

12-31-2021

THE EFFECT OF CEO CHARACTERISTICS ON PRE-EARNINGS MANAGEMENT PROFITABILITY

Adhitya Agri Putra
Universitas Riau, adhitrebe@gmail.com

Follow this and additional works at: <https://scholarhub.ui.ac.id/jaki>



Part of the [Accounting Commons](#), [Corporate Finance Commons](#), [Finance and Financial Management Commons](#), and the [Taxation Commons](#)

Recommended Citation

Putra, Adhitya Agri (2021) "THE EFFECT OF CEO CHARACTERISTICS ON PRE-EARNINGS MANAGEMENT PROFITABILITY," *Jurnal Akuntansi dan Keuangan Indonesia*: Vol. 18: Iss. 2, Article 1.

DOI: 10.21002/jaki.2021.07

Available at: <https://scholarhub.ui.ac.id/jaki/vol18/iss2/1>

This Article is brought to you for free and open access by the Faculty of Economics & Business at UI Scholars Hub. It has been accepted for inclusion in *Jurnal Akuntansi dan Keuangan Indonesia* by an authorized editor of UI Scholars Hub.

Jurnal Akuntansi dan Keuangan Indonesia
Volume 18 Issue 2, December 2021

THE EFFECT OF CEO CHARACTERISTICS ON PRE-EARNINGS MANAGEMENT PROFITABILITY

Adhitya Agri Putra

Accounting Program, Universitas Riau
adhitrebe@gmail.com

Abstract

This research aims to examine the effect of CEO characteristics on pre-earnings management profitability. CEO characteristics include gender, tenure, age, education level, founding-family status, and nationality. Pre-earnings management profitability is measured by return on assets minus discretionary accruals. Data analysis uses firm and year fixed-effect regression analysis. The result shows that female CEO, longer tenure CEO, CEO with higher education levels, and foreign CEO increase firms' profitability without engaging in earnings management. On the other hand, there is no effect of CEO age and founding-family status on pre-earnings management profitability. This research contributes to filling the gap of inconsistent previous findings of CEO characteristics and profitability by considering earnings management behavior.

Keywords: *CEO characteristics, profitability, earnings management, pre-earnings management profitability*

Abstrak

Penelitian ini bertujuan untuk menguji pengaruh karakteristik CEO terhadap profitabilitas sebelum manajemen laba. Karakteristik CEO terdiri dari gender, tenur, usia, tingkat pendidikan, status keluarga pendiri, dan warga negara. Profitabilitas sebelum manajemen laba diukur dengan *return on assets* dikurang *discretionary accruals*. Analisis data menggunakan analisis regresi *fixed-effect* perusahaan dan tahun. Hasil penelitian menunjukkan bahwa CEO wanita, CEO dengan tenur yang lebih lama, CEO dengan tingkat pendidikan yang lebih tinggi, dan CEO asing meningkatkan profitabilitas tanpa melakukan manajemen laba. Di sisi lain, tidak ada pengaruh usia dan status keluarga pendiri CEO terhadap profitabilitas sebelum manajemen laba. Penelitian ini berkontribusi untuk menjawab hasil penelitian terdahulu yang tidak konsisten mengenai karakteristik CEO dan profitabilitas dengan mempertimbangkan perilaku manajemen laba.

Kata kunci: *karakteristik CEO, profitabilitas, manajemen laba, profitabilitas sebelum manajemen laba*

INTRODUCTION

CEO is the person in charge to lead the firm and has responsibility for all business activities. In a two-tier board system such as Indonesia, the CEO leads as a top manager in the executive board of directors and contributes to deciding daily business activities (Ditta and Setiawan 2019). One of the important goals of the firms is profit. CEO has an important role to achieve the goal. Firms' profitability is often used as CEO performance evaluation. In Indonesia, it is important to examine the relationship between CEO and profitability since most of the Indonesian cases of CEO's dismissal are initiated by reduction of profitability (Lindrianasari et al. 2011; Setiawan et al. 2017).

As an upper echelons theory by Hambrick and Mason (1984) and Hambrick (2007), CEO characteristics determine the decision-making behavior to increase firms' profitability such as gender, tenure, age, education level, founding-family status, and nationality. First, females tend to have stable and mature characteristics (Wani and Masih 2015), risk-averse preference of investment (Croson and Gneezy 2009), and multitasking (Ruderman et al. 2002). Female CEO also depends on factual event and detailed information to make a decision (Anggraeni et al. 2016). Although her counterpart of a male CEO also has a different style to improve performance, in the context that risk reduction leads to higher and stable growth, a female CEO style of management is more likely to reduce uncertainty to increase profitability (Jadiyappa et al. 2019).

Second, CEO tenure is an indicator of a specific experience as a CEO in a specific firm. Longer CEO tenure shows the higher experience of firms' business environment and characteristics had by CEO. CEO with longer tenure can make effective decisions (Shakir 2009).

Third, similar to tenure characteristics, CEO age is also an indicator of general experience and career had by CEO (Hambrick 2007; Hambrick and Mason

1984). An older CEO has higher experiences than a younger one (Peni, 2014). Since experiences are one of the most important factors to make an effective decision (Wei et al. 2005), longer tenure and older CEO increases profitability.

Fourth, CEO education level also shows the ability of CEO (Hambrick 2007; Hambrick and Mason 1984). Higher education level indicates that a CEO has higher cognitive complexity to find a new idea of business (Davila and Foster 2007). Higher educated CEO can improve firms' profitability.

Fifth, the founding-family status of the CEO shows that CEO has the characteristics of the firms' founder. The founder has a strong knowledge and experience of firms' business since it is founded (Andres 2008). The founder also needs to keep the firms' reputation and does sustainable business by maintaining a good relationship with employees (Ward 1988), selecting reputable suppliers (Andres 2008), and maintaining financing risk (Anderson et al. 2003). Founders' characteristics will be absorbed more by their family members than by outsiders. When the founder, or the member of the founding family, becomes CEO, they tend to use the founder's value to improve profitability.

Sixth, a foreign CEO has international experience as a unique competitive advantage to improve firms' profitability (Le and Kroll 2017). Compare to their counterpart of local CEOs, foreign CEOs can create a unique business strategy across countries and have the ability to understand the international market (Le and Kroll 2017).

Some studies find that executive directors' characteristics of gender (Jalbert et al. 2013; Susanti et al. 2018), tenure (Shakir 2009; Juenke 2005), age (Emilia Peni 2014; Wei et al. 2005), an education level (Cheng et al. 2010; Saidu 2019), founding-family status (Cai et al. 2012), and foreign nationality (Le and Kroll 2017; Pradono and Widowati 2016) increase firms' performance. On the other hand, some studies provide conflicting findings.

Wachudi and Mboya (2012) find that there is no effect of gender diversification on return on assets. Anggraeni *et al.* (2016) do not find any significant relationship between CEO tenure and firms' performance. Amin and Sunarjanto (2016) and Eduardo and Poole (2016) also do not find any significant relationship between the executive board and CEO age and firms' performance. Gottesman and Morey (2010) and Lindorff and Jonson (2013) do not find a significant effect of CEO education level on financial performance. Peng and Jiang (2010) find the negative effect of family representation in the executive board on firms' performance. Wijaya and Suprasto (2015) do not find any significant relationship between nationality diversity on firms' performance.

Inconsistent findings of executive directors and firms' profitability and performance come from the strategy selection of earnings management practice. There are some arguments to explain why earnings management practice is the factor of inconsistent findings between executive directors and firms' profitability and performance. First, earnings management generally is the managers' intervention to affect earnings numbers in financial reporting (Healy and Wahlen 1999). In this case, earnings management can be an option for executive directors to affect reported performance. Second, when managers' performance is determined by accounting numbers from the financial report, there is a possibility that the performance measurement contains bias since accounting numbers can be manipulated through earnings management (Hsieh *et al.* 2018; Demerjian *et al.* 2012). Third, some studies find that different executive directors' characteristics lead to a different approach to earnings management practice when executive directors improve performance. Hsieh *et al.* (2018) find that executive directors with higher knowledge and longer tenure improve firms' performance through earnings management while Qi *et al.* (2018) find that female and older executive directors improve performance without engaging in earnings management.

Earnings management behavior aims to manage profit numbers (Healy and Wahlen 1999; Sloan 1996; Richardson *et al.* 2005) by using the loophole of accounting method and estimation (Scott 2014). Earnings management includes profit-increasing (aggressive) and profit-decreasing (conservative) behavior (Institute of Management Accountants 2018). Earnings management makes profitability evaluation cannot reflect the real firms' condition (Gopalan and Jayaraman 2012). Both executives' characteristics and profitability relate to earnings management behavior. The strategy of earnings management is determined by executives' characteristics. The case of Toshiba in 2015 shows the profit mark-up to USD 1.2 billion in 7 years (Prasetya and Gayatri 2016). It leads to firm value reduction until USD 13.4 billion and makes the CEO, *Hisao Tanaka*, and other 8 top managers resign from their managerial position. It shows that CEO takes the full responsibility for profitability-related strategy selection including earnings management strategy.

Some earnings manipulation cases in Indonesia affect the firms' CEOs. In 2016, *PT Hanson International* manipulate its financial report by boosting its revenues. Indonesian Financial Service Authority (*Otoritas Jasa Keuangan*) penalizes the CEO of *PT Hanson International* as much as IDR 5 billion (Idris 2020). In 2020, *PT Jiwasraya* has been found that they manipulate their earnings since 2006 and leads their former CEO to prison (C. A. Putri 2020). In 2017, a survey of Edelman Trust Barometer shows that Indonesian CEO credibility touches the lowest point where 63% of respondents have moderate to low trust in CEO performance (Center for Risk Management & Sustainability 2018). Since there is Indonesian CEO credibility reduction, also some cases lead CEOs to take full responsibility for earnings manipulation to cover their bad performance, it is important to examine the true or fair performance (for instance, profitability that is free from earnings

management) that can be achieved by the CEOs.

Although CFOs have the main responsibility for financial reporting and accounting policy (Beasley et al. 2010), this research focuses more on the CEO. First, the CEO is the top leader in the firm. CEO has more authority to decide the business strategy to achieve profitability and authorize the use of accounting policy for financial reporting (Bouaziz et al. 2020; Ittner et al. 1997). Second, the CEO gives more concern about earnings management since CEO performance is evaluated by earnings number to determine CEO compensation (Ittner et al. 1997). Third, a survey by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) shows that CEO involves more in financial manipulation than CFOs (Beasley et al. 2010). To avoid the difference of accounting and financial knowledge between CEO and CFO, this research use CEO accounting and financial experience as variable control.

