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Ex-Auditor CEOs and Corporate Social Responsibility (CSR) Disclosure: Evidence from a Voluntary Period of Sustainability Report in Indonesia

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Abstract: This study examines the relationship between ex-auditor CEOs in companies and corporate social responsibility disclosure in the Indonesian setting, where the presence of ex-auditor CEOs is increasing every year. We use the sample of 581 firm-year observations from 106 firms that published sustainability reports on the Indonesian Stock Exchange from 2010–2020. The results show that CEOs with an auditor background are more likely to disclose CSR information. This suggests that the auditor background of the CEO can affect corporate decision making, specifically the decision of CSR disclosure, because their auditing experience is also related to a monitoring mechanism of voluntary information, such as CSR disclosure. Moreover, auditors are practically accustomed to being required to have professional judgment when carrying out their work, so they are more aware and careful in terms of running a sustainable business by disclosing the CSR. This study enhances the literature by providing insights into the disclosure practice of CSR among firms with ex-auditor CEOs that are robust to Heckman’s two-stage model and the Coarsened Exact Matching test. This study provides empirical evidence of a relationship between ex-auditor CEOs and CSR information disclosure and several additional analyses in the period of a voluntary sustainability report in Indonesia.

Keywords: ex-auditor CEO; CSR disclosure; voluntary reporting; corporate sustainability



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Citation: Ngelo, A.A.; Permatasari, Y.; Rasid, S.Z.A.; Harymawan, I.; Ekasari, W.F. Ex-Auditor CEOs and Corporate Social Responsibility (CSR) Disclosure: Evidence from a Voluntary Period of Sustainability Report in Indonesia. *Sustainability* **2022**, *14*, 11418. <https://doi.org/10.3390/su141811418>

Academic Editors: Ioannis Nikolaou and Mark Anthony Camilleri

Received: 13 July 2022

Accepted: 6 September 2022

Published: 12 September 2022

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1. Introduction

Recently, mounting research is focused on the issue of corporate social responsibility since, nowadays, firms should not only prioritize their own economic benefit but also consider the interests of their stakeholders through their CSR activity. Therefore, many firms engage in CSR in order to conduct business in an ethical manner [1]. Businesses nowadays are developing sustainable business models that consider environmental, social, and governance issues [2]. Hence, companies are trying to communicate their sustainable activities and development to stakeholders through CSR reports to decrease information asymmetry [3,4].

Currently, corporate governance is an important determinant of CSR disclosure to ensure that firms comply with their social obligations [5], because corporate governance can determine the systems, principles, and processes through which an organization creates an environment with sound behaviors [6]. As resource dependence theory suggests, firms can engage in different strategies by accessing key resources, such as individuals, to reduce uncertainty and increase discretion and control over their activities [7,8]. Nowadays, successful management should focus on stakeholder demand and can guide CSR reporting and enhance non-financial performance. This is because companies often face pressure from their stakeholders to invest in socially responsible activities [9]. Corporate governance has already evolved from a “profit-centered model” to a “social responsibility model” [1].

For example, now CEOs have the role of undertaking proper resource allocation and strategic decision making related to CSR. Prior studies mention that CEO characteristics could explain the disclosure of the CSR activity of a firm [9–13]. They play a crucial role in reassuring their shareholders that the firms can still fulfil the CSR disclosure objectives [14].

In this study, we examine how an ex-auditor CEO influences a firm's CSR disclosure. This is because the characteristics of the top executives, especially CEOs, can affect organizational decisions and behaviors [15,16]. Specifically, we aimed to examine CEOs with work experience as an auditor. In practice, a former auditor has been exposed to different types of business, and this can provide valuable experiences regarding the firm's transactions, business strategy, and reporting [17]. There are several reasons why studying ex-auditor CEOs and CSR disclosure matters.

First, starting a career as an auditor at a public accounting firm is often considered a "steppingstone" to achieving a better career path [18]. Thus, it is not surprising that some executives of companies in Indonesia seem to have work experience as auditors. Second, in practice, the profession of auditor is responsible for ensuring that stakeholders can obtain accurate and timely information regarding the company's actions [19]. Moreover, the auditing process is essential to ensuring a monitoring mechanism that can enhance voluntary information disclosure, such as CSR disclosure [20]; therefore, there is the possibility that a CEO with an auditor's background will be more aware of the importance of CSR disclosure for the company stakeholders. Hence, it thought it would be interesting to specifically examine CEOs with an auditing background because they are part of the top management level and have the authority to decide the level of CSR disclosure [11].

Third, the auditors' role cannot be separated from the precautionary principle because they are responsible for issuing useful outcomes for stakeholders to help them make decisions. In practice, auditors are required to have unbiased professional judgment in order to conduct the audit process and be part of fraud detection [21,22]. The characteristics of ex-auditor CEOs can be carried over in former auditors that serve as the top management in a company. This could encourage them to be more aware and careful when running a sustainable business through increased disclosure of information in CSR reports, because voluntary CSR disclosure might be used as a signaling mechanism to indicate that there is "nothing to hide" and to avoid adverse market reactions [23]. Fourth, auditors are required to understand new reporting standards or issues that may affect company reporting, including CSR reporting standards and trends [24]; thus, CEOs with an auditor background tend to be more familiar with CSR reporting.

In this study, we used upper echelon theory to explain that the characteristics of the top management, such as CEOs, affect preferences in the decisions related to CSR reporting. For example, CEOs with characteristics like political conservatism tend to reduce their level of CSR [10]. This finding encouraged the authors to make a connection with the background characteristics of the executives as an auditor, because executives who have accounting expertise have the potential to be associated with more conservative characteristics since they tend to avoid uncertainty [25].

Nevertheless, another study in the literature claimed that auditors also have the role of improving CSR engagement; therefore, there is the possibility that CEOs who have experience as auditors will be more considerate when disclosing CSR information and this could encourage them to invest and engage in CSR activities [26]. Therefore, we argue that the characteristics adopted from work experience as an auditor could affect the CEO when they are making decisions, such as CSR information disclosure.

This study is interesting because there is a lack of empirical evidence examining the relationship between ex-auditor CEOs and CSR disclosure. This study is unlike the prior studies [27–29], which only consider the association between the ex-auditor top management and the audit outcomes. We want to specifically look at the impact of work experience as an auditor in the CEO position in relation to their strategic decisions, such as the decision to undertake CSR disclosure. The study of specific attributes of ex-auditors is still underexplored in Indonesia, even though the number of CEOs with an auditor

background tends to increase every year. In this study, we consider the characteristics and abilities of CEOs with auditing work experience in relation to managerial decisions, such as CSR disclosure. The topics related to factors that affect the firm's CSR disclosure matter because this is closely related to the firm's sustainability.

We used the sample data period of 2010–2020 of Indonesian listed companies. This was when there was no mandatory rule for Indonesian listed firms to disclose their level of corporate social responsibility in their sustainability report. Therefore, this study provides empirical evidence of the relationship between ex-auditor CEOs and their decision to disclose CSR.

