

Research Article

The Disclosure Tone, Earnings Management, Earnings Quality: Evidence Found in Indonesia Listed Manufacturing Industry

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ORCIDOviliani Yenty Yuliana: <https://orcid.org/0000-0002-2446-0402>**Abstract.**

This study examined the influence of earnings management (EM) and earnings quality (EQ) on the disclosure tone of an annual report. NVIVO's coding AI measures the DT (Disclosure Tone) through automated text analysis. The sample used was 61 of Indonesia's listed manufacturing companies from 2017 to 2021. The balanced panel data was used and executed by a weighted panel least square. The results prove that EM is essential for DT, while EQ is insignificant for DT. The higher EQ indicates the high asymmetric information from management to the stakeholders, which leads the company to disclose a more positive tone. However, the negative tone is also improving with a higher EQ. These results imply that when the company has higher EM, it tries to balance the tone of its annual report in order to gain the trust of stakeholders, this is beneficial for analysts, investors, and regulators when collecting information from annual reports. Future studies can extend this framework to other types of industries since each industry has specific characteristics in giving the tone in their reports. Besides, future studies can also focus on the tone of the sustainability report or integrated report in other countries.

Keywords: earnings management, earnings quality, disclosure tone, manufacturing industry

1. Introduction

In reality, businesses are pressured to portray steady long-term economic growth and to have inclined earnings to show their business profitability. By understanding the nature of companies in emerging markets in Indonesia, it's impossible to have smooth incline earnings due to instability nowadays with all the endless uncertainty influenced by political, sociocultural, and technological changes. Through this uncertainty and competitive market situation, a firm's management is required to manage its earnings with the right strategy to gain the most significant result for the firm. From a practical standpoint, Indonesia, as an emerging market, relies on several businesses to supplement its national economic income.

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Published: 22 March 2024

Publishing services provided by
Knowledge E

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Selection and Peer-review under the responsibility of the ICEMSIT Conference Committee.



As one of the key players, state-owned enterprises in the manufacturing industry [1] are reported to have a decline in their income, yet the firm can show positive earnings in 2021, as reported by *Bisnis.com*. This example shows how firms manage their earnings through earning management. Earning management is a legal way to manage a business's earnings. But it can become illegal if they have high discretionary accruals compared to their non-Discretionary accruals in their earnings. The measurement method to prove this is where we can check the company's earnings quality.

Discretionary accruals are the portion of overall accruals that impact the result of earnings quality. Earnings are indeed a crucial component of the financial report and are used to aid management in setting business strategies. Disclosure tone is one of the corporate story disclosure qualities. In addition to positive and negative words, disclosure tone now contains qualities such as unsure, controversial, and strong modal tones, as well as sub-categories including commendation, pleasure, guilt, and rejection.

The disclosure tone in business descriptions is primarily intended to be educational, conveying management's perspective on the businesses' present and future performance to consumers. On the other hand, narrative or qualitative disclosures have recently acquired traction, making for a considerable amount of annual business information. The increasing essentiality of descriptive disclosure compared to reviewed monetary accounts prompted this research. Discretionary narratives are narrative disclosures that are included in unregulated areas of corporate paperwork that go beyond audited financial reports.

Most study into disclosure tone manipulation has remained in developed markets. This research aims to look at the company's Earnings Quality to help external stakeholders and investors have an improved knowledge of the company's earnings quality and then safeguard them from any manipulation that the corporate's management may do. Despite these changes, Indonesian businesses are challenged to improve corporate disclosure and protect investors. The circumstances of Indonesia as a growing market inspired this research on how disclosure tone affects earnings management and quality.

Similarly, through this research, we are trying to look at the likely impact of those indicators mentioned above. This study attempted to improve and conduct a more in-depth analysis based on empirical research in Indonesian corporate firms, emphasizing publicly listed manufacturing firms. As a developing country, Indonesia has tremendous opportunities to grow as a government through bilateral and regional agreements, opening up new opportunities for entrepreneurs, individual workers, and corporate firms. As a result, each party must concentrate more on understanding and developing an excellent corporate strategy at each level.

