigating how the performance of public accounting companies influences this relationship. The detailed study undertaken gives promising insights into the interplay of various variables. The hypothesis testing results clearly show strong evidence in favour of Hypothesis 1, demonstrating that professional ethics have a beneficial impact on audit quality. This emphasises the vital importance of the Public Accountant Code of Ethics as a cornerstone guiding every member of the profession in their professional service activities.

However, Hypothesis 2 does not acquire support from the empirical findings. The data reveals that the moderating influence of public accounting firm size reduces the connection between professional ethics and audit quality. This discovery emphasises the intricate and interconnected nature of the auditing field, suggesting the requirement for additional investigation and improvement in comprehending these intricacies.

Based on these findings, various recommendations arise for future research endeavours. It is proposed that further research increase the scope by integrating additional variables such as Audit Tenure, Time Budget Pressure, and other dimensions of Audit Experience. These variables have the potential to provide more profound insights into their impact on the quality of audits, enhancing our understanding of the complex factors that shape the auditing profession. Future research can make a

substantial contribution to expanding knowledge and informing best practices in auditing by adopting a comprehensive strategy that includes various elements.

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