We expect our study to enhance the literature on ex-auditor CEOs and CSR disclosure, specifically in the setting of an emerging country like Indonesia. We extended this study by considering an institutional setting in which the number of ex-auditor CEOs in Indonesia tends to increase, and we used the voluntary period of a sustainability report in Indonesia. Furthermore, we show that ex-auditor CEOs have characteristics that might affect them when taking a strategic decision, specifically CSR reporting. This study also provides empirical evidence to support upper echelon theory, which states that the personal perspectives and background of senior executives have a significant role in their decision making.

In practice, our study proposes that the work experience of a CEO, specifically auditor background, can be a novel determinant of CSR reporting decisions. The results suggest that ex-auditor CEOs provide more CSR disclosure that is in accordance with GRI standards. This insight could be utilized in company management when selecting the company organs, e.g., selecting top management with auditing work experience. It is important to identify the drivers of CSR reporting, because economically, more and better CSR information can benefit the capital market through greater liquidity, lower cost of capital, and better capital allocation [30]. The decision to increase CSR disclosure is expected to be an effective tool to encourage and drive firms to engage in better social and environmental actions. This condition can indirectly contribute to the economic growth of companies running sustainable businesses. Investors and other stakeholders can gain benefits and insights to help them take the decision, because increased CSR disclosure can enhance their information transparency.

The remainder of this paper is organized as follows. Section 2 presents the literature review and hypothesis development. Section 3 explains the research methodology. Section 4 contains the result and discussion, and Section 5 presents the conclusion.

2. Literature Review

2.1. Indonesia's Setting and CSR Disclosure

Previously, the study conducted by the Center for Governance, Institutions, and Organizations of the National University of Singapore discovered that, among ASEAN countries, Indonesia has the lowest quality CSR disclosure. Countries like the Philippines, Malaysia, Singapore, and Thailand have disclosure levels of 56.3%, 64.5%, 61.7%, and 60%, respectively, while Indonesia has a 53.6% CSR disclosure quality level. Indonesian companies have experienced a lack of awareness in terms of taking the initiative when engaging with CSR activities. However, the CSR commitment level in Indonesia has improved because there is external pressure from both the public and government [31]. This external pressure emerged as there is an increasing concern about the weak CSR implementation of Indonesian companies.

In practice, based on Law No. 40 from 2007 concerning Limited Liability Companies, regulated public companies that carry out their business activities related to natural resources should report their social and environmental responsibility in their annual reports. However, the information regarding the companies' sustainability activities is more focused on a stand-alone report, such as a sustainability report. Therefore, the Financial Services Authority of Indonesia issued regulation POJK 51/2017 concerning the implementation of sustainable finance by requiring public companies to publish sustainability reports in 2021.

However, it was delayed until 2022 due to the COVID-19 pandemic. As a result, all listed firms prior to 2022 still voluntarily disclose their sustainability reports.

In this study, we measure the CSR disclosure by using a sustainability report, because this report specifically delivers more comprehensive information of the company's economic, environmental, and social performance [32]. Furthermore, this study used the period when sustainability reporting was still voluntary in Indonesia. This condition provides a special setting because of the initiatives and intentions of management to prepare the stand-alone report. Therefore, the firm's management must have gone through careful consideration to disclose CSR through the sustainability report.

Previous study also mentioned that CSR reporting in Indonesia is mainly driven by internal factors such as corporate governance mechanisms [33]. Therefore, in this study, we aimed to examine the internal factors, specifically the characteristics of the executives based on work experience, which could affect their decision making when engaging with CSR disclosure.

2.2. Previous Studies of CEO's Background and CSR Disclosure

Limited studies provide empirical evidence of CEO characteristics and CSR disclosure in Indonesia. First, we noted in several studies that the presence of a foreign board in a firm could improve corporate social responsibility [34]. This result suggests that corporate governance mechanisms, such as the identity of the board, affect strategic decisions such as CSR. Second, a prior study found that CEO characteristics, such as busyness, tenure, and the frequency of CEO meetings, could affect CSR disclosure [14]. This study suggested that certain characteristics of CEOs could be reflected in their strategic decisions, such as CSR disclosure strategy. Third, previous studies found that the political connection of board members influences the extent of CSR disclosure in companies, and the findings indicated that the background and work experience of the board are related to the level of CSR disclosure [31,35,36].

However, most of these studies examine CSR disclosure using information from the annual report. In our study, we specifically used a sustainability report because this report is a stand-alone report of firm's CSR activities, and the content is more focused on delivering information regarding the sustainability of companies [32]. Moreover, we used the setting of a voluntary period for public companies to publish sustainability reports. This period provides a special setting through which to study the motivation of firms to prepare sustainability reports voluntarily, as the firm's management must have gone through careful consideration when disclosing CSR.

Therefore, we aimed to examine the previous work experience of CEOs, especially auditor backgrounds, as related to their decision regarding CSR disclosure. We argue that an auditor background provides CEOs with several characteristics that influence them when they serve as a CEO and can affect them when making a strategic decision, including CSR disclosure. Previous literature highlighted the characteristics of an accounting background executive in terms of the strategic decision of corporate investment efficiency [25]. Nevertheless, as far as we are aware, there are few studies exploring CEOs with an auditor background in relation to the company's strategic decisions. Most studies focus on the audit outcomes of firms when their CEO has the same auditor background as the audit firm that audited them.

A similar study used the basis of upper echelon theory, which states that the experience, values, and personalities of the executives greatly affect their interpretation of the situations that they face, which will influence their decisions [6]. In relation to the CEO's profession in the company, the accumulated work experience can contribute to the personality and skill development of the individual CEOs. The experience, personalities, and values involved cause the senior executives to have different personal perspectives. Previous research using this theory also states that work experience can shape the behavior of executives when faced with risks, and this will have an impact when they have to make strategic decisions in the company [25]. Based on this theory, strategic choices at the firm level can be based

on the characteristics and values of the top managers, and therefore, firms are a reflection of their executives [10].

There are several motivations that explain why corporate executives disclose CSR activities: First, they believe that they have a moral imperative when they invest in CSR activities [12]; second, to maintain the firm's financial interest, such as establishing a reputation for being socially responsible to maintain loyal customers; third, to boost their professional or personal reputation. These reasons show that firms may disclose CSR information because of the motives of corporate executives.

2.3. Ex-Auditor CEOs and CSR Disclosure

A previous study found that executive's previous work experience can shape their behavior when faced with risk and this will have an impact when they have to make a decision when serving as CEO [25]. Hence, experience of CEOs could affect how they make decisions. For example, another study found that CEO interlocking through serving on other companies' audit committees or boards could enhance CSR performance [37]. This study indicated that a corporate executive has a significant influence on CSR decisions and that CEO experience is valuable when making decisions regarding CSR activities. Moreover, it was discovered that the CEO's personal background, including work experience, has a significant influence on the voluntary disclosure choices [38]. Manager characteristics could also be a key determinant of voluntary CSR reporting [30]. This shows that the CEO influences the level of CSR activity disclosure. This is because CEOs are individuals in the top management hierarchy who are responsible for the actions and performance of the firm, including the decision to disclose CSR activity to the public [10]. Therefore, CEOs have a significant role in ensuring that the company can fulfill its CSR disclosure objectives [5].

