Pengaruh *Investment Opportunity Set* (IOS), Persistensi Laba, Dan Ukuran Perusahaan Terhadap Kualitas Laba Dengan Asimetri Informasi Sebagai Variabel *Moderating*

THE EFFECT OF INVESTMENT OPPORTUNITY SET (IOS), EARNINGS PERSISTENCE, AND FIRM SIZE ON EARNINGS QUALITY WITH INFORMATION ASYMMETRY AS A MODERATING VARIABLE

Safira Siwi Perwita Kusumawardhani[1], Dhyah Setyorini[2]

[1,2] Universitas Negeri Yogyakarta
Safirasiwipk31@gmail.com

ARTICLE INFORMATION

ABSTRAK

Penelitian ini menguji pengaruh *investment opportunity set* (ios), persistensi laba, dan ukuran perusahaan terhadap kualitas laba dengan asimetri informasi sebagai variabel moderasi. Dorongan utama untuk melakukan penelitian ini adalah banyaknya kasus yang melibatkan manipulasi laporan keuangan, yang menunjukkan kualitas pendapatan perusahaan yang buruk dan perubahan informasi mengenai pendapatan, sehingga menimbulkan keraguan terhadap keandalan angka-angka tersebut. Melalui *purposive sampling*, lima belas perusahaan infrastruktur yang terdaftar di BEI antara tahun 2020 dan 2022 dipilih sebagai sampel. Metode analisis data yang digunakan dalam penelitian ini adalah analisis regresi linear berganda dan *moderated regression analysis* (MRA). Hasil penelitian menunjukkan bahwa kualitas laba tidak dipengaruhi oleh *investment opportunity set* (IOS) atau persistensi laba. Akan tetapi, kualitas laba dipengaruhi oleh ukuran perusahaan. Berdasarkan hasil *moderated regression analysis* (MRA), asimetri informasi tidak memoderasi pengaruh *investment opportunity set* (IOS), persistensi laba, dan ukuran perusahaan terhadap kualitas laba.
Kata kunci: Investment Opportunity Set; Persistensi Laba; Ukuran Perusahaan; Kualitas Laba; Asimetri Informasi

ABSTRACT

This study examines the effect of investment opportunity set (IOS), earnings persistence, and firm size on earnings quality with information asymmetry as a moderating variable. The primary impetus for this study was the number of instances of financial statement manipulation, which indicated that the firm's earnings quality was low and earnings information was subject to change. In 2020-2022, the sample consisted of as many as 15 infrastructure firms listed on the IDX, selected using purposive sampling. This study employed multiple linear regression analysis, and moderated regression techniques to analyze the data. The results of this study showed that earnings quality was unaffected by the investment opportunity set (IOS) and earnings persistence. Meanwhile, the firm size did affect the earnings quality. According to the results of moderated regression analysis (MRA), information asymmetry did not reduce the effect of investment opportunity set (IOS), earnings persistence, and firm size on earnings quality.
Keywords: Investment Opportunity Set; Earnings Persistence; Firm Size; Earnings Quality; Information Asymmetry

[*] Corresponding author:
Address: Universitas Negeri Yogyakarta
E-mail: safirasiwipk31@gmail.com

INTRODUCTION

The accuracy and reliability of financial statements are essential in making the right decisions for stakeholders. Earnings quality is not only focused on the amount of profit value earned but more on the ability of earnings as a reliable basis to support decision-making (Kasmir, 2018). Quality earnings must provide accurate, relevant, and reliable information to become a strong foundation. Conversely, low earnings quality indicates that the information presented is not sufficiently reliable or relevant, hindering the ability to make effective decisions. However, the reality is that the earnings presentation in the financial statements is still questionable.

The company manipulates earnings regularly, implying that its earnings do not continuously reflect genuine conditions. One of them is the case of PT Nusa Konstruksi Enjiniring Tbk (DGIK) by making changes to the financial statements which were able to change the current year's loss of Rp5.22 billion to a profit of Rp5.12 billion. Therefore, in order to safeguard creditors, minority shareholders, and future investors, several shareholders have voiced their concerns regarding the changes made to the financial statements and have asked the Indonesian Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX) to investigate the matter (Situmorang, 2023).

