Humanities and Social Sciences Letters
2021 Vol. 9, No. 3, pp. 250-259.
ISSN(e): 2312-4318
ISSN(p): 2312-5659
DOI: 10.18488/journal.73.2021.93.250.259

EARNINGS QUALITY AND AUDIT QUALITY: ANALYSIS OF INVESTOR REACTION

Deden Tarmidi[1+]
Etty Murwaningsari[2]
Zuhal Maftuh Ahnan[3]

[1,3]*Department of Accounting, Faculty of Economics and Business, Universitas Mercu Buana, Jakarta, Indonesia.*
[1]*Email: deden.tarmidi@mercubuana.ac.id Tel: 6281806323331*
[3]*Email: ahnanzuhal@gmail.com Tel: 6221-5840816*
[2]*Department of Accounting, Faculty of Economics and Business, Universitas Trisakti, Jakarta, Indonesia.*
[2]*Email: etty.murwaningsari@trisakti.ac.id Tel: 6221-56969066*

(+ Corresponding author)

Article History
Received: 2 June 2021
Revised: 30 June 2021
Accepted: 4 August 2021
Published: 25 August 2021

Keywords
Earnings quality
Audit quality
Investor reaction
Financial performance.

ABSTRACT

This study aims to analyze investor reaction to management behavior in preparing financial reports, especially earnings quality and audit quality. We also analyze the effect of financial performance as moderation. Generally, investors react positively to a company's financial performance, but the amount of fraud surrounding financial information, including auditor cooperation, raises big questions for investors about a company's financial information. We analyzed companies within the manufacturing sector that were listed on the Indonesia Stock Exchange from 2015 to 2019, and it was found that investors reacted positively to earnings quality and audit quality moderated by financial performance. These results provide evidence that management should focus on earnings quality in financial reports and on the audit process to ensure quality and exceptional financial performance to obtain positive reactions from investors, which has a positive impact on increasing the value of companies' shares. This study used the stock prices on the publication date of the financial statements, which reflect the direct reactions of investors to the information contained in the financial statements, such as earnings quality, audit quality, and financial performance. The different investor reactions were apparent on the day of the deadline for submitting financial statements according to existing regulations. These results reflect that the use of stock prices on the publication dates more accurately describes the reaction of investors than on the deadline for submitting financial statements.

Contribution/Originality: This study contributes to existing literature by investigating investor reaction to management behavior in preparing financial reports, especially earnings quality and audit quality.

1. INTRODUCTION

The change in the status of a private company to a public company is based on several reasons, one of which is receiving funding from investors through buying and selling shares on the stock exchange. As an internal entity aware of the ins and outs of a company's internal transactions, management will make various efforts to portray their companies positively to attract investors.

As people who do business, on the other hand, investors do not want to be reckless when making choices in stock transactions. Some investors consider the maximum return in the form of returns in the short term, while other groups consider stable returns in the long term, including a company's relationship with the community (Waluyo, 2017). Of the two types, investors' analysis of the issuer will differ as well as their reactions to the information published by the issuer through annual reports and financial reports (Melgarejo, Montiel, & Sanz, 2016; Sunder, 2017).

Written laws in the statutory provisions of the country or the business world, as well as unwritten laws that apply to the general public, are a reference or guide for every community for carrying out activities and must be followed. Law number 40 of 2007 concerning Limited Liability Companies and Law Number 8 of 1995 concerning the capital market are laws that must be obeyed by companies listed on Indonesia Stock Exchange. Several provisions state that the issuer is prohibited from taking any action that could drop the price of its shares in the market. Concerning financial reports, several cases can be used as examples of how the actions of companies that do not comply with the rules receive negative reactions from investors in the form of falling share prices and even the company's bankruptcy. For example, the Enron case involving external auditors where financial statements were manipulated destroyed the company. In Indonesia itself, there was a case in Garuda Indonesia, where recorded revenue did not comply with accounting standards, which the auditors discovered, causing chaos.