There are several motives as to why CEOs disclose voluntary CSR reports, such as minimizing information asymmetry [4], providing relevant information for stakeholders to make decision [39], indicating that there is nothing to hide (a signaling mechanism), avoiding any adverse market reaction [23], and communicating sustainable activities to manage public impressions [40].

In the context of their work experience as auditors, previous studies found that the auditor profession is used to assess fraud risk in which the characteristics of professional skepticism are an important basis [41]. Indirectly, auditors tend to have a skeptical mindset. These characteristics can be carried over when they hold important positions in the company and influence decision making, including the decision to invest in CSR disclosure.

The preferences and values of CEOs can have a significant influence on corporate decisions such as CSR disclosure [11]. There are several reasons why CEOs with an auditor background could be related to the likelihood of CSR disclosure. First, the auditors' role cannot be separated from the precautionary principle because they are responsible for issuing useful outcomes for stakeholders to make a decision. In practice, auditors are required to have an unbiased professional judgment when conducting the audit process and fraud detection [21,22]. Based on these traits, they will become more aware and carefully consider disclosing the CSR report to maintain the good image of a company. This is because non-financial factors such as CSR also need to be considered by the CEO [13].

In practice, CSR can be used as a management tool to increase the company's reputation. The CEO often receives both praise or criticism when they engage with the social behavior of the organization, and this attention is not only directed towards the firm [11]. If firms disclose their CSR activities, they will receive scrutiny from the mass media and socially responsible investment funds [13], and if the firms perform better, the CSR activities can obtain legitimacy [13]. Therefore, a company is required to disclose information when delivering the company's CSR performance. Prior studies even mention there are several benefits for firms that disclose their CSR activities, such as improved transparency [42], accountability [43], reputation [44], company legitimacy [45], and awareness of environmental and social practice [46].

Furthermore, another study that examined auditor attributes in relation to CSR disclosure discovered that auditor size, age, and specialization have a positive association with the client's CSR disclosure [26]. The findings were supported by the argument that the auditor could encourage their client to disclose more social and environmental information to their stakeholders. The auditor also has the role of enhancing the reliability and credibility of the CSR reporting [47], or increasing the credibility of the information from the sustainability reporting [48]. Another prior study points out that external auditors can affect a firm's CSR activities [49]. Based on these findings, it was shown that auditors also have the role of improving CSR disclosure; therefore, there is the possibility that CEOs who have experience as auditors in an accounting firm will be more likely to consider disclosing their CSR activities. This argument is supported by upper echelon theory, which states that the values and characteristics of the top management obtained from prior experience could affect the decisions they make [15]. Based on these arguments, we also propose the following hypothesis.

H1. *Companies with ex-auditor CEOs are more likely to disclose CSR information.*

3. Research Methodology

3.1. Sample and Data Source

This research employed the quantitative approach to test the causality between ex-auditor CEOs and their tendency to disclose their CSR activities. This approach is appropriate because it enabled us to statistically examine and measure the variables using secondary data. The independent and control variables were obtained from the annual reports and OSIRIS database, while the data of the dependent variables in this study were gathered from the sustainability reports of Indonesian listed companies. We focused on using information from stand-alone sustainability reports because this type of reporting helped to better evaluate the readability of CSR information [50]. We used data from non-financial companies that were listed on the Indonesian Stock Exchange (IDX) from 2010–2020.

For the sample selection criteria, we excluded firms with a standard industrial classification (SIC) code number 6. This consisted of companies from the finance, insurance, and real-estate industries and was done so in order that the research can be more comparable [51]. We excluded them to avoid bias because the financial industries are highly regulated, including sustainability reports-related regulations. The sample selection criteria are presented in Table 1. The initial observation of this study was that all non-financial listed firms disclose sustainability reports based on the GRI Index. After we excluded the firms with a SIC code number 6 and any missing data, the final observation included 581 firm-years from 106 unique firms, since there was no mandatory rule for Indonesian-listed firms to disclose a sustainability report in this study period.

Table 1. Number of observation.

	Observation Amount	Unique Firm Amount
Indonesian Listed Firms That Disclose a Sustainability Report (2010–2020)	878	162
Excluded by:		
SIC 6	(251)	(45)
Missing data	(46)	(11)
Final Observation	581	106

3.2. Variables Definition

The dependent variable of this study is CSR disclosure. We measured the CSR disclosure by scaling up the total items disclosed in the sustainability report by the total items that should be disclosed based on the GRI guideline. We refer to the total items of the GRI

index that is used by the company, which is mentioned in the sustainability reports. In this study, we used several types of GRI guidelines for the research timeframe, such as GRI G.3, GRI G 3.1, GRI 4 index, GRI standard comprehensive option, and GRI standard core option [33,52]. We calculated the number of items disclosed in the sustainability report divided by the maximum amount disclosed for each guideline, such as GRI G.3 with 123 items, G3.1 with 126 items, G4 with 150 items, and the GRI standard comprehensive with 147 items. However, the amount for the GRI G4 and standard core options were based on each firm's condition.

The variable of interest in this study is ex-auditor CEOs. An ex-auditor CEO is an executive in a top management position in a company who has experience as an auditor in a public accounting firm. In practice, the CEO has a crucial role in making company decisions and overseeing the overall activity of the company [53]. Moreover, CEOs have the authority to decide on CSR disclosure in a company [11]. In this study, we manually collected data of ex-auditor CEOs by obtaining the information from the profile of the CEO in the annual report. We also double checked the information concerning the auditor work experience of the CEO through media coverage such as LinkedIn, Bloomberg, and the company's website. If there was no detailed information about the work experience of the CEO in the annual report, or on LinkedIn, Bloomberg, or the internet, we excluded these data from our sample and categorized them as missing to reduce any bias. This variable was coded 1 if the CEO had work experience as an auditor in a public accounting firm, and 0 otherwise.

In this study, we used several control variables drawn from aspects of corporate governance mechanisms and firm characteristics that can be several determinants to explain the function of CSR [13,14,31,34]. First, the governance control variable consisted of CEO tenure because it can affect the motivation and commitment of the CEO to disclose CSR [13]. Second, auditor tenure was selected because we believe that the duration as an auditor affects knowledge and expertise [54], so it may affect them in making CSR decisions when they are serving as a CEO. Third, board size was considered because it is associated with monitoring mechanisms that could affect CSR disclosure [55]. Fourth, the presence of a Big 4 auditor could contribute to enhancing the level of voluntary disclosure [56]. In addition, we controlled for several predictors of the firm's CSR disclosure based on corporate characteristics, such as property plant equipment, firm age, firm profitability, firm size, and leverage [14]. This study also used the year fixed effect, industry fixed effect, and GRI guideline type fixed effects to control for the differences in the research observation period, the industry characteristics, and the different types of GRI standard used. This is because these three components could affect the CSR reporting of firms [56].