Based on these instances, it is possible to conclude that the company's profitability is one of the most crucial factors that financial statement readers consider. Companies should avoid distorting the presentation of their financial accounts. The veracity of a company's earnings information in publicly available financial statements is called earnings quality. Several factors can influence the quality of a firm's profitability such as the investment opportunity set (IOS), the sustainability of revenues, and the firm size.

An investment opportunity set (IOS) establishes the criteria by which the potential for future company expansion is assessed and categorized. The value of IOS depends on the costs decided by management in the future (Sari & Supratiwi, 2019). When principal cannot agree, it is difficult to determine if the manager's actions reflect their desires. Problems that arise, such as environmental changes, including continuous regulatory changes, will undoubtedly change the value of IOS because it can reduce or increase investment opportunities in certain sector companies. It indicates that managers must take the proper steps to determine current decisions.

The description above shows that a high growth opportunity follows a high investment opportunity set. This increase significantly impacts the quality of a company's profitability, with greater IOS resulting in better earnings, which is consistent with a study undertaken by Indriana & Handayani (2021). Meanwhile, research conducted by Ilma & Subardjo (2023) shows that there is no impact of the investment opportunity set (IOS) on the character of earnings. The study results demonstrate that company advantages have an impact on IOS (Sari & Supratiwi, 2019). This research proves that companies must be able to maintain their advantages in order to have greater growth opportunities.

Earnings persistence, specifically the adjustment of forthcoming earnings forecasts in response to current earnings innovation, also impacts earnings quality. Earnings persistence demonstrates the company's capacity to retain earnings year after year. It represents the

caliber of its income that can be relied upon regarding income in the coming year. Earnings persistence in the capital market correlated with stock performance, which is expressed in return, so a higher correlation between company profits and investor profits indicates high persistence.

The current business structure of a company often changes, resulting in earnings persistence becoming problematic due to the complex reconciliation process. Uncertainty after a change in organizational structure because usually the profit earned after a change will fluctuate during and even beyond the transition period, which results in low earnings quality and persistence. This indicates that earnings quality and earnings persistence have a relationship. It is supported by the findings of Tarigan (2022), contrary to the assertions of Alwan and Achyani (2023) which show that earnings persistence significantly improves earnings quality.

In addition, larger companies tend to be more prone to risk due to their large size and exposure to a broader market. Total assets and equity indicate firm size, and the level of revenue as a whole indicates the firm's size. Firm size is just an identified economic factor. As a result, earlier research findings are inconsistent. Desyana et al. (2023) show that firm size influences earnings quality, while previous research conducted by Puteri & Trisnaningsih (2022) shows there is no effect of this variable on earnings quality.

The cases of earnings quality issues (often resulting in earnings manipulation) are closely tied to management. Managers wield greater control over earnings when they possess more information about the internal workings of the company compared to shareholders. This increased information asymmetry can heighten the risk of earnings management (Widjayanti, 2018), highlighting the potential for agency conflicts between managers and shareholders within the firm. The findings of Hasna & Aris (2022) argue that earnings quality is substantially impacted by information asymmetry, whereas Abriantini (2023) argues that information asymmetry does not affect earnings quality.

The current implementation of the ASEAN Economic Community (AEC) and infrastructure initiatives in Indonesia are crucial to developing the country's building industry. Building and construction are among the most compelling industries supporting Indonesia's economic growth. It makes researchers interested in making infrastructure companies the object of research (Mulyati, Umiyati, & Dewi, 2021; Purwanti & Hakim, 2021). In addition, using information asymmetry as a moderating variable makes this research different from previous studies. This study aims to examine the relationship between earnings quality and business size, investment opportunity set (IOS), and the persistence of profits. Additionally, it considers the moderating variable of information asymmetry concerning the supplied rationale and context.

Incorporating information asymmetry as a moderating variable makes this study different and offers a more in-depth analysis. It explores how variations in information availability affect the relationship between earnings quality and factors such as business size, investment opportunity set (IOS), and earnings persistence. Given the impact of information transparency on the decision-making process and the assessment of earnings quality, this adds to the complexity of this study.

