

# **The Effect of Company Size and Complexity of Company Operations on Audit Delay with Auditor Quality as a Moderating Variable**

**(Empirical Study of Manufacturing Companies Listed on the Indonesian Stock Exchange for The 2019-2021 period)**

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**Abstract:** This study aims to determine the influence of company size and the complexity of company operations on audit delay with auditor quality as a moderation variable. The population of this study is manufacturing companies listed on the Indonesia stock exchange for the 2019-2021 period. The sampling technique used is a purposive sampling method with a sample of 287 companies. statistical analysis method with moderated regression analysis (MRA) using SPSS application. The results showed that (1). The variable size of the company affects the audit delay (2). The variable complexity of the company's operations has no effect on the audit delay (3). The auditor quality variable was unable to moderate the relationship between company size and audit delay (4). The auditor's quality variable is not able to moderate the relationship of the complexity of the company's operations with audit delay.

**Keywords:** Company Size, Complexity of Company Operations, Quality of Auditors, Audit Delay.

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## **1. Introduction**

The capital market in Indonesia has experienced significant development, this is marked by the development of public listed companies that issue their shares to the wider public. This development has resulted in an increase in demand for audited financial statements. Every company going public is required to publish financial statements prepared in accordance with Financial Accounting Standards (SAK) and have been audited by public accountants who have been registered with the Financial Services Authority (OJK) which was previously the Capital Market Supervisory Agency (Baepam).

Financial statements are the most important thing for companies going public to support sustainability because financial statements provide information about the company's financial performance that can be used as a basis for decision making when investing and serves as a useful communication medium to convey financial statement information. A good report must have relevant characteristics, be free from material misstatements, be representable, compared, and verified (Indonesian Accounting Association, 2018). Information contained in the company's financial statements can be useful if presented accurately and timely when needed by users of financial statements such as creditors, investors, government, the public, and other parties as a basis for decision making. Investment by investors in entities must be based on reliable and timely information.

Audit delay is the vulnerable time required by auditors in completing independent audit reports. The vulnerability of audit completion time can be seen from the time difference between the date of the financial statements prepared by the company and the date of the audit opinion in the independent audit report. Audit delay refers to the vulnerable period or length of time required by audit workers to complete the audit assignment of bookkeeping reports, which can be added from the closing time of the entity's books, namely December 31 until the issuance of the inspection report (Saputra et al., 2020).

The size of the company is the capacity of the amount of assets or wealth owned by the company. The size of the company is one of the factors that affect audit delay. Fabio et al (2015) stated that the larger the company, the faster it is because the company has many sources of information and has a good company internal control system so as to reduce errors in the preparation of financial statements that make it easier for auditors to audit financial statements.

The complexity of the company's operations is a result of the formation of departments and the division of work that has a focus on the number of different units. Increasingly complex dependencies occur when organizations with different types or amounts of work and units pose more complicated managerial and organizational problems. The complexity of operations has an impact on the deadline needed for auditors to

complete their audit activities, the more branches operated, the more information disclosure so that the audit implementation is also longer (Yamashida et al., 2020).

The quality of auditors was chosen as a moderation variable because the selection of competent public accountants has the potential to accelerate the completion of audits in time so as to increase the reputation of public accountants and generate client trust to use their services again in the future. According to Pradipta and Zalukhu (2020), this is also because companies affiliated with the Big Four have greater resources so that they can complete audits faster.

## **2. Literature review and hypothesis**

### **2.1 Agency Theory**

Agency theory explains the relationship between the manager and shareholders as owners. Jensen & Meckling (1976) explain that agency theory is needed as a form of work agreement between authorized parties (agencies) or managers to regulate the rights and obligations of each party in carrying out their duties and functions.

Agency theory in audit delay refers to the idea that there is a conflict of interest between company management and independent auditors that results in delays in the audit process. This conflict of interest occurs because company management tends to want to avoid disclosing information that harms the company, while independent auditors must ensure that the company's financial statements meet the established standards.

In this context, audit delay occurs when independent auditors have difficulty in obtaining the necessary information from the company's management to complete the audit. This can result in delays in the preparation of financial statements, which in turn can have an impact on investor confidence in the company.

### **2.2 Signal theory**

Signaling theory is the action of a company in signaling to investors about how management views the company's future prospects. The signals provided by the company are in the form of timely and accurate publication of financial statements. This information is very important for investors as a tool in analyzing and making decisions (Ginanjari, et al 2019).