3.3. Empirical Model

This study aimed to examine the relationship between ex-auditor CEOs and CSR disclosure. We used the fixed effect regression model with a clustering approach, as presented in the following equation:

$$CSR_{i,t} = \beta_0 + \beta_1 CEOEXAUD_{i,t} + \beta_2 CEOTENURE_{i,t} + \beta_3 AUDITORTENURE_{i,t} + \beta_4 BSIZE_{i,t} + \beta_5 BIG4_{i,t} + \beta_6 PPE_{i,t} + \beta_7 AGE_{i,t} + \beta_8 ROA + \beta_9 FSIZE_{i,t} + \beta_{10} LEV_{i,t} + YEAR FE + INDUSTRY FE + GRI FE + \varepsilon_i$$

We expected the variables of ex-auditor CEO (*CEOEXAUD*), auditor experience tenure (*AUDITORTENURE*), board size (*BSIZE*), the presence of a Big 4 auditor (*BIG4*), property plant and equipment (*PPE*), firm age (*AGE*), firm's profitability (*ROA*), and firm size (*FSIZE*) to have a positive relationship with CSR disclosure. In contrast, we expected the variables CEO tenure (*CEOTENURE*) and leverage (*LEV*) to have a negative relationship with CSR disclosure, because of the potential horizon problem and the firm's financial conditions.

The regression model was used to test the hypothesis of this study, and the details of the variables can be seen in Table 2.

Table 2. Operational variable definition.

Variable		Measurement	Data Source
Dependent Variable			
CSR Disclosure	<i>CSRD</i>	The score of CSR disclosure was obtained by dividing the total items disclosed by the total items that should be disclosed based on the GRI index.	Sustainability Report
Independent Variable			
Ex-Auditor CEO	<i>CEOEXAUD</i>	The dummy variable is given a value of 1 if the CEO has work experience as an auditor in a public accounting firm, and 0 otherwise.	Annual Report
Control Variable			
CEO Tenure	<i>CEOTENURE</i>	Number of years a person has served as the CEO of a company.	Annual Report
Auditor Experience Tenure	<i>AUDITORTENURE</i>	Number of years of a CEO's auditor experience.	Annual Report
Number of Company Boards	<i>BSIZE</i>	Number of members of the board of commissioners and board of directors.	Annual Report
Auditor BIG4	<i>BIG4</i>	The dummy variable was assigned a value of 1 for companies audited by Big4 audit firms, and 0 otherwise.	Annual Report
PPE	<i>PPE</i>	The value of the natural logarithm of the company's PPE amount.	OSIRIS
Firm Age	<i>AGE</i>	Natural logarithm of the number of years since the company was founded.	OSIRIS
Profitability	<i>ROA</i>	Total net income divided by the total assets of the company.	OSIRIS
Firm Size	<i>FIRMSIZE</i>	Natural logarithm of total assets.	OSIRIS
Leverage	<i>LEVERAGE</i>	Total debt. divided by total assets.	OSIRIS

4. Results and Discussion

4.1. Descriptive Statistics and Univariate Analysis

In this study, we present the information regarding the sample distribution of ex-auditor CEOs in this study as shown in Table 3. The data provided in the following sample distribution only involve the CEOs of listed firms that published sustainability reports. Panel A shows the sample distribution based on year and it indicates that the highest percentage of ex-auditors in firms was seen in the year 2019. Moreover, Panel B indicates the sample distribution based on industry categories (SIC code), and it shows the highest percentage of ex-auditor CEOs in the industries with a SIC code number 2 and 4. This implies that the highest percentage of ex-auditor CEOs were mostly found in manufacturing and transportation, communications, electric, gas, and sanitary service firms. However, the information on the sample distribution could not be generalized to all Indonesian listed firm contexts because we only provided the sample distribution of the percentage of ex-auditor CEOs from the non-financial firms that published sustainability reports.

Table 3. Sample distribution.

Panel A: Sample Distribution Based on Year	
Year	Percentage of Ex-Auditor CEO
2010	0.34%
2011	0.52%
2012	0.69%
2013	0.52%
2014	0.34%
2015	0.17%
2016	0.34%
2017	0.69%
2018	0.69%
2019	1.55%
2020	1.20%
TOTAL	7.06%
Panel B: Sample Distribution Based on Industry	
Industry (SIC Code)	Percentage of Ex-Auditor CEO
Agriculture, Forestry, and Fishing (0)	0.52%
Mining and Construction (1)	1.20%
Manufacturing (2)	1.89%
Manufacturing (3)	0.17%
Transportation, Communications, Electric, Gas, and Sanitary Service (4)	1.89%
Wholesale and Retail Trade (5)	1.03%
Services (7)	0%
Services (8)	0.34%
TOTAL	7.06%

Furthermore, we present the descriptive statistics in Table 4. This indicates the mean, median, minimum, and maximum value of all variables. The data presented are winsorized at 1% and 99% to address the problem of outlier data. According to the table, the average score of CSR disclosure of all firms in the sample was 0.512. This means that on average, a company discloses CSR reporting at a rate of 51.2% when considering the total disclosure of the GRI standards. Despite the average score of CSR disclosure being quite good, the number of firms that disclose sustainability reports was only 106 (refer to Table 1). This is because this study was conducted during the period of voluntary sustainability reporting in Indonesia. Furthermore, the maximum value of CSR disclosure score in this study was 1, which uniquely implies that firms have all items in their sustainability reports as recommended by the GRI. For the independent variable, the mean value of ex-auditor CEO in this study was 0.068.

We present the correlation among non-dummy variables in this study using Pearson correlation. The results are shown in Table 5. We observed that our control variable had significant positive correlation with CSR disclosure, such as board size (coeff = 0.172 and $p = 0.000$). In contrast, CEO tenure (coeff = -0.114 , $p = 0.005$) and PPE (coeff = -0.232 , $p = 0.000$) had a negative significant correlation with CSR disclosure. However, we performed a further analysis and it showed that the significant correlation among the variables in this study did not cause multi-collinearity problems.

Table 4. Descriptive statistics.

	Mean	Median	Minimum	Maximum
<i>CSRD</i>	0.512	0.524	0.135	1.000
<i>CEOEXAUD</i>	0.068	0.000	0.000	1.000
<i>CEOTENURE</i>	4.289	3.000	0.000	24.000
<i>AUDITORTENURE</i>	0.320	0.000	0.000	17.000
<i>BSIZE</i>	11.211	11.000	5.000	20.000
<i>BIG4</i>	0.706	1.000	0.000	1.000
<i>PPE</i>	24.972	28.935	0.074	32.052
<i>AGE</i>	3.769	3.871	1.946	4.691
<i>ROA</i>	5.343	3.460	−19.020	41.620
<i>FSIZE</i>	29.239	30.105	21.262	32.997
<i>LEV</i>	0.532	0.533	0.134	1.424
<i>GEN</i>	0.724	0.726	0.000	1.000
<i>ECO</i>	0.488	0.444	0.000	1.000
<i>ENV</i>	0.331	0.286	0.000	1.000
<i>SOC</i>	0.380	0.313	0.000	1.000
<i>LAB</i>	0.405	0.313	0.000	1.000
<i>HUM</i>	0.180	0.000	0.000	1.000
<i>SOCIE</i>	0.273	0.182	0.000	1.000
<i>PROD</i>	0.245	0.111	0.000	1.000

Table 5. Pearson correlation.