In the context of behavioral theory in the accounting field (Kutluk 2017), CEO characteristics determine CEO behavior towards accounting policy including the selection of accounting methods and estimation to manage earnings. Barua *et al.* (2010) and Peni and Vahamaa (2010) find that female executives engage more in accounting conservatism than aggressive ones where they recognize more the loss potential than the profit one as an impact of risk-averse behavior. Ali and Zhang (2015) find that CEO tenure affects earnings management behavior. Putri and Rusmanto (2019) CEO tenure and age have a significant effect on earnings management. Qi *et al.* (2018) also find that CEO education and age affect earnings management. Santoso dan Rakhman (2013) and Dwiyantri and Astriena (2018) find the role of founding-family reduce earnings management. Enofe *et al.* (2017) also find that foreign executives reduce aggressive earnings management behavior, while Khalil *et al.* (2020) finds that foreign investor needs accounting conservatism.

Since earnings management leads to a biased evaluation between executives' characteristics and profitability, it is important to measure the profitability before earnings management is included to show the real performance of the CEO. This research aims to examine the effect of CEO characteristics on pre-earnings management profitability. Previous studies do not consider the earnings management behavior to examine the effect CEO characteristics, such as gender (Jalbert et al. 2013; Susanti et al. 2018; Wachudi and Mboya 2012), tenure (Anggraeni et al. 2016; Shakir 2009; Juenke 2005), age (Emilia Peni 2014; Wei et al. 2005; Amin and Sunarjanto 2016; Eduardo and Poole 2016), an education level (Cheng et al. 2010; Saidu 2019; Gottesman and Morey 2010; Lindorff and Prior Jonson 2013), founding-family status (Cai et al. 2012; Peng and Jiang 2010) and foreign nationality (Le and Kroll 2017; Pradono and Widowati 2016; Wijaya and Suprasto 2015) on profitability. As previous studies find that CEOs involves in earnings management behavior (Barua et al. 2010; Ali and Zhang 2015; E. A. Putri and Rusmanto 2019; Qi et al. 2018; Santoso and Rakhman 2013), this research considers earnings management behavior to examine the effect of CEO characteristics on profitability by excluding the earnings management from profitability.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Corporate Governance in Indonesia

Different from the one-tier board system such as in the US, Indonesia implements the two-tier board system. One-tier board system refers to the corporate governance system where the board of directors (executive and non-executive) is one body (Aluchna 2013). One-tier board is usually implemented in Anglo-Saxon countries such as the US, the UK, Spain, Italy, Canada, Australia, and India (Mallin 2016). Indonesia implements the two tier-board systems where the board of directors is formed separately into the board of

commissioners (non-executive) and board of executive directors. Based on *UU 40 2007* about "Limited Companies", the board of executive directors has full responsibility for firms' business activities while the board of commissioners has the responsibility to do monitoring and oversight on board of executive directors.

In the context of CEOs' roles, there are some implications of the two-tier board system in Indonesia. A two-tier board system offers the independent role of CEOs (Cho and Rui 2009). As the separation of the board of commissioners and executive directors, there is no significant relationship between CEOs and the board of commissioners, so the board of commissioners can implement effective monitoring on CEOs without intervention from CEOs or other executive directors. Different from a one-tier board system, the duality role of CEOs as the CEOs and the board chairman may exist (Spencer Stuart 2015) and can disturb the monitoring role of non-executive directors and leads to lower firms' profitability (Mubeen et al. 2021). However, the two-tier board system does not allow efficient information flows and knowledge sharing between CEOs and boards of commissioners since the board of commissioners and executive directors are separated (Jungmann 2006). Yang and Zhao (2014) find that the close relationship between CEOs and supervisory boards leads to lower information costs and faster decision-making.

The role of shareholders is also different between Indonesia and other Anglo-Saxon countries. In Anglo-Saxon countries such as the US, the ownership structure is dispersed while in two-tier board system countries such as Indonesia, the ownership structure is concentrated (Sun 2019). The concentrated ownership structure allows controlling shareholders to take an important role in the firms. Concentrated ownership can reduce managers-shareholders conflict and leads to higher firms' performance (Choi 2018). However, concentrated ownership also leads to abuse of power and higher

minority-majority shareholders' conflict (Choi 2018; La Porta et al. 1999). Some studies find that concentrated ownership leads to higher earnings management and lower earnings quality (Leuz et al. 2003; Grimaldi and Muserra 2017). In the context of CEOs' roles, concentrated ownership allows CEOs to fulfill the private benefits of controlling shareholders by engaging in earnings management.

In the context of Indonesia, the monitoring role of the board of commissioners leads CEOs to improve profitability while there is the possibility that CEOs engage in earnings management to improve profitability as controlling shareholders tend to abuse their power to reduce earnings quality. It leads to a biased performance evaluation of CEOs. This research mitigates the biased performance evaluation by measuring the profitability before earnings management involvement.

Behavioral Theory

In the beginning, the behavioral theory comes from the social field that explains individuals' behavior by analyzing the antecedents and consequences around them (Angell 2013). Further, the behavioral theory is developed in other fields including the accounting field. In the context of accounting, behavioral theory explains the relationship between an individual with accounting issues by understanding, analyzing, and predicting individuals' behavior when they face accounting issues (Kutluk 2017). Factors of cognitive and affective can determine how individuals behave towards accounting (Kutluk 2017).

In this case, CEO characteristics of cognitive (such as age, tenure, education level, founding-family status, and nationality) and affective (such as gender and founding-family status) are examined to determine CEO behavior towards profitability. Age and tenure show the cognitive characteristic of competence that is got from experience had by the CEO. Education level shows the cognitive characteristic of knowledge that is got from formal edu

cation taken by the CEO. Founding-family status level shows the cognitive characteristic of CEO knowledge that is got from firm founder and also affective characteristic of emotional to maintain family reputation. Gender shows affective characteristics of CEO emotional towards risk-taking behavior.

Upper Echelons Theory

The upper echelons theory explains that firms' strategy and output are determined by how managers interpret the businesses' condition and environment (Hambrick 2007; Hambrick and Mason 1984). Managers' interpretation depends on the managers' characteristics that shape their attributes of cognitive, value, and viewpoint (Hambrick and Mason 1984). In this case, CEO characteristics are important to determine the firms' output of profitability. Some of the CEO characteristics are gender, tenure, age, education, founding-family status, and nationality.

Agency Theory

Agency theory explains the relationship between the principal (shareholders) and agent (managers) (Jensen and Meckling 1976). Shareholders and managers have different interests that lead to agency conflict where shareholders expect to have higher wealth and value while managers have interests of higher compensation. Greater agency conflict also comes from information asymmetry where managers have more information about firms' daily business activities than shareholders have. In this case, managers tend to use the information asymmetry condition by engaging in earnings management. Earnings management will affect the firms' profitability, also, managers' performance. As the top manager, the CEO also has the opportunity to engage in earnings management behavior to affect their performance evaluation.

Earnings Management

Earnings management refers to managers' behavior (in this case, it refers to

CEOs' behavior as top managers) to manage the profit numbers by using the accounting standard loophole that triggered by motivations of compensation, debt contracting, or political costs (Scott 2014). Earnings management is a critical issue since the big financial scandal in the late 1990s and early 2000s by Enron, Tyco, WorldCom, and Xerox who cover up their poor profitability by managing profit (Litt et al. 2014). Since profit is the main concern for firms' profitability evaluation, there is a close relationship between earnings management and profitability performance. When firms do not reach a certain level of profitability, they are more likely to engage in earnings management (Healy and Wahlen 1999; Sloan 1996; Richardson et al. 2005; Muslim 2020).

There are two types of earnings management which are aggressive profit-increasing and conservative profit-decreasing (Institute of Management Accountants 2018). Aggressive profit-increasing refers to earnings management to boost-up profit numbers based on higher compensation. Aggressive profit-increasing earnings management is used to avoid losses or negative profit numbers (2002) (Burgstahler and Dichev 1997), beat previous profit (Abarbanell and Lehavy 2003), or meet analysts' forecasts (Payne and Robb 2000; Das and Zhang 2003). Most aggressive profit-increasing earnings management is done when CEO has a greater incentive for compensation or debt-contract violation (Scott 2014; Watts and Zimmerman 1978).

Conservative profit-decreasing refers to earnings management to decrease profit numbers based on uncertain conditions. Conservative itself refers to behavior to recognize bad news and loss potential and delays the good news and gains potential (Penman and Zhang 2002). Most conservative profit-decreasing earnings management is done when CEO has a greater incentive to reduce higher costs for having higher profit and greater uncertainty (Scott 2014; Watts and Zimmerman 1978). Some studies find that CEO engages more in

earnings management to decrease profit when the CEO faces the uncertainties of investment (Arif et al. 2016), higher volatility of stock return (Cormier et al. 2013), greater tax payment (Scott 2014), and environmental issues (Yao and Liu 2020).

This research eliminates the earnings management components out from profitability because it leads to a biased profitability performance evaluation. Real firms' condition occurs when earnings management is excluded. It is important to examine the profitability before earnings management since only the CEO and internal management know more about real firms' performance than external parties (Jara-Bertin and Sepulveda 2016). There are previous studies that examine the firms' profitability before earnings management (Tran and Duong 2020; Jara-Bertin and Sepulveda 2016). Jara-Bertin and Sepulveda (2016) examine the pre-earnings management profitability in founding-family firms and find that founding-family firms have higher pre-earnings management profitability than non-family ones. Tran and Duong (2020) examine the earnings management motivation and find that negative pre-earnings management profit leads to higher earnings management behavior.

Based on the theory of upper echelons, the strategy of earnings management is based on CEO characteristics. On one hand, previous studies find that CEO and other executives characteristics of gender (Barua et al. 2010; E Peni and Vahamaa 2010), tenure (Ali and Zhang 2015; E. A. Putri and Rusmanto 2019), age (E. A. Putri and Rusmanto 2019; Qi et al. 2018), founding-family status (Santoso and Rakhman 2013; Dwiyantri and Astriena 2018), and nationality (Enofe et al. 2017) have an effect on earnings management behavior. On the other hand, some studies find that executives' characteristics of gender (E. A. Putri and Rusmanto 2019), an education level (Fatimah 2019), founding-family status (Lestari and Harindahyani 2017), and nationality (Setyawan and

Anggraita 2018) have no effect on earnings management. Since earnings management brings a bias to CEO performance evaluation, also, since the inconsistent findings of CEO and other executives' characteristics on earnings management bring a biased relationship between CEO and profitability, this research eliminates the earnings management components from profitability measurement to ensure that CEO characteristics can determine firms' profitability without engaging in earnings management.

