



CEO Duality, Ownership, and Readability of Financial Statement Footnotes: Some Evidence from Indonesia

Tubagus Algan Roiston¹, Iman Harymawan^{2*}

^{1,2}Accounting Department, Airlangga University, Surabaya, Indonesia

*Corresponding author: harymawan.iman@feb.unair.ac.id

<https://dx.doi.org/10.24815/JDAB.V9I2.25569>

ARTICLE INFO

Article history:

Received date: 15 April 2022

Received in revised form: 25 July 2022

Accepted: 25 July 2022

Available online: 7 September 2022

Keywords:

Corporate governance, CEO duality, financial statement footnotes, ownership, readability

Citation:

Roiston, T.A., and Harymawan, I., (2022). CEO Duality, Ownership, and Readability of Financial Statement Footnotes: Some Evidence from Indonesia. *Jurnal Dinamika Akuntansi dan Bisnis*, 9(2), 149-168

Kata kunci:

Tata kelola perusahaan, dualitas CEO, catatan kaki laporan keuangan, kepemilikan, keterbacaan

ABSTRACT

This study examines the association between CEO duality, CEO ownership and financial footnotes readability. The data were collected from 1,469 non-financial firms listed on the Indonesian Stock Exchange (IDX) between 2010 and 2018. Using ordinary least squares (OLS) regression, this study unveiled a negative and significant relationship between CEO duality and financial statement footnotes. In addition, the relationship between CEO ownership and financial statement footnotes is positive and significant. Furthermore, this indicates that CEO duality expands the embarrassment and provokes opportunistic behaviour from the CEO to prioritize personal interests by exploiting potential company resources to weaken the independence of the CEO. Hence, the readability of financial footnotes is undecipherable. On the other hand, CEO ownership is more responsible for improving corporate performance, so more financial statement footnotes are readable. Therefore, this study contributes to the literature on seeking the understanding of the readability of a firm's written communication in emerging countries.

Dualitas CEO, Kepemilikan dan Keterbacaan Catatan Kaki Laporan Keuangan: Beberapa Bukti dari Indonesia

ABSTRAK

Penelitian ini bertujuan untuk menguji hubungan antara dualitas CEO, kepemilikan CEO dan keterbacaan catatan kaki keuangan. Data dikumpulkan dari 1,469 perusahaan non-keuangan yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2010 s.d. 2018. Dengan menggunakan regresi ordinary least squares (OLS), penelitian ini menemukan adanya hubungan yang negatif dan signifikan antara dualitas CEO dan catatan kaki laporan keuangan. Selain itu, hubungan antara kepemilikan CEO dan catatan kaki laporan keuangan adalah positif dan signifikan. Hasil ini menunjukkan bahwa dualitas CEO memperluas rasa malu dan memancing perilaku oportunistik dari CEO untuk memprioritaskan kepentingan pribadi dengan memanfaatkan sumber daya potensial perusahaan untuk melemahkan independensi CEO. Oleh karena itu, keterbacaan catatan kaki laporan keuangan tidak dapat diuraikan. Di sisi lain, kepemilikan CEO meningkatkan tanggung-jawabnya untuk meningkatkan kinerja perusahaan, sehingga catatan kaki laporan keuangan lebih mudah dibaca. Oleh karena itu, penelitian ini memberikan kontribusi untuk memperluas literatur tentang mencari pemahaman keterbacaan komunikasi tertulis perusahaan di negara-negara berkembang.

1. Introduction

The accounting scandals in corporations that have occurred recently have caused considerable losses to investors. The losses of those scandals are not only on the material side, but also the company's business continuity on a prolonged basis.

For example, Lehman Brothers (2008) caused a loss of 50 million dollars as a hidden loan asset that lowered the balance of income and expense accounts over the past few periods (Sorensen & Miller, 2017). On the contrary, in Indonesia,

recently there has been an accounting scandal at PT. Garuda Indonesia Tbk has significant losses for its investors due to unpredictable revenues that have caused a scandal of fraudulent company financial statements (Aviantara, 2021). Many companies carry out governance reforms to determine what caused the scandal (Amiram et al., 2018). The scandal is inseparable from the role of the company's executives, in particular the company's CEO. In the Indonesian context, the CEO is analogous to the president director of the company (Harymawan et al., 2019). Also, the Chief Executive Officer (CEO) holds the top position in the management of the company and has responded to the company's operations and performance (Fu et al., 2017). Companies hire CEOs based on their expertise, experience, and ability to create value for shareholders, so the CEO's performance and responsibilities are critical to the company.

In the Indonesian setting, the position of a CEO is regulated in the financial services authority (OJK) regulation NO 33 / POJK.04 / 2014. This regulation states that a member of the board of directors/president director is allowed a maximum of 1 (one) issuer or other public company. However, this regulation does not explicitly regulate how the dual position of the CEO of a public company and its subsidiaries is linked, so this is an opportunity for opportunistic company CEOs to get more incentives. A number of the study state that CEO duality can reduce the effectiveness of monitoring managerial decisions and actions, thus allowing the CEO to make decisions that can increase his wealth instead of firm performance or value (Seifzadeh et al., 2021; Abernathy et al., 2019; Salehi et al., 2020).

Ammari (2021) argues that CEO duality can reduce board independence and effectiveness and increase CEO power in making corporate decisions, thereby increasing agency conflict within the company (Antounian et al., 2021; Ginesti et al., 2017). According to several studies, CEO duality in corporate decision-making tends to be (Pavlopoulos et al., 2019; Al-ahdal et al., 2020).

Tahir et al. (2020) also stated that CEO duality has less effective control in making effective decisions, indicating weak management performance. Ginesti et al. (2018), when managers have weak performance, tend to complicate the information they present annually, which negatively impacts the stock market because they respond to complex information. One of the critical information in the annual report is the financial statement footnotes.

Seifzadeh et al. (2021) stated that corporate financial reports have always been among the most important information sources for decision-making, such as capital market practitioners (shareholders, creditors, and financial analysts), capital market legislators, and other stakeholders. For readers of financial statements, notes to financial statements are necessary because they help investors value companies in the stock market (Salehi et al., 2020). Financial statement footnotes are an integrated part of the company's financial statements. The increasing complexity of information in the financial statement footnotes makes readers have difficulty analyzing and processing existing information, which can cause readers or investors to find it challenging to determine what decision to choose (De Franco et al., 2020; Yen et al., 2021; Liu, 2021).

The readability of financial statement footnotes is critical because it communicates the numbers in the financial statements to every reader. With CEO duality positions in a subsidiary, it allows the CEO to have much room to make decisions that are not in line with shareholders' interests and can mislead the submission of information in a particular company's annual report in the financial statement footnotes. CEO's duality makes readability in the financial statement footnotes challenging to understand. However, Kim et al. (2021) argued that CEOs concurrently held by a subsidiary could reduce internal conflicts and inconsistencies in decision making. Likewise, if the multiple positions' role can utilize the CEO's knowledge, expertise, and information to increase the board's overall effectiveness, Kim et al. (2021), disclose

information in financial statement footnotes that is understandable to readers.

Besides, companies often try to reduce conflicts of interest by giving their shares rights to their management, especially the CEO. A director who owns most of the company's shares bears the consequences and reaps the benefits of destructive and value-creating managerial actions; thus, CEO ownership can reduce agency costs (Kim et al., 2021). In addition, CEO ownership aligns with agents' and shareholders' interests, reducing the need for shareholder monitoring, thereby improving disclosure quality, especially the disclosure's readability. Bernini et al. (2021) argue that the need for more excellent monitoring and more transparent disclosure decreases with direct ownership of the company. Hence, director ownership is a corporate governance mechanism that acts as a substitute for exposure. CEO ownership expects to disclose information in the financial statement footnotes that the reader understands.