From Variable <i>CSRD</i> (1) to Variable <i>PPE</i> (5)						
		(1)	(2)	(3)	(4)	(5)
(1)	<i>CSRD</i>	1.000				
(2)	<i>CEOTENURE</i>	−0.114 *** (0.005)	1.000			
(3)	<i>AUDITORTENURE</i>	0.019 (0.639)	0.089 ** (0.028)	1.000		
(4)	<i>BSIZE</i>	0.172 *** (0.000)	−0.077 * (0.060)	−0.035 (0.391)	1.000	
(5)	<i>PPE</i>	−0.232 *** (0.000)	0.055 (0.177)	−0.048 (0.243)	0.181 *** (0.000)	1.000
From Variable <i>AGE</i> (6) to Variable <i>LEV</i> (9)						
		(6)	(7)	(8)	(9)	(10)
(6)	<i>AGE</i>	1.000				
(7)	<i>ROA</i>	0.072 * (0.078)	1.000			
(8)	<i>FSIZE</i>	−0.266 *** (0.000)	0.147 *** (0.000)	1.000		
(9)	<i>LEV</i>	0.147 *** (0.000)	−0.302 *** (0.000)	0.119 *** (0.003)	1.000	

p-values in parentheses; * *p* < 0.1, ** *p* < 0.05, *** *p* < 0.01.

Furthermore, as shown in Table 6, we performed a chi-square test to explore the correlation between the two dummy variables in this study, i.e., the independent variable of ex-auditor CEO (*CEOEXAUD*) and the presence of a Big 4 auditor (*BIG4*). The results

show that there was no significant correlation between ex-auditor CEO (*CEOEXAUD*) and the presence of a Big 4 (*BIG4*) auditor, with a Pearson chi-square test value = 0.1176 and a *p*-value = 0.732.

Table 6. Tabulation of chi-square test.

CEO	BIG4		Total
	0	1	
0	164	398	562
1	13	28	41
Total	177	426	603
Pearson chi-square test = 0.1176		<i>p</i> -value = 0.732	

4.2. Multivariate Regression Model

We tested the hypothesis by presenting the multivariate regression model in Table 6. In Table 7, the results show that ex-auditor CEOs had a positive significant relationship with CSR disclosure at the level of 10% (coeff = 0.090, *t* = 1.85). This indicates that CEOs with an auditor background are more likely to disclose more in CSR reporting. The result shows that ex-auditor CEOs could help improve sustainability information disclosure for the stakeholders by producing more information in line with the GRI standard.

Table 7. Multivariate regression model.

	(1)
	CSR D
<i>CEOEXAUD</i>	0.090 * (1.85)
<i>CEOTENURE</i>	−0.002 (−1.25)
<i>AUDITORTENURE</i>	−0.006 (−0.94)
<i>BSIZE</i>	0.002 (0.81)
<i>BIG4</i>	0.030 * (1.68)
<i>PPE</i>	−0.002 (−0.38)
<i>AGE</i>	0.051 *** (3.00)
<i>ROA</i>	0.003 *** (2.84)
<i>FSIZE</i>	0.025 *** (3.21)
<i>LEV</i>	−0.099 *** (−2.77)
_cons	−0.428 ** (−2.39)
Year Fixed Effect	Yes
Industry Fixed Effect	Yes
GRI Guidelines Fixed Effect	Yes
Adjusted R ²	0.382
<i>N</i>	581

t statistics in parentheses; * *p* < 0.1, ** *p* < 0.05, *** *p* < 0.01.

This result shows that the position of the CEO could affect the firm's outcomes. They are more likely to have a substantial influence on the organizational outcomes [11]. This

positive result between ex-auditor CEOs and CSR disclosure may be driven by characteristics from prior work experience as an auditor. When the CEO has work experience as an auditor, which involves special expertise and experience, it can be carried over and influence their interpretation when dealing with a strategic decision such as deciding the level of CSR information to disclose.

In practice, the profession of auditor is responsible for ensuring that stakeholders can obtain accurate and timely information regarding the company's actions [19]. Moreover, the auditing process is essential to ensuring a monitoring mechanism that can enhance voluntary information disclosure, such as CSR disclosure. Furthermore, the auditors' role cannot be separated from the precautionary principle because they are responsible for issuing outcomes that are useful for stakeholders and help them make decisions. In practice, auditors are required to have an unbiased professional judgment to conduct the audit process and fraud detection [21,22]. These characteristics of ex-auditor CEOs can be carried over when they serve as the top management in a company. This could encourage them to be more aware and careful when running a sustainable business through an increased level of disclosure in CSR reports.

This result is also consistent as auditors are required to understand new reporting standards and issues that may affect company reporting, including the CSR reporting standards and trends [24]; therefore, CEOs with an auditor background will be pay more attention to CSR reporting. This suggests that the character and mindset of former auditors could carry over when serving as a company executive, especially in their decision to comply more by disclosing CSR content in their sustainability report based on the GRI index.

Moreover, nowadays, CSR reporting is attracting public concern regarding social and environmental issues; therefore, CEOs with an auditor background will be more aware of the need to provide detailed CSR reports. CEOs with an auditor background will be more likely to possess the characteristic of professional skepticism, which is associated with a questioning mind and careful consideration of the company's actions [57]. Commonly, the profession of an auditor is associated with the image of a careful and competent professional [58]. This trait will be carried over when they serve as a CEO and when they want to consider the company's actions. This will improve the image of the company, because socially responsible firms are likely to maintain a good corporate reputation [59].

We also argue that CEOs with an auditor background disclose more CSR information, because of the several benefits associated with disclosing this information, such as improved transparency [42], accountability [43], reputation [44], and company legitimacy [45]. Moreover, the motive to maintain a good reputation by disclosing more and better quality CSR information indirectly makes firms engage in social and environmental change. This may indirectly contribute to economic growth as a result of running a sustainable business. In addition, more and better quality CSR information can benefit the capital market through greater liquidity, lower cost of capital, and better capital allocation [30]. Hence, it is necessary to identify the factors that determine CSR disclosure.

4.3. Robustness Test

In this study, we argue that the existence of an ex-auditor CEO may generate a potential endogeneity problem arising from the unobservable factor and observable factor. Prior research mentioned that the study of CEO characteristics and CSR has a potential endogeneity problem [12]. We provide evidence that ex-auditor CEOs are more likely to disclose CSR information; however, it may be the case that ex-auditor CEOs seek employment in firms that disclose more CSR. Therefore, we used Heckman's two-stage regression and coarsened exact matching (CEM) to address the endogeneity problem.

4.3.1. Heckman's Two-Stage Regression

We used Heckman's two-stage regression to remove the sample self-selection bias [60]. This test has been widely used to control the effect of CEO characteristics [61]. In this test, we utilized an instrument variable to test the first-stage regression [62]. We used

the average value of the presence ex-auditor CEO on each year and the SIC code as an instrument variable by following prior studies [37]. This variable shows how the industry-level proportion of the presence of an ex-auditor CEO in a certain year and the same industry could be the determinant that drives firms to follow and have a CEO with auditor background. The rationale for choosing this variable is that companies in industries with a higher presence of ex-auditor CEOs could influence its likelihood of being typical to a particular industry.