Hypothesis Development

This research develops the research hypotheses in the context of the two-tier board system and concentrated ownership structure in Indonesia. On one hand, the two-tier board system allows CEOs to improve profitability as there is an effective monitoring role by the board of commissioners where they are separated from the board of directors although the two-tier board system also decreases the knowledge sharing between commissioners' members and executive directors. On the other hand, CEOs may improve profitability by engaging in earnings management as there is a possibility that concentrated ownership allows CEOs to do so. This research examines the role of CEOs in Indonesia to improve profitability without engaging in earnings management. In this research, the role of CEOs in Indonesia is determined by the characteristics of gender, tenure, age, education, founding-family status, and nationality.

CEO Gender and Pre-Earnings Management Profitability

Gender does not only refer to sexuality terms but also defines a specific nature that is attached to a specific gender based on the social and cultural contexts where the social and cultural contexts bring out a different social and cultural role between a male and a female. Although both males and females do the same job in the firms, they have different ways to do it. According to upper echelons theory, the female has different cognitive, value, and

perception on the firms' business condition compare to a male to make a specific strategy. Cognitive, value, and perception characteristics can be affected by psychological, biological, social, and cultural terms. Based on a psychological term, the female has a stable and mature emotion because the female gets into a mature age earlier than a male (Wani and Masih 2015). Based on a biological term, a female has a lower testosterone hormone than a male (Sapienza et al. 2009). Since the testosterone hormone can bring higher adrenaline and riskier action, females tend to do less risky behavior (Sapienza et al. 2009). A stable, mature, and less risky behavior brings a female CEO to make a decision carefully and effectively. It can lead to higher profitability. Based on a social and cultural term, especially in Indonesia, the female has the ability of multitasking since she can do various things almost at the same time in her family and home so she can bring the ability into the firms (Ruderman et al. 2002). A multitasking ability leads a female CEO to do various work in the firms which leads to efficiency. It also can lead to higher profitability. Jalbert *et al.* (2013) and Susanti *et al.* (2018) find that female executive directors increase firms' performance.

On the other hand, Wachudi and Mboya (2012) find that there is no effect of gender diversification on firms' performance. There is a possibility that earnings management is included in the business strategy implementation. Inconsistent findings of CEO gender and firms' performance may come from the male CEO also generates higher profitability by engaging in earnings management. Aggressive and risk-taking characteristics make male CEO increase profit by using a strategy of aggressive earnings-profit earnings management.

Although the risk-averse behavior brings a female CEO avoids an aggressive profit-increasing earnings management, it can bring a female CEO to engage more in conservative profit-decreasing earnings management, especially when she faces the

uncertainty condition (Heminway 2007; Barua et al. 2010; E Peni and Vahamaa 2010). It happens because a female CEO does not only care about the financial performance but also her social status (Backhaus et al. 2002). In this case, there is a possibility that real firms' profitability is higher than a reported one when the firms are led by a female CEO. In another case, a female CEO also engages in aggressive profit-increasing earnings management especially when she faces a lower risk of litigation costs (Zalata et al. 2019). It shows that there is also a possibility that firms' profitability is lower than it should be when the firms are led by a female CEO. Based on the competitive advantages of stable and mature behavior, risk-averse, and multitasking ability, a female CEO can increase profitability without engaging in earnings management. Oppositely, a male CEO has lower profitability without engaging in earnings management.

In the context of concentrated ownership in Indonesia, controlling shareholders tend to engage in earnings management to gain private benefits (Leuz et al. 2003; Grimaldi and Muserra 2017). However, controlling shareholders also can use their superior position to provide effective monitoring to increase profitability (Choi 2018). In this case, as females have higher ethics and are risk-averse (Heminway 2007; Barua et al. 2010; E Peni and Vahamaa 2010; Backhaus et al. 2002), female CEOs can avoid the earnings management behavior to gain private benefits of controlling shareholders and improve profitability.

H₁: Female CEO has a positive effect on pre-earnings management profitability.

CEO Tenure and Pre-Earnings Management Profitability

Tenure is defined as a cumulative period in a specific job position. CEO tenure refers to a cumulative period as a CEO in a specific firm (Shakir 2009). CEO tenure defines a specific experience and knowledge as a CEO to capture the under

stating level about the firms. A longer tenure CEO has better experience, knowledge, and understanding to make an effective decision and policy for the firms. Juenke (2005) and Shakir (2009) find that longer CEO tenure has a positive effect on firms' performance.

On the other hand, Anggraeni *et al.* (2016) do not find any significant relationship between CEO tenure and firms' performance. There is a chance that a shorter tenure CEO also brings higher profitability by engaging in aggressive earnings-profit earnings management. Gibbons and Murphy (1992) suggest that market participants always have doubt in shorter tenure CEO for having no longer performance track record to ensure CEO succession. There are no rewards for shorter tenure CEO' performance (Oyer 2008) but there is a punishment for shorter tenure CEO's failure (Ali and Zhang 2015). It motivates shorter tenure CEO to engage in aggressive earnings-profit earnings management to boost up profitability. In contrast, loner tenure CEO already has a sufficient performance track record and reputation (Ali and Zhang 2015). For longer tenure CEO, reputation comes first and earnings management behavior will be avoided. Longer tenure CEO increases profitability by using higher knowledge and experience without earnings management behavior while shorter tenure CEO, without aggressive profit-increasing earnings management, has lower profitability.

The two-tier board system, as implemented in Indonesia, does not allow CEO to enjoy knowledge sharing between executive directors and commissioners as they are in separated boards (Jungmann 2006). In this case, CEO with longer tenure can utilize their long experience and higher knowledge to mitigate the disadvantage of the two-tier board system. CEO with longer tenure can improve profitability by using their experience and knowledge.

H₂: CEO tenure has a positive effect on pre-earnings management profitability.

CEO Age and Pre-Earnings Management Profitability

Hambrick and Mason (1984) explain age is one of the CEO demographic characteristics that affect CEO behavior to make a business decision. Similar to tenure characteristics, age also is an indicator of cumulative experiences, career line, and commitment (Hambrick and Mason 1984; Eduardo and Poole 2016; Mathieu and Zajac 1990). Peni (2014) assumes that older CEO has the long experience to be used to gather more information and literature than a younger one. Older CEO can make an effective strategy to increase profitability. Peni (2014) and Wei *et al.* (2005) find that older CEO has a positive effect on firms' performance. In the context of the two-tier board system in Indonesia, a younger CEO will be difficult to gain knowledge from the board of commissioners. As older CEO has longer cumulative experiences and career line, older CEO will enjoy the advantage of experience to improve profitability.

On the other hand, Amin and Sunarjanto (2016) and Eduardo and Poole (2016) do not find any significant relationship between executives' age and firms' performance. Younger CEO also can increase profitability by engaging in aggressive profit-increasing earnings management. Younger CEO has a lower concern about financial and career stability (Wiersema and Bantel 1992), higher risk-taking behavior, and lower organizational commitment (Mathieu and Zajac 1990). A younger CEO is more likely to engage in earnings management than an older one (Qi *et al.* 2018). In this case, an older CEO increases profitability by using longer experience without earnings management behavior while a younger CEO, without aggressive profit-increasing earnings management, has lower profitability.

H₃: CEO age has a positive effect on pre-earnings management profitability.

CEO Education and Pre-Earnings Management Profitability

Becker (1985) explains that education level is one of the human capital factors that provide the skill to increase productivity. Higher education level allows managers to increase their capacity and productivity (Fahmia and Mulyono 2015). Based on the upper echelon theory, education level is one of the CEO characteristics that affect decision-making (Hambrick and Mason 1984). A CEO with a higher education level has higher thinking complexity, ability, and innovation to implement business strategy effectively (Davila and Foster 2007). Higher education levels also provide more cognitive ability to analyze information (Nadkarni and Herrmann 2010). Cheng *et al.* (2010) find that higher education had by the executive board increases firms' performance. Higher education level is important to mitigate the disadvantage of a two-tier board system that does not allow efficient information flows and knowledge sharing between CEOs and board of commissioners since the board of commissioners and executive directors are separated (Jungmann 2006).

On the other hand, Gottesman and Morey (2010) and Lindorff and Jonson (2013) do not find any significant effect of CEO education level on financial performance. There is a possibility that CEOs with higher education level uses their ability to engage in earnings management. Since higher thinking complexity and more cognitive ability allow the CEO to have a higher knowledge of firms' financial reporting environment and engage more in earnings management. Qi *et al.* (2018) find that education level has a positive effect on earnings management. It makes a bias for the relationship between CEO education level and firms' profitability. In this case, CEOs with higher education levels can use their ability to increase profitability without engaging in earnings management.

H4: CEO education level has a positive effect on pre-earnings management profitability.

CEO Founding-Family Status and Pre-Earnings Management Profitability

Santoso and Rakhman (2013) and Dwiyanti and Astriena (2018) suggest that the founding-family role in firms' leadership brings higher effectivity and monitoring function because the founding-family has interests to maintain firms' reputation. Andres (2008) also suggests that the founders and their families have a higher knowledge of the firm since it is founded. Founding-family characteristics have a positive effect on firms' performance (Anderson and Reeb 2003; Craig and Dibrell 2006; González-Cruz and Cruz-Ros 2016; Tsao *et al.* 2016; Yasser *et al.* 2017; Vieira 2014). Founding-family characteristics are also embedded in the CEO with founding-family status. It indicates that founding-family CEO increases firms' performance. In the case of the Indonesian context, most founding-family firms in Indonesia have concentrated ownership and lead founding-family as controlling shareholders (Santoso and Rakhman 2013). By appointing the member of the family as CEO, founding-family shareholders run their monitoring function and ensure that CEO can achieve better profitability.

On the other hand, Peng and Jiang (2010) find the negative effect of family representation in the executive board on firms' performance. Non-founding family CEO has no emotional relationship to keep firms' reputation and has lower knowledge of firms' characteristics than a founding-family one. It leads non-founding family CEO to increase profitability by engaging in aggressive profit-increasing earnings management. Meanwhile, founding-family CEO needs to maintain the firms' reputation by engaging less in earnings management. Wang (2006) and Demsetz and Lehn (1985) find that the founding-family role reduces earnings management behavior that harms firms' reputations. Both non-founding and founding-family CEOs respectively have higher profitability with and without earnings management which leads to a biased relationship between CEO founding-family status and profitability. In

this case, founding-family CEO increases profitability by higher knowledge of firms' characteristics and providing effective monitoring without earnings management behavior while a non-family founding CEO, without aggressive profit-increasing earnings management, has lower profitability. Jara-Bertin and Sepulveda (2016) find that founding-family firms have higher profitability than non-family ones without engaging in earnings management.

H5: Founding-family CEO has a positive effect on pre-earnings management profitability.