We found that CEOs who concurrently held subsidiaries' positions had readability of financial statement footnotes challenging to understand. Where CEO duality, indirectly, much power is placed in one person's hands, which will create agency problems (Melón-Izco et al., 2021; Carrillo et al., 2019), which can trigger opportunistic behaviour of boards, especially CEOs, to make a profit. Personal and at the expense of the interests of shareholders. García-Sánchez et al. (2022) also mention that CEOs with multiple positions tend to complicate their disclosure and be dishonest when evaluating their performance, thus leading to long-term organizational deviations. Also, CEOs who have shares in the companies they lead can reduce agency problems in the company so that the CEO acts in the shareholders' interests. CEO ownership makes more responsibility for their decisions because CEOs will receive the same consequences as other shareholders for their actions and decisions (Khatib et al., 2021) and can avoid negligence in a CEO (Moreno-Ureba & Bravo-Urquiza, 2019). So,

CEO ownership will positively impact company performance and make the financial statement footnotes easy to understand. The remainder of this paper is organized as follows. The following section reviews relevant literature and develops research hypotheses. Section 3 presents our data and research design. Section 4 reports and discusses our results; before Section 5 concludes.

2. Literature review and hypothesis development

Readability is a person's ability to understand the context of sentences thrown through a writing instrument. Readability is initially a necessary process for a person to interpret the context of reading and then transform it into information for himself (Abshari & Rahman, 2020; Ajina et al., 2016). Gunning (1952) first coined the readability theory, which explained the ability to transfer information from obtained readings (Hassan et al., 2019). The readability of financial statement records is a process of understanding the context of financial statements aimed at digging for information on the company's segmentation and financial performance. According to Chall (1958), readability is the ability of a particular individual or subject to understand the context of reading influenced by a combination of the person's internal factors such as interests, willpower, and abilities. Some studies' readability of financial statement records indicates inconsistencies in results influenced by various characteristics of top management (Zhou, 2019; Uppal, 2020; Nguyen, 2020), CEO duality and CEO ownership as a dominant character.

In Indonesia, the CEO is a company organ that occupies the top position in company management and has responsibility for its operational activities. To create value for shareholders, companies usually will select and appoint CEOs based on their experience, expertise, and abilities (Harymawan et al., 2019). Managing and directing the company to achieve its goals is the CEO's full responsibility. The CEO also must plan and analyze the company's

functional performance; compile company policies and procedures, and gather and determine the company's strategic decisions. Based on a regulation on Indonesia Financial Services Authority NO 75 /POJK.04/2017, a CEO is responsible for all the company's preparation and financial reporting, so disclosing information in financial reports is very important for stakeholders. The information might represent all of the activities and risks in the business process.

CEO duality, indirectly, much power is placed in the hands of one person, which in turn will create agency problems (Khatib et al., 2021; Zou et al., 2015) and affect company performance (Malik & Makhdoom, 2016) so that the quality of the disclosures made by the CEO is questionable, especially the readability of the financial statement footnotes. However, Goergen et al. (2020) argue that CEOs with multiple positions can improve company performance by increasing decision-making efficiency at the top management level and reducing conflict of opinion between board members. CEO duality is closely related to multiple controls, increasing the risk of incorrectly choosing less active board members, leading to poor company performance (Sehrawat et al., 2020).

Besides, in a weak and political organizational structure, the CEO may abuse his dual power and appoint a person who has a close relationship as a director who tends to work under the CEO's direction (Kao & Chen, 2020). Moreover, CEO duality can reduce the efficiency of organizational operations, such as control of the company by the CEO, which results in a waste of resources (Wijethilake & Ekanayake, 2020). Thus, CEOs with multiple positions can weaken the organizational monitoring structure and negatively affect company performance (Chatterjee, 2020). Uppal (2020) and Ozbek & Boyd (2020) state that CEOs with multiple positions can reduce CEO independence and worsen company performance. Chychyla et al. (2019) and Salehi et al. (2020) show that companies with a worse performance show that the company annual report is longer and more complicated than

companies with a good performance. Furthermore, Chatterjee (2020) states that companies with weak performance present long financial reports that can decrease readability. CEO duality allows them to make their financial statement footnotes challenging to understand. Although CEO duality has a positive side in aligning parent and subsidiary companies' goals, it has not yet answered how open the CEOs are, given the high level of financial scandals among Indonesia's CEOs. Thus, the proposed hypothesis is: H_1 : CEO duality makes financial statement footnotes challenging to understand.

From the agency theory perspective, in general, every company mostly gives their stock ownership to CEOs to reduce conflicts of interest between agents and principals. The debate arose when CEOs held many shares in the public company over time. This reason comes true with the power of the CEO by improving the firm performance indicators (Tejerina-Gaite & Fernández-Temprano, 2021; Salma et al., 2003). Another consequence of a CEO's share ownership is that the CEO will get some punishment when they cannot give an action and decision managerial most appropriate for the corporate going concern (Habib & Monzur, 2019). Therefore, the CEO's share ownership gives more accountability for making an appropriate decision to reduce conflict between management and shareholders. Vu et al. (2018) suggest that CEO's share ownership will increase the firm performance, corporate governance, and firm value. Therefore, in the long term, the CEO's share ownership can encourage top management to focus more on determining business strategies rather than the negligence of using the firm's assets excessively (Abernathy et al., 2019). The CEO's share ownership is sometimes inseparable from the family ownership, where social ties between family members encourage loyalty and commitment to the family and company, thereby reducing agency costs.

On the other hand, the CEO's share ownership can increase the strength of a CEO in the company,

so that the CEO tends to choose company personnel who place their credit on them, which can worsen company performance. Based on this evidence, poor company performance results in unreadable annual reports leading to reduced transparency or increased uncertainty (Nguyen, 2020). However, in general we think that with the ownership of shares in the CEO, it is hoped that the CEO will be more responsible for the company to present disclosures that are easy to

understand, especially in financial statements and footnotes. Thus, the proposed hypothesis is:

H₂: CEO ownership makes financial statement footnotes easy to understand.

3. Research method

To test our hypothesis, we test the association between CEO Duality (Ownership) and the readability of financial statement footnotes by estimating the following model:

$$H_1: READ_{i,t} = \beta_0 + \beta_1 CEODUAL_{i,t} + \beta_2 CEOOWNERSHIP_{i,t} + \beta_3 BOARDSIZE_{i,t} + \beta_4 INDCOMSIZE_{i,t} + \beta_5 AUCOMSIZE_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LOSS_{i,t} + \beta_8 MARCAP_{i,t} + \beta_9 NETSALES_{i,t} + \beta_{10} YEAR + \beta_{11} INDUSTRY + \varepsilon \dots \dots \dots (1)$$

Readability indices

Readability is the dependent variable on our study. To measure readability, we use the content calculated from the financial statements' footnotes, which are part of the explanatory paragraph on accounting numbers in financial statements. Financial statements' footnotes could provide additional information on the risk of an audit engagement (Abernathy et al., 2019). The specific

measurement of readability was measured by four readability indexes (Chan et al., 2020; Xu, 2020; Habib & Hasan, 2018), namely the Flesch-Kincaid Grade Level (FLESCH), Flesch-Kincaid Readability Index (KINCAID), Gunning -Fog Readability Index (FOG), and Simple Measure of Gobbledygook (SMOG). The measurements of the four readability indices are as follows:

$$FLESCH\ index = 206.835 - 1.015 \left(\frac{total\ words}{total\ sentences} \right) + 84.6 \left(\frac{total\ syllables}{total\ words} \right) \quad (3)$$

$$Flesch-KINCAID\ Index = 0.39 \left(\frac{total\ words}{total\ sentences} \right) + 11.8 \left(\frac{total\ syllables}{total\ words} \right) - 15.59 \quad (4)$$

$$FOG\ Index = 0.4 \left\{ \left(\frac{words}{sentences} \right) - 100 \left(\frac{complex\ words}{words} \right) \right\} \quad (5)$$

$$SMOG\ Index = 1.043 \sqrt{30 \times \frac{total\ syllables}{total\ sentences}} - 3.1291 \quad (6)$$

The complex words are determined based on words that have three syllables or more. To measure the readability score, we employ readability.exe,¹ an open-access textual analysis software. A higher score in a readability index means that the text is more complex (i.e. less readable) (Lo et al., 2017). In addition, the high and low scores depended more

on the complexity of words on financial statement footnotes.