The relationship between company owners and managers hired to manage the company is explained in agency theory. According to Ajzen (1991), this theory discusses the misalignment of interests between owners and managers, which can lead to conflicts that affect decision-making. This misalignment arises due to goal differences between the two parties and information asymmetry. The existence of this asymmetry means there is a monitoring cost from the principal to overcome agency conflicts.

One of the three types of monitoring costs that principals generally use is audits. The accounting team audited the financial statements to ensure accuracy and prevent significant errors, thus protecting the company stakeholders from potential losses. As a result, larger companies often face greater scrutiny and have more complicated financial reporting requirements. With this supervision, the audit results will find fewer misstatements, especially in the profits presented by the company in its financial statements. This statement suggests that the caliber of the company's earnings will be influenced by its scale. As the scale of a company expands, the caliber of its earnings also improves.

Spence (1973) pioneered signaling theory to explain how asymmetric information affects decision-making among economic actors. According to Spence (1973), individuals or entities with private information use signals to convey that information to others. Signaling theory can explain investment opportunity set (IOS), earnings persistence, and earnings quality. Based on the signaling theory, investors receive a signal in the form of earnings quality that the management gives. An increase in earnings persistence and IOS signifies a positive signal, as it potentially enhances a company's earnings quality.

The correlation between earnings quality and an investment opportunity set (IOS) is explicable through signaling theory. The caliber of earnings in this circumstance functions as an indicator for investors. If the company can create significant profits from a vast IOS, investors may perceive this as a positive signal about the company's management. The sentence above emphasizes that IOS impacts earnings quality. Prior research conducted by Indriana & Handayani (2021) further strengthens the argument, which means that growth opportunities (IOS) cause an increase in future corporate profits followed by high earnings quality. Other research results show that company excellence has an impact on IOS (Sari & Supratiwi, 2019). This research proves that companies must be able to maintain their advantages in order to have greater growth opportunities. Thus, this study expects that the investment opportunity set (IOS) has a positive effects on earnings quality.

A high earnings persistence usually has a positive relationship with earnings quality. An earnings signal indicating that past earnings can be maintained in the future indicates genuine operational performance rather than mere accounting manipulation. In this case, it means that when earnings persistence is high, it can provide a positive signal for earnings quality because it can improve earnings quality. Based on the description above, high earnings persistence leads to high-quality earnings. Previous research conducted by Tarigan (2022) and Kristanti (2022) supports this assertion. Thus, this study expects that earnings persistence has a positive effects on earnings quality.

Large-scale companies often have higher earnings quality due to their compliance with regulatory authorities and market supervision. The relationship between the two is explained in agency theory and supported by research by Desyana et al. (2023). The quality of a company's earnings seems directly proportional to its scale. In order to prepare financial statements and sustain internal control procedures, large organizations frequently incur fixed expenses. Thus, this study expects that firm size has a positive effects on earnings quality.

Agency theory explains that high information asymmetry can moderate the effect of IOS on earnings quality by creating a gap between actual information about investments made and earnings reports reported to shareholders. This assertion is supported by signaling theory, which explains the correlation between earnings quality and IOS. These assertions align with the findings of two studies (Indriana & Handayani, 2021; Hasna & Aris, 2022). The former demonstrates a positive correlation between earnings quality and the Investment opportunity set (IOS) variable and the latter, information asymmetry, which significantly impacts earnings quality. Thus, this study expects that information asymmetry moderates the effect of the investment opportunity set (IOS) on earnings quality.

Management can use information asymmetry to manage earnings and consistently strengthen their position regarding earnings persistence. Signaling theory explains that when earnings persistence is high, it can provide a positive signal for earnings quality because it can improve earnings quality. Tarigan (2022), Kristanti (2022), and Hasna & Aris (2022) stated that earnings persistence has a positive and considerable influence on earnings quality, in contrast to claims that knowledge asymmetry significantly impacts earnings quality. Thus, this study expects that information asymmetry moderates the effect of earnings persistence on earnings quality.