CEO Nationality and Pre-Earnings Management Profitability

CEO nationality refers to the CEO's country of origin and citizenship as a foreign or Indonesian/local CEO. A foreign CEO does not only have cross-business, sector, or industry experience but also a cross-country one. A cross-country experience is important to develop firms' strategies (Tams 2013), especially to develop a global market network. Foreign CEO relates to foreign funding access, cross-country market network, and better global point of view than local CEO that can be used in the host country to increase firms' performance (Le and Kroll 2017). A foreign CEO also has a unique experience about the social, economic, and political environment in the home country that can be used as additional information and knowledge to develop a business strategy in the host country. Characteristics of foreign CEO can help firms to increase profitability. Knowledge and experience of global business allow foreign CEO to mitigate the disadvantage of a two-tier system that does not allow knowledge sharing between executive directors and commissioners' members. Le and Kroll (2017) find a positive effect of foreign CEO on performance.

On the other hand, Wijaya and Suprasto (2015) do not find any significant relationship between nationality diversity on firms' performance. There is a chance that a local CEO also has higher

profitability by engaging in aggressive profit-increasing earnings management. Compare to their counterpart of local CEOs, foreign CEOs are less likely to engage in earnings management because they tend to avoid a culture of politeness to other local executives and more open mind and transparent (Chiu et al. 2013) to reduce more problems in the future (Enofe et al. 2017). Local CEO behavior to engage more in aggressive profit-increasing earnings management make a bias for the relationship between CEO nationality and profitability. A foreign CEO can use a unique cross-country strategy to improve profitability without earnings management behavior while a local CEO, without earnings management, will have lower profitability.

There is also a possibility that a foreign CEO engages in conservative profit-decreasing earnings management. Khalil *et al.* (2020) find that institutional foreign shareholders need accounting conservatism since they face the uncertainty of information disadvantages relative to their domestic peers. Conservative profit-decreasing earnings management also brings a bias to the relationship between CEO nationality and profitability. It shows that a foreign CEO has higher profitability than a reported one.

H6: Foreign (non-Indonesian) CEO has a positive effect on pre-earnings management profitability.

RESEARCH METHOD

Sample

The research sample includes manufacturing firms listed on the Indonesian Stock Exchange 2012-2018. This research considers Ahmed and Azim (2015) and Rasmussen (2013) that manufacturing firms experience higher uncertainty of revenues and profit that leads to higher earnings management behavior. This research also uses manufacturing firms to avoid industry characteristics differences. Compare to other industries, the manufacturing industry

Table 1
Research Sample

Sample Criteria	Firm	Firm-Years
Manufacturing Firms listed on the Indonesian Stock Exchange 2012-2018	123	851
Incomplete annual report	(5)	(35)
Incomplete CEO profile data	(23)	(151)
Net Sample	95	665

$$Return\ on\ Assets = \frac{Earnings\ After\ Tax}{Lagged\ Total\ Assets} \quad (1)$$

$$\frac{(Earnings\ After\ Tax - Operating\ Cash\ Flow)}{Lagged\ Total\ Assets} = b_0 + b_1 \frac{1}{Lagged\ Total\ Assets} + b_2 \frac{(\Delta Sales - \Delta Accounts\ Receivable)}{Lagged\ Total\ Assets} + b_3 \frac{(Gross\ Fixed\ Assets)}{Lagged\ Total\ Assets} + b_4 \frac{Earnings\ After\ Tax}{Lagged\ Total\ Assets} + e \quad (2)$$

$$Pre\ earnings\ management\ profitability = Return\ on\ Assets - e \quad (3)$$

has a different characteristic that leads to a different level of accruals to engage in earnings management (Effiong et al. 2020). The manufacturing industry has higher accruals estimation from higher credit sales (Rasmussen 2013) that leads to higher bad debt expenses estimation, accounting method for inventory valuation (Sulistyawati et al. 2019), and fixed assets intensity (Fakhroni et al. 2018) that leads to depreciation method. Research period of 2012-2018 based on the regulations of *Keputusan BAPEPAM-LK Nomor: KEP-431/BL/2012* and *Surat Edaran Otoritas Jasa Keuangan Nomor 30 /SEOJK.04/2016* about executives' profiles disclosures in annual report. These two regulations regulate more detailed disclosures about executives' profiles (e.g. name, age, nationality, education, and position tenure) than the previous regulation of *Keputusan BAPEPAM-LK Nomor: KEP-134/BL/2006* that only regulate general information of executives' profiles (e.g. name, position, and other brief information). The sample consists of 665 firm-years as in table 1.

Measurement of Pre-Earnings Management Profitability

There are two components of pre-earnings management profitability which are profitability and earnings management. Profitability is measured by return on assets where earnings after tax are divided by

lagged total assets as in equation 1 (Tran and Duong 2020; Jara-Bertin and Sepulveda 2016). Earnings management is measured by discretionary accruals performance-based estimation by Kothari et al. (2005) as used by Jara-Bertin and Sepulveda (2016) and Tran and Duong (2020) to measure pre-earnings management profitability. Basically, earnings management consists of accrual earnings management and real earnings management (Roychowdhury 2006), but previous studies only provide the measurement of preearnings management profitability by using accrual earnings management (e.g.(Tran and Duong 2020; Jara-Bertin and Sepulveda 2016) and there is still no study that uses real earnings management to determine pre-earnings management profitability. Model of discretionary accruals performance-based uses firm fixed-effect regression model as in equation 2 (Kothari et al. 2005). Firm fixed-effect in equation 2 aims to control the different accounting policy and method that is used by different firms.

The value of *e* in equation 2 is discretionary accruals. Instead of using the absolute value of discretionary accruals, this research uses the magnitude value of discretionary accruals to capture different approaches of earnings management (for instance: profit-increasing earnings management and profit-decreasing earnings

management) to adjust the level of profitability before earnings management practice. As the discretionary accruals are the estimation of residual value (value of e) in equation 2 and the mean value of residual value is zero (or almost/close to zero) (Jones 1991; Dechow et al. 1995), this research follows the suggestion by Jones (1991), Dechow et al. (1995), and Kothari et al. (2005) that discretionary accruals value that is above zero (positive value of the value of e) is an indicator of profit-increasing earnings management while discretionary accruals value that is below zero (negative value of the value of e) is an indicator of profit-decreasing earnings management.

The positive value of e shows the use of discretionary accruals components as aggressive profit-increasing earnings management. Profit-increasing earnings management is considered as an aggressive financial reporting since managers boost up the earnings number by recognizing the future income and revenue earlier and delaying the recognition of current expenses to avoid losses or earnings reduction (Islam et al. 2011; The Auditing Practice Board 2001). In this case, pre-earnings management profitability occurs when aggressive profit-increasing earnings management is eliminated from the current profitability as in equation 3.

The negative value of e shows the use of discretionary accruals components as conservative profit-decreasing earnings management. Profit-decreasing earnings management is considered as conservative financial reporting based on the argument that conservatism allows managers to delay the future income and recognize the future expenses to the current period (A. S. Ahmed and Duellman 2013) while profit-decreasing earnings management is executed by recognizing the future expenses to the current period and delaying the recognition of current income or revenue (Islam et al. 2011; The Auditing Practice Board 2001). For instance, Peni and Vahamaa (2010) find female directors have a characteristic of conservatism and

lead them more to negative discretionary accruals (profit-decreasing earnings management). Although conservatism can be used as a tool of prudence to face future risk (A. S. Ahmed and Duellman 2013), it can also not provide the "fair or true" level of the current earnings (The Auditing Practice Board 2001). In this case, pre-earnings management profitability occurs when conservative profit-decreasing earnings management is eliminated from the current profitability as in equation 3.

Earnings consist of components of operating cash flow and accruals (Dechow 1994). The accruals component of earnings consists of non-discretionary accruals and discretionary accruals. Non-discretionary accruals are accruals component that is subject to industry and business risk and condition while discretionary accruals are accruals component that is subject to managers' estimation (Jones 1991; Dechow et al. 1995). For instance, non-discretionary accruals can be seen as the predictive value of accruals (the difference of earnings and operating cash flow) in equation 2 while the value of e in equation 2 shows the discretionary accruals. Pre-earnings management profitability as in equation 3 is measured by return on assets minus discretionary accruals where discretionary accruals are the value of e in equation 2 (Tran and Duong 2020; Jara-Bertin and Sepulveda 2016). In this case, pre-earnings management profitability shows the component of operating cash flow and accruals component that is subject to industry and business risk and condition (non-discretionary accruals) by eliminating the accruals component that is subject to managers' estimation (discretionary accruals).

Measurement of CEO Characteristics

CEO characteristics include gender, tenure, age, education level, founding-family status, and nationality. CEO gender is measured by a dummy variable where score 1 for female CEO and score 0 for male CEO (Zalata et al. 2019). Gender information is provided in the annual report as the photo or when the profile mentions

$$ROA_{Pre-EM(it)} = \alpha + b1GENDER_{(it)} + b2TENURE_{(it)} + b3AGE_{(it)} + b4EDU_{(it)} + b5FAMILY_{(it)} + b6NATION_{(it)} + b7SIZE_{(it)} + b8LEV_{(it)} + b9AG_{(it)} + b10SG_{(it)} + b11FIN_EXP_{(it)} + e \quad (4)$$

the CEO as “she” or “he”. CEO tenure is measured by the number of years a current CEO takes the CEO position since the first appointment (Shakir 2009). Regarding tenure information, the annual report provides the date of CEO appointment or re-appointment in the CEO profile. CEO age is measured by the number of years of age of the current CEO (Emilia Peni 2014). Regarding age information, the annual report also provides the CEO age or CEO date of birth.

CEO education level is measured by a scoring method. Score 1 for high school graduated CEO, score 2 for associate degree graduated CEO, score 3 for bachelor degree graduated CEO, score 4 for master degree graduated CEO, score 5 for doctorate graduated CEO (Qi et al. 2018). Regarding education information, the annual report provides information on the last educational level that has been taken by the CEO.

CEO founding-family status is measured by a dummy variable where score 1 if CEO is also firm’ founder or family member of firm’ founders by blood or marriage, and score 0 if otherwise (Santoso and Rakhman 2013). Firm’ founder information can be accessed in annual reports, prospectus, firm websites, or search engines (such as www.google.com). The family had by the founder can be accessed on the firm's websites or search engines (such as www.google.com). The relationship between the CEO and the founder can be accessed in annual reports, firm websites, or search engines (such as www.google.com).

CEO nationality is measured by a dummy variable where score 1 for foreign (non-Indonesian) CEO and score 0 for local (Indonesian) CEO (Enofe et al. 2017). CEO profile in the annual report provides information whether CEO is Indonesian or foreign.