Accuracy and timeliness in presenting financial statements to the public are signals that can be useful for the needs of investors in decision making. The longer the audit delay, this causes uncertainty in stock movements. Investors can perceive the length of the audit delay because the company has bad news, so it does not immediately release financial statements to the public, which will cause the company's stock price to fall (Rahmawati & Suryono, 2015).

### **2.3 Compliance Theory**

Compliance is a form of behavior carried out by both people and organizations. Obedience theory has been researched in the social sciences, especially in psychology and sociology which emphasizes more on the importance of the socialization process in influencing the obedience behavior of an individual. Demands for compliance with time provisions in the submission of financial reporting of public companies in Indonesia have been regulated in Law No. 8 of 1995 and OJK Regulation No. 29 / PO. JK.04/2016 which states that issuers or entities are required to submit their financial statements to OJK no later than four months after the financial year ends.

Compliance theory explains the relationship between audit delay and timeliness in the submission of financial statements. In the regulation issued by the Financial Services Authority regarding the deadline for submitting financial statements, which is 120 days after the closing date of the financial year, making public accountants work is not easy. Auditors must complete financial statements on time before 120 days, so it is expected that financial statements submitted to the Indonesia Stock Exchange are also on time (Sofiana et al, 2018).

### **2.4 The effect of company size on audit delay**

Company size is a measure that shows the size or size of a company as seen from the total assets owned by the company, total sales, number of workers and so on (Wulandari & Wiratmaja, 2017). Companies with large operations will certainly have a good internal control system and the use of technology, thus it can overcome the possibility of misstatements in the preparation of financial statements, so as to shorten the occurrence of audit delays in a company (Muliartari & Latrini, 2017).

H1: company size affects audit delay

## **2.5 The Effect of Company Operation Complexity on Audit Delay**

The complexity of operations is the result of the existence of departments and divisions of work that have a focus on different numbers of units. (Yoga and Sari, 2017). The number of subsidiaries owned by a company indicates that the company has more operating units and other accompanying records, resulting in the length of time the auditor examines the transaction and causes a longer audit delay.

H2: The complexity of company operations affects audit delay

## **2.6 The effect of company size on audit delay moderated by the quality of auditors**

The large size of the company certainly has a high complexity in its financial statements. Large companies have great assets as well. . The larger the size of the company will tend to accelerate the preparation of financial statements which makes auditors have more time in auditing. To encourage faster audit work time, is to choose auditors or KAP who are reputable and affiliated with the Big Four. Because KAP, which is classified as the Big Four resources, is better and competent, this of course will speed up the audit work time, thus affecting the audit delay to be shorter. This means that the size of the company accompanied by the reputation of KAP which includes the Big Four Public Accountants is able to have a significant impact on audit delays so that audit delays become faster (Fuad Rahardi, Afrizal, and Diah PA, 2021).

H3: Quality auditors moderate the relationship of company size with audit delay

## **2.7 The Effect of Company Operation Complexity on Audit Delay Moderated by the Quality of Auditors**

Companies with a high level of complexity with many subsidiaries certainly have many operating units with accompanying transactions and records. The existence of many operating units makes auditors tend to require more time to conduct audit checks (Ariyani and Budiarta, 2014). However, if the KAP that audits the company is affiliated with the Big Four, it will speed up the auditor's time in completing the audit process. The understanding and experience of KAP affiliated with the Big Four is considered to be able to accelerate the completion of audits even though clients have a high level of complexity because auditors have understood the transaction patterns and operations of companies that have many subsidiaries.

H4: Quality Auditors Moderate the Relationship of Company Operations Complexity with Audit Delay

# **3. Research Methods**

## **3.1 Population and Sample**

The population used in this study is all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. Sample selection is carried out using the purposive sampling method. Based on the specified criteria, the sample obtained was 372 companies. However, in testing the model that was not good, it was carried out to reduce data containing outliers as many as 85 companies. The basis of the outlier used in this study is to use Unstandardized Residual by looking at residual values that are too extreme, so that the data that can be processed in this study is as many as 287 companies.

## **3.2 Operational Definition and Variable Measurement**

### **Dependent Variables**

The dependent variable in this study is the audit completion time or commonly referred to as audit delay. Audit delay is defined as the length of time an audit completes measured from the closing date of the financial year to the date of issuance of the audit report. Audit delay is an estimate of audit completion, with benchmarks for closing dates and approvals (Danang, 2017). Audit delay in this review is benchmarked using the number of days required to obtain independent reporting until the close of December 31 (Ni Made, 2016).

### **Independent Variables**

#### **a. Company Size**

According to (Hery, 2017) company size is a classification of the size of a company measured using a scale, which can be done according to various ways ranging from total sales, total assets, stock market value, and others. This study measures the size of the company with the natural logarithmic value of total assets referring to the research of Kartini and Tulus (2008) in Fanny (2017).