CEO duality

CEO duality is the independent variable used to test (H1). A CEO with multiple positions is often associated with a one-tier system setting in

¹https://trans4mind.com/personal_development/writing/Readability_software/downloadReadability.htm

corporate governance. A CEO is considering a double if the CEO is concurrently a commissioner in a company. However, this study brings new meaning in a two-tier system, where dummy variables measure CEO duality, with a value of 1 if the CEO serves as a director or commissioner in 1 subsidiary and 0 vice versa (Abels & Martelli, 2013).

CEO ownership

CEO ownership is an independent variable in this study that is used to test (H2). This variable is measured by a dummy variable, with a value of 1 if the CEO has ownership of the company and 0 if vice versa (Zona et al., 2018).

Control variables

Referring to previous research (Lee, 2019; Chan et al., 2020; Xu, 2020; Abernathy et al., 2019; Zona et al., 2018), this study uses Several control variables, including board size (BOARD SIZE), are measured by the natural logarithm of the number of members of the board of directors and the board of commissioners in the company. Independent commissioner measure (INDCOMSIZE), calculated by the number of independent commissioners in a company. Audit committee

board size (AUCOMSIZE) is calculated by the number of audit committee boards in one company—return on Asset (ROA) is measured by dividing net income by total assets. Company losses (LOSS), measured using a dummy variable, have a value of 1 if the company received negative after-tax income in the current year and 0 if otherwise. Market Capitalization (MADCAP) was calculated using the natural logarithm of market capitalization (year-end closing price multiplied by total outstanding shares). Finally, total net sales (NET SALES) are calculated using the natural logarithm of the company's net sales. Besides, this study also uses several fixed effect variables to accommodate differences in observations' characteristics (Gujarati & Dawn, 2008), including year fixed effects and industry fixed effects. The year fixed effect variable controls differences in economic conditions during the research observation period. Furthermore, the fixed effect industry variable is used to control for differences in each industry's characteristics in the study. These two variables are nominal data types, which only explain the category, not the level, which is then transformed into several dummy variables at the time of analysis to capture the difference in intercept between research objects (Gujarati & Dawn, 2008).

Table 1. Variables definition and operationalization

Variable		Measurement	Sources
Dependent variable			
Readability	FLEACH, KINCAID, FOG, SMOG	Using readability measurements with the Flesch-Kincaid Grade Level model, Flesch-Kincaid Readability Index, Gunning-Fog Readability Index, and Simple Measure of Gobbledygook, Coleman-Liau.	Financial statement footnotes
Independent variable			
CEO Duality	CEODUALITY	Dummy variable, value of 1 if the CEO serves as a director or commissioner in 1 subsidiary and 0 otherwise.	Annual report
CEO Ownership	CEO OWNERSHIP	Dummy variable, value of 1 if the CEO has ownership of the company and 0 otherwise.	Annual report
Control variable			
Board size	BOARDSIZE	Natural logarithm of the number of boards of directors and boards of commissioners in a company.	Annual report

Independent commissioner size	INDCOMSIZE	the number of independent commissioners in a company.	Annual report
Audit committee size	AUCOMSIZE	The total number of audit committee boards in one company.	Annual report
Return on asset	ROA	Income after tax divided by total assets.	OSIRIS
Loss	LOSS	Dummy variable, value of 1 if the company received negative after-tax income in the current year, and 0 otherwise.	OSIRIS
Market capitalization	MARCAP	Natural logarithm of the company's market capitalization.	OSIRIS
Net sales	NETSALES	The natural logarithm of the firm's net sales.	OSIRIS

Sample selection

The population in this study are all companies listed on the IDX for the 2010-2018 period. Except for those included in the SIC (standard industrial classification), six codes cover depository institutions; non-depository credit institutions; securities and commodity brokers, dealers, exchanges and services; insurance holders;

insurance agents, brokers, and services agents; holders and other investment offices. We also drop all observations with missing data. Finally, we drop observations for firms that do not provide a full-text annual report. Panel A Table 2 provides the sample selection process. The final sample consists of 1,469 firm-years observation. Panel B presents the number of observations by industry.

Table 2. Sample selection and firm distribution by industry

Panel A: Sample selection process			
Selection criteria		Observations	
Initial observations		5,940	
Excluded: firms from financial industries (SIC 6)		(1,944)	
Excluded: firms with missing data		(2,527)	
Final observations		1,469	
Panel B: Firm distribution by industry			
Industry	Code	Observations	Percentage
Agriculture, forestry, and fishery	SIC 0	73	4.97
Mining and construction	SIC 1	240	16.34
Construction industries	SIC 2	422	28.73
Manufacturing	SIC 3	205	13.96
Transportation, communication, electricity, gas and cleaning services	SIC 4	262	17.84
Wholesale and retails trader	SIC 5	153	10.42
Services industries	SIC 7	85	5.79
Health, legal, and educational services and consulting	SIC 8	29	1.97
Total		1469	100.00

Panel A reports the sample selection for the period 2010–2018 and industry breakdown of the sample firms. Panel A reports the selection of firm-year observations for the regression analyses in this study. Panel B reports firm distribution by industry. The industry classification is based on one-digit SIC codes. Firms with codes 6 (financials) are excluded from the sample.

4. Results and discussion

Descriptive statistics and univariate analysis

Table 3 shows the distribution of the research

sample based on multiple positions and shared ownership by the CEO. Panel A shows the sample

distribution based on CEO duality. From a total of 1469 observations, it can be seen that as many as 671 observations or 45.68% are companies that have CEO duality. Also, the construction industry (SIC2) is the industry that has the most CEO duality, with 182 observations. The transportation, communication, and utility industry (SIC4) continued with 131 observations, and the manufacturing industry (SIC4), with 118 observations.

Furthermore, Panel B shows the distribution of the sample based on share ownership by the CEO. From the total observations, CEOs who have right of company shares are 423 observations or 28.80% of a total of 1469 observations, the construction industry (SIC2) is the industry that has the most CEOs who own company shares, namely 144 observations, then the mining industry (SIC1), as many as 74 observations, and the manufacturing industry (SIC4), as many as 66 observations.