Control Variables

Control variables include firms’ size, leverage, firms’ growth, and CEO financial expertise. Firms' size controls the firms' resources to generate profit. Bigger firms have higher resources to increase profitability. Firms' size is measured by the logarithm natural of total assets (Jara-Bertin and Sepulveda 2016). Leverage shows the firms’ risks of financial and default where higher risks lead to lower profitability. Leverage is measured by the ratio of debt to total assets (Rahman et al. 2020). Firms' growth shows the possibility for firms to improve profitability (Jang and Park 2011). This research uses asset growth and sales growth as a proxy of firms' growth. Asset growth is measured by total assets change divided by lagged total assets. Sales growth is measured by sales change divided by total assets. CEO financial expertise controls CEO knowledge to reduce the financial risk to improve profitability (Apergis 2019). CEO financial expertise is measured by a dummy variable where score 1 if CEO has financial experiences and score 0 if otherwise.

Empirical Model

To examine the effect of CEO characteristics on pre-earnings management profitability, this research uses firm and year fixed-effect regression. Firm fixedeffect is used to control different firms' characteristics to implement the business strategy by the CEO. Year fixed-effect is used to control different CEO tenure and age in each different year. The regression model is as in equation 4.

$ROA_{Pre-EM(it)}$ is pre-earnings management return on assets of firm i in the period of t . $GENDER_{(it)}$ is CEO gender of firm i in the period of t . $TENURE_{(it)}$ is CEO tenure of firm i in the period of t . $AGE_{(it)}$ is the CEO age of firm i in the period of t .

Table 2
Descriptive Statistics

Panel A. Variables of Profitability and Earnings Management	Minimum	Maximum	Mean	Std. Deviation	Variance	K-S
ROA	-0.3727	2.5401	0.0567	0.1558	0.0243	4.2453***
DA	-0.8516	0.3405	0.0000	0.0802	0.0064	2.4138***
ROA _{pre-EM}	-0.3612	2.3425	0.0567	0.1753	0.0307	3.2918***
F-Statistics for variance difference between ROA and ROA _{pre-EM}					9.0076***	
Winsorized ROA	-0.1393	0.2016	0.0429	0.0780	0.0061	1.3271#
Winsorized DA	-0.1244	0.1247	0.0003	0.0576	0.0033	0.7219#
Winsorized ROA _{pre-EM}	-0.2499	0.3221	0.0426	0.1014	0.0103	0.7577#
F-Statistics for variance difference between Winsorized ROA and Winsorized ROA _{pre-EM}					38.5566***	
Panel B. Continuous Variables of CEO profile	Minimum	Maximum	Mean	Std. Deviation		
TENURE	0.0000	47.0000	10.3300	10.7090		
AGE	32.0000	79.0000	55.0300	9.0630		
EDU	1.0000	5.0000	3.1400	0.7950		
Panel C. Dummy Variables of CEO profile	No. of Sample	Percent of Total Sample				
Male CEO	621	93.4 %				
Female CEO	44	6.6 %				
Non-founding family CEO	392	58.9 %				
Founding-family CEO	273	41.1 %				
Local CEO	550	82.7 %				
Foreign CEO	115	17.3 %				
CEO with no financial expertise	511	76.8 %				
CEO with financial expertise	154	23.2 %				
Panel D. Control Variables	Minimum	Maximum	Mean	Std. Deviation		
SIZE	24.3182	33.4737	28.4323	1.6739		
LEV	0.0395	5.0733	0.5631	0.5717		
AG	-0.7918	4.8175	0.1329	0.3945		
SG	-3.3273	2.9459	0.0647	0.3138		

***significant in 0.01, #insignificant

Source: Proceed data

$EDU_{(it)}$ is the CEO's education level of firm i in the period of t . $FAMILY_{(it)}$ is CEO founding-family status of firm i in the period of t . $NATION_{(it)}$ is the CEO nationality of firm i in the period of t . $SIZE_{(it)}$ is the size of firm i in the period of t . $LEV_{(it)}$ is the leverage of firm i in the period of t . $AG_{(it)}$ is the assets growth of firm i in the period of t . $SG_{(it)}$ is the sales growth of firm i in the period of t . $FIN_EXP_{(it)}$ is the CEO's financial expertise of firm i in the period of t . This research expects coefficients of $b1$ to $b6$ are positive and significant.

RESULT AND DISCUSSION

Descriptive Statistics

Table 2 shows the descriptive statistics of the interest variables. In panel A, the lowest and highest profitability (ROA) respectively have the values of -0.3727 and 2.5401. The average value of profitability

is 0.0567 with a deviation of 0.1558. The highest level of conservative profit-decreasing earnings management (the lowest value of DA) is -0.8516. The highest level of aggressive profit-increasing earnings management (the highest value of DA) is 0.3405. The lowest value of pre-earnings management profitability (ROA_{pre-EM}) is -0.3612 while the highest value of pre-earnings management profitability is 2.3425.

As the value of Kolmogorov-Smirnov (K-S) for the variable of pre-earnings management profitability (ROA_{pre-EM}) is significant in 0.01, it shows that the data are not distributed normally. To normalize the data, there are the methods of trimming, transformation, and winsorizing. This research use winsorizing method as trimming will reduce the number of samples and transformation (e.g. square root and logarithm natural) does not allow data with negative values. This research winsorizes

the extreme values of profitability (ROA) and earnings management (DA) to normalize the data. The extreme values are determined by analysis of stems and leaves based on a normal distribution curve. After winsorizing, the lowest and highest winsorized profitability (winsorized ROA) respectively have the values of -0.1393 and 0.2016. The average value of winsorized profitability is 0.0429 with a deviation of 0.078. The highest level of winsorized conservative profit-decreasing earnings management (the lowest value of winsorized DA) is -0.1244. The highest level of winsorized aggressive profit-increasing earnings management (the highest value of winsorized DA) is 0.1247. The lowest value of winsorized pre-earnings management profitability (winsorized ROA_{pre-EM}) is -0.2499 while the highest value of pre-earnings management profitability is -0.3221. Based on the value of Kolmogorov-Smirnov (K-S) after winsorizing, pre-earnings management profitability (winsorized ROA_{pre-EM}) is distributed normally.

This research assumes that profitability before and after earnings management is different since the strategy selection of earnings management practice leads to inconsistent findings of executive directors and firms' profitability. In panel A, profitability (ROA) and pre-earnings management profitability (ROA_{pre-EM}) have the same average value as the average value of discretionary accruals is the average value of e in equation 2 that will lead to zero. In this case, instead of examining the mean difference between profitability (ROA) and pre-earnings management profitability (ROA_{pre-EM}), this research examines whether decreasing or increasing (variability) of profitability (ROA) is different from decreasing or increasing (variability) of pre-earnings management profitability (ROA_{pre-EM}) by using variance difference test. Before winsorizing, panel A shows that the value of F-statistics for variance difference between profitability (ROA) and pre-earnings management profitability (ROA_{pre-EM}) is

9.0076 (significant in 0.01). After winsorizing, panel A shows that the value of F-statistics for variance difference between winsorized profitability (winsorized ROA) and pre-earnings management profitability (winsorized ROA_{pre-EM}) is 38.5566 (significant in 0.01). It indicates that variabilities of profitability and pre-earnings management profitability are different. The result confirms this research assumption where inconsistent findings of executive directors and firms' profitability come from strategy selection of earnings management practice.

Panel B shows that the shortest and longest tenures of CEO (TENURE) respectively are 0 years and 47 years. Each CEO has an average tenure of 10.3300 years with a deviation of 10.7090 years. The youngest and oldest ages of CEO (AGE) respectively are 32 years old and 79 years old. Each CEO has an average age of 55.0300 years old with a deviation of 9.0630 years. The lowest and highest education levels of CEO (EDU) respectively are 1 (high school degree) and 5 (doctorate). Each CEO has an average education level of 3.1400 (around bachelor's degree) with a deviation of 0.7950 scores of education level.

Panel C shows that there are 621 male CEOs or 93.4% of the total 665 samples and 44 female CEOs or 6.6% of the total 66 samples. There are 392 non-founding family CEOs or 58.9% of the total 665 samples and 273 founding-family CEOs or 41.1% of the total 66 samples. There are 550 local (Indonesian) CEOs or 82.7% of the total 665 samples and 273 foreign (non-Indonesian) CEOs or 17.3% of the total 66 samples.

CEO Characteristics on Pre-Earnings Management ROA

Table 3 shows that CEO gender (GENDER) has a coefficient value of 0.0831 with a t-statistic of 3.1398 (significant in 0.01). The result indicates that CEO gender has a positive effect on pre-earnings management profitability. CEO tenure (TENURE) has a coefficient

Table 2
CEO Characteristics on Pre-Earnings Management ROA

Variable	Coefficient	t-Statistic	Prob.
<i>GENDER</i>	0.0831	3.1398***	0.0018
<i>TENURE</i>	0.0022	2.4553**	0.0143
<i>AGE</i>	-0.0001	-0.5330	0.5492
<i>EDU</i>	0.0215	2.2478**	0.0249
<i>FAMILY</i>	-0.0202	-1.1180	0.2460
<i>NATION</i>	0.0545	2.9657***	0.0031
SIZE	0.0109	2.675***	0.0077
LEV	-0.0578	-4.9465***	0.0000
AG	0.0632	3.7055***	0.0002
SG	0.0075	0.3520	0.7250
FIN_EXP	-0.0206	-1.2770	0.2021
Constant	-0.2950		
Adjusted R-squared	0.1042		
F-statistic	8.0184***		
Firm-Effect	Yes		
Year-Effect	Yes		

***significant in 0.01,
**significant in 0.05

Source: Proceed data

value of 0.0022 with a t-statistic of 2.4553 (significant in 0.05). It indicates that CEO tenure has a positive effect on pre-earnings management profitability. CEO age (AGE) has a coefficient value of -0.0001 with a t-statistic of -0.5330 (insignificant). There is no significant effect of CEO age on pre-earnings management profitability. CEO education level (EDU) has a coefficient value of 0.0215 with a t-statistic of 2.2478 (significant in 0.05). It indicates that CEO education level has a positive effect on pre-earnings management profitability. CEO founding-family status (FAMILY) has a coefficient value of -0.0202 with a t-statistic of -1.1180 (insignificant). There is no significant effect of CEO founding-family status on pre-earnings management profitability. CEO nationality (NATION) has a coefficient value of 0.0545 with a t-statistic of 2.9657 (significant in 0.01). It indicates CEO nationality has a positive effect on pre-earnings management profitability, is accepted.

Discussion

This research aims to examine the effect of CEO characteristics which are gender, tenure, age, education level, founding-family status, and foreign nation-

ality on pre-earnings management profitability. It is important to examine the effect of CEO characteristics on preearnings management profitability since there is a previous findings gap of CEO characteristics on firms' profitability. Previous studies do not consider the earnings management behavior by CEOs that give biases to profitability achievement. By examining the pre-earnings management profitability, this research is expected to fill the gap in previous findings gap and provide the CEO performance of profitability without engaging in earnings management.