Earnings Management (EM) arises when individuals utilize their discretion in financial statements and transactional structure to manipulate financial reports in order to deceive certain stakeholders regarding the firm's actual financial outlook or to affect results and evaluations that rely on the financial performance of the firm.

Through EM conduct, managers of a company could utilize that data to leverage the corporation's earnings, resulting in an improved corporate's performance that external parties will see. This kind of practice is not protecting the company's existing shareholders, and at the same time, it is also deceiving the public, for example, in the case of Enron. Indeed, we can see if the scenario in the previous sentence is implemented, that means management is doing it only for their own personal benefit and not for the rest of the stakeholders in the corporations [2].

H1: There is an association between earnings management and the disclosure tone of the listed Indonesia Manufacturing Industry.

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The grade to which a business's financial records precisely depict income for that period, for example, by only showing actual sales made during that period and excluding money that may not be reproduced in the future, is referred to as earnings quality [3]. The trustworthiness and legitimacy of a company's stated earnings are referred to as earnings quality. Investors view the earnings report as containing data to examine the Ownership shares. Quality Earnings are profits that might represent long-term earning potential as decided by accrual and cash, the future components, and display the business's actual financial performance.

Earnings quality also serves as the caliber of financial data. Consequently, the preceding concept of Earnings quality only when seen in the context of decision models. The initial category consists of earnings consistency, the size of accruals, residual model accrual, and Smoothness of earnings. In addition, the presence of earnings management by the agent or the connection between the agent and principal that is detrimental to the financial statement user might indicate that a moral hazard is present.

A strong indicator of lower earnings quality would be the existence of earnings management. When a manager chooses an accounting system or a policy, they have the option of managing earnings. However, this choice may impact earnings or the accomplishment of specific managerial statement goals. Empirical evidence suggests that the existence of earnings manipulation could be utilized to examine the effectiveness of earnings. Three proxies were employed to gauge the quality of earnings. In the sense that reported profits give information about a firm's long-term sustainability and are also closely connected to a company's cost of capital, earnings correctness is one of the essential elements influencing a firm's sustainability.

H2: There is an association between earnings quality and disclosure tone of the listed Indonesia Manufacturing Industry.

Disclosure tone is the tone of the annual report or information, or data publicly shared by the corporation, such as annual press releases and annual reports. According to initial disclosure theory, corporations are compelled to reveal all material information because of the classic unwinding result [4]. Recent research has also revealed several corporate governance variables that affect transparency.

Managers frequently exercise discretion to highlight the success of their companies. In their examination of disclosure practices prior to experienced equity offers, they concluded that administrators "hype" the firm's shares through swelling unrestricted disclosure, mainly positive disclosures. In cases when the market has a more challenging time spotting misrepresentation, administrators tend to skew the income estimates. Shakespeare [5] offers proof that businesses purposefully withhold information on off-balance sheet activities when it was carried out to improve the presence of financial information, but not otherwise. Li [6] discovers evidence to provide the idea that administrators hide subpar outcomes by making publications that are harder to understand.

Evidence suggests that these discretionary disclosure decisions impact investors' and analysts' perceptions. For instance, rising stock prices prior to share offerings are linked to the rise in positive disclosures. Similarly, the degree of confidence in an income statement is favorably associated with the announcement's immediate impact on the market. A similar relationship embraces evidence produced by the company for SEC filings [7] as well as information produced by third parties; Frankel et al. [8] discovers that revenues are associated with the tone of news stories about the company and more generally.

Although previous findings have both statistical and economic significance, this study also agrees with Kang et al. [7] that textual research is enough to solve the returns riddle. In other words, litigation risk is not only determined by disclosure tone, and litigation

risk is not the only cost or benefit that should be considered when choosing disclosure tone. The fact that management has control over a tone of disclosure and that it is related to the danger of a lawsuit, in our opinion, is what's most important.