Information asymmetry associated with firm size can strengthen earnings quality. Large companies may have better access to information but also have a greater responsibility to ensure transparency and reliability of information. The quality of earnings and the relationship between the two are elucidated by agency theory. As the scale of a company increases, so does the caliber of its earnings. A study conducted by Desyana et al. (2023) Shows that the size of a company is directly proportional to the quality of its earnings. According to Hasna & Aris (2022), earnings quality is significantly impacted by information asymmetry. Thus, this study expects that information asymmetry moderates the effect of firm size on earnings quality. Figure 1 presents the research framework of this study.
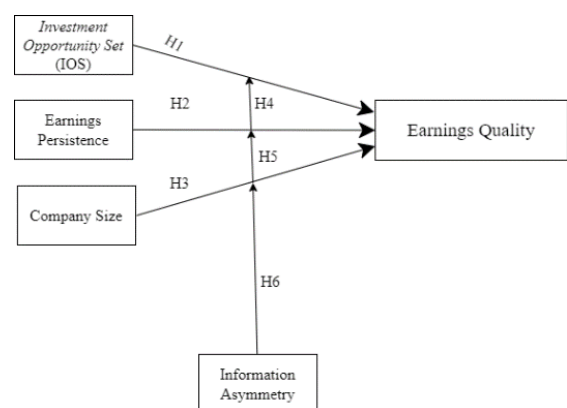
Figure 1. Research Framework

RESEARCH METHODS

This study aims to examine the effect of investment opportunity set, earnings persistence, and firm size on earnings quality

with information asymmetry as a moderating variable. This study uses a quantitative design with a type of research in the form of a comparative causal through causal correlation between the variables described. This study focuses on infrastructure businesses listed on the Indonesia Stock Exchange from 2020 to 2022. Research methods, such as descriptive and moderated regression analyses, can help researchers identify the link or influence of the problem under study.

The companies used as samples are infrastructure sector companies listed on the IDX in 2020-2022 because according to Bappenas (2023), this sector grew significantly compared to the previous quarter with a growth of 5.2% (YoY), the highest growth since the beginning of 2020 in line with the infrastructure development target in 2023. In addition, the use of these three years corresponds to the growth of this sector which is a result of the continued development of the National Capital City (IKN). Finally, cases of manipulation in this sector recorded by the Indonesia Corruption Watch (ICW) are also high in both infrastructure in health and education development. Research methods, such as descriptive and moderated regression analyses, can help researchers identify the link or influence of the problem under study.

A total of sixty-seven companies from the infrastructure sector listed on the IDX between 2020 and 2022 made up the study's population. From this demographic, 15 companies were selected, with a vulnerable period of data observation spanning three years from 2020-2022. The sampling technique, purposive sampling, follows specific considerations or criteria based on research objectives. The criteria set are as follows:

1. Businesses that debuted on the Indonesia Stock Exchange between 2020 and 2022 will not be included in the research samples if they debuted that same year.
2. Companies present annual financial reports for 2020-2022.
3. Have positive profits and do not experience losses from 2020 to 2022.
4. Companies present the financial statements in Rupiah.
5. Companies with share prices of 0 on the announcement date of their financial statements are among those with the lowest or highest values removed from samples.

This study uses three independent variables consist of earnings persistence, investment opportunity set (IOS), and firm size. Meanwhile, this study uses information asymmetry as a moderating variable. Furthermore, the dependent variable in this study is earnings quality.

Paton & Littleton (1940) define profit as an increase in wealth over time due to productive activities. When evaluating the quality of earnings, financial statements should present actual earnings and their impact on decision-making. The quality of earnings itself can be seen by how earnings describe the sustainability of future profits with determining components such as accruals and cash (Jayanih et al., 2023). Earnings quality refers to the reliability, relevance, and accurate representation of a company's performance as reflected in its financial statements. In this study, earnings quality was measured using CFO divided by net income.