The first result shows that CEO gender has a positive effect on pre-earnings management profitability. It indicates that H1, where female CEO has a positive effect on pre-earnings management profitability, is accepted. The result is consistent with Jalbert *et al.* (2013) and Susanti *et al.* (2018) who find that female executive directors increase firms' performance. The result is also supported by Barua *et al.* (2010) and Peni and Vahamaa (2010) who find female executive directors are less engaged in aggressive earnings management to boost up firms' profitability. In the context of profitability improvement, a female CEO has the characteristics of stable and

mature emotion, and also the ability of multitasking. A stable and mature behavior leads a female CEO to make a decision carefully and effectively. Careful and effective decision-making improves the strategy's success, further, it will increase profitability. A multitasking characteristic makes a female CEO can do various things at the same time and leads to higher efficiency. In the context of earnings management behavior, a female CEO has a characteristic of risk-averse. A risk-averse behavior leads a female CEO to avoid an aggressive strategy, such as earnings management to increase profitability. Although risk-averse behavior leads a female CEO to engage more in conservative profit-decreasing earnings management, it only occurs when she faces an uncertain condition. This research finds that a female CEO can also achieve higher profitability without engaging in both aggressive profit-increasing and conservative profit-decreasing earnings management.

The second result shows that CEO tenure has a positive effect on pre-earnings management profitability. It indicates that H2, where CEO tenure has a positive effect on pre-earnings management profitability, is accepted. The result is consistent with Juenke (2005) and Shakir (2009) who find that longer CEO tenure increases firms' performance. The result is also supported by Ali and Zhang (2015) who find that longer tenure CEO is less engaged in aggressive earnings-profit earnings management. Longer tenure CEO has the characteristics of more experience, knowledge, and understanding of firms' business. It helps the CEO to implement an effective business strategy and increase firms' profitability without engaging in earnings management. On the other hand, shorter tenure CEO improve profitability by engaging in aggressive earnings-profit earnings management since there is a punishment for shorter tenure CEOs' failure. A shorter tenure CEO fails to achieve better performance without engaging in earnings management behavior.

The third result shows that there is no significant effect of CEO age on preearnings management profitability. It indicates that H3, where CEO age has a positive effect on pre-earnings management profitability, is rejected. The result is consistent with Amin and Sunarjanto (2016) and Eduardo and Poole (2016) who find no significant relationship between executive' age and firms' performance. Peni (2014) suggests that older CEO can increase profitability by using longer life experience and working careers to implement effective business strategies without engaging in earnings management. Meanwhile, there is also a possibility that younger CEO can increase profitability without engaging in earnings management. Wei *et al.* (2005) explain that younger CEO has more fresh idea, are faster in decision making, and are more innovative. Although older CEO increases the probability of a firm's survival, younger CEO that has characteristics of a more fresh idea, faster decision-making, and more innovation is needed by firms that rely more on innovation and creativity (Belenzon et al. 2019). It indicates that the relationship between CEO age and firms' profitability does not occur without considering the factors of business survival and the needs of innovation and creativity.

The fourth result shows that CEO education level has a positive effect on pre-earnings management profitability. It indicates that H4, where CEO education level has a positive effect on pre-earnings management profitability, is accepted. The result is consistent with Cheng *et al.* (2010) who find that higher education had by the executive board increases firms' performance. CEO with higher education levels has the characteristics of higher thinking complexity, cognitive ability, and innovation. It helps the CEO to provide better business analysis and information to formulate an effective strategy and leads to higher profitability. Interestingly, a previous study (e.g.(Qi et al. 2018) finds that executive directors with higher education levels tend to use their ability to have higher knowledge of firms' financial

reporting environment and engage more in earnings management. Based on the result in this research and previous finding, CEO with higher education levels can improve profitability by engaging either with or without earnings management behavior. It indicates that the relationship between CEO education level, profitability, and earnings management can be examined more deeply by considering the monitoring on how CEOs with higher education levels use their ability to improve performance.

The fifth result shows that there is no significant effect of CEO founding-family status on pre-earnings management profitability. It indicates that H5, where founding-family CEO has a positive effect on pre-earnings management profitability, is rejected. The insignificant result may come from the family interests of socio-emotional wealth. Socioemotional wealth refers to the family interests in the emotional attachment to the firm, other family members' wealth, and reputation (Kalm and Gomez-Mejia 2016). Kalm and Gomez-Mejia (2016) explain that the founding family has an interest more in socioemotional wealth than financial performance. Although founding-family CEOs have more effective monitoring functions and higher knowledge of the firms' business since the firms are founded, they will use it more to fulfill the family interests than financial performance. It indicates that the relationship between CEO founding-family status and firms' profitability does not occur without considering the factors of socioemotional wealth.

The sixth result shows that CEO nationality has a positive effect on pre-earnings management profitability. It indicates that H6, where foreign (non-Indonesian) CEO has a positive effect on pre-earnings management profitability, is accepted. The result is consistent with Le and Kroll (2017) who find a positive effect of foreign CEO on performance. The result is also supported by Chiu *et al.* (2013) and Enofe *et al.* (2017) who find that foreign directors are less engaged in earnings management behavior. A foreign (non-

Indonesian) CEO has the characteristic of a cross-country network. A unique competitive advantage of cross-country market knowledge helps a foreign CEO to improve a firms' global market network and increase profitability without engaging in earnings management. On the other hand, since a local (Indonesian) CEO still brings the culture of politeness to other local executives, there is a possibility that a local (Indonesian) CEO improves profitability by engaging in aggressive profit-increasing earnings management.

The result implies firms be selective to choose a CEO. Since earnings management causes the biased profitability evaluation, firms should choose female CEO, foreign CEO, longer tenure CEO, or CEOs with higher education levels to improve profitability without engaging in earnings management behavior. The result also implies firms do not frequently change the longer tenure CEOs with the new ones and formulate the scholarship program for CEO to achieve higher education degrees.

The result also implies a corporate governance system in Indonesia. Firms in Indonesia implement the two-tier board system and concentrated ownership. A two-tier board system allows independent monitoring on CEO as the board of commissioners (supervisory/non-executive board) is separated from the board of executive directors (executive board). However, the two-tier board system does not provide knowledge sharing and efficient information flow between the board of commissioners and the CEO. Female CEO with higher cognitive ability, longer tenure CEO with longer experience, CEO with higher education level who has higher cognitive ability and knowledge, and foreign CEO with higher global business knowledge can mitigate the disadvantage of knowledge sharing in two-tier board system and allow CEO to improve profitability.

Concentrated ownership provides controlling shareholders effective monitoring of the CEO to improve shareholders' value by increasing profitability. However, there is a probability that controlling

$$\frac{(\text{Earnings After Tax} - \text{Operating Cash Flow})}{\text{Lagged Total Assets}} = b_0 + b_1 \frac{1}{\text{Lagged Total Assets}} + b_2 \frac{(\Delta \text{Sales} - \Delta \text{Accounts Receivable})}{\text{Lagged Total Assets}} + b_3 \frac{(\text{Gross Fixed Assets})}{\text{Lagged Total Assets}} + e \quad (3)$$

shareholders abuse their power to gain private benefits by engaging in earnings management. Female CEO with higher ethical behavior and risk-averse, and foreign (non-Indonesian) CEO who are more independent and transparent can avoid the earnings management behavior in the condition of concentrated ownership.

The result has some limitations. First, the result fails to capture the effect of CEO age and pre-earnings management profitability since this research does not consider the factors of business survival and needs of innovation and creativity that can increase the possibility of younger CEO to improve profitability without engaging in earnings management. Future research is expected to consider the factors of business survival and needs of innovation and creativity to capture the possibility that younger CEO also can improve profitability without engaging in earnings management. Second, the result captures the positive effect of CEO education level on pre-earnings management profitability in the assumption that CEO with lower education level tend to engage in aggressive profit-increasing earnings management since CEO with lower education level has lower analysis ability that can lead to ineffective strategy. Meanwhile, based on the previous study, there is a possibility that CEO with higher education level also engages in aggressive profit-increasing earnings management. Future research is expected to control the use of higher analysis ability by CEO with higher education levels, such as considering the monitoring mechanism to control the behavior of CEO with higher education levels. Third, the result fails to capture the effect of CEO founding-family status and pre-earnings management profitability since this research does not consider the family interest of socioemotional wealth where financial performance of profitability comes in second place after family interest. Future re-

search is expected to consider considering the factors of socioemotional wealth.

Alternative Analysis

This research also runs an alternative analysis. For the first alternative analysis, this research examines the effect of CEO characteristics on firms' profitability by using market-based measurement. Return on assets is accounting-based profitability that contains accounting judgment and estimation. Since earnings management takes advantage of accounting standard loophole (Scott 2014), return on assets also contains earnings management behavior. Market-based profitability relies on stock market participant evaluation of firms' prospects that has minimum accounting judgment and estimation (Salinger 1984). Market-based profitability is measured by the market value to assets ratio. The market value to assets ratio is calculated by the market value of firms' shares divided by total assets. The market value of a firms' share is calculated by share price multiplied by total outstanding share. The result first alternative analysis is as in table 5.

For the second alternative analysis, this research examines the effect of CEO characteristics on pre-earnings management profitability by using a Jones-Modified model of discretionary accruals as an alternative model of earnings management estimation. The result of the second alternative analysis is as in table 6. Jones-Modified model of discretionary accruals is as in equation (3).

For the third alternative analysis, this research examines the effect of CEO characteristics on pre-earnings management profitability by considering the level of firms' risk. Pre-earnings management profitability is adjusted with firms' risk. Firms' risk is shown by the standard deviation of pre-earnings management return on assets for each firm along the research period (Jara-Bertin and Sepulveda 2016).

Table 4
Descriptive Statistics of Variables for Alternative Analysis

Variable	Minimum	Maximum	Mean	Std. Deviation	K-S
MVA	0.0000	54.7062	1.5191	4.0967	9.1944***
ROA	-0.3727	2.5401	0.0567	0.1558	4.2453***
DA _{Jones Modified}	-0.8553	2.1129	0.0000	0.1333	4.7425***
ROA _{pre-EM (Jones Modified)}	-0.3151	0.8250	0.0567	0.1302	2.6213***
Risk-adjusted ROA _{Pre-EM}	-3.7118	9.5106	0.7488	1.7681	2.4320***
Ln MVA	-21.1654	4.0020	-0.6442	1.5433	1.6738***
Winsorized Ln MVA	-3.1925	2.7483	-0.6313	1.2808	1.1568#
Winsorized ROA	-0.1393	0.2016	0.0429	0.0780	1.3271#
Winsorized DA _{Jones Modified}	-0.1560	0.1421	-0.0028	0.0641	0.7219#
Winsorized ROA _{pre-EM (Jones Modified)}	-0.2281	0.3380	0.0458	0.0905	0.7430#
Winsorized Risk-adjusted ROA _{Pre-EM}	-3.7118	4.0029	0.6297	1.4380	1.2820#

***significant in 0.01, #insignificant

Source: Proceed data

$$Risk_{adjusted} ROA_{Pre-EM(it)} = \frac{ROA_{Pre-EM(it)}}{Standard\ Deviation\ of\ ROA_{Pre-EM(firm\ i\ period\ of\ 2012-2018)}} \quad (4)$$

Risk-adjusted pre-earnings management profitability is measured by pre-earnings management return on assets divided by the standard deviation of pre-earnings management return on assets (Jara-Bertin and Sepulveda 2016). Higher risk-adjusted pre-earnings management profitability indicates higher profitability with lower risk. The result third alternative analysis is as in table 7. Risk-adjusted pre-earnings management profitability is calculated as in equation (4).