Even though there have been numerous essential studies on disclosure tone, there has been very little research on how corporate earnings management, earnings quality, and disclosure tone are associated. According to Tucker and Parker [9], managers have more control over disclosure tone than they do over numerical reporting. Both boards of directors and chief executive officers should decide on the disclosure tone, according to Fang et al. [10]. They contend that one crucial approach for directors to demonstrate leadership is the tone of the CEO letters. Additionally, they offer empirical proof that resolute, challenging, and uninteresting language is positively associated with aggressive financial reporting. According to Albitar et al. [11], the management of the Fiat Group strategically employs several disclosure techniques with varying degrees of salience and optimism to interact with diverse stakeholders (such as the local press, the foreign press, and financial analysts). One question arises after knowing the previous study: Does any association between Earnings Management and Earnings Quality to Disclosure Tone become the core foundation of this study?

2. Methods

We use the purposive sampling method for the sample from manufacturing firms, particularly in the basic industry and chemical sector, miscellaneous sub-sector, and consumer goods. As a result, 61 firms fit the purposive sampling criteria. Further, this study will cover a five-year period which results in 305 firm years (61 firms × 5 years) of firm annual reports from Indonesian publicly listed manufacturing corporations. The data obtained and utilized for the study are further explained in Table 1.

This study includes many variables and quantitative research methods using multiple linear regression models to measure the relationship between independent and dependent variables. To test the hypothesis, the research model is shown (1).

$$TONE_{it} = \alpha + \beta_0 EM_{it} + \beta_1 EQ_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 AGE_{it} + \beta_5 MTB_{it} + \varepsilon_{it} \quad (1)$$

with the following explanations:

TONE_{it} = Net tone score in the earnings press release of company *i* in time *t*
COMPANY *i* in time *t*

EM_{it} = Net income before extraordinary items scaled by beginning total assets

EQ_{it} = Earnings smoothness of firm (*i*) in year (*t*)

- SIZE_{it} = Firm size of company i in time t
- LEV_{it} = Firm leverage of company i in time t
- AGE_{it} = Log (1 + age from the first year the firm listed in IDX)
- MTB_{it} = Market to book of company i in time t
- ε_{it} = Error of company i in time t
- α₀ = Constant of the linear regression
- β₁₋₇ = Regression coefficient of each variable

TABLE 1: Description and calculation of the main variables.

Variable Categories	Variable Name	Calculation Method
Dependent Variable	Disclosure Tone	Net tone score in the annual report of the firm in year (t)
Independent Variable	Earnings Quality	Earning smoothness as the value significance of profits metric, and three bookkeeping metrics of earnings quality (income smoothness, consistency, and predictability) [12] s $Smooth_{i,t} = \frac{(EARN_{i,t} / A_{i,t-1})}{(CFPI_{i,t} / A_{i,t-1})}$
	Earnings Management	Total accruals of company (i) in year (t) [13]. $TACC_{i,t} = b_0 (\frac{1}{A_{i,t-1}}) + b_1 (\frac{\Delta REV_{i,t} - \Delta REV_{i,t}}{A_{i,t-1}}) + b_2 (\frac{PPE_{i,t}}{A_{i,t-1}}) + e_{i,t}$
Control Variable	Firm Size	Firm's total assets
	Firm Leverage	Ratio of the total debt to total assets
	Firm Age	The total period of the firm's operation year.
	Firm Value	Total value of shares traded in the market x share price

Source: Author research's compilation.

3. Results and Discussion

Table 2 assists in explaining the Standard Deviation from each of variables as in accordance with the nature of Standard Deviation helps in showing the variability of data collected.

TABLE 2: Descriptive Statistics Analysis of Variables.

Variable	Mean	Median	Min	Max	Standard Deviation
Earnings Management	-0.004	0.011	-2.087	0.810	0.227
Earnings Quality	1.310	0.523	0.008	23.479	2.489
Disclosure Tone	-2.505	-4.000	-351.000	219.000	60.181
Firm Leverage	0.206	0.269	0.000	4.520	0.468
Firm Size	12.634	12.481	11.226	14.565	0.725
Firm Age	47.544	26.000	0.000	41.000	227.968

Source: Author research's compilation.