With the many cases of misappropriation of financial statements, the earnings quality of financial information is very important for investors to avoid being trapped due to wrong predictions of future returns (Shahzad, Rehman, Colombage, & Nawaz, 2019), although some studies found a positive impact on predicted returns from good earnings management in the form of accruals or real earnings management (Rachmawati, 2019). Including the quality of audits that accompany the financial report preparation process, a quality audit can produce financial reports that comply with applicable standards (Williem & Aryati, 2017) to help investors predict earnings and achieve positive reactions.

However, as investors aim to invest in those who promise high returns in the future, the value of profit or financial performance is still a primary concern for investors (Anwaar, 2016; Macharia & Gatuhi, 2013). Also, technical analysis is still widely used by investors in Indonesia (Utami, Nugroho, & Farida, 2017). With a high-profit value, investors will react more positively to the quality of earnings and audit quality of the issuer's financial reporting process.

This study attempts to analyze the effect of earnings quality and audit quality on investors' reactions and financial performance as a moderator to provide information for management on how investors react to published financial information, either quantitatively in the form of earnings values, which are commonly used as proxies of financial performance, or qualitatively. The process of preparing financial statements is proxied by earnings quality and audit quality.

2. THEORY AND HYPOTHESIS

2.1. Signaling Theory

The signaling theory is used as the main theory of this study. Signaling theory in the business world is an action taken by a company's internal management to guide investors regarding the company's condition or prospects (Brigham & Ehrhardt, 2005).

Companies with good prospects tend to avoid selling current shares and prefer to take other actions to advance the company, such as through debt, even though it exceeds the limited capital structure. On the other hand, companies with unfavorable prospects for the future tend to sell their shares and implement certain policies to attract investors' attention. The announcement of the sale of shares by a company is generally a signal that the condition of the company is not good. Because of these signals, when a company offers to sell new shares more often, the stock price usually drops because the public has become aware of the negative signal the company has given.

Brigham & Houston (2014) defined a signal as an action taken by a company to inform investors about how management views the company's future prospects. The signals given by the company are circulated in the form of information about what internal management has done to realize the targets of investors. That way, investors will see that management is efficient and performs well.

Because the signal is given by the management of the company through information, any information provided has an important meaning for investors regarding their funding or investment decisions through buying and selling shares on the stock exchange. Essentially, valuable information includes notes, or descriptions of events that have occurred in the past, actions currently being taken, or prospects that will occur in the future in connection with company policies on conducting company business.

2.2. Earnings Quality and Investor Reaction

Earnings quality is the quality of the information in published financial reports, especially earnings information. Financial reports are of higher quality if the reported earnings are free from earnings management so that investors can predict future earnings more accurately based on the current year's earnings information (Dayanandan & Sra, 2018). High profits get a more positive reaction from investors (Abdallah, 2018) concerning investment efficiency (Houncine, 2017).

The real profit of a company that is free from accrual earnings management indicates higher quality financial reports, and investors will be helped by this information because the analysis in predicting future earnings is more accurate. With high earnings quality, investors will respond positively (Salehi, Tagribi, & Farhangdoust, 2018; Shahzad et al., 2019; Sugiarto & Deviesa, 2017).

H1. Investors react to the quality of earnings on a company's financial statements.

2.3. Audit Quality and Investor Reaction

Audit quality is about processing information accurately, thoroughly, and without bias to produce reliable financial reports. Generally, audit quality is proxied by the size of the auditing company. Although this is not always the case, the "big four" auditors (Deloitte, KPMG, PwC, and Ernst & Young) are considered to be of higher quality because of the size of the organization in the auditing world and their processes are always updated and they use better methods. High audit quality is proven to reduce the risk of stock decline (Khajavi & Zare, 2016), thereby affecting investment policy (Rahayu & Darmawati, 2011). Farouk & Hassan (2014) and Matoke & Omwega (2016) found that the audit quality proxied by the big four auditors received a positive reaction from investors because it is believed that their processes are better and more orderly according to applicable standards.