Table 3. Sample distribution based on CEO duality and CEO ownership

Panel A: CEO duality						
SIC	Company with CEO duality		Company without CEO duality		Total	
	n	%	n	%	n	%
Agriculture, forestry, and fishery	29	39.73	44	60.27	73	100
Mining and construction	86	35.83	154	64.17	240	100
Construction industries	182	43.13	240	56.87	422	100
Manufacturing	118	57.56	87	42.44	205	100
Transportation, communication, electricity, gas and cleaning services	131	50.00	131	50.00	262	100
Wholesale and retails trader	59	38.56	94	61.44	153	100
Services industries	56	65.88	29	34.12	85	100
Health, legal, and educational services and consulting	10	34.48	19	65.52	29	100
Total	671	45.68	798	54.32	1469	100
Panel B: CEO Ownership						
SIC	Company with CEO Ownership		Company without CEO Ownership		Total	
	n	%	n	%	n	%
Agriculture, forestry, and fishery	16	21.92	57	78.08	73	100
Mining and construction	74	30.83	166	69.17	240	100
Construction industries	144	34.12	278	65.88	422	100
Manufacturing	56	27.32	149	72.68	205	100
Transportation, communication, electricity, gas and cleaning services	66	25.19	196	74.81	262	100
Wholesale and retails trader	34	22.22	119	77.78	153	100
Services industries	22	25.88	63	74.12	85	100
Health, legal, and educational services and consulting	11	37.93	18	62.07	29	100
Total	423	28.80	1046	71.20	1469	100

This table reports the summary of data used in this study. This table is divided into two panel where panel A is sample distribution for company with duality and without duality CEO from 1469 firm-year observation, while panel B is sample distribution for company with ownership and without ownership of CEO from 1469 firm-year observation. This test was done after winsorizing the data for 1 and 99 percent.

Table 4 shows the descriptive statistics in this study. The readability of financial statements footnotes is measured using the readability index

(FLESCH, KINCAID, FOG, SMOG). The average FLESCH is 21.191, KINCAID is 24,612, FOG is 24.728, SMOG is 19,240. It indicates that the

readability of its financial statements' footnotes is difficult to understand.

Also, CEO DUALITY has an average of 0.457, CEO OWNERSHIP has an average of 0.288, BOARDSIZE has an average of 0.457,

INDCOMSIZE has an average of 0.288, AUCOMSIZE has an average of 1.654, ROA has an average of 0.042, LOSS has an average of a mean of 0.214, MARCAP has a mean of 21.564, NETSALES has a mean of 21.578.

Table 4. Descriptive statistics

	Mean	Median	Minimum	Maximum
FLESCHE	21.191	21.200	18.862	23.908
KINCAID	24.612	24.888	12.317	41.334
FOG	24.728	24.704	22.450	28.375
SMOG	19.240	19.183	17.220	24.810
CEO DUALITY	0.457	0.000	0.000	1.000
CEO OWNERSHIP	0.288	0.000	0.000	1.000
BOARDSIZE	2.200	2.197	1.386	2.996
INDCOMSIZE	1.654	2.000	0.000	4.000
AUCOMSIZE	2.900	3.000	0.000	5.000
ROA	0.042	0.036	-0.346	0.392
LOSS	0.214	0.000	0.000	1.000
MARCAP	21.564	21.566	17.467	26.337
NETSALES	21.578	21.601	16.687	24.940

This table reports the descriptive statistics result on 1469 observations. This test was done after winsorizing the data for 1 and 99 percent. This table included information related to mean, median, minimum, and maximum.

Table 5 shows the Pearson correlation results, which indicates a positive relationship between the CEO DUALITY variable and the readability index (FLESCHE, KINCAID, FOG, SMOG) at a significant level of 10%, 5%, 5%, and 10%. The relationship between the CEO OWNERSHIP variable and the readability index (FLESCHE, KINCAID, FOG, SMOG) is negatively significant at the 1%, 5%,

10%, and 1% levels. It is shown CEO DUALITY will produce financial statement footnotes difficult to understand. In contrast, the relationship between CEO OWNERSHIP and the financial statements' footnotes shows that the CEO's share ownership makes the financial statements' footnotes easy to understand.

Table 5. Pearson correlation results

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
[1] FLESCHE	1.000												
[2] KINCAID	0.853***	1.000											
	(0.000)												
[3] FOG	0.917***	0.865**	1.000										
	(0.000)	(0.000)											
[4] SMOG	0.810***	0.706**	0.859***	1.000									
	(0.000)	(0.000)	(0.000)										
[5] CEO DUALITY	0.046*	0.055**	0.053**	0.044*	1.000								

	(0.075)	(0.036)	(0.042)	(0.093)									
[6] CEO OWNERSHIP	-0.077***	-0.065**	-0.046*	-0.068***	0.078***	1.000							
	(0.003)	(0.013)	(0.077)	(0.009)	(0.003)								
[7] BOARDSIZE	-0.039	-0.076**	-0.054**	-0.028	0.004	0.028	1.000						
	(0.139)	(0.004)	(0.038)	(0.279)	(0.876)	(0.279)							
[8] INDCOMSIZE	0.038	-0.012	0.017	0.035	-0.024	-0.028	0.666**	1.000					
	(0.147)	(0.642)	(0.504)	(0.174)	(0.358)	(0.282)	(0.000)						
[9] AUCOMSIZE	0.055**	0.008	0.061**	0.074***	-0.039	0.037	0.108**	0.104**	1.000				
	(0.035)	(0.761)	(0.020)	(0.004)	(0.133)	(0.153)	(0.000)	(0.000)					
[10] ROA	-0.047*	-0.020	-0.042	-0.071***	0.099***	0.010	0.226**	0.080**	-0.002	1.000			
	(0.070)	(0.438)	(0.111)	(0.006)	(0.000)	(0.699)	(0.000)	(0.002)	(0.947)				
[11] LOSS	0.038	0.040	0.021	0.026	-0.106***	-0.017	0.173**	0.072**	-0.021	0.631**	1.000		
	(0.142)	(0.122)	(0.415)	(0.321)	(0.000)	(0.509)	(0.000)	(0.006)	(0.418)	(0.000)			
[12] MARCAP	0.016	-0.023	0.022	0.028	0.060**	0.118**	0.555**	0.375**	0.135**	0.422**	-0.273***	1.000	
	(0.541)	(0.383)	(0.410)	(0.277)	(0.022)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
[13] NETSALES	-0.047*	0.096**	-0.039	-0.003	0.078***	0.094**	0.612**	0.410**	0.137**	0.309**	-0.271***	0.707**	1.000
	(0.074)	(0.000)	(0.134)	(0.903)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	

This table reports the pearson correlation test result on 1469 observations. This test was done after winsorizing the data for 1 and 99 percent. p-values in parentheses * p < 0.1, ** p < 0.05, *** p < 0.01. FLESCH, KINCAID, FOG, and SMOG are variables that state the level of readability of records on financial statements, As for CEO Duality and CEO Ownership are independent variables of this study.

Table 6 shows the results of different tests based on the mean (T-test). Panel A shows the results of companies with CEO duality and companies that do not have CEO duality. The results show that the average of financial statements footnote readability (FLESCH, KINCAID, FOG, SMOG) is significantly different for companies with CEO duality with companies that do not have CEO duality. Panel B

shows companies with CEO ownership, and companies do not have CEO ownership. The results show that the average of financial statements footnote readability (FLESCH, KINCAID, FOG, SMOG) is significantly different for companies with CEO ownership and companies that do not have CEO ownership.

Table 6. Independent t-test

Panel A: CEO Duality				
Company with CEO Duality		Company without CEO Duality		
			Coeff	t-value
FLESCH	21.234	21.154	0.080*	1.782*

KINCAID	24.850	24.412	0.438**	2.103**
FOG	24.781	24.684	0.097**	2.037**
SMOG	19.288	19.199	0.089*	1.681*
Panel B: CEO Ownership				
	Company with CEO Ownership	Company without CEO Ownership	Coeff	t-value
FLESCH	21.086	21.233	-0.146***	-2.967***
KINCAID	24.205	24.776	-0.572**	-2.497**
FOG	24.662	24.755	-0.092*	-1.770*
SMOG	19.131	19.283	-0.152***	-2.625***

This table reports the independent t-test result on 1469 firm-year observations. This test was done after winsorizing the data for 1 percent and 99 percent. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

CEO duality (ownership) and readability of financial statement footnotes

Table 7 shows the OLS regression results for CEO DUALITY and CEO OWNERSHIP with the readability of financial statement footnotes. The CEO DUALITY variable against FLESCH is 0.107 ($t = 2.31$) and is significant at the 5% level. The CEO DUALITY variable against KINCAID is 0.591 ($t = 2.71$) and is significant at the 1% level. The coefficient value of the CEO DUALITY variable against FOG is 0.124 ($t = 2.51$) and is significant at the 5% level. The CEO DUALITY variable against SMOG is 0.108 ($t = 2.71$) and is significant at the 5% level. The results of several regressions indicate that CEOs with multiple positions in subsidiaries have a significant positive relationship with the level of readability of the company's financial statements (FLESCH, KINCAID, FOG, SMOG).