The descriptive statistic of interest variables for alternative analysis is as in table 4. It includes variables of market value to assets ratio, pre-earnings management profitability by using a Jones-Modified model of discretionary accruals, and risk-adjusted pre-earnings management profitability.

Table 4 shows that variables of market value to assets ratio (MVA), pre-earnings management profitability by using a Jones-Modified model of discretionary accruals (ROA_{pre-EM (Jones Modified)}), and risk-adjusted pre-earnings management profitability (Risk-adjusted ROA_{Pre-EM}) have values of Kolmogorov-Smirnov (K-S) that are significant in 0.01. It indicates that the variables are not distributed normally. This research uses the data normalization method that does not reduce the number of samples, which are transformation (natural logarithm) and winsorizing methods.

After transformation, the natural logarithm of market value to assets ratio (Ln MVA) has a value of Kolmogorov-Smirnov (K-S) that is significant in 0.01. It indicates that the natural logarithm of the market value to assets ratio is still not distributed normally. The next step to normalize the data is winsorizing the natural logarithm of the market value to assets ratio. After winsorizing, winsorized natural logarithm of market value to assets ratio (winsorized Ln MVA) has an insignificant value of Kolmogorov-Smirnov (K-S). It indicates that winsorized natural logarithm of market value to assets ratio is distributed normally.

After winsorizing, winsorized profitability (winsorized ROA) and winsorized earnings management by using a Jones-Modified model of discretionary accruals (winsorized DA_{Jones Modified}) have insignificant values of Kolmogorov-Smirnov (K-S). It indicates that winsorized profitability and winsorized earnings management by using a Jones-Modified model of discretionary accruals are distributed normally. It leads the winsorized pre-earnings management profitability by using a Jones-Modified model of discretionary accruals (winsorized ROA_{pre-EM (Jones Modified)}) to have a normal distribution with an insignificant value of Kolmogorov-Smirnov (K-S).

Table 5
CEO Characteristics on Market Value to Assets Ratio

Variable	Coefficient	t-Statistic	Prob.
<i>GENDER</i>	<i>0.2461</i>	<i>1.3252</i>	<i>0.1856</i>
<i>TENURE</i>	<i>0.0055</i>	<i>0.8870</i>	<i>0.3754</i>
<i>AGE</i>	<i>0.0002</i>	<i>0.0356</i>	<i>0.9716</i>
<i>EDU</i>	<i>0.3277</i>	<i>4.8775***</i>	<i>0.0000</i>
<i>FAMILY</i>	<i>-0.0230</i>	<i>-0.1813</i>	<i>0.8562</i>
<i>NATION</i>	<i>0.1280</i>	<i>0.9925</i>	<i>0.3213</i>
SIZE	0.0827	2.8897***	0.0040
LEV	-0.7090	-8.6508***	0.0000
AG	0.0802	0.6707	0.5026
SG	0.2797	1.8803*	0.0605
FIN_EXP	-0.3264	-2.8871***	0.0040
Constant	-3.6631		
Dependent Variable	Winsorized Ln MVA		
Adjusted R-squared	0.1750		
F-statistic	13.8055***		
Firm-Effect	Yes		
Year-Effect	Yes		
***significant in 0.01, *significant in 0.10			

Source: Proceed data

After winsorizing, winsorized risk-adjusted pre-earnings management profitability (winsorized Risk-adjusted ROA_{Pre-EM}) has an insignificant value of Kolmogorov-Smirnov (K-S). It indicates that winsorized risk-adjusted pre-earnings management profitability is distributed normally. In this case, variables of winsorized logarithm natural of market value to assets ratio (winsorized Ln MVA), winsorized pre-earnings management profitability by using a Jones-Modified model of discretionary accruals (winsorized ROA_{pre-EM (Jones Modified)}), and winsorized risk-adjusted pre-earnings management profitability (winsorized Risk-adjusted ROA_{Pre-EM}) are used in the alternative analysis as in table 5, 6, and 7.

Table 5 shows that CEO gender (GENDER) has a coefficient value of 0.2461 with a t-statistic of 1.3252 (insignificant in). It indicates that there is no significant effect of female CEO on the market value to assets ratio. CEO tenure (TENURE) has a coefficient value of 0.0055 with a t-statistic of 0.8870 (insignificant). It indicates that there is no significant effect of CEO tenure on the market value to assets ratio. CEO age (AGE) has a coefficient value of 0.0002 with a t-statistic of 0.0356 (insignificant). It

indicates that there is no significant effect of CEO age on the market value to assets ratio. CEO education level (EDU) has a coefficient value of 0.3277 with a t-statistic of 4.8775 (significant in 0.01). It indicates that CEO education level has a positive effect on market value to assets ratio. CEO founding-family status (FAMILY) has a coefficient value of -0.0230 with a t-statistic of -0.1813 (insignificant). It indicates that there is no significant effect of the founding-family CEO on the market value to assets ratio. CEO nationality (NATION) has a coefficient value of 0.1280 with a t-statistic of 0.9925 (insignificant). It indicates that there is no significant effect of foreign CEO on the market value to assets ratio. In the first alternative analysis, the result of CEO age, CEO education level, CEO founding-family status is consistent with the main result of table 3. On the other hand, the main results of CEO gender, CEO tenure, and CEO nationality are sensitive if profitability involves the stock market participant evaluation. The only CEO characteristic that has an effect on market value to total assets ratio is CEO education level. It indicates that stock market participant considers the CEO education level to evaluate the firms' prospects.

Table 6
CEO Characteristics on Pre-Earnings Management ROA (Jones-Modified)

Variable	Coefficient	t-Statistic	Prob.
<i>GENDER</i>	<i>0.0240</i>	<i>2.0369**</i>	<i>0.0421</i>
<i>TENURE</i>	<i>0.0019</i>	<i>2.9498***</i>	<i>0.0033</i>
<i>AGE</i>	<i>-0.0007</i>	<i>-1.0891</i>	<i>0.2765</i>
<i>EDU</i>	<i>0.0209</i>	<i>2.9831***</i>	<i>0.0030</i>
<i>FAMILY</i>	<i>-0.0156</i>	<i>-1.1743</i>	<i>0.2407</i>
<i>NATION</i>	<i>0.0488</i>	<i>3.6294***</i>	<i>0.0003</i>
SIZE	0.0101	3.3746***	0.0008
LEV	-0.0559	-6.5419***	0.0000
AG	0.0112	0.8994	0.3688
SG	0.0298	1.9202*	0.0553
FIN_EXP	-0.0285	-1.4687	0.1424
Constant	-0.2454		
Dependent Variable	Winsorized ROA _{pre-EM} (Jones Modified)		
Adjusted R-squared	0.1310		
F-statistic	10.0996***		
Firm-Effect	Yes		
Year-Effect	Yes		
***significant in 0.01, **significant in 0.05, *significant in 0.10			

Source: Proceed data

Table 6 shows that CEO gender (GENDER) has a coefficient value of 0.0240 with a t-statistic of 2.0369 (significant in 0.05). It indicates that female CEO has a positive effect on pre-earnings management (Jones-Modified) profitability. CEO tenure (TENURE) has a coefficient value of 0.0019 with a t-statistic of 2.9498 (significant in 0.01). It indicates that CEO tenure has a positive effect on pre-earnings management (Jones-Modified) profitability. CEO age (AGE) has a coefficient value of -0.0007 with a t-statistic of -1.0891 (insignificant). It indicates that there is no significant effect of CEO age on pre-earnings management (Jones-Modified) profitability. CEO education level (EDU) has a coefficient value of 0.0209 with a t-statistic of 2.9831 (significant in 0.01). It indicates that CEO education level has a positive effect on pre-earnings management (Jones-Modified) profitability. CEO founding-family status (FAMILY) has a coefficient value of -0.0156 with a t-statistic of -1.1743 (insignificant). It indicates that there is no significant effect of the founding-family CEO on pre-earnings management (Jones-Modified) profitability. CEO nationality (NATION) has a coeffi-

cient value of 0.0488 with a t-statistic of 3.6294 (significant in 0.01). It indicates that foreign (non-Indonesian) CEO has a positive effect on pre-earnings management (Jones-Modified) profitability. The result of the second alternative analysis is consistent with the main result of table 3.

Table 7 shows that CEO gender (GENDER) has a coefficient value of 0.6947 with a t-statistic of 3.2698 (significant in 0.01). It indicates that female CEO has a positive effect on risk-adjusted pre-earnings management profitability. CEO tenure (TENURE) has a coefficient value of 0.0051 with a t-statistic of 0.7317 (insignificant). It indicates that there is no effect of CEO tenure on risk-adjusted pre-earnings management profitability. CEO age (AGE) has a coefficient value of 0.0032 with a t-statistic of 0.4365 (insignificant). It indicates that there is no effect of CEO age on risk-adjusted pre-earnings management profitability. CEO education level (EDU) has a coefficient value of 0.0945 with a t-statistic of 1.2295 (insignificant). It indicates that there is no effect of CEO education level on risk-adjusted pre-earnings management profitability. CEO founding-family status

Table 7
CEO Characteristics on Pre-Earnings Management ROA (Risk-Adjusted)

Variable	Coefficient	t-Statistic	Prob.
<i>GENDER</i>	<i>0.6947</i>	<i>3.2698***</i>	<i>0.0011</i>
<i>TENURE</i>	<i>0.0051</i>	<i>0.7317</i>	<i>0.4646</i>
<i>AGE</i>	<i>0.0032</i>	<i>0.4365</i>	<i>0.6626</i>
<i>EDU</i>	<i>0.0945</i>	<i>1.2295</i>	<i>0.2193</i>
<i>FAMILY</i>	<i>0.1225</i>	<i>0.8433</i>	<i>0.3994</i>
<i>NATION</i>	<i>0.2663</i>	<i>1.8049*</i>	<i>0.0715</i>
SIZE	0.1942	5.9522***	0.0000
LEV	-0.5561	-5.9302***	0.0000
AG	0.1218	0.8902	0.3737
SG	0.4676	2.7475***	0.0062
FIN_EXP	-0.2778	-2.1476**	0.0321
Constant	-5.2487		
Dependent Variable	Winsorized Risk-Adjusted ROA _{Pre-EM}		
Adjusted R-squared	0.1433		
F-statistic	11.0943***		
Firm-Effect	Yes		
Year-Effect	Yes		
***significant in 0.01, **significant in 0.05, *significant in 0.10			

Source: Proceed data

(FAMILY) has a coefficient value of 0.1225 with a t-statistic of 0.8433 (insignificant). It indicates that there is no effect of CEO founding-family status on risk-adjusted pre-earnings management profitability. CEO nationality (NATION) has a coefficient value of 0.2663 with a t-statistic of 1.8049 (significant in 0.10). It indicates that foreign (non-Indonesian) CEO has a positive effect on risk-adjusted pre-earnings management profitability. In the third alternative analysis, the result of CEO gender, CEO age, CEO founding-family status, and CEO nationality are consistent with the main results of table 3. On the other hand, the CEO characteristics of tenure and education level are not consistent with the main result of table 3. It indicates that the effect of CEO characteristics of tenure and education level on pre-earnings management profitability is sensitive to firms' risk factors. The CEO characteristics that have an effect on risk-adjusted pre-earnings management profitability are CEO gender and CEO nationality. It indicates that female and foreign (non-Indonesian) CEOs can generate higher profitability with lower risk.