H2. Investors react to the audit quality of the company's financial statements.

2.4. Moderation of Financial Performance on Earnings Quality, Audit Quality and Investor Reaction

Investors expect a good return in the form of dividends, which are distributed when the company has accrued sufficient profits. Good management performance is looked on high-profit companies as well as the company's financial performance indicators, thus the indicator becomes a matter being considered by investors. Anwaar (2016) and Macharia & Gatuhi (2013) found that financial performance with indicators has a positive impact on investor reactions. High financial performance, as proxied in ROA, ROE, and NIM, has an impact on investors' positive reactions in the form of stock prices (Wulansari & Prihantoro, 2018).

Even though the quality of financial information in the form of earnings quality and audit quality influences investors' reactions, financial performance can still be considered information in investment policy.

H3a. Investors react to earnings quality moderated by financial performance.

H3b. Investors react to audit quality moderated by financial performance.

3. METHOD

3.1. Sample

The population of this research comprises manufacturing companies listed on the Indonesia Stock Exchange in the 2015–2019 period. Manufacturing companies are a type of issuer whose growth is quite high both in terms of the number of issuers and the number of transactions on the stock exchange. A total of 545 manufacturing company financial statements and stock prices were used and analyzed in this study after going through a purposive sampling procedure.

3.2. Measurement Variables

3.2.1. Dependent Variables

Investor reaction is the dependent variable in this study, and it is defined as the behavior of investors in reacting to financial information published by the issuer. In this study, investor reactions are proxied on the closing stock price at the time the issuer's financial statements are published (Fahlevi, Asmapane, & Oktavianti, 2018). In the sensitivity test, investor reactions are measured by adopting the research of Li & Wang (2016), who used the closing stock price at the deadline for submitting financial statements according to regulations on the stock exchange. In Indonesia, the deadline for submitting financial statements is the end of the third month after the end of the financial year, as stated in KEP-346/BL/2011.

3.2.2. Independent Variables.

Earnings quality is the value of earnings that is reported to be close to the true value without manipulation. The number of earnings quality measurements used in previous research indicates that there is no single measure for calculating them (Dechow, Hutton, Kim, & Sloan, 2012; Yasser, Mamun, & Ahmed, 2016). Earnings quality in this study adopts the research of Yasser et al., 2016, which regresses total accrual with an increase in income, compilation, and ROA. Total accruals are measured by adopting the research of Chen, Cheng, & Wang (2015) and Yasser et al. (2016) by reducing non-cash current assets with non-interest-bearing liabilities, minus depreciation expenses. The residual results in the regression process illustrate the abnormal accrual value or earnings management score (Peterson, Schmardebeck, & Wilks, 2015). A greater abnormal accrual value or value of earnings management indicates a low earnings quality. To obtain the earnings quality value, this abnormal accrual value is multiplied by -1 after being absolute (Perotti & Wagenhofer, 2014). Adopting research by Williem & Aryati (2017) and Murwaningsari (2014), the audit quality of this study uses a nominal scale – "1" for companies audited by one of the "big four", and "0" for companies audited by a non-big four company.

3.2.3. Moderating Variable.

This study uses financial performance as a moderating variable to analyze the comparative effects of earnings quality and audit quality on investor reactions. Return on equity (ROE) is used to show a company's ability to generate profit using total resources, namely the equity assets owned by the company (Kasmir, 2016).

4. DATA ANALYSIS AND RESULTS

Based on purposive sampling, there are 545 manufacturing company financial statements and stock prices were processed and analyzed using STATA software.

Table 1. Descriptive Statistics.

Variable	EQ	FP*EQ	FP*AQ	IR
Min.	-4.18242	-0.81933	-1.41960	50
Max.	-0.00049	2.05708	1.55124	111.400
Mean	-0.23771	-0.01246	0.05197	2.916
Std. Dev.	0.41539	0.17089	0.20459	9.027

Note: EQ = Earnings Quality, AQ = Audit Quality, FP = Financial Performance, IR = Investor Reaction.