Investment opportunity set (IOS) is the company's investment activities that aim to determine what the company will get in the future (Sari & Supratiwi, 2019). IOS can also be

said to be an alternative to utilizing net income by companies by reinvesting or sharing it in the form of dividends (Jumady et al., 2022). IOS explains the amount of investment probability for the company. Companies with high growth are where the investor typically finds high investment opportunities. In this study, IOS was measured using the following formula:

$$\frac{MV}{BVA} = \frac{(TA-TE)+(\text{Outstanding shares x CP})}{\text{Total Asset}}$$

Earnings persistence describes a company's ability to hold on to its earnings, both now and in the future (Petra et al., 2020). The number of transition elements that affect current profits increase profits significantly but do not affect future profits. It can cause profits to rise and fall simultaneously due to fluctuations. The earnings persistence is measured using the following formula:

$$\text{Earnings Persistence} = \frac{EBT_{t-1}-EBT_t}{\text{Total Asset}}$$

The magnitude of a corporation (firm size) is ascertained by its total assets, volume of sales, or share value. Hery (2017) divides a business into three categories such as large, medium, and tiny. In this study, firm size was measured using a natural logarithm of total assets.

The other party has less information than the first party regarding information asymmetry. For example, company managers have more information in the capital market than investors. Scott (2009) argues that information asymmetry into two types, namely adverse selection (the type of information obtained between parties when going to or carrying out commercial transactions) and moral hazard (the information in which one party can watch the actions of another but the other party

cannot). The information asymmetry was measured using SPREAD with the following formula:

$$SPREAD_{it} = \frac{(ask_{it}- bid_{it})}{[(ask_{it}+bid_{it})/2]} \times 100$$

Multiple linear regression tests and moderation regression analysis are methods used to evaluate the data precisely to determine the relationship or influence of the variables studied. In the interim, discovering which model is most suited to the panel data used in this study is the goal of the model selection test. The classical assumption test is another tool for determining if a regression model is suitable. The model that includes multiple linear regression (Model 1) and moderated regression equations (Model 2) goes below:

$$EQ = \alpha + \beta_1 IO + \beta_2 EP + \beta_3 FS + \beta_4 IA + e \text{ (Model 1)}$$

$$EQ = \alpha + \beta_1 IO + \beta_2 EP + \beta_3 FS + \beta_4 IA + \beta_5 IO*IA +$$

$$\beta_6 EP*IA + \beta_7 FS*IA + e \text{ (Model 2)}$$

Notes:

EQ	=	Earnings Quality
α	=	Constants
$\beta_1 - \beta_7$	=	Regression coefficients
IO	=	Investment Opportunity Set
EP	=	Earnings Persistence
FS	=	Firm size
IA	=	Information Asymmetry
IO*IA	=	The interaction between investment opportunity set and information asymmetry
EP*IA	=	The interaction between earnings persistence and information asymmetry
FS*IA	=	The interaction between firm size and information asymmetry
E	=	Error

This study employs six hypotheses. Below are the hypotheses that can be formulated

based on the given regression model:

H1 : Investment opportunity set (IOS) has a positive effect on earnings quality (EQ).

H2 : Earnings Persistence (EP) has a positive effect on earnings quality (EQ).

H3 : Firm size has a positive effect on earnings quality (EQ).

H4 : Information asymmetry (IA) moderates the effect of the investment opportunity set (IOS) on earnings quality (EQ)

H5 : Information asymmetry (IA) moderates the effect of earnings persistence (EP) on earnings quality (EQ)

H6 : Information asymmetry (IA) moderates the effect of firm size (FS) on earnings quality (EQ)

There are several assumptions for the hypothesis testing. The hypothesis is supported if the variable has a probability value < 0.05 and the direction of the regression coefficient is in line with the hypothesis. Meanwhile, when the variable has a probability value < 0.05 but the direction of the regression coefficient is not in line with the hypothesis or when the variable has a probability value > 0.05, thus the hypothesis is not supported.

RESULTS AND DISCUSSION
Results

The samples of this study consist of 15 companies for the period of 2020 – 2022. Therefore, this study consists of 45 firm-year observations. To get the best regression model, this study examines the best model using the Chow test and the Lagrange Multiplier test. The result of the chow test is presented in Table 1.

Table 1. The Result of the Chow Test

	Probability
Cross-section Chi-square	0.1841

Source: processed data, 2023

Based on Table 1, it is known that the probability cross-section chi-square value is 0.1841 > α 0.05. It is indicated that the common effect model (CEM) is the most suitable regression model. Furthermore, the result of the Lagrange Multiplier test is presented in Table 2.