#### **b. The complexity of the company's operations**

According to Wijaya and Effriyanti (2019), the complexity of company operations reflects that companies have more operating units that must be checked in each transaction and accompanying records, so auditors take longer to carry out their audit work. The complexity of the company's operations is measured using dummy variables, which are given code 1 if the company has subsidiaries and given code 0 if the company does not have subsidiaries.

### Moderation Variable

The moderation variable used in this study is the quality of the auditor. The quality of auditors is a reputation or good name that has accounting firms affiliated with universal public accounting firms such as Big Four Worldwide Accounting Firm (Big 4) Virawati and Wirakusuma (2016). The quality of auditors in this study was measured using indicators of Big Four and Non Big Four auditor groups. The quality of auditors is measured using dummy variables, which are given code 1 if using KAP affiliated with Big Four KAP, and given code 0 if KAP is not affiliated with Big Four KAP.

### 3.3 Hypothesis Testing

#### A. Multiple Linear Regression Analysis

In this study, multiple linear analysis is used to determine the dependence of one variable tied to only two variables, namely the size of the company and the complexity of the company's operations without adding moderation variables, and to determine the dependence of a variable tied to independent variables. Here is the multiple linear regression formula:

$$AD = \alpha + \beta_1 UK + \beta_2 KOP + e$$

Description:

AD : Audit Delay  
 $\alpha$  : Constants  
 $\beta_1, \beta_2$  : Regression Coefficient  
 UK : Company Size  
 KOP : Company Operation Complexity  
 E : error

#### B. Moderated Regression Analysis

Moderated Regression Analysis (MRA) or interaction test is a special application of multiple linear regression where the regression equation contains an element of interaction (multiplication of two or more independent variables). According to Ghazali (2018), the MRA test aims to control the effects of moderation variables through an analytical approach that maintains the integrity of the research sample. In this study, MRA was used to test moderation variables, namely the quality of auditors in the relationship between the size of the company and the complexity of the company's operations against audit delay. The formula is as follows:

$$AD = \alpha + \beta_1 UK + \beta_2 KOP + \beta_3 (UK * KA) + \beta_4 (KOP * KA) + e$$

Description:

AD : Audit Delay  
 $\alpha$  : Constants  
 $\beta_1, \beta_2$  : Regression Coefficient  
 UK : Company Size  
 KOP : Company Operation Complexity  
 KA : Quality of Auditors  
 $\beta_3 (UK * KA)$  : Interaction of Company Size on Quality of Auditors  
 $\beta_4 (KOP * KA)$  : Interaction of Company Operation Complexity on Auditor Quality  
 E : error

## 4. Analysis and Discussion

### 4.1 Descriptive Statistics

Table 4.1: Descriptive Statistical Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
firm size	287	24,267	32,402	28,47855	1,589651
operating complexity	287	,000	1,000	,94425	,229837
auditor quality	287	,000	1,000	,31707	,466149
audit delay	287	29,000	162,000	91,81533	26,501828
Valid N (list wise)	287				

Based on the table above, the audit delay, which is the dependent variable, has the lowest value of 29,000 and the highest value of 162,000. While the average value (mean) owned is 91.81533 with a standard deviation value of 26.501828.

The size of the company measured using the natural logarithm of total assets had a lowest value of 24,267 and a highest value of 32,402. While the average value (mean) owned is 28.47855 with a standard deviation value of 1.589651.

The complexity of the company's operations has a lowest value of 0.000 and a highest value of 1.000. While the average value (mean) owned is 0.94425 with a standard deviation value of 0.229837.

The quality of the auditor as a moderation variable has the lowest value of 0.000 and the highest value of 1.000. While the average value (mean) owned is 0.31707 with a standard deviation value of 0.466149.

## 4.2 Discussion

Table 4.2: Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	198,981	27,331		7,281	,000
firm size	-4,186	,968	-,251	-4,324	,000
operating complexity	12,771	6,697	,111	1,907	,058

The results of the first hypothesis testing showed that the significance value of the Company Size variable was  $0.000 < 0.05$ . So it can be concluded that the size of the company affects the audit delay, so that **H<sub>1</sub> is accepted**. The results of this study are consistent with the research of Shaena et al (2020) showing that company size affects audit delay

This means that the larger the size of the company, the faster the audit delay. Large-scale company management generally has a good internal control system that will assist auditors in conducting their audit process. So that the audit process carried out can be faster. In addition, large companies tend to get high pressure from external parties on the company's financial performance. So that management will try to publish the audited financial statements on time. The results of this study are consistent with the research of Shaena et al (2020) showing that company size affects audit delay.