In the first-stage regression, we performed probit regression of the instrument variable and ex-auditor CEO (*CEOEXAUD*) dummy variable as a dependent variable. The result of the first-stage regression is shown in the first column in Table 8. We observed a positive significant relationship between the average industry proportion of the presence of an ex-auditor CEO and the variable of an ex-auditor CEO.

Table 8. Heckman’s two-stage regression.

	(1)	(2)
	<i>CEOEXAUD</i>	<i>CSRD</i>
<i>CEOEXAUD</i>		0.082 * (1.67)
<i>MEANCEOEXAUD</i>	11.433 *** (5.36)	
<i>CEOTENURE</i>	−0.001 (−0.07)	−0.002 (−1.38)
<i>AUDITORTENURE</i>		−0.007 (−1.10)
<i>BSIZE</i>	0.074 * (1.85)	0.002 (0.77)
<i>BIG4</i>	−0.295 (−1.21)	0.038 ** (2.11)
<i>PPE</i>	0.048 (0.97)	−0.003 (−0.52)
<i>AGE</i>	−0.234 (−1.22)	0.055 *** (3.40)
<i>ROA</i>	−0.028 ** (−2.15)	0.002 *** (2.59)
<i>FSIZE</i>	−0.196 *** (−2.58)	0.024 *** (3.19)
<i>LEV</i>	−1.738 *** (−3.07)	−0.055 (−1.39)
<i>MILLS</i>		−0.014 (−1.25)
_cons	2.527 (1.27)	−0.366 ** (−2.11)
Year Fixed Effect	Yes	Yes
Industry Fixed Effect	Yes	Yes
GRI Guidelines Fixed Effect	Yes	Yes
Adjusted R ²	0.342	0.377
N	581	581

t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Furthermore, the second-stage regression is shown in the second column. The result shows a significant positive result for ex-auditor CEO (*CEOEXAUD*) and corporate social responsibility disclosure (*CSRD*), at a 10% significant level and a coefficient of 0.082. This indicates that the result is consistent with our main analysis. Further, this suggests that ex-auditor CEOs are more likely to disclose CSR that is in line with the GRI standard.

4.3.2. Coarsened Exact Matching (CEM)

As a further robustness test, we employed coarsened exact matching (CEM) because this method matches the multivariate distribution of the covariates and can address the observed variable issues in endogeneity [52]. This test is used to enhance the estimation of causal effects by reducing the imbalance in covariates between the treated and control groups [63]. Furthermore, this test can address the limitation of the matching method propensity score matching (PSM), which is subject to the problem of “random matching” [64]. In this study, the treated group consisted of ex-auditor CEOs, while the control group contained non-ex-auditor CEOs. We included all control variables based on three strata.

The results of the robustness test are shown in Table 9. Panel A presents the matching summary of ex-auditor CEOs and non-ex-auditor CEOs. It shows that 33 out of 41 observations of ex-auditor CEOs matched with 469 out of 540 observations of non-ex-auditor CEOs. In Panel B, the results suggest that ex-auditor CEOs had a positive significant relationship with CSR disclosure at the level of 5% using 502 firm-year observations (coeff = 0.164 and $t = 2.09$). This result suggests that our results are consistent and robust whether we are testing the unmatched or matched sample. This confirms that ex-auditor CEOs are more likely to disclose CSR. This shows that ex-auditor CEOs have better CSR disclosure because they disclose more CSR components that are in line with the GRI index. This suggests that ex-auditor CEO could help improve sustainability information disclosure for stakeholders.

Table 9. Coarsened exact matching method.

Panel A: Matching Summary		
	<i>CEOEXAUD = 1</i>	<i>CEOEXAUD = 0</i>
All	41	540
Matched	33	469
Unmatched	8	71
Panel B: Coarsened Exact Matching Regression Result		
CEM		
	(1) CSR	
<i>CEOEXAUD</i>	0.164 **	(2.09)
<i>CEOTENURE</i>	−0.003	(−1.53)
<i>AUDITORTENURE</i>	−0.035 *	(−1.85)
<i>BSIZE</i>	0.006	(1.55)
<i>BIG4</i>	0.011	(0.55)
<i>PPE</i>	0.006	(0.80)
<i>AGE</i>	0.053 ***	(3.14)
<i>ROA</i>	0.003 ***	(2.74)
<i>FSIZE</i>	0.014	(1.23)
<i>LEV</i>	−0.172 ***	(−3.94)
<i>_cons</i>	−0.299	(−1.13)
Year Fixed Effect	Yes	
Industry Fixed Effect	Yes	
GRI Guidelines Fixed Effect	Yes	
Adjusted R ²	0.385	
N	502	

t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

4.4. Additional Analysis

4.4.1. Ex-Auditor CEOs and CSR Disclosure Based on Reporting Section

We attempted to extend this study by examining the relationship between ex-auditor CEOs and CSR disclosure based on the reporting section. According to the GRI guidelines, there are four sections that were used in this study: the general (*GEN*), economy (*ECO*), environmental (*ENV*), and social (*SOC*) section. Based on Table 10, we discovered that the positive relationship between ex-auditor CEOs and CSR disclosure is mostly emphasized by the environment and social sections. This result indicates that ex-auditor CEOs tend to focus deeply on environmental and social information in their CSR reports. This could happen because they want to lessen any risk of overlapping information because they are aware that general and economic information is mostly disclosed in the annual report, rather than the sustainability report [33]. We could infer that ex-auditor CEOs carefully consider the efficiency of their reporting. This trait is consistent with the professional judgment that is commonly held by the auditor. The results also suggest that ex-auditor CEOs are more likely to analyze situations with the aim of reducing any likelihood of overlapping and inefficient reporting. This corresponds to auditors having a conservative tendency and tending to be more stable when making decisions [65].

Table 10. Regression of ex-auditor CEO and CSR disclosure based on CSR reporting section.

	(1)	(2)	(3)	(4)
	<i>GEN</i>	<i>ECO</i>	<i>ENV</i>	<i>SOC</i>
<i>CEOEXAUD</i>	0.068 (1.43)	0.052 (0.89)	0.133 * (1.88)	0.102 * (1.83)
<i>CEOTENURE</i>	−0.003 * (−1.88)	−0.003 (−1.36)	−0.002 (−1.30)	−0.001 (−0.73)
<i>AUDITORTENURE</i>	−0.010 * (−1.88)	0.002 (0.18)	−0.007 (−0.77)	−0.000 (−0.05)
<i>BSIZE</i>	0.009 *** (2.77)	−0.002 (−0.45)	0.004 (1.07)	0.001 (0.32)
<i>BIG4</i>	0.063 *** (3.03)	0.041 * (1.74)	0.072 *** (2.85)	0.042 * (1.86)
<i>PPE</i>	−0.004 (−0.77)	−0.014 (−1.65)	0.005 (0.57)	−0.005 (−1.12)
<i>AGE</i>	0.042 ** (2.36)	0.008 (0.42)	0.065 *** (2.95)	0.052 ** (2.48)
<i>ROA</i>	0.002 (1.55)	0.002 (1.55)	0.002 * (1.68)	0.003 ** (2.31)
<i>FSIZE</i>	0.016 ** (1.99)	0.043 *** (3.84)	0.010 (0.86)	0.032 *** (3.59)
<i>LEV</i>	−0.013 (−0.33)	−0.065 (−1.29)	−0.154 *** (−3.08)	−0.096 ** (−2.03)
<i>_cons</i>	−0.025 (−0.13)	−0.420* (−1.78)	−0.405 (−1.62)	−0.663 *** (−2.86)
Year Fixed Effect	Yes	Yes	Yes	Yes
Industry Fixed Effect	Yes	Yes	Yes	Yes
GRI Guidelines Fixed Effect	Yes	Yes	Yes	Yes
Adjusted R ²	0.243	0.178	0.244	0.309
<i>N</i>	581	581	581	581