Table 2. The Result of the Lagrange Multiplier Test

	Test-Hypothesis Both
Breusch-Pagan	0.9757 (0.3233)

Source: processed data, 2023

According to Table 2, it is known that the Breusch-Pagan value is 0.3233. This value is more than the significance threshold of α 0.05. This indicates that the common effect model (CEM) is the appropriate regression model. This study employs a classical assumption test to get the best linear unbiased estimator model. The classical assumption test consists of a normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. The result of the normality test is presented in Table 3.

Table 3. The Result of the Normality Test

	Value
Jarque Bera	3.6740
Probability	0.1592

Source: processed data, 2023

Based on Table 3, it is known that the Jarque Bera probability value is 0.1592 > α 0.05. It means that the residual data of this study has a normal distribution. The second classical

assumption test is a multicollinearity test. This test informs about the correlation between independent variables. The result of the multicollinearity test is presented in Table 4.

Table 4. The Result of the Multicollinearity Test

	IOS	EP	FS
IOS	1.0000	-0.0855	0.0047
EP	-0.0855	1.0000	0.1764
FS	0.0047	0.1764	1.0000

Source: processed data, 2023

Based on Table 4, the correlation between investment opportunity set (IOS) and earnings persistence (EP) is -0.0855, while the correlation between ISO and Firm size (FS) is 0.0047. The correlation between earnings persistence and firm size is 0.1764 < 0.90. This indicates that there is no correlation between independent variables. Furthermore, the result of the autocorrelation test is presented in Table 5.

Table 5. The Result of the Autocorrelation Test

	Value
Durbin-Watson statistics	2.0370

Source: processed data, 2023

In this study, the samples consist of 45 firm-year observations (n = 45) with three independent variables (k = 3). Based on the Durbin-Watson table with α = 5%, the D_l value is 1.3832, the $4 - D_l$ value is 2.6168, while the D_u value is 1.6662, and the $4 - D_u$ value is 2.3338. Based on the Table 5, the Durbin Watson (D_w) value is 2.0370, therefore the Durbin-Watson autocorrelation test results are $D_u < D_w < 4 - D_u = 1.6662 < 2.0370 < 2.3338$. Based on these results, it can be concluded that there is no autocorrelation problem in this study. The last result which is the heteroscedasticity test is presented in Table 6.

Table 6. The Result of the Heteroskedasticity Test

	Value
Obs*R-squared	8.1963
Prob. Chi-Square (4)	0.0846

Source: processed data, 2023

Based on Table 6, the Obs*R-squared value (Prob. Chi-Square) is 0.0846 > 0.05. Thus, it can be concluded that there is no heteroscedasticity problem in this study. After the regression model passes the classical assumption test, this study continues the test with the regression analysis test. As stated in the previous section, this study employs two regression models. The first model is multiple linear regression to examine the effect of investment opportunity set, earnings persistence, and firm size on the earnings quality. The result of the multiple linear regression is presented in Table 7.

Table 7. The Result of the Multiple Linear Regression

Variables	Coefficient	Probability
Constant	-8.3389	0.0108
IOS	0.5339	0.1904
EP	-9.6055	0.2670
FS	0.3081	0.0049
IA	-0.1228	0.2795

Notes: IOS = Investment opportunity set; EP = Earnings persistence; FS = Firm size; IA = Information asymmetry

Source: processed data, 2023

Based on Table 7, the investment opportunity set (IOS) has a coefficient value of 0.5339 and a probability value of 0.1904 > 0.05. Therefore, the hypothesis H1 is not supported. It means that the investment opportunity set does not affect earnings quality. The earnings persistence has a coefficient value of -9.6055

with a probability value of 0.2670 > 0.05. Thus, hypothesis H2 is not supported. It means that the earnings persistence does not affect earnings quality. The firm size has a coefficient value of 0.3081 with a probability value of 0.0049 < 0.05. Thus, hypothesis H3 is supported. It means that firm size has a positive effect on earnings quality. A further test to know the moderating effect of the information asymmetry is examined through moderated regression analysis which is presented in Table 8.