Table 1 presents the descriptive statistics in this regression model. With a mean value of -0.23771, or -23.77%, it explains that the earnings quality of the unit of analysis is quite good with low manipulation of earnings in published financial information. With a mean value of -0.01246, or -1.24%, it explains that the average value of moderation between financial performance and earnings quality in the unit of analysis is quite high because the company's financial performance information is minimal from earnings manipulation using discretionary accruals, and a mean value of 0.05197 explains that the average value of moderation between financial performance and audit quality in the unit of analysis is quite high because the company's financial performance information has been audited by good quality auditors. The closing share price of the entity on the publication date of the financial statements is very far apart, namely between IDR 50 to IDR 111,400. Figure 1 explains that 42% of units were audited by one of the big four and the rest were audited by a non-big four company.

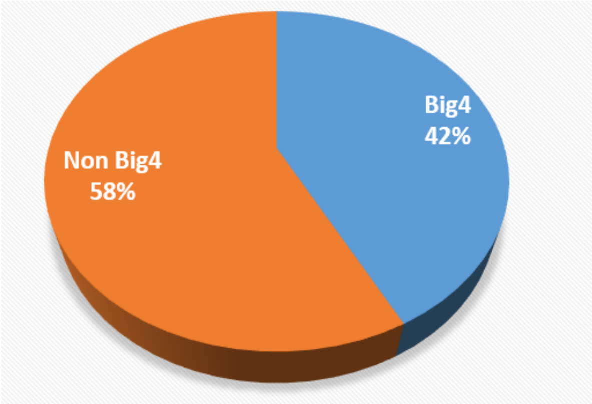

Figure 1. Audit Quality.

The advantage of panel data compared to other types of data is that there is a model selection that fits the existing data, because panel data is a combination of time series and cross-sectional data, so that the research regression model must be precise in describing the existing data (Gujarati, 2012). Based on the results of the Chow test, LM test, and Hausman test, it was concluded that the fixed effect model is the most appropriate for use in this study.

Based on the model suitability test on the research data, namely the common effect, the ordinary least squares (OLS) is used to estimate the effect of the independent variable on the dependent variable (Zulfikar, 2018). In the normality test, it is known that the observed data of 545 has a p-value of 0.145, which, if above 0.05, the data is normally distributed. In the multicollinearity test, it is known that all VIF values in each variable are not greater than ten because the range of VIF values for each variable is between 1.02 and 1.55, so can be said that the model passes the multicollinearity test.

In the heteroscedasticity test, the Prob > chi2 value is 0.0001, which is smaller than 0.05, so the research data is indicated to have symptoms of heteroscedasticity. This is because the moderating value is the result of independent multiplication, namely earnings quality and audit quality with the moderating variable of financial performance. To treat the symptoms of heteroscedasticity, robustness is then carried out according to general statistical rules using STATA software. In the autocorrelation test, the prob > F value is 0.0000, or less than 0.05, so the observed data indicate autocorrelation symptoms. This is because the moderating value is the result of independent multiplication, namely earnings quality and audit quality with the moderating variable of financial performance. To treat the symptoms of autocorrelation, a Prais–Winsten estimation was carried out according to general statistical rules using STATA software.

The results of the main hypothesis (H1) (see Table 2) show a sig value of 0.042, which means that investors have a significant reaction to the quality of earnings in the entity's published financial statements, so H1 is accepted. The sig value of 0.466 in H2 indicates that investors do not react to audit quality in the process of preparing financial statements, so H2 is rejected.

Table 2. Main Hypothesis.

Model 1: IR $= \beta_0 + \beta_1 EQ + \beta_2 AQ + \varepsilon$					
Variable	**Coef.**	**t-stat.**	**Sig.**		**Result**
H1. EQ -> IR	0.15106	2.04	0.042	**	Approved
H2. AQ -> IR	0.06236	0.73	0.466		Rejected
N	545				
F	0.0885*				
R-squared	0.1153				

Note: EQ = Earnings Quality, AQ = Audit Quality, FP = Financial Performance, IR = Investor Reaction.

* Significant at 10%, ** Significant at 5%, *** Significant at 1%

Table 3. Moderating Hypothesis.

Model 2 : IR $= \beta_0 + \beta_1 EQ + \beta_2 AQ + \beta 3EQ*FP + \beta 4AQ*FP + \varepsilon$					
Variable	**Coef.**	**t-stat.**	**Sig.**		**Result**
EQ -> IR	0.12792	1.72	0.086	*	Accepted
AQ -> IR	0.01711	0.20	0.842		Rejected
H3a. EQ*FP -> IR	-0.04520	-0.56	0.574		Rejected
H3b. AQ*FP -> IR	0.30271	2.79	0.006	***	Accepted
N	545				
F	0.0058***				
R-squared	0.2689				

Note: EQ = Earnings Quality, AQ = Audit Quality, FP = Financial Performance, IR = Investor Reaction.

* Significant at 10%, ** Significant at 5%, *** Significant at 1%

The results of H3a, as described in Table 3, show a sig value of 0.574, which means that investors do not have a significant reaction to the value of a company's financial performance, so H3 is rejected. The sig value of 0.006 for H3b shows that investors react to a company's financial information that has been audited by a qualified auditor, so H4 is accepted.

With an R-squared value of 26.89%, model 2 is considered better than model 1. An R-squared value of 11.53% indicates that the influence of financial performance as a moderator is quite high and the value of profit as an indicator of financial performance is still very much needed and is one of the factors that influences financial performance. These are indicators that encourage investors to trade on company shares.

Many studies have analyzed investor reactions with various indicators, such as closing stock prices or stock trading volumes. Studies that used the closing stock price indicators are unique with their respective arguments. Adopting the research of Li & Wang (2016), in the sensitivity test of this study, a regression test was conducted to analyze the effects of earnings quality and audit quality as well as financial performance moderation on closing stock prices on the deadline for submitting financial statements according to Indonesian regulations.

Table 4. Sensitivity Test 1.

Model 3 : IR $= \beta_0 + \beta_1 EQ + \beta_2 AQ + \varepsilon$			
Variable	**Coef.**	**t-stat.**	**Sig.**
EQ -> IR	0.10980	1.36	0.174
AQ -> IR	0.04856	0.52	0.603
N	545		
F	0.3324		
R-Square	0.0895		

Note: EQ = Earnings Quality, AQ = Audit Quality, FP = Financial Performance, IR = Investor Reaction.

* Significant at 10%, ** Significant at 5%, *** Significant at 1%

As illustrated in Table 4, earnings quality with a sig value of 0.174 and audit quality with a value of sig 0.603 explains that investors do not react to earnings quality and audit quality at the end of the third month of the following year, this is because many companies have not submitted financial statements, even though there are rules that require the submission of financial statements by that time.

Table 5. Sensitivity Test 2.

Model 4 : IR $= \beta_0 + \beta_1 EQ + \beta_2 AQ + \beta 3EQ*FP + \beta 4AQ*FP + \varepsilon$				
Variable	**Coef.**	**t-stat.**	**Sig.**	
EQ -> IR	0.08732	1.07	0.283	
AQ -> IR	0.00317	0.03	0.973	
EQ*FP -> IR	-0.05049	-0.58	0.565	
AQ*FP -> IR	0.22976	2.53	0.012	**
N	545			
F	0.0350**			
R-squared	0.2103			

Note: EQ = Earnings Quality, AQ = Audit Quality, FP = Financial Performance, IR = Investor Reaction.

* Significant at 10%, ** Significant at 5%, *** Significant at 1%

Table 5 illustrates that investors react positively to the profitability ratio as an indicator of a company's financial performance, which is supported by audit quality in the preparation process. High profit information attracts investors to transact company shares and the big four auditors foster investor confidence in the information submitted by the company.

The results of the sensitivity test were compared with the results of the main and moderating hypothesis tests discussed previously to obtain an in-depth analysis of investors' reactions to financial information. Of the four existing models, the R-squared value of model 2 (moderation regression) is the highest at 21.21%, meaning that in the regression model, earnings quality, audit quality, and financial performance moderation can explain investors' reactions by 21.21% and the remaining 78.79% is explained by other variables outside this study.

5. DISCUSSION

This study found that investors reacted positively to the quality of earnings in the financial statements produced by a company. This explains that with the lack of earnings manipulation using discretionary accruals, investors believe that a company's profit value is close to the real value and can be used to predict future earnings, thus attracting investors to transact company shares and have an impact on the value of the shares themselves.

Financial statements are still one of the main sources of information used by investors in assessing a company's current performance, and at the same time are used to predict the company's future performance, although financial information alone is not enough because in the process of preparing these financial statements there is management discretion, which often obscures the actual, biased information and harms investors. With high earnings quality, investors trust the existing financial information, which encourages them to invest in a company.

High quality of earnings in the financial statements published by a company invoke positive reactions from investors, which is in line with findings by Shahzad et al. (2019), Salehi et al. (2018) and Sugiarto & Deviesa (2017), who also found that investors are interested in shares of companies whose financial statements have been minimally manipulated. High earnings quality in companies' financial information helps investors to predict future earnings and expected returns due to the accuracy of the earnings information (Lento & Yeung, 2017; Sunder, 2017).

This study did not find that investors react to audit quality. This indicates that there are still many investors who do not believe in the performance of financial statement auditors in Indonesia, so the big auditors are not used when considering investment transactions. This is presumably due to the many cases, in Indonesia and around the world, involving the big four auditors who are considered to be credible and are qualified in the process of auditing financial statements.

The absence of investor reactions to audit quality is not in line with research by Farouk & Hassan (2014) and Matoke & Omwega (2016), who found positive reactions to audit quality. Even so, this difference in results is reasonable due to a large amount of information in the media about cases of financial statement fraud involving the big four auditors.

This study also did not find investor reactions to high financial performance and earnings quality. Financial performance in this study was measured using ROE, which is the ratio of profit after tax compared to total equity. With no investor reactions to high financial performance despite having good earnings quality, it is suspected that investors lack confidence in the ROE ratio. A high ratio may be caused by the low equity of the company due to low market interest or lack of investors; a high ROE value leads to concerns that future stock returns will not be significant meaning that the company's shares do not attract market interest.

The opposite result was found for H4, where we discovered that financial performance strengthens the effect of audit quality on investor reactions. This indicates that investors are interested in shares of companies that perform well and whose information has been recognized or assessed by qualified auditors. Although there are many cases of financial statements involving the big four auditors, high profit value is still an attraction for investors. This illustrates the culture within the Indonesia Stock Exchange, where the profitability ratio is still the main benchmark in considering stock transactions coupled with very high trust in high-class auditors who are well known, qualified, and have years of experience auditing financial statements.

The high reaction of investors to the value of earnings, which is an indicator of company performance and quality audits in the process of preparing financial statements, is in line with the research of Anwaar (2016), Macharia & Gatuhi (2013) and Wulansari & Prihantoro (2018), who found that the profitability ratio is a measure of success management which still attracts investors' interest in transactions on the Indonesian stock market.

With the discovery of different reactions of investors to earnings quality, audit quality, and financial performance at the submission deadline for financial statements (end of March) and on the publication date of financial statements, investors reacted more on the publication date of financial statements, indicating that financial statement information is still being used, especially high quality financial reports. The high quality of earnings helps investors in predicting a company's future expected returns.

In addition, we saw no response from investors on the quality of earnings, audit quality, and financial performance at the deadline for submitting financial statements because many issuers are late in submitting financial statements, so investors do not dare to speculate or assume and do not provide meaningful reactions until the financial statements are published and can be studied.

6. PRACTICAL IMPLICATION AND CONTRIBUTION

The discovery of positive investor reactions to high earnings quality encourages investors to consider these indicators when transacting on the stock market, so that analysis and prediction of company profits are accurate and produce the expected returns.

Likewise, the discovery of investor reactions to audit quality moderated by financial performance should be considered by management, especially the use of quality auditors during the process of preparing financial statements, so that the profit value as an indicator of the company's financial performance can be trusted by the public and generate positive interest from investors to maintain the company's stock price.

7. LIMITATIONS AND DIRECTION FOR FUTURE STUDIES

Although the number of manufacturing issuers on the Indonesian Stock Exchange is the largest, there are still many other types of issuers that investors will be interested in, so further research by analyzing other issuers will provide broader and more interesting results. This study did not find investor reactions to financial information on the deadline for submitting financial statements as per regulations in Indonesia. On the contrary, investors reacted on the submission date for financial statements directly, so further research can use the dates of submission of financial statements on the Indonesian Stock Exchange to analyze investor reactions.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

Abdallah, S. (2018). External auditor type, discretionary accruals and investors' reactions. *Journal of Accounting in Emerging Economies, 8*(3), 352-368. Available at: https://doi.org/10.1108/JAEE-10-2017-0098.

Anwaar, M. (2016). Impact of firms' performance on stock returns (Evidence from Listed Companies of Ftse-100 Index London, UK). *Global Journal of Management and Business Research, 16*(1), 30-33.

Brigham, E. F., & Ehrhardt. (2005). *Fundamentals of financial management* (9th ed.). Jakarta: Salemba Empat.

Brigham, E. F., & Houston. (2014). *Fundamentals of financial management*. Jakarta: Four Salemba.

Chen, X., Cheng, Q., & Wang, X. (2015). Does increased board independence reduce earnings management? Evidence from recent regulatory reforms. *Review of Accounting Studies, 20*(2), 899–933. Available at: https://doi.org/10.1007/s11142-015-9316-0.

Dayanandan, A., & Sra, J. K. (2018). Accrual management and expected stock returns in India. *Journal of Accounting in Emerging Economies, 8*(2), 426-441. Available at: https://doi.org/10.1108/JAEE-08-2016-0073.

Dechow, P. M., Hutton, A. P., Kim, J. H., & Sloan, R. G. (2012). Detecting earnings management: A new approach. *Journal of Accounting Research, 50*(2), 275–334. Available at: https://doi.org/10.1111/j.1475-679X.2012.00449.x.

Fahlevi, R. R., Asmapane, S., & Oktavianti, B. (2018). The effect of financial performance on stock prices in banking companies listed on the Indonesian stock exchange. *Accountable, 15*(1), 39–48.

Farouk, M. A., & Hassan, S. U. (2014). Impact of audit quality and financial performance of quoted cement firms in Nigeria. *International Journal of Accounting and Taxation, 2*(2), 01-22.

Gujarati. (2012). *Basics of econometrics* (5th ed.). Jakarta: Salemba Empat.

Houncine, A. (2017). The effect of financial reporting quality on corporate investment efficiency: Evidence from the Tunisian stock market. *Research in International Business and Finance, 42*, 321-337. Available at: https://doi.org/10.1016/j.ribaf.2017.07.066.

Kasmir. (2016). *Financial statement analysis*. Jakarta: Raja Grafindo Persada.

Khajavi, S., & Zare, A. (2016). The effect of audit quality on stock crash risk in Tehran Stock Exchange. *International Journal of Economics and Financial Issues, 6*(1), 20-25.

Lento, C., & Yeung, W. H. (2017). Earnings benchmarks , earnings management and future stock performance of Chinese listed companies reporting under ASBE-IFRS. *Asian Review of Accounting, 25*(4), 502–525.

Li, X., & Wang, T. (2016). Investor reaction to R&D investment. *International Journal of Innovation Science, 8*(2), 133-147. Available at: 10.1108/IJIS-06-2016-009.

Macharia, P. I., & Gatuhi, S. K. (2013). Effect of financial performance indicators on market price of shares in commercial banks of Kenya. *International Journal of Management and Business Studies, 3*(3), 57-60.