The results of the second hypothesis test show that the significance value of the variable complexity of the company's operations is  $0.058 > 0.05$ , so it can be concluded that the complexity of the company's operations has no effect on the audit delay, so **H<sub>2</sub> is rejected**. The results of this study are contrary to the research of Sari and Sujana (2021) which states that the complexity of company operations has a positive influence on audit delay. However, this study is consistent with the research of Angruningrum and Wirakusuma (2013) which states that the complexity of company operations does not affect audit delay.

This is because the complexity of the company's operations that describes the level of audit sources in the company in this case shows that more and more audit sources from subsidiaries of the company will require audit examinations tend to be longer by auditors. However, companies generally anticipate it with the existence of greater resources so that operational complexity is not something that reduces the time for preparing financial statements.

Table 4.3: Moderated Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	192,637	39,191		4,915	,000
ukuranperusahaan	-4,041	1,419	-,242	-2,847	,005
kompleksitasoperasi	16,753	7,467	,145	2,244	,026
kualitas auditor	-32,521	64,124	-,572	-,507	,612
ukuranperusahaan*kualitas auditor	1,572	2,210	,819	,711	,478
kompleksitasoperasi*kualitas auditor	-19,502	16,878	-,340	-1,155	,249

The results of testing the third hypothesis showed that the significance value of the company size variable with moderation of auditor quality was  $0.478 > 0.05$ . So it can be concluded that the quality of auditors cannot moderate the relationship between company size and audit delay, so **H<sub>3</sub> is rejected**.

This means that even though the company uses the services of auditors with high quality, if the size of the company is large enough and complex, then audit delays will still occur. Conversely, if the company is relatively small and simple, the audit time can be completed quickly due to less complexity of financial transactions. In this case, the quality of the auditor may not have much effect on the length of the audit delay. So this research is in line with research conducted by Ni Made Dwi Ari Murti and Ni Luh Sari Widhiyani (2016) which stated that the reputation of KAP weakens the relationship between company size and audit delay.

The results of hypothesis testing showed that the significance value of the variable complexity of company operations moderated by the quality of auditors was  $0.249 > 0.05$ . So it can be concluded that the quality of auditors is not able to moderate the relationship between the complexity of company operations and audit delays, so **H<sub>4</sub> is rejected**.

This means that even if the company uses the services of high quality auditors, if the company's operations are very complex then the audit time may still take a long time. High quality auditors may be able to help improve audit efficiency but ultimately the high complexity of a company's operations can hinder the speed of auditing. The results of this study are in line with the research hypothesis that states that the quality of auditors can weaken the relationship between the complexity of company operations and audit delay.

## 5. Conclusion

### 5.1 Conclusion

The purpose of this study is to examine and the effect of company size and complexity of company operations on audit delay with auditor quality as a moderation variable. Based on the results of the analysis and discussion described in the previous chapter, the following conclusions can be drawn: The Company Size variable has a significance value of  $0.000 < 0.05$  so that **H<sub>1</sub> is accepted**. This means that the size of the company affects the Audit Delay, The Company's Operating Complexity variable has a significance value of  $0.058 > 0.05$  so that **H<sub>2</sub> is rejected**. This means that the Company's Operation Complexity variable has no effect on Audit Delay, The Company Size variable moderated with Quality Auditor has a significance value of  $0.478 > 0.05$  so that **H<sub>3</sub> is rejected**. This means that Auditor Quality weakens the relationship between Company Size and Audit Delay, The variable Complexity of Company Operations moderated with Quality Auditor has a significance value of  $0.249 > 0.05$  so that **H<sub>4</sub> is rejected**. This means that the Quality of Auditors weakens the relationship between the Complexity of Company Operations and Audit Delay.

### 5.2 Limitations

In this study there are several limitations experienced by researchers. This can be used as a consideration for further researchers, these limitations are as follows:

1. The sample of this study is limited to only manufacturing companies listed on the Indonesia Stock Exchange so that the research cannot be generalized with other companies.
2. The results of the analysis show that the independent variable, namely the size of the company and the complexity of the company's operations along with the moderation variable, namely the quality of the auditor, is only able to explain the dependent variable, namely the audit delay of 8%, while 92% is influenced by other variables outside the model so that it does not represent most of the factors that can affect the audit delay.
3. The moderation variable, namely the quality of the auditor, cannot moderate the relationship between the size of the company and the complexity of the company's operations to audit delay.

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