Table 8. The Result of the Moderated Regression Analysis Test

Variable	Coefficient	Probability
Constants	-1.1515	0.8295
IOS	0.7670	0.2498
EP	-22.8871	0.0936
CS	0.0398	0.8188
IA	-3.2101	0.0899
IOS*IA	-0.0683	0.7631
EP*IA	3.3983	0.3389
FS*IA	0.1131	0.0666

Notes: IOS = Investment opportunity set; EP = Earnings persistence; FS = Firm size; IA = Information asymmetry; IOS*IA = Interaction between investment opportunity set and information asymmetry; EP*IA = Interaction between earnings persistence and information asymmetry; FS*IA = Interaction between firm size and information asymmetry

Source: processed data, 2023

Based on Table 8, the information asymmetry is insignificant as a moderator of the effect of the investment opportunity set on earnings quality cause the IOS*IA has a probability value of 0.7631 > 0.05. Therefore hypothesis H4 is not supported. It means that

information asymmetry does not moderate the effect of the investment opportunity set (ios) on earnings quality. The EP*IA has a coefficient value of 3.3983 with a probability value of 0.3389 > 0.05. Thus hypothesis H5 is not supported. It means that information asymmetry does not moderate the effect of earnings persistence on earnings quality. The FS*IA has a coefficient value of 0.1131 with a probability value of 0.0666. Therefore, hypothesis H6 is not supported. It means that information asymmetry does not moderate the effect of firm size on earnings quality.

The coefficient determination test informs about the ability of all the independent variables to explain the variation of the dependent variable. The result of the coefficient determination test is presented in Table 9.

Table 9. Result of Determinant Coefficient

	Value
R-squared	0.254185

Source: processed data, 2023

Based on Table 9, it is known that the coefficient of determination (R-squared) is 0.2541. This value means that investment opportunity set, earnings persistence, and firm size simultaneously explain earnings quality by 25.41%. Meanwhile, the 74.59% is explained by other factors which are not studied in this study.

Discussion

This study finds that the investment opportunity set does not affect earnings quality. The findings of this investigation are consistent with those of Ilma & Subardjo (2023) and Jumady et al. (2022). Since there is no relationship between investment opportunity set and earnings quality, it follows that fluctuations in investment opportunity set value

do not significantly impact earnings quality. This situation is because investors do not focus on investment opportunity set in making investment decisions but are more concerned with and pay attention to the profits generated by the company. Indirectly, investors' motivation to invest is often only for short-term gains. In addition, Using results manipulation methods in financial statements may influence the accuracy of the results, but it will not affect the value of the company's operations in and of itself.

This study finds that earnings persistence does not affect earnings quality The findings of this investigation are consistent with those of Alwan & Achyani (2023) and Priskanodi et al. (2022). Undoubtedly, the presence of transitory earnings causes annual fluctuations in the company's generated profits. Earnings persistence here cannot affect or reflect earnings quality because temporary values in company profits cannot serve as predictions of future earnings. In addition, to be declared quality, financial statements must meet the criteria of relevant, reliable, comparable, and trustworthy so that if the reported profit does not reflect the actual condition of the company's economy even though the company was able to maintain the previous year's profit, this does not necessarily mean that the company's profit quality is good.

The results of this study explain that firm size has a positive effect on earnings quality. Those findings is consistent with prior investigations carried out by Desyana et al. (2023), Tarigan (2022), and Kristanti (2022). It demonstrates that as the scale of a company increases, so does the caliber of earnings produced by that company. Generally, large companies have stabilized in terms of

operations to generate profits in the following years. Companies with a large number of assets can increase future profits by expanding. In addition, although larger companies tend to be more vulnerable to risk due to their large size and exposure to a broader market, They attract greater interest from stakeholders, including investors, and prevent extreme profit fluctuations. Investors pay great attention to a company's size since it is a crucial indicator of its financial performance quality.

The results of this study are consistent with both signaling and agency theories. According to signaling theory, larger companies are perceived to have more stable operations and greater potential for future profitability. This perception serves as a positive signal to investors, indicating higher quality earnings and thus attracting greater interest from stakeholders. On the other hand, from an agency theory perspective, larger companies tend to have more resources and mechanisms in place to mitigate risks and ensure consistent earnings performance. This aligns with the notion that larger firms are better equipped to manage agency conflicts and maintain stable earnings quality.