This result supports H1, where the CEO who concurrently holds the position makes the financial statement's footnotes difficult to understand. These results supported for study from Abernathy et al., (2019), where the readability of financial statements footnotes that is difficult to understand is closely related to increased audit risk and corporate litigation risk. Therefore, this study gives a short answer that one of the causes of the increased risk is the increase in agency problems. It is indicated that companies' weak supervision with a double role of

CEO in subsidiary companies weakens the level of independence of a CEO (Grove et al., 2011).

In addition, the OLS regression result for CEO OWNERSHIP with readability of financial statement footnotes shows that the CEO OWNERSHIP variable against FLESCH is -0.144 ($t = -2.84$) and is significant at the 1% level. The CEO OWNERSHIP variable's coefficient value to KINCAID is -0.481 ($t = -2.08$) and is significant at the 5% level. The CEO OWNERSHIP variable against FOG is -0.093 with ($t = -1.76$) and is significant at the 10% level. The coefficient value of the CEO OWNERSHIP variable to SMOG is -0.165 ($t = -2.96$) and is significant at the 1% level. The results of several regressions indicate that the CEO's share ownership has a significant negative relationship with the level of readability of the company's financial statements (FLESCH, KINCAID, FOG, SMOG).

Thus, these results are consistent with the second research hypothesis (H2), which means that CEOs who own shares of companies tend to produce notes on financial statements that are easy to understand. CEO ownership of company shares gives a CEO more responsibility for their decisions because CEOs will receive the same consequences as other shareholders for their actions and decisions (Shleifer & Vishny, 1997). This is in line with Vu et al., (2018). With this increased sense of

responsibility, a CEO will try hard to improve their performance and performance because they feel they own the company and make financial statement footnotes easy to read.

Table 7. CEO duality, CEO ownership, and readability of financial statement footnotes

	Prediction Direction	FLESCH	KINCAID	FOG	SMOG
CEO DUALITY	?	0.107** (2.31)	0.591*** (2.71)	0.124** (2.51)	0.108** (1.98)
CEO OWNERSHIP	?	-0.144*** (-2.84)	-0.481** (-2.08)	-0.093* (-1.76)	-0.165*** (-2.96)
BOARDSIZE	-	-0.218** (-2.24)	-0.774* (-1.84)	-0.297*** (-3.01)	-0.263** (-2.44)
INDCOMSIZE	-	0.110*** (3.00)	0.320** (1.98)	0.095** (2.57)	0.101** (2.48)
AUCOMSIZE	+	0.018 (0.66)	-0.036 (-0.27)	0.018 (0.64)	0.021 (0.72)
ROA	-	-0.128 (-0.44)	1.302 (1.01)	-0.232 (-0.74)	-0.660* (-1.93)
LOSS	+	0.040 (0.60)	0.409 (1.36)	-0.009 (-0.12)	-0.046 (-0.60)
MARCAP	+	0.037** (2.03)	0.164* (1.92)	0.042** (2.12)	0.031 (1.46)
NETSALES	-	-0.047** (-2.51)	-0.348*** (-4.01)	-0.038** (-1.98)	-0.006 (-0.30)
CONSTANT		21.766*** (61.44)	29.799*** (19.05)	25.047*** (66.98)	19.031*** (47.81)
Year FE		Included	Included	Included	Included
Industry FE		Included	Included	Included	Included
R2		0.068	0.071	0.071	0.069
N		1469	1469	1469	1469

This table reports the result of OLS regression for hypothesis testing of this study This test was done after winsorizing the data for 1 percent and 99 percent. *t* statistics in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Robustness analysis

There is a possibility that the variable CEO DUALITY and CEO OWNERSHIP can be endogenous, where there is a possibility that there is a correlation between the CEO DUALITY treatment variable (CEO OWNERSHIP) and the observable variable. To overcome the endogeneity problem of the correlation between the independent variables and other variables in the observations in this study, in additional analysis, the coarsened exact matching (CEM) approach will be carried out. For this reason, this study will use CEM as an additional sensitivity analysis. In this study, the covariates were arranged into the same five strata, and using four covariates were included in the CEM model.

Table 8 panel A shows a summary of CEM matching for CEO duality. In this test sample, there are 651 of 671 CEO observations with multiple positions, which are then matched with 733 out of 798 not-concurrent CEO observations, so that the total sample is 1384 observations.

Whereas Panel B shows a summary of CEM matching for testing CEO ownership where in this test sample there are 404 out of 423 observations of CEOs who own shares of the company, which are then matched with 924 out of 1046 observations of CEOs who do not own company shares so that a total sample is a number of 1328 of observations.

Table 8. CEM – Matching Summary

Panel A: Matched CEM Sample – CEO duality		
	CEO Duality = 0	CEO Duality = 1
All	798	671
Matched	733	651
Unmatched	65	20
Panel B: Matched CEM Sample – CEO ownership		
	CEO Ownership=0	CEO Ownership=1
All	1046	423
Matched	924	404
Unmatched	122	19

This table reports a matching summary of all observations where the sample match with the duality and ownership of the CEO is treated as the number 1 while the sample mismatch of the two things is treated as 0. The result of the match of the sample is an observation that states the resolution of the problem of endogeneity of the sample. The table reported sample match for duality and CEO ownership of 1384 observations.

Table 9 is the result of CEM regression on CEO duality and CEO ownership with the readability of financial statement footnotes. This table show that the relationship between the readability variables (FLESCH, KINCAID, FOG, SMOG) has a significant positive relationship with the independent variable CEO DUALITY and has a significant level variation of 5% (FLEACH), 1% (KINCAID), 5% (FOG), and 5% (SMOG), these

results still support H1 and indicate that this model is free from endogeneity problems. In addition, this relationship also has a significant negative with CEO ownership on the significant level variation 1% (FLESCH), 5% (KINCAID), 10% (FOG), and 1% (SMOG). From our result, CEO ownership still supports H2 and the model also freely from endogeneity issues.