TABLE 3: Weighted Least Square Result of Earnings Management.

Variable	Negative Tone		Positive Tone		Net Tone	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
const	-702.515	<0.0001***	-906.988	<0.0001***	316.992	0.512
Earnings Management	22.084	0.0750*	36.535	0.003***	16.894	0.537
Firm Age	-65.979	<0.0001***	-87.983	<0.0001***	-57.554	0.095*
Firm Size	85.097	<0.0001***	103.459	<0.0001***	-19.387	0.625
Firm Leverage	-3.356	0.833	-12.628	0.327	-11.161	0.174
Firm Value	2.413	0.0378**	4.308	<0.0001***	0.111	0.915
Adjusted R-squared	0.532		0.648		0.033	
P-value(F)	1.99e-48		1.02e-66		1.04e-22	

Source: Author research's compilation.

The findings from Table 3 shows the R-squared value shows the amount of 0.648. It can be interpreted that the independent variable of this result can explain the dependent variable of DT. Based on the weighted least square result in Table 3, it can be observed that 5 out of 6 independent and control variables have a significant association with the dependent variables of DT. It is shown that the p-value is less than 1%. The result of less than 1% suggests enough indication to reject the null hypothesis and accept the research premise. Meanwhile, the R-squared value shows the amount of 0.532. It can be interpreted that the independent variable of this result could clarify the dependent variable of DT. The findings from Table 3 demonstrate that Earnings Management (EM) has a good association with both positive and negative tones. Because the net tone is the sum of the positive and negative tones, this could prevent Earnings Management from impacting the net tone. Positive EM's influence on positive and negative signals shows that it is impossible for EM to control the net tone of the financial statements, either by raising the positive tone or lowering the negative tone.

Whereas the findings from Table 4 demonstrate that Earnings Quality (EQ) positively affects both positive and negative tones. Because the net tone is the sum of the positive and negative tones, this could prevent the EQ from impacting the net tone. Positive EQ's influence on positive and negative signals shows that it is impossible for EQ to control the net tone of the financial statements, either by raising the positive tone or lowering the negative tone.

TABLE 4: Weighted Least Square Result of Earnings Quality.

Variable	Negative Tone		Positive Tone		Net Tone	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Const	-725.116	<0.0001***	-144.276	<0.0001***	-144.276	<0.0001***
Earnings Quality	-0.753	0.601	-0.165	0.840	-0.165	0.840
Firm Age	-33.085	0.0140**	-11.906	0.0020***	-11.906	0.0020***
Firm Size	83.821	<0.0001***	12.481	<0.0001***	12.481	<0.0001***
Firm Leverage	-3.602	0.830	-5.247	0.297	-5.247	0.297
Firm Value	2.547	0.0510*	0.912	0.129	0.912	0.129
Adjusted R-squared	0.540		0.604		0.083	
P-value(F)	2.03e-49		4.22e-59		9.53e-06	

Source: Author research's compilation.

4. Conclusion

This research aims to discover the relationship between Earnings Management and Earnings Quality and the disclosure tone in annual reports issued by a sample of Indonesian enterprises listed on the Indonesia Stock Exchange. Similarly, agency theory and the opportunistic or image management framework investigate whether a corporation uses tone in its narrative disclosures to promote its opportunistic behavior while employing EM. It mainly analyzes if the disclosure tone levels in firms' narrative disclosures are connected to firm EM and EQ in the setting of a developing market. The data show that disclosure tone levels in the narratives of annual reports of Indonesian manufacturing businesses are positively connected with EM, as measured by the size of DA.

This finding implies that manipulating the tone of corporate narratives as part of anomalous disclosure tone levels can be a valuable addition to earnings management techniques. It bolsters the agency theory's interpretation of the atypical disclosure tone from an opportunistic standpoint. Results indicate that organizations' management may employ a narrative disclosure tone to support the managed figures if they use earnings management tactics. We also investigate the association of Earnings Quality with disclosure tone.