t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Based on the prior additional analysis, ex-auditor CEOs are more likely to focus on environmental and social section reporting in their sustainability reports. Since there is a sub-section on social information reporting, we attempted to specifically analyze that information. According to the G3, G3.1, and G4 guidelines, the social section is divided into sub-sections, such as labor (*LAB*), human rights (*HUM*), society (*SOCIE*), and product responsibility (*PROD*). However, this social information sub-section is no longer regulated

for sustainability reporting in 2020; therefore, we only tested the following additional analysis for the sample period 2010–2019.

According to Table 11, the results suggest that significant results are more prominent in all types of sub-section reporting, except labor sub-section reporting. This indicates that there is a positive relationship between ex-auditor CEOs and the social section of ESG reporting in the prior analysis, driven by the sub-sections human rights, society, and product responsibility. This implies that ex-auditor CEOs are aware of human rights, society, and product responsibility issues. Furthermore, we observed that ex-auditor CEOs are reasonably cautious due to their experience in the auditing profession [58]. This was done by focusing on three out four of the social reporting sub-sections.

Table 11. Regression of ex-auditor CEO and CSR disclosure based on sub-section reporting.

	(1)	(2)	(3)	(4)
	<i>LAB</i>	<i>HUM</i>	<i>SOCIE</i>	<i>PROD</i>
<i>CEOEXAUD</i>	0.136 (1.63)	0.285 ** (2.54)	0.193 * (1.94)	0.256 * (1.87)
<i>CEOTENURE</i>	0.000 (0.10)	−0.003 (−1.12)	−0.001 (−0.30)	−0.001 (−0.35)
<i>AUDITORTENURE</i>	−0.008 (−1.35)	−0.011 (−1.20)	−0.014 * (−1.84)	−0.020 * (−1.94)
<i>BSIZE</i>	0.003 (0.56)	0.007 (0.95)	0.000 (0.06)	0.005 (0.67)
<i>BIG4</i>	0.024 (0.74)	0.059 * (1.84)	0.035 (1.11)	0.070 * (1.93)
<i>PPE</i>	0.010 (0.59)	−0.006 (−0.33)	0.003 (0.18)	0.001 (0.05)
<i>AGE</i>	0.087 *** (3.24)	0.063 ** (2.10)	0.083 *** (2.83)	0.118 *** (3.77)
<i>ROA</i>	0.004 ** (2.40)	0.002 (1.55)	0.003 ** (2.04)	0.005 ** (2.51)
<i>FSIZE</i>	0.024 (1.04)	0.037 (1.32)	0.021 (0.83)	0.036 (1.17)
<i>LEV</i>	−0.134 * (−1.83)	−0.160 ** (−2.09)	−0.193 *** (−2.69)	−0.169 ** (−1.98)
<i>_cons</i>	−0.857 ** (−2.47)	−0.863 ** (−2.13)	−0.686 * (−1.81)	−1.334 *** (−2.93)
Year Fixed Effect	Yes	Yes	Yes	Yes
Industry Fixed Effect	Yes	Yes	Yes	Yes
GRI Guidelines Fixed Effect	Yes	Yes	Yes	Yes
Adjusted R ²	0.270	0.183	0.223	0.191
<i>N</i>	357	357	357	357

t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

4.4.2. Ex-Auditor CEOs and CSR Disclosure Based on a Sub-Sample of High- and Low-Growth Industries

According to a prior study, value-creation strategies can differ between low-growth and high-growth industries [66]. We were interested in examining the relationship between ex-auditor CEOs and CSR disclosure based on the level of industry growth, because these industries have different growth opportunities. We followed on from a prior study that categorized industries that have potential for growth in Indonesia [67]. Based on the literature, we categorized high-growth industries if they belonged to consumer services, agriculture and fisheries, resources, and human capital, and we categorized the low growth for any other categories. This shows that investment projects create values that vary between high- and low-growth industries. Moreover, CSR initiatives between firms can vary based on the growth of the industry. Since companies that carry out CSR categorize it

as an investment, we wanted to specifically examine the relationship between ex-auditor CEOs and CSR disclosure based on a sub-sample of high- and low-growth industries.

Based on Table 12, the results suggest that ex-auditor CEOs were more likely to disclose CSR in the low-growth sample. This is because low-growth firms tend to have limited business development opportunities and they require a strategy to maintain a competitive advantage for their business [68]. According to this result, ex-auditor CEOs are more likely to carefully consider the best strategy with which to enhance the value of low-growth industries by engaging with CSR. This is because CSR disclosure can be used by the management to boost a firm's competitive advantage.

Table 12. Regression of ex-auditor CEO and CSR disclosure based on industry growth.

	High-Growth Sample	Low-Growth Sample
	(1)	(2)
		<i>CSR</i>
<i>CEOEXAUD</i>	0.036 (0.54)	0.133 * (1.91)
<i>CEOTENURE</i>	0.002 (0.85)	−0.001 (−0.60)
<i>AUDITORTENURE</i>	−0.001 (−0.15)	0.001 (0.04)
<i>AUCOM</i>	−0.010 (−1.61)	0.006 (1.60)
<i>BSIZE</i>	−0.031 (−1.20)	0.062 *** (2.70)
<i>BIG4</i>	0.004 (0.30)	−0.006 (−1.42)
<i>PPE</i>	0.046 (1.31)	0.056 *** (2.68)
<i>AGE</i>	0.004 * (1.93)	0.002 * (1.82)
<i>ROA</i>	0.059 *** (3.13)	0.010 (1.04)
<i>FSIZE</i>	−0.125* (−1.91)	−0.055 (−1.22)
<i>LEV</i>	−1.463 *** (−4.52)	0.086 (0.35)
<i>_cons</i>	0.036 (0.54)	0.133 * (1.91)
Year Fixed Effect	Yes	Yes
Industry Fixed Effect	Yes	Yes
GRI Guidelines Fixed Effect	Yes	Yes
Adjusted R ²	0.459	0.366
N	214	367

t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

4.4.3. Ex-Auditor CEO and CSR Disclosure Based on Industry's Digital Level

In this section, we examine the relationship between ex-auditor CEOs and CSR disclosure based on the industry's digital intensity level, because each sector differs in its development. There are also differences between some industries in accelerating their digital transformation [69]. The industry level of each firm was based on the taxonomy of digital intensive sectors as developed by the OECD [69]. Based on that study, we classified industries into four levels of digital intensity using two ISIC digits. Furthermore, we altered the ISIC codes into double-digit SIC codes, and we categorized the digital level manually on each SIC. The industry's digital level using double-digit ISIC codes is shown in Appendix A.