Table 9. CEM method- CEO duality and readability of financial statement footnotes

	Prediction Direction	FLESCH	KINCAID	FOG	SMOG
CEO DUALITY	?	0.116** (2.41)	0.594*** (2.62)	0.132** (2.57)	0.125** (2.24)
CEO OWNERSHIP	?	-0.159*** (-2.95)	-0.541** (-2.21)	-0.109* (-1.93)	-0.207*** (-3.57)
BOARDSIZE	-	-0.192* (-1.82)	-0.790* (-1.72)	-0.265** (-2.45)	-0.245** (-2.08)
INDCOMSIZE	-	0.112*** (2.97)	0.339** (2.04)	0.099** (2.56)	0.098** (2.33)
AUCOMSIZE	+	0.002 (0.06)	-0.137 (-0.92)	0.003 (0.10)	0.014 (0.41)
ROA	-	-0.121 (-0.36)	0.642 (0.43)	-0.274 (-0.76)	-0.639 (-1.63)
LOSS	+	0.040 (0.58)	0.331 (1.04)	-0.013 (-0.17)	-0.030 (-0.37)
MARCAP	+	0.037* (1.85)	0.179* (1.92)	0.042* (1.92)	0.032 (1.38)
NETSALES	-	-0.047** (-2.38)	-0.347*** (-3.80)	-0.040* (-1.96)	-0.010 (-0.47)
CONSTANT		21.760*** (58.65)	29.896*** (18.22)	25.073*** (63.67)	19.067*** (45.73)
Year FE		Included	Included	Included	Included
Industry FE		Included	Included	Included	Included
R-Squared		0.063	0.069	0.064	0.063
Adj-R Squared		0.047	0.053	0.048	0.047
N		1384	1384	1384	1384

This table reports the results of Coarsened Exact Matching regression test using 1,384 firm-year observations. The CEM test using five strata as basis. The decreased number of observations due to several requirements in CEM for observations to classified matched by CEM. This test was done after winsorizing the data for 1 percent and 99 percent. T statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Discussion

The level of readability of the financial statement footnotes in this study is viewed from the perspective of duality and ownership from CEO; the duality of the CEO leads to a position controlled by

him on several subsidiaries. The authority and discretion of the company will be compromised if the CEO has duality in every position he occupies. This will affect the vagueness of the information

produced because there is a blurring of information from poor organizational performance. On the other hand, the fact shows that the CEO who has control of the company with shares ownership that has affects the operational decisions and policies of the company so that it will impact on the level of readability of the information was disclosed by the company (Grove et al., 2011). From our best knowledge, the study of readability level in Indonesia context from the duality and ownership of CEOs is still confined carried out. This study adds a bit to extent the literature for reviewing of the duality and ownership of CEOs that have the potential to affect the level of readability of financial statement footnotes.

The baseline test gives some sufficient evidence for the readability context, the critical information needs to be considered for the relationship between duality and ownership of the CEO at the readability of financial statement footnotes. Table 2 of panel B displaying in detail that the most prominent and smallest number of observations in terms of industrial scale is dominated by the mining and construction industry with a total of 240, the construction industry with 422, the manufacturing with 205, and transportation, communication, electricity, gas and cleaning services getting a total of 262 observations. In addition, the company with the smallest number of observations obtained health, legal, and educational services and consulting with a total of 29 companies, agriculture, forestry, and fishery with a total of 73 companies, and service industry with 85 companies. This shows that the average industry for our subject analysis is the construction and mining industry, where CEO duality dominates its influence on companies with many subsidiary companies under parent companies. In addition, from the table 3 shows that the distribution of samples based on CEO duality and CEO ownership, overall, the distribution of samples based on CEO duality shows that companies with CEOs with concurrent positions in subsidiary companies are as much as 46%. In comparison, those that do not have a position frame are 54%. This

indicates that almost 50% of CEOs in Indonesia have concurrent positions in several positions in the company. Meanwhile, based on CEO ownership shows that CEOs who have share ownership in the company are as much as 29%, while those who do not own company shares are 71%. This result provides sufficient evidence that the average CEO in Indonesia rarely owns a stake in the company where he is the head of the company.

Table 5 shows that the Pearson correlation between CEO duality and CEO ownership to the readability of financial statement footnotes. the result of Pearson correlation indicate that the CEO duality positively correlates to the readability of financial statement footnotes proxied with FLESCH, KINCAID, FOG, and SMOG. This provides information that the information disclosed by the company through financial statement footnotes with CEOs with concurrent positions has a positive relationship with the level of readability. In addition, CEO Ownership is negatively correlated with the readability rate. This evidence shows that ownership impacts increasing the level of readability of financial statement footnotes.

According the test results shows that a quite surprising fact about the influence of CEO duality and ownership on the level of readability. Concurrent CEOs have an impact on reducing the quality of financial information produced. When the CEO duplicates positions in several strategic positions in the company, the resulting decision has an information bias that can obscure the facts because the duality of the CEO can increase agency issues that give rise to interest debates between owners and management (Khatib et al., 2021; Zou et al., 2015). In addition, the duality of CEOs increases the dual control role, which causes an increased risk that CEOs fail to elect active board members so as to reduce the quality of company performance (Sehrawat et al., 2020). Based on the results of previous baseline tests, it can be concluded that the duality of the CEO makes the level of readability more challenging; this is indicated by reducing and weakening the monitoring structure of the

organization and, in the end, can cause a negative influence on the performance of the organization. Thus, when the CEO has a position with multiple positions, there is a tendency that the CEO will do unfit work and produce incorrect information; it has an impact on reducing the quality of the information produced (Chatterjee, 2020). The decline indicates that management is reluctant to properly inform the company's condition so that the level of readability becomes more difficult to digest and challenge.

CEO ownership explained that the ownership or right of participation of shares in a company by the CEO could reduce conflicts of interest between principals and agents, where this happens because share ownership will increase the tension of the company's performance better than CEO do not a control related to the company (Habib & Monzur, 2019). In addition, while they control the company, it will require the CEO to make performance following the company's long-term interests. This control from CEO can be proven by the increase in the company's performance for long time. Ownership of CEOs requires them to perform the best managerial actions and performance decisions that most appropriately follow the goals of the organization. Instead of taking actions that can bring penalties and consequences for a decrease in performance, causing a conflict of interest between the principal and management (Abernathy et al., 2019). In addition, the level of readability will be easier to understand because the information disclosed by the company reflects all available information. Furthermore, management seeks to increase information accountability for its responsibilities in the company by participating in shareholding and control. This statement reinforces evidence that CEO ownership in companies will bring and encourage those in the domain of top management to focus on determining valuable business strategies instead of misusing organizational assets (Nguyen, 2020). For this reason, the existence of an ownership CEO can increase his responsibility to improve the company's performance so that all the information presented

reflects the conditions that are the objectivity of the CEO's performance without blurring the available information, and this will have an impact on the level of readability of the information more easily.

Finally, Ordinary Least Square (OLS) testing sometimes has endogeneity problems that cause the results presented to be biased. The bias of a test is caused because the resulting observations overlap each other, so a test tool is needed to analyze and prove that the resulting observation is biased. CEM or coarsened exact matching is a test tool that seeks to analyze and prove that the observations obtained are free from test bias. This tool works by equalizing the uniqueness of observation so that the observations will be produced with the same and unique characteristics. For this reason, CEM is an exciting test tool to overcome the endogeneity problem from regression testing. The problem of endogeneity is a problem that occurs because a test can negate or hold each other and will have an impact on the inaccuracy in the results that will be generated by the baseline regression. Based on tables 8 and 9, as cited in the previous section, presents a summary of the sample match and the test of the resulting sample match. The table display that there is consistency in results from CEM testing conducted with simple regression testing. This concludes that endogeneity was successfully overcome by the CEM test, which was proven to have a certain degree of significance. However, the results of the CEM test have become unproven. In other words, the endogeneity problem has not been resolved, while the test results do not show a significance level. Thus, the endogeneity problem has been resolved by the presence of CEM treatment and the results of such treatment.

The financial authority regulation No. 33/POJK. 04/2014 explained that a CEO has a limit on holding a position in the company, thus requiring them to act in accordance with their capacity on the board of directors and will affect the satisfaction of the CEO's interests in the company and have the potential to increase moral hazard behavior so that regulations are also needed that regulate the concurrent position

of the CEO in the company to avoid interests that have the potential to clash with each other. CEO duality and ownership also can generate behaviors that lead to moral hazard and enrich themselves by acting outside the provisions of the company's strategic goals. They believe that their power is sufficient to remove traces of misbehavior over their interests and that such information is rarely disclosed in financial statements or information that is potentially convoluted and produces information that is difficult to understand.