In contrast to the relation of EM to tone, Earnings Quality has a significant negative association with disclosure tone. As a result, the body of data proposes that the degree of DT could be utilized to indicate the AR-qualifying firm's profitability. Concerning the recommendation, the study proposes BOD and auditors ought to be mindful of management's desire to employ atypical manipulative methods to justify their EM. While

for Market players, especially amateur investors who might base their decisions on the narrative parts, need this study more than anyone. The findings increase their understanding of a company's authority over particular textual aspects in business reports, as well as the ability of managers to use narrative disclosure to impact investors' attitudes deliberately. As a result, this study advises consumers to consider various information sources when making decisions. Our findings also highlight the need for laws and guidelines that govern how corporate narrative information is disclosed. Governments and regulators should also examine the broader impact of their actions while enacting regulations because the effect could go beyond the main objective.

This research is subject to various limitations during the research. Further researchers who want to perform an in-depth study on the issue of EQ, EM, and DT are expected to use these limits as a preliminary for their own study on the subject. DT can be affected by a multitude of factors beyond the internal and external factors listed in this research. With this increasing complexity and uncertainty in the world, future research may use other DT characteristics, business segmentation, or financial components to study its impact on DT. Future research may try to investigate the factors influencing DT in another specific sector to obtain a more detailed understanding of the factors driving DT. This research only focuses on the factors influencing DT within the four years of 2017-2021.

References

- [1] Ministry of Industry. "Kemenperin" Indonesia's Manufacturing Industry is Expanding. 10-Feb-2022. [Online]. Available: <https://www.kemenperin.go.id/artikel/23125/Industri-Manufaktur-Indonesia-Semakin-Ekspansif>. [Accessed: 10-Jun-2022].
- [2] Hassan Y, Abousamak A, Hijazi R. Does corporate governance constrain earnings management in an unstable economic and political environment? *Asian Econ Financ Rev.* 2022;12(12):1074–93.
- [3] Abou-El-Sood H, El-Sayed D. Abnormal Disclosure Tone, Earnings Management and Earnings Quality. *Journal of Applied Accounting Research.* 2022;23(2):402–33.
- [4] Milgrom PR. Good news and bad news: representation theorems and applications. *Bell J Econ.* 1981;12(2):380–91.
- [5] Shakespeare C. Reporting matters: the real effects of financial reporting on investing and financing decisions. *Account Bus Res.* 2020;50(5):425–42.

- [6] Li F. Textual analysis of corporate disclosures: A survey of the literature. *J Account Lit.* 2010;29(1):143–65.
- [7] Kang Y, Cai Z, Tan CW, Huang Q, Liu H. Natural language processing (NLP) in Management Research: A literature review. *Journal of Management Analytics.* 2020;7(2):139–72.
- [8] Frankel R, Jennings J, Lee J. Disclosure sentiment: machine Learning vs. dictionary methods. *Manage Sci.* 2022;68(7):5514–32.
- [9] Tucker BP, Parker LD. Business as usual? An Institutional View of the Relationship between Management Control Systems and Strategy. *Financ Account Manag.* 2015;31(2):113–49.
- [10] Fang X, He K, Meng Y, Ye J. Supervision or collusion? CEO–CFO social ties and financial reporting quality. *J Account Lit.* 2022;44(2/3):133–53.
- [11] Albitar K, Abdoush T, Hussainey K. Do corporate governance mechanisms and ESG disclosure drive CSR narrative tones? *Int J Finance Econ.* 2022.
- [12] Menicucci E. *Earnings Quality: Definitions, Measures, and Financial Reporting.* Springer Nature; 2021.
- [13] Durana P, Valaskova K, Siekelova A, Michalkova L. Appraisal of Earnings Management Across the Sectors. *J Bus Econ Manag.* 2022;23(2):399–425.