CONCLUSION

This research aims to examine the effect of CEO characteristics on pre-earnings management profitability. Based on the firm and year fixed-effect regression, the result shows that female CEO, longer tenure CEO, CEO with higher education levels, and foreign CEO increase firms' profitability without engaging in earnings management. On the other hand, there is no effect of CEO age and founding-family status on pre-earnings management profitability.

This research implies firms. First, firms are expected to appoint a CEO either a female, an older, a foreign, or a higher educated CEO to increase profitability without using earnings management. Second, firms are expected to provide a scholarship or additional training for CEO with lower education levels to increase CEO ability. Third, firms are expected to increase monitoring and controlling functions to ensure CEO do not engage in earnings management that leads to a biased performance evaluation. This research also implies the CEO. First, a CEO with a lower education level is expected to take a higher education degree to increase cognitive ability. Second, CEO with shorter tenure is

expected to improve their experience and knowledge to increase profitability. This research also implies the corporate governance system in Indonesia. By appointing female, higher education, and foreign CEOs, the disadvantage of knowledge sharing in a two-tier board system and earnings management in concentrated ownership can be mitigated.

This research has limitations. First, this research does not consider the factor of firms' survival and business needs of innovation and creativity to determine the contribution of younger and older CEOs on firms' profitability. Based on Belenzon *et al.* (Belenzon *et al.* 2019), younger CEO increases firms' profitability that lies on creativity and innovation while older CEO increases firms' business survival. Second, this research does not consider the factor of founding-family needs of socioemotional wealth to determine the contribution of founding-family CEO on firms' profitability. Based on Kalm and Gomez-Mejia (2016), the founding family has an interest more in socioemotional wealth such as emotional attachment to the firm, other family members' wealth, and reputation. Third, this research assumes that CEO with lower education level tends to engage in aggressive profit-increasing earnings management since CEO with lower education level has lower analysis ability which can lead to ineffective strategy. Meanwhile, Qi *et al.* (2018) find that CEO with higher education level also engages in aggressive profit-increasing earnings management. Fourth, this research uses accruals earnings management that is measured by discretionary accruals since previous studies only provide pre-earnings management profitability measurement based on discretionary accruals and there are no previous studies that provide pre-earnings management profitability measurement based on real earnings management.

There are some suggestions for future research. First, future research is expected to consider the factor of firms' survival and business needs of innovation and creativity to examine the CEO age and firms'

profitability. Second, future research is expected to consider the socioemotional wealth to examine the CEO founding-family status and firms' profitability. Third, future research is expected to control the use of higher analysis ability by CEO with higher education levels, such as considering the monitoring mechanism to control the behavior of CEO with higher education levels. Fourth, future research is expected to examine pre-earnings management profitability based on real earnings management practice.

REFERENCES

- Abarbanell, J., and R. Lehavy. 2003. Biased Forecasts or Biased Earnings? The Role of Reported Earnings in Explaining Apparent Bias and Over/Underreaction in Analysts' Earnings Forecasts. *Journal of Accounting and Economics*. 36 (1–3), 105–46.
- Ahmed, A. S., and S. Duellman. 2013. Managerial Overconfidence and Accounting Conservatism. *Journal of Accounting Research*. 51 (1), 1–30.
- Ahmed, H., and M. Azim. 2015. Earnings Management Behavior: A Study on the Cement Industry of Bangladesh. *International Journal of Management, Accounting and Economics*. 2 (4), 265–76. http://www.ijmae.com/article_115478.html.
- Ali, A., and W. Zhang. 2015. CEO Tenure and Earnings Management. *Journal of Accounting & Economics*. 59 (1), 60–79.
- Aluchna, M. 2013. One Tier Board. In *Encyclopedia of Corporate Social Responsibility*., 1778–90. Berlin, Heidelberg: Springer Berlin Heidelberg.
- Amin, N. N., and Sunarjanto. 2016. Pengaruh Diversitas Dewan Komisaris Dan Dewan Direksi

- Terhadap Kinerja Perusahaan. *Fokus Manajerial: Jurnal Manajemen Dan Kewirausahaan*. 14 (1), 51–66.
- Anderson, R. C., S. A. Mansi, and D. M. Reeb. 2003. Founding Family Ownership and the Agency Cost of Debt. *Journal of Financial Economics*. 68 (2), 263–85.
- Anderson, R. C., and D. M. Reeb. 2003. Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *The Journal of Finance*. 58 (3), 1301–28.
- Andres, C. 2008. Large Shareholders and Firm Performance—An Empirical Examination of Founding-Family Ownership. *Journal of Corporate Finance*. 14 (4), 431–45.
- Angell, B. 2013. Behavioral Theory. In *Encyclopedia of Social Work*. Oxford: Oxford University Press.
- Anggraeni, G., F. T. Kristanti, and M. Muslih. 2016. Pengaruh Intellectual Capital, Gender Diversity, Age Diversity, Dan Tenure Diversity Terhadap Kinerja Keuangan Perusahaan. *E-Proceeding of Management*. 3 (2), 1656–64.
- Apergis, N. 2019. Financial Experts on the Board: Does It Matter for the Profitability and Risk of the U.K. Banking Industry? *Journal of Financial Research*. 42 (2), 243–70.
- Arif, S., N. Marshall, and T. L. Yohn. 2016. Understanding the Relation between Accruals and Volatility: A Real Options-Based Investment Approach. *Journal of Accounting and Economics*. 62 (1), 65–86.
- Backhaus, K. B., B. A. Stone, and K. Heiner. 2002. Exploring the Relationship between Corporate Social Performance and Employer Attractiveness. *Business & Society*. 41 (3), 292–318.
- Barua, A., L. Davidson, D. Rama, and S. Thiruvadi. 2010. CFO Gender and Accruals Quality. *Accounting Horizons*. 24 (1), 25–39.
- Beasley, M., J. Carcello, D. Hermanson, and T. Neal. 2010. *Fraudulent Financial Reporting: 1998-2007: An Analysis of US Public Companies*. Durham: COSO.
- Becker, G. S. 1985. Human Capital, Effort, and Sexual Division of Labor. *Journal of Labor Economics*. 3 (1), S33–58.
- Belenzon, S., A. Shamsur, and R. Zarutskie. 2019. CEO's Age and the Performance of Closely Held Firms. *Strategic Management Journal*. 40 (6), 917–44.
- Bouaziz, D., B. Salhi, and A. Jarboui. 2020. CEO Characteristics and Earnings Management: Empirical Evidence from France. *Journal of Financial Reporting and Accounting*. 18 (1), 77–110.
- Burgstahler, D., and I. Dichev. 1997. Earnings Management to Avoid Earnings Decreases and Losses. *Journal of Accounting and Economics*. 24 (1), 99–126.
- Cai, D., J. Luo, and D. Wan. 2012. Family CEOs: Do They Benefit Firm Performance in China? *Asia Pacific Journal of Management*. 29 (4), 923–47.
- Center for Risk Management & Sustainability. 2018. Peran Tata Kelola Perusahaan Dalam Organisasi Modern. Crmsindonesia.Org. 2018. <https://crmsindonesia.org/publications/peran-tata-kelola-perusahaan-dalam-organisasi-modern/>.
- Cheng, L. T. W., R. Y. K. Chan, and T. Y. Leung. 2010. Management Demography and Corporate Performance: Evidence from China. *International Business Review*. 19 (3), 261–75.
- Chiu, P.-C., S. H. Teoh, and F. Tian. 2013. Board Interlocks and Earnings

- Management Contagion. *The Accounting Review*. 88 (3), 915–44.
- Cho, S., and O. M. Rui. 2009. Exploring the Effects of China's Two-Tier Board System and Ownership Structure on Firm Performance and Earnings Informativeness. *Asia-Pacific Journal of Accounting & Economics*. 16 (1), 95–117.
- Choi, A. H. 2018. Concentrated Ownership and Long-Term Shareholder Value. *Harvard Business Law Review*. 8, 53–99.
- Cormier, D., S. Houle, and M.-J. Ledoux. 2013. The Incidence of Earnings Management on Information Asymmetry in An Uncertain Environment: Some Canadian Evidence. *Journal of International Accounting, Auditing and Taxation*. 22 (1), 26–38.
- Craig, J., and C. Dibrell. 2006. The Natural Environment, Innovation, and Firm Performance: A Comparative Study. *Family Business Review*. 19 (4), 275–88.
- Croson, R., and U. Gneezy. 2009. Gender Differences in Preferences. *Journal of Economic Literature*. 47 (2), 448–74.
- Das, S., and H. Zhang. 2003. Rounding-up in Reported EPS, Behavioral Thresholds, and Earnings Management. *Journal of Accounting and Economics*. 35 (1), 31–50.
- Davila, A., and G. Foster. 2007. Management Control System in Early-Stage Startup Companies. *The Accounting Review*. 82 (4), 907–37.
- Dechow, P. M. 1994. Accounting Earnings and Cash Flows as Measures of Firm Performance: The Role of Accounting Accruals. *Journal of Accounting and Economics*. 18 (July), 3–42.
- Dechow, P. M., R. G. Sloan, and A. P. Sweeney. 1995. Detecting Earnings Management. *The Accounting Review*. 70 (2), 193–225.
- Demerjian, P., B. Lev, and S. McVay. 2012. Quantