Company Characteristics and Earnings Quality

Yuni Pristiwati Noer Widianingsih[1,2], Doddy Setiawan[2*], Y. Anni Aryani[3], and Evi Gantyowati[3]
doddy.setiawan@staff.uns.ac.id, yuni@stas.ac.id, , yanniaryani@staff.uns.ac.id

Accounting Department, STIE Swasta Mandiri Surakarta, Jl. Tejonoto I Gading 57156 Surakarta, Indonesia[1] and Doctoral Student of Faculty of Economics and Business, Universitas Sebelas Maret, Jl. Ir. Sutami No. 36A, 57126, Surakarta, Indonesia[2]
Faculty of Economics and Business, Universitas Sebelas Maret, Jl. Ir. Sutami No. 36A, 57126, Surakarta, Indonesia[3]

Abstract. This study aims to determine the effect of profitability, growth, leverage, and size on the earnings quality of Indonesian companies. It also shows that the preparation of financial reporting has referred to the International Financial Reporting Standards. However, capital market investments are being evaluated with an increasingly inadequate image of corporate earnings. The Indonesian Capital Market Supervisory Agency reported many cases of financial reporting indicating low earnings quality. Therefore, this study aims to analyze 556 non-financial companies that reported statements for 2017 – 2019 and obtained 1280 data based on the unbalanced panel method. The results show that an increase in earnings quality is influenced by profitability, while a decrease is influenced by leverage, growth, and company size.

Keywords: Earnings Quality, Profitability, Leverage, Market Capitalization, Indonesia

1 Introduction

Earnings quality describes the quality of working capital accruals on cash flow operating activities in the current, previous, and future periods based on changes in income and fixed assets [1]. Its level indicates the quality of company information for making investment decisions. Furthermore, high earnings quality is expected to provide timely and accurate information for investors, reducing information asymmetry [2]. On average, Indonesian companies have low earnings quality and may experience declines [3]. This also shows that preparing financial reporting has referred to the international standards [4]. However, reporting profits is increasingly incomplete in assessing investments within the capital market.

The Indonesian Capital Market Supervisory Agency reported many financial reporting cases indicating low earnings quality [5]. A study conducted with 94 banks shows an increase in earnings management to improve company performance [6]. Furthermore, a study from [7] showed that the case of PT. Indofarma, Tbk was higher in the 2001 financial statements, resulting in increased production costs and lower profits. PT. Bank Lippo, Tbk published two different financial statements in 2002, while PT. Kimia Farma, Tbk reported high ending inventory and sales in the 2002 financial statements, resulting in higher profit reporting.

Previous research on company characteristics and earnings quality was mostly conducted in developed countries using general indexes. The index approach has a weakness because it describes the quality of the company's earnings in general, while each company has different characteristics. It is possible that these differences in characteristics may affect earnings quality. For this reason, this study discovers the variables impacting the quality of earnings. Earnings quality is specifically influenced by company characteristics such as size, profitability, growth rate, and leverage. According to this research, more testing is needed, especially in Indonesia. Furthermore, stakeholders' perceptions of a company's earnings can be influenced by the activities of its managers in selecting accounting procedures and policies. This study used the stakeholder theory approach to examine how stakeholders' interests align with those of companies [8]. Companies can build shareholder trust by enhancing the quality of their earnings based on the theory's implications.

This study determines the effects of a company's characteristics based on profitability, growth, debt, and size on earnings quality. According to the results obtained, the features of a firm are to be analyzed to evaluate whether or not they can help or damage the quality of the company's earnings.

2 Literature Review and Hypothesis

Earnings quality can be used to assess current performance in predicting future performance [9]. They are presented based on the balance sheet to accurately assess liquidity risk, financial flexibility, and solvency. Previous studies have shown that earnings quality is influenced by profitability, growth rate, leverage, and firm size. Meanwhile, a study on profitability and earnings quality showed that companies with high profitability tend to disclose complete information to show their positive performance [10] [11]. Thus, the hypothesis used is:
H1: Company profitability has a positive effect on earnings quality.

A study on growth and earnings quality showed that company growth has a negative effect on earnings quality [11]. This is related to the high growth rate resulting from the valuation of property, plant, and equipment

ICBAE 2022, August 10-11, Purwokerto, Indonesia

DOI 10.4108/eai.10-8-2022.2320852

(PPE) based on the accrual model, which has the potential for profit manipulation. Therefore, the hypothesis proposed is:
H2: Company growth has a negative effect on earnings quality

Earning manipulation is also possible in companies with high leverage levels. Therefore, high levels of leverage may have the potential to reduce earnings quality [12]. Then, the hypothesis used is:
H3: The company's leverage has a negative effect on earnings quality

There were conflicting results from the prior study on the impact of business size on earnings quality. Large companies have a robust internal control system because they can enhance the quality of their financial reports [13] and stimulate quality improvement [11]. Another study found that large companies may have a lower quality of earnings to maintain a consistent profit growth trend [14]. Thus, the hypothesis proposed is:
H4: Firm size has a negative effect on earnings quality

3 Method

This study used earnings quality as the dependent variable and company characteristics as the independent variable. The characteristics included profitability, growth, leverage, and size. It also included control variables of operating cash flow and net income volatilities. Earnings quality used abnormal accrual proxies as residual values (εi,t) using the equation:

$$TA_{i,t} = \alpha_0 + \alpha_1 (\Delta REV_{i,t} - \Delta AR_{i,t}) + \alpha_2 PPE_{i,t} + \alpha_3 \Delta CFO_{i,t} + \varepsilon_{i,t} \quad 1$$

The equation is the modification and expansion of the model [15], adjusting the sales revenue variable for changes in receivables by including changes in operating cash flows as an explanatory variable (Dechow et al., 1995). TA is the total accrual that shows the sum of the differences between net income and operating cash flows. Change in revenue (ΔREV) is the difference in period t minus period t-1. Meanwhile, changes in accounts receivable (ΔAR) are the difference in receivable for the period t-1. Property, plant, and equipment (PPE) is the amount of PPE value, while changes in operating cash flow activity are the difference (ΔCFO) period t and t-1. The data will be tested using equation 1 to obtain the residual value, which shows the abnormal accrual value as a proxy for earnings quality. Low earnings quality is indicated by a higher abnormal accrual value and conversely.

The next stage is hypothesis testing using the following equation:

$$EQ_{i,t} = \alpha_0 + \alpha_1 ROA_{i,t} + \alpha_2 GROWTH_{i,t} + \alpha_3 LEV_{i,t} + \alpha_4 SIZE_{i,t} + \alpha_5 VOL\_CFO_{it} + \alpha_6 VOL\_NI_{it} + \varepsilon_{i,t} \quad 2$$

EQ known as earnings quality and company characteristics are dependent and independent variables. The company's characteristics consist of profitability, growth, leverage, and size. This research also included operating cash flow control variables and net income volatilities.

Earnings quality used abnormal accrual value proxy as the residual value (εi,t) based on equation 1. The company profitability used the return on assets (ROA) ratio of net income to the asset value. Company growth (GROWTH) used changes in asset value, and the level of leverage (LEV) used a proxy debt-to-asset ratio (DAR) as the ratio of long-term liabilities. Furthermore, company size used market capitalization value (SIZE) for outstanding shares to signal public awareness.

4 Results and Discussion

Table 1 shows the descriptive statistics of each variable used. Earnings quality, as measured by the standard deviation of the modified model [15], shows a range between -12.98 and 12.82. ROA shows an average negative value of -1.53, indicating a low level of company profitability, and the growth rate shows an average of 0.36. Meanwhile, the average level of leverage is 3.31, indicating a higher level of debt than its assets which shows a critical condition. Company size based on market capitalization value shows an average of 12.07, indicating the company is well known by the public.

Table 1. Descriptive Statistics

	N	Mean	Median	Maximum	Minimum	Std. Dev.
EQ	1,280	-1.58	-1.45	12.82	-12.98	1.63
ROA	1,280	-1.53	0.03	1.30	-1.61	45.92
GROWTH	1,280	0.36	0.06	16.68	-0.98	4.87
LEV	1,280	3.31	0.14	2.35	0.00	71.17
SIZE	1,280	12.07	12.00	15.00	0.00	1.58
VOL_CFO	1,280	1.06	0.04	44.90	0.00	19.08
VOL_NI	1,280	1.51	0.03	6.28	0.00	27.31

Table 2 shows the correlation between variables. Earnings quality (EQ) is correlated with ROA, growth, leverage, size, cash flow volatility (VOL_CFO), and net income volatility (VOL_NI).

Table 2. Correlation

	Eq	ROA	GROWTH	DAR	MCAP	VOL_CFO	VOL_NI
EQ	1.000						
ROA	-0.262[a]	1.000					
GROWTH	0.179[a]	0.003	1.000				
LEV	0.327[a]	-0.465a	-0.005	1.000			
SIZE	0.145[a]	0.002	0.015	-0.002	1.000		
VOL_CFO	0.418[a]	-0.755a	-0.005	0.731a	0.000	1.000	
VOL_NI	0.383[a]	-0.738a	-0.007	0.744	-0.003	0.971[a]	1.000
[a], [b], [c] = significance level is 0.01; 0.05; 0.10							

The test results are presented in Table 3. It was carried out in two stages: testing on all companies and industrial classification, namely raw material, manufacturing, and service companies. Furthermore, it was conducted by adding control variables of operating cash flow volatility and net income volatility to determine the model's consistency, showing the influence of company characteristics on earnings quality.

Table 3. Company Characteristics And Earnings Quality

	All		Raw Material Industries		Manufacture Industries		Service Industries	
	Coeff	Coeff	Coeff	Coeff	Coeff	Coeff	Coeff	Coeff
	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat

ROA	-0.005	-0.004	-0.005	-0.002	0.793	0.801	0.860	1.652
	-4.916[a]	-2.789[a]	-3.142[a]	-0.067[c]	2.242[a]	2.299[a]	3.379[a]	5.972[a]
GROWTH	0.060	0.060	0.439	0.002	0.000	1.077	0.055	0.055
	7.014[a]	7.314[a]	2.246[a]	2.051[c]	0.002	4.279[a]	6.734[a]	6.983[a]
LEV	0.006	0.001	0.006	0.504	0.252	0.249	0.233	0.237
	9.150[a]	1.619[c]	6.043[a]	0.000[a]	4.940[a]	4.961[a]	2.257[b]	2.357[a]
SIZE	0.147	0.145	0.266	0.170	0.150	0.157	0.100	0.106
	5.622[a]	5.774[a]	1.882[a]	0.061[a]	4.376[a]	4.672a	2.861[a]	3.110[a]
VOL_CFO		0.074		0.280		0.596		0.303
		8.176[a]		0.000		0.742		0.966
VOL_NI		-0.025		-0.176		-1.679		2.969
		-4.050[a]		0.000		-4.282[a]		6.002[a]
N	1,280	1,280	134	134	429	429	717	717
Adj R2	0.173	0.240	0.385	0.755	0.099	0.132	0.087	0.135
F Stat	67.986[a]	68.423[a]	22.006[a]	69.376[a]	12.756[a]	11.888[a]	18.086[a]	19.633[a]
[a], [b], [c] = significance level is 0.01; 0.05; 0.10								

The overall test shows that the company characteristics affect earnings quality by 0.17 and 0.240 with the addition of control variables. The results show that ROA, growth, leverage, and company size significantly affect earnings quality. A decrease in abnormal accruals indicates improved earnings quality when a company's ROA rises. The same result is also shown from the test on the raw material industry group, while the manufacturing and service companies group shows the opposite.

The company's growth also led to an increase in abnormal accruals, indicating a decrease in earnings quality, as seen in each industry group. This is consistent with company size with an effect on the increase in abnormal accruals, which indicates a decrease in earnings quality. Large and expanding companies' earnings quality decreases, as evidenced by these two studies. Abnormal accruals also increase with leverage, which indicates a decline in profitability.

5 Conclusion

The test shows that the company characteristics significantly affect earnings quality. These findings are based on research performed across various companies and industries. Considering the level of profitability, company characteristics show a negative effect on earnings quality. Therefore, those with high profitability can reduce the value of abnormal accruals to increase the quality of reported earnings. Companies with higher profitability tend to report complete information on the profit achievement.

The other three characteristics, growth, leverage, and size, positively affect earnings quality. This shows that large companies with high growth rates and leverage can increase the abnormal accrual value, indicating a decrease in earnings quality due to profit manipulation.

The results indicate that the company needs to maintain its profitability to provide a favorable position in promoting positive performance. Large companies with high growth rates need to pay attention to the method of preparing financial statements to improve the quality of reporting. Meanwhile, companies with high leverage need to pay attention to their debt policies to maintain a balance.

6 Acknowledgments

The authors are grateful to the Directorate of Research, Technology, and Community Service (DRTPM), the Ministry of Education, Culture, Research and Technology for funding this study through the National Competitive Research Program with the Doctoral Dissertation Research scheme in 2022.

References

[1] P. M. Dechow dan I. D. Dichev.: The quality of accruals and earnings: The role of accrual estimation errors *Account. Rev.*, vol. 77, no. SUPPL., hal. 35–59, 2002, doi: 10.2308/accr.77.s-1.35 (2002)

[2] T. Zhou, J. Xie, dan X. Li.: Financial Reporting Quality and Idiosyncratic Return Volatility: Evidence from China. *Emerg. Mark. Financ. Trade*, vol. 53, no. 4, hal. 835–847, doi: 10.1080/1540496X.2016.1142200 (2017)

[3] J. Foye dan A. Valentinčič: Testing factor models in Indonesia. *Emerg. Mark. Rev.*, vol. 42, hal. 100628, 2020, doi: 10.1016/j.ememar.100628 (2019)

[4] Y. Hutagaol-Martowidjojo, A. Valentincic, dan D. L. Warganegara.:Earnings Quality and Market Values of Indonesian Listed Firms. *Aust. Account. Rev.*, vol. 29, no. 1, hal. 95–111, doi: 10.1111/auar.12234 (2019)

[5] E. Suprianto, R. Rahmawati, D. Setiawan, dan Y. A. Aryani.: Controlling generation of family firms and earnings management in Indonesia: The role of accounting experts of audit committees. *J. Int. Stud.*, vol. 12, no. 3, hal. 265–276, doi: 10.14254/2071-8330.2019/12-3/21 (2019)

[6] D. Setiawan, R. Prabowo, V. Arnita, dan A. Wibawa.:Does corporate social responsibility affect earnings management? Evidence from the Indonesian banking industry. *Bus. Theory Pract.*, vol. 20, no. 2010, hal. 372–378, doi: 10.3846/btp.2019.35 (2019)

[7] Sulistiawan, Januarsi, dan Alvia.:Creative Accounting Mengungkap Manajemen Laba dan Skandal Akuntansi, hal. 120 (2011)

[8] Freeman, R. E. E., & McVea, J. A Stakeholder Approach to Strategic Management. SSRN Electronic Journal, March 2018. https://doi.org/10.2139/ssrn.263511C. (2005)

[9] J. M. Wahlen, and B. Baginski, Stephen P., dan M. T.:*Financial Reporting, Financial Statement Analysis, and Valuation*, 8 ed. United States of America: Cengage Learning (2015)

[10] K. Alsaeed.:The association between firm-specific characteristics and disclosure: The case of Saudi Arabia, *Manag. Audit. J.*, vol. 21, no. 5, hal. 476–496, doi: 10.1108/02686900610667256 (2006)

[11] K. A. Soyemi dan L. S. Olawale.:Firm Characteristics and Financial Reporting Quality: Evidence from Non-Financial Firms in Nigeria, *Int. J. Econ. Manag. Account.*, vol. 27, no. 2, hal. 445–472 (2019)

[12] O. A. Olowokure, M. Tanko, dan T. Nyor.:Firm Structural Characteristics and Financial Reporting Quality of Listed Deposit Money Banks in Nigeria," *Int. Bus. Res.*, vol. 9, no. 1, hal. 106, doi: 10.5539/ibr.v9n1p106 (2015)

[13] P. Chalaki.:Corporate Governance Attributes and Financial Reporting Quality : Empirical Evidence from Iran, *Int. J. Bus. Soc. Sci.*, vol. 3, no. 15, hal. 223–229 (2012)

[14] Shehu & Ahmad.:Firm Characteristics and Financial Reporting Quality of Listed Manufacturing Firms, *Internantional J. Accounting, Bank. Manag.*, vol. 9, no. 1, hal. 47–63. (2013)

[15] J. J. Jones.: Earnings Management During Import Relief Investigations, *J. Account. Res.*, vol. 29, no. 2, hal. 193, 1991, doi: 10.2307/2491047 (1991)