Matoke, V. N., & Omwega, J. (2016). Audit quality and financial performance of companies listed in Nairobi securities exchange. *International Journal of Scientific and Research Publications, 6*(11), 372-381.

Melgarejo, M., Montiel, E., & Sanz, L. (2016). The stock market's reaction to accounting information: The cases of Chile and Peru. *Journal of Accounting in Emerging Economies, 6*(3), 254-268. Available at: https://doi.org/10.1108/JAEE-11-2013-0054.

Murwaningsari, E. (2014). Institutional ownership and audit quality on information disclosure and future earnings response coefficient. *Journal of Finance and Banking*, *18*(2), 161-171.

Perotti, P., & Wagenhofer, A. (2014). Earnings quality measures and excess returns. *Journal of Business Finance and Accounting*, *41*(5–6), 545–571. Available at: https://doi.org/10.1111/jbfa.12071.

Peterson, K., Schmardebeck, R., & Wilks, T. J. (2015). The earnings quality and information processing effects of accounting consistency. *Accounting Review*, *90*(6), 2483-2514. Available at: https://doi.org/10.2308/accr-51048.

Rachmawati, S. (2019). Company size, moderates the effect of real earnings management And accrual earnings management on value relevance. *Etikonomi*, *18*(1), 133-142.

Rahayu, I., & Darmawati, D. (2011). The effect of audit quality on the relationship between earnings management and stock returns. *Media Research in Accounting, Auditing & Information*, *11*(2), 1-28. Available at: http://dx.doi.org/10.25105/mraai.v11i2.616.

Salehi, M., Tagribi, M., & Farhangdoust, S. (2018). The effect of reporting quality on stock returns of listed companies on the Tehran Stock Exchange. *International Journal of Productivity and Performance Management*, *67*(1), 4-19. Available at: https://doi.org/10.1108/IJPPM-09-2015-0127.

Shahzad, F., Rehman, I. U., Colombage, S., & Nawaz, F. (2019). Financial reporting quality, family ownership, and investment efficiency: An empirical investigation. *Managerial Finance*, *45*(4), 513–535. Available at: https://doi.org/10.1108/MF-02-2018-0081.

Sugiarto, S. V., & Deviesa, D. (2017). The effect of earnings management on stock returns with earnings quality as an intervening variable. *Business Accounting Review*, *5*(1), 193-204.

Sunder, S. (2017). Statistical studies of financial reports and stock markets. *Journal of Capital Markets Studies*, *1*(1), 5–9. Available at: https://doi.org/10.1108/jcms-10-2017-006.

Utami, W., Nugroho, L., & Farida. (2017). Fundamental versus technical analysis of investment: Case study of Investors decision in Indonesia Stock Exchange. *The journal of internet Banking and Commerce*, *22*(8), 1-18.

Waluyo. (2017). Firm size, firma age, and firm growth on corporate social responsibility in Indonesia: The case of real estate companies. *European Research Studies Journal*, *20*(4), 360-369.

Williem, & Aryati, T. (2017). Effect of audit quality, institutional ownership, and long-term investment on future earnings response coefficient (FERC) in companies listed on the Indonesia Stock Exchange. *Journal of Information, Taxation, Accounting and Public Finance*, *12*(1), 21–34.

Wulansari, D., & Prihantoro, P. (2018). The effect of financial performance on stock prices listed on the Indonesia stock exchange. *Scientific Journal of Business Economics*, *23*(1), 1-18.

Yasser, Q. R., Mamun, A. A., & Ahmed, I. (2016). Quality of financial reporting in the Asia-Pacific region: The influence of ownership composition. *Review of International Business and Strategy*, *26*(4), 543–560. Available at: https://doi.org/10.1108/RIBS-02-2016-0011.

Zulfikar, R. (2018). Estimation model and selection method of panel data regression: An overview of common effect, fixed effect, and random effect model. *INA-Rxiv, June 15*. Available at: https://doi.org/10.31227/osf.io/9qe2b.