5. Conclusions

The purpose of this study was to analyse the relationship between CEO duality in subsidiaries, CEO ownership, and the readability of financial statement footnotes in all companies listed on the IDX for the 2010-2018 period. CEO duality in subsidiaries has a significant positive relationship with the readability of financial statement footnotes. It indicates that companies with CEO duality tend to produce financial statement footnotes that are difficult to understand because a CEO duality can increase conflicts of interest and provoke opportunistic behaviour from the CEO to prioritize personal interests to weaken the independence of the CEO. The performance of the CEO is not optimal because he must hold responsibility for the two companies simultaneously. Meanwhile, CEO ownership has a significant negative relationship with the readability of financial statement footnotes. It shows that CEO ownership can increase responsibility to improve company performance and make the readability of financial statement footnotes easy to understand. In addition, share ownership by the CEO will increase the CEO's vigilance in leading the company because errors in the policies they take can impact their level of incentives in the form of company shares, which will be detrimental to the CEO.

This research enriches knowledge and implication to call for more ownership from CEO on the firm, especially in corporate governance and the readability of disclosure in an annual report,

particularly in financial statement footnotes. Besides, this research provides an overview of the adverse effects and negative trends of multiple CEO positions in subsidiaries. In Indonesia, multiple roles are often misused in acts of corruption, collusion, or nepotism from a leader. This study also provides input on government regulations and financial authority regulation NO 33 / POJK.04 / 2014. This regulation only regulates public companies' concurrent positions with other public companies. Still, it is not clear how the relationship between simultaneous positions between public companies and subsidiaries. Therefore, it is essential to add to the new regulations to avoid CEOs' moral hazard of enriching themselves and ignoring the interests of the crowd.

This study has several limitations. First, it only focuses on concurrent positions of a CEO in one subsidiary company. However, it does not count how many positions a CEO holds in other subsidiaries because there is a possibility that a CEO will have multiple positions in many subsidiaries. It is hoped that in the future, this research can develop the impact of multiple positions in subsidiaries, especially in family companies, whether the results obtained are still consistent or vice versa.

References

- Abels, P. B., & Martelli, J. T. (2013). CEO duality: how many hats are too many? 13(2), 135–147. <https://doi.org/10.1108/14720701311316625>
- Abernathy, J. L., Guo, F., Kubick, T. R., & Masli, A. (2019). Financial statement footnote readability and corporate audit outcomes. *Auditing*, 38(2), 1–26. <https://doi.org/10.2308/ajpt-52243>
- Abshari, F. R., & Rahman, A. (2020). Manajemen Laba Riil Dan Keterbacaan Laporan Tahunan. *Jurnal Akuntansi Kontemporer*, 12(1), 35–43. <https://doi.org/10.33508/jako.v12i1.2211>
- Ajina, A., Laouiti, M., & Msolli, B. (2016). Research in International Business and Finance Guiding through the Fog: Does annual report readability reveal earnings management? *Research in International Business and Finance*, 38, 509–516. <https://doi.org/10.1016/j.ribaf.2016.07.021>

- Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. S. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. *Research in International Business and Finance*, 51(August 2019), 101083. <https://doi.org/10.1016/j.ribaf.2019.101083>
- Amiram, D., Bozanic, Z., Cox, J. D., Dupont, Q., Karpoff, J. M., & Sloan, R. (2018). Financial reporting fraud and other forms of misconduct: a multidisciplinary review of the literature. *Review of Accounting Studies*, 23(2), 732–783. <https://doi.org/10.1007/s11142-017-9435-x>
- Ammari, A. El. (2021). Do CEO duality and ownership concentration impact dividend policy in emerging markets? The moderating effect of crises period. *International Journal of Financial Studies*, 9(4). <https://doi.org/10.3390/ijfs9040062>
- Antounian, C., Dah, M. A., & Harakeh, M. (2021). Excessive managerial entrenchment, corporate governance, and firm performance. *Research in International Business and Finance*, 56(January), 101392. <https://doi.org/10.1016/j.ribaf.2021.101392>
- Aviantara, R. (2021). Scoring the financial distress and the financial statement fraud of Garuda Indonesia with «DDCC» as the financial solutions. *Journal of Modelling in Management*. <https://doi.org/10.1108/JM2-01-2020-0017>
- Bernini, F., Ferretti, P., & Angelini, A. (2021). The digitalization-reputation link: a multiple case-study on Italian banking groups. *Meditari Accountancy Research*. <https://doi.org/10.1108/MEDAR-02-2021-1201>
- Carrillo, M. I. A., De La Cruz, A. M. P., & Chicharro, M. N. (2019). The impact of corporate governance on corruption disclosure in European Listed Firms through the implementation of directive 2014/95/EU. *Sustainability (Switzerland)*, 11(22), 1–21. <https://doi.org/10.3390/su11226479>
- Chan, C. S. R., Dennis, H., & Huang, J. Y. (2020). Journal of Business Venturing Insights Less is more? Evidence for a curvilinear relationship between readability and screening evaluations across pitch competition and crowdfunding contexts. *Journal of Business Venturing Insights*, 14(May), e00176. <https://doi.org/10.1016/j.jbvi.2020.e00176>
- Chatterjee, C. (2020). Board Quality and Earnings Management: Evidence from India. *Global Business Review*, 21(5), 1302–1324. <https://doi.org/10.1177/0972150919856958>
- Chychyla, R., Leone, A. J., & Minutti-Meza, M. (2019). Complexity of financial reporting standards and accounting expertise. *Journal of Accounting and Economics*, 67(1), 226–253. <https://doi.org/10.1016/j.jacceco.2018.09.005>
- De Franco, G., Fogel-Yaari, H., & Li, H. (2020). Md&a textual similarity and auditors. *Auditing*, 39(3), 105–131. <https://doi.org/10.2308/ajpt-18-016>
- Fu, J., Shimamoto, D., & Todo, Y. (2017). Can firms with political connections borrow more than those without? Evidence from firm-level data for Indonesia. *Journal of Asian Economics*, 52, 45–55. <https://doi.org/10.1016/j.asieco.2017.08.003>
- García-Sánchez, I. M., Aibar-Guzmán, C., Serrano-Valdecillos, C., & Aibar-Guzmán, B. (2022). Analysis of the Dialogue with Stakeholders by the IBEX 35 Companies. *Sustainability (Switzerland)*, 14(3), 1–26. <https://doi.org/10.3390/su14031913>
- Ginesti, G., Drago, C., Macchioni, R., & Sannino, G. (2018). Female board participation and annual report readability in firms with boardroom connections. *Gender in Management*, 33(4), 296–314. <https://doi.org/10.1108/GM-07-2017-0079>
- Ginesti, G., Sannino, G., & Drago, C. (2017). Board connections and management commentary readability: the role of information sharing in Italy. *Corporate Governance (Bingley)*, 17(1), 30–47. <https://doi.org/10.1108/CG-01-2016-0015>
- Goergen, M., Limbach, P., & Scholz-Daneshgari, M. (2020). Firms' rationales for CEO duality: Evidence from a mandatory disclosure regulation. *Journal of Corporate Finance*, 65(October), 101770. <https://doi.org/10.1016/j.jcorpfin.2020.101770>
- Gujarati, Damodar & Dawn, P. (2008). Basic Econometrics.
- Habib, Ahsan & Hasan, M. M. (2018). Business strategies and annual report readability *.