Following a prior study, we divided our sample into two sub-samples: a high-tech sample and low-tech sample [69]. We followed a prior study in considering low and

medium-to-low digital intensity levels were categorized as low-tech industry. Furthermore, we categorized medium-to-high and high digital intensity levels as high-tech industry. According to Table 13, the results suggest that ex-auditor CEOs are more likely to disclose qualified CSR in the low-tech industry category. This might happen because ex-auditor CEOs do not consider their company to be able to keep up with digital transformation, so they consider other things to attract stakeholders, such as disclosing CSR information, which is currently an important issue.

Table 13. Regression of ex-auditor CEO and CSR disclosure based on industry digital level.

	High-Tech Sample	Low-Tech Sample
	(1)	2
	<i>CSR</i>	
<i>CEOEXAUD</i>	−0.057 (−0.43)	0.136 ** (2.49)
<i>CEOTENURE</i>	−0.000 (−0.08)	−0.001 (−0.60)
<i>AUDITORTENURE</i>	0.034 (1.02)	−0.009 (−1.31)
<i>BSIZE</i>	0.015 * (1.92)	−0.002 (−0.61)
<i>BIG4</i>	−0.018 (−0.63)	0.041 * (1.89)
<i>PPE</i>	0.041 (1.31)	−0.001 (−0.14)
<i>AGE</i>	0.019 (0.50)	0.091 *** (4.76)
<i>ROA</i>	0.004 *** (2.87)	0.002 (1.22)
<i>FSIZE</i>	−0.086 ** (−1.98)	0.042 *** (3.67)
<i>LEV</i>	0.004 (0.08)	−0.174 *** (−3.76)
<i>_cons</i>	1.448 ** (2.19)	−0.952 *** (−4.25)
Year Fixed Effect	Yes	Yes
Industry Fixed Effect	Yes	Yes
GRI Guidelines Fixed Effect	Yes	Yes
<i>r2_a</i>	0.556	0.382
<i>N</i>	135	446

t statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5. Conclusions

This study examines the relationship between the presence of ex-auditor CEOs and CSR disclosure using non-financial firms listed on the Indonesian Stock Exchange during 2010–2020. We used a sample of 581 firm-year observations from 106 firms that published sustainability reports. The results suggest that ex-auditor CEOs are more likely to disclose the company CSR reports in accordance with the GRI index. This result is robust and consistent when examined using the endogeneity test of Heckman’s two-stage regression and coarsened exact matching (CEM) regression.

We also performed several additional analyses to extend the literature on ex-auditor CEOs and CSR disclosure. We discovered that the CSR reporting of ex-auditor CEOs is more pronounced in terms of environmental and social information. Moreover, their social section CSR reporting is more pronounced in terms of human rights, society, and product responsibility. Furthermore, the positive relationship between ex-auditor CEOs and CSR disclosure is more likely to be driven by low-growth companies and low-tech digital industries. Overall, the results show that the auditor background of the CEOs could influence

corporate decision making, and specifically enhance CSR information in sustainability reports because their auditing experience is also related to the monitoring mechanism of voluntary information quality, such as CSR disclosure. Moreover, auditors are practically accustomed to being required to exhibit professional judgment when carrying out their work, meaning that they may be more aware and careful when running a sustainable business in relation to CSR disclosure.

This study contributes to the literature on the relationship between corporate governance and CSR disclosure. We expect our results to help users identify which background profile on the top management level could be related to CSR disclosure decisions. We expect this study to provide insight regarding the drivers of CSR reporting because it can encourage firms to engage in better CSR performance and communicate it to stakeholders. In the long term, this could drive companies to run sustainable businesses and contribute to economic growth.

Furthermore, our study shows that the number of ex-auditor CEOs in Indonesia has tended to increase. This study specifically focuses on the special period in the Indonesian setting in which there was the adoption of a voluntary system to publish company sustainability reports. This condition represents an interesting research setting but, at the same time, it restricts the sample size in this study. This is because the number of Indonesian listed firms that disclose sustainability reports is limited. Future studies should consider other sources of data, such as firms' website, annual reports, general shareholder meetings, and updated news of firms' CSR activities. Our study was also limited to the measurement of CSR disclosure because we measured based on the occurrence of items that are related to the GRI guideline. There is a possibility that there are companies that deliver CSR information through another style of communication, which is not specifically conveyed through sustainability reports, but through media coverage. Lastly, since this study is focused on the period of voluntary sustainability reporting, this also indirectly limits the sample of ex-auditor CEOs. We conducted a quality check of the CEO's background by considering the information from the annual report, LinkedIn, Bloomberg, and the company's website. We encourage future studies to further explore the auditor background of corporate executives by considering different levels of auditor experience in practice, auditor tenure, former Big 4 auditors, and auditor industry specialization. We argue these experiences could drive corporate executives to have special characteristics that affect their strategic decisions.

Author Contributions: Conceptualization, A.A.N., Y.P. and I.H.; methodology, A.A.N., Y.P., S.Z.A.R. and I.H.; software, A.A.N. and I.H.; validation, Y.P., I.H. and W.F.E.; formal analysis, A.A.N., Y.P. and I.H.; investigation, S.Z.A.R. and W.F.E.; resources, A.A.N. and I.H.; data curation, A.A.N. and I.H.; writing—original draft preparation, A.A.N., Y.P. and W.F.E.; writing—review and editing, S.Z.A.R. and I.H.; visualization, A.A.N.; supervision, Y.P., S.Z.A.R., I.H. and W.F.E.; project administration, Y.P. and A.A.N.; funding acquisition, Y.P. and W.F.E. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Universitas Airlangga, grant number Rp 90,000,000 and the APC was funded by Universitas Airlangga.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Industry	ISIC	Category of Digital Intensity
Agriculture, forestry, fishing	01–03	Low
Mining and quarrying	05–09	Low
Food products, beverages, and tobacco	10–12	Low
Textiles, wearing apparel, leather	13–15	Low
Wood and paper products, and printing	16–18	High
Coke and refined petroleum products	19	Low
Chemicals and chemical products	20	Low
Pharmaceutical products	21	Low
Rubber and plastics products	22–23	Low
Basic metals and fabricated metal products	24–25	Low
Computer, electronic and optical products	26	High
Electrical equipment	27	High
Machinery and equipment n.e.c	28	High
Transport equipment	39–30	High
Furniture; other manufacturing; repairs of computers	31–33	High
Electricity, gas, steam and air cond	35	Low
Water supply; sewerage, waste management	36–39	Low
Construction	41–43	Low
Wholesale and retail trade, repair	45–47	High
Transportation and storage	49–53	Low
Accommodation and food service activities	55–56	Low
Publishing, audiovisual and broadcasting	58–60	High
Telecommunications	61	High
IT and other information services	62–63	High
Finance and insurance	64–66	High
Real estate	68	Low
Legal and accounting activities, etc.	69–71	High
Scientific research and development	72	High
Advertising and market research; other business services	73–75	High
Administrative and support service activities	77–82	High
Public administration and defense	84	High
Education	85	Low
Human health activities	86	Low
Residential care and social work activities	87–88	Low
Arts, entertainment and recreation	90–93	
Other service activities	94–96	

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