In conclusion, the findings underscore the importance of firm size as a crucial indicator of a firm's financial performance quality. Larger companies not only demonstrate more stable operations and greater potential for future profits but also attract greater interest from investors, contributing to the overall stability and confidence in the market.

This study finds that the impact of investment opportunity set on earnings quality does not appear to be moderated by information asymmetry due to increased investor interest in company information. This

increased interest allows investors to conduct in-depth analysis by quickly accessing financial reports through electronic media to understand the investment opportunities available.

Along with increased transparency, company information increases investor confidence in the company, thereby reducing uncertainty in making investment decisions. In addition, the investment opportunity set, which means investment opportunities, is more influenced by other factors such as market conditions, technological advances, and the condition of the industry itself, so information asymmetry is not proven to moderate this variable.

This study finds that information asymmetry does not moderate the effect of earnings persistence on earnings quality. These results align with Rachmawati (2021), which states that it has not been demonstrated that information asymmetry moderates the influence of earnings persistence on earnings quality. There is no evidence that knowledge asymmetry affects the correlation between earnings quality and earnings persistence, as it impedes the ability to differentiate between genuine and manipulated earnings. In the context of earnings persistence, although earnings have a high level of persistence, which should be a good indicator of earnings quality, high information asymmetry can make it difficult for outsiders to distinguish earnings that truly reflect company performance from earnings that are adjusted or manipulated to trick or influence perceptions.

The effect of firm size on earnings quality is not found to be moderated by information asymmetry. The mitigating effect of information asymmetry has prevented the conclusive demonstration of the link between business size and profit quality, as firm size tends to indicate greater internal oversight and control. In this context, larger companies have more vital internal monitoring and control systems, such as more active audit committees or strict corporate governance practices. It can certainly reduce the potential for information manipulation. Moreover, despite information asymmetries, large companies may have more information available to the public, reducing significant information gaps.

CONCLUSION

This study aims to examine the effect of investment opportunity set, earnings persistence, and firm size on earnings quality with information asymmetry as a moderating variable. Based on the study results, there are several conclusions. First, the investment opportunity set (IOS) based on the MV / BVA ratio does not affect earnings quality as indicated. It means investors' motivation to invest is often only for short-term gains. Second, earnings persistence based on measurement by subtracting the previous year's profit before tax from the current year's profit before tax divided by total assets does not affect earnings quality. It is because high transitory earnings result in profits generated by the company tending to fluctuate yearly, so earnings persistence here cannot affect earnings quality or even reflect earnings quality.

Third, the quality of earnings is influenced by the firm size. It indicates that as the scale of a company increases, so does the caliber of earnings it generates. In addition, the bid-ask spread is the foundation of the existing information imbalance. The correlation between investment opportunity set and earnings quality does not seem to be moderated by the spread.

Increased investor interest in company information so that they can understand the available investment opportunities.

Fifth, information asymmetry based on bid-ask spread has not been proven to moderate the effect of earnings persistence on earnings quality, because it inhibits the ability to distinguish actual earnings from manipulated ones. Sixth, information asymmetry based on bid-ask spread has not been proven to moderate the effect of firm size on earnings quality, because firm size is an indicator of determining more substantial supervision and internal control.

There are limitations to this study: the population used is limited to the infrastructure sector, the data used is 2020 - 2022, where 2020 is a pandemic year that results in an economic crisis and the following year is still in the recovery stage, and the use of multiple regression where the results obtained are estimated values, so the possibility of not being under actual data remains. Regarding this research, the researchers expected companies in and outside the sample to consider the research results to report better earnings quality.

As shown in the company's financial statements, investors and other stakeholders should consider elements that affect profit quality, such as firm size over time. The researchers hope that further research can examine other elements related to earnings quality, such as the quality of corporate social responsibility, and alternative proxies for earnings quality, such as the Earning Response Coefficient (ERC). The sample size and year should increase to obtain more representative research results.

For company management, the implications are profound. Recognizing the significance of firm size and other determinants of earnings quality, management should prioritize strategies aimed at maintaining or enhancing these factors. This may involve strategic decisions regarding business expansion, operational efficiency improvements, and transparent communication with stakeholders. By actively managing these elements, companies can bolster investor confidence, attract capital investment, and ultimately foster sustainable growth and profitability.

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