- Accounting and Finance*.
<https://doi.org/10.1111/acfi.12380>
- Habib, A., & Monzur, M. (2019). International Review of Financial Analysis Corporate life cycle research in accounting, finance and corporate governance: A survey, and directions for future research ☆. *International Review of Financial Analysis*, 61(November 2018), 188–201. <https://doi.org/10.1016/j.irfa.2018.12.004>
- Harymawan, I., Nasih, M., Madyan, M., & Sucahyati, D. (2019). The role of political connections on family firms' performance: evidence from Indonesia. *International Journal of Financial Studies*, 7(4). <https://doi.org/10.3390/ijfs7040055>
- Hassan, M. K., Abbas, B. A., & Garas, S. N. (2019). Readability, governance and performance: a test of the obfuscation hypothesis in Qatari listed firms. 19(2), 270–298. <https://doi.org/10.1108/CG-05-2018-0182>
- Kao, L., & Chen, A. (2020). CEO characteristics and R&D expenditure of IPOs in emerging markets: Evidence from Taiwan. *Asia Pacific Management Review*, 25(4), 189–197. <https://doi.org/10.1016/j.apmr.2020.01.001>
- Khatib, S. F. A., Abdullah, D. F., Elamer, A. A., & Abueid, R. (2021). Nudging toward diversity in the boardroom: A systematic literature review of board diversity of financial institutions. *Business Strategy and the Environment*, 30(2), 985–1002. <https://doi.org/10.1002/bse.2665>
- Kim, K., Ryu, D., & Yang, H. (2021). Information uncertainty, investor sentiment, and analyst reports. *International Review of Financial Analysis*, 77(November 2020), 101835. <https://doi.org/10.1016/j.irfa.2021.101835>
- Lee, D. (2019). Financial analyst coverage for U.S firms facing foreign competition: Evidence from trade liberalization. *Journal of International Financial Management and Accounting*, (September), 1–30. <https://doi.org/10.1111/jifm.12111>
- Liu, J. (2021). Does negative information in MD&A can reduce stock crash risk? *Nankai Business Review International*, 12(4), 537–552. <https://doi.org/10.1108/NBRI-04-2021-0027>
- Lo, K., Ramos, F., & Rogo, R. (2017). Earnings management and annual report readability. *Journal of Accounting and Economics*, 63(1), 1–25. <https://doi.org/10.1016/j.jacceco.2016.09.002>
- Malik, M. S., & Makhdoom, D. D. (2016). Does corporate governance beget firm performance in Fortune Global 500 companies? *Corporate Governance (Bingley)*, 16(4), 747–764. <https://doi.org/10.1108/CG-12-2015-0156>
- Melón-Izco, Á., Ruiz-Cabestre, F. J., & Ruiz-Olalla, C. (2021). Readability in management reports: Extension and good governance Practices. *Revista de Contabilidad-Spanish Accounting Review*, 24(1), 19–30. <https://doi.org/10.6018/RCSAR.363171>
- Moreno-Ureba, E., & Bravo-Urquiza, F. (2019). Corporate governance codes compliance and environmental, social and governance disclosures. *Contaduria y Administracion*, 64(4), 1–16. <https://doi.org/10.22201/FCA.24488410E.2020.2388>
- Nguyen, H. J. (2020). Tax Avoidance and Financial Statement. *European Accounting Review*. <https://doi.org/10.1080/09638180.2020.1811745>
- Ozbek, O. V., & Boyd, B. (2020). The influence of CEO duality and board size on the market value of spun-off subsidiaries: The contingency effect of firm size. *Journal of Strategy and Management*, 13(3), 333–350. <https://doi.org/10.1108/JSMA-03-2019-0039>
- Pavlopoulos, A., Magnis, C., & Iatridis, G. E. (2019). Integrated reporting: An accounting disclosure tool for high quality financial reporting. *Research in International Business and Finance*, 49(May 2018), 13–40. <https://doi.org/10.1016/j.ribaf.2019.02.007>
- Salehi, M., Lari Dasht Bayaz, M., Mohammadi, S., Adibian, M. S., & Fahimifard, S. H. (2020). Auditors' response to readability of financial statement notes. *Asian Review of Accounting*, 28(3), 463–480. <https://doi.org/10.1108/ARA-03-2019-0066>
- Salehi, M., Zimon, G., & Seifzadeh, M. (2022). The Effect of Management Characteristics on Audit Report Readability. *Economies*, 10(1), 1–23. <https://doi.org/10.3390/economies10010012>
- Salma, I., Id, O., Eduardo, S., & Id, O. (2003). The Use of Nonfinancial Performance Measures in CEO Bonus Compensation MyoJung Cho. *Corporate Governance: An International Review*, 0–3. <https://doi.org/10.1111/corg.12280>

- Sehrawat, N. K., Singh, S., & Kumar, A. (2020). Does corporate governance affect financial performance of firms? A large sample evidence from India. *Business Strategy and Development*, 3(4), 615–625. <https://doi.org/10.1002/bsd2.126>
- Seifzadeh, M., Salehi, M., Abedini, B., & Ranjbar, M. H. (2021). The relationship between management characteristics and financial statement readability. *EuroMed Journal of Business*, 16(1), 108–126. <https://doi.org/10.1108/EMJB-12-2019-0146>
- Sorensen, D. P., & Miller, S. E. (2017). Financial accounting scandals and the reform of corporate governance in the United States and in Italy. *Corporate Governance (Bingley)*, 17(1), 77–88. <https://doi.org/10.1108/CG-05-2016-0125>
- Tahir, H., Masri, R., & Rahman, M. M. (2020). Impact of board attributes on the firm dividend payout policy: evidence from Malaysia. *Corporate Governance (Bingley)*, 20(5), 919–937. <https://doi.org/10.1108/CG-03-2020-0091>
- Tejerina-Gaite, F. A., & Fernández-Temprano, M. A. (2021). The influence of board experience on firm performance: does the director's role matter? *Journal of Management and Governance*, 25(3), 685–705. <https://doi.org/10.1007/s10997-020-09520-2>
- Uppal, N. (2020). CEO narcissism, CEO duality, TMT agreeableness and firm performance: An empirical investigation in auto industry in India. *European Business Review*, 32(4), 573–590. <https://doi.org/10.1108/EBR-06-2019-0121>
- Vu, M., Tu, T., & Tuyen, N. (2018). Research in International Business and Finance Relationship between board ownership structure and firm financial performance in transitional economy: The case of Vietnam. *Research in International Business and Finance*, 45(January 2017), 512–528. <https://doi.org/10.1016/j.ribaf.2017.09.002>
- Wijethilake, C., & Ekanayake, A. (2020). CEO duality and firm performance: the moderating roles of CEO informal power and board involvements. *Social Responsibility Journal*, 16(8), 1453–1474. <https://doi.org/10.1108/SRJ-12-2018-0321>
- Xu, H. (2020). *Annual report readability and trade credit*. 19(3), 363–385. <https://doi.org/10.1108/RAF-10-2019-0221>
- Yen, J. C., Wang, T., & Chen, Y. H. (2021). Different is better: how unique initial coin offering language in white papers enhances success. *Accounting and Finance*, 61(4), 5309–5340. <https://doi.org/10.1111/acfi.12760>
- Zhou, C. (2019). Effects of corporate governance on the decision to voluntarily disclose corporate social responsibility reports: evidence from China. *Applied Economics*, 51(55), 5900–5910. <https://doi.org/10.1080/00036846.2019.1631440>
- Zona, F., Gomez-mejia, L. R., & Withers, M. C. (2018). Board Interlocks and Firm Performance: Toward a Combined Agency – Resource Dependence Perspective. *Management*, 44(2), 589–618. <https://doi.org/10.1177/0149206315579512>
- Zou, H. L., Zeng, S. X., Xie, L. N., & Zeng, R. C. (2015). Are Top Executives Rewarded for Environmental Performance? The Role of the Board of Directors in the Context of China. *Human and Ecological Risk Assessment*, 21(6), 1542–1565. <https://doi.org/10.1080/10807039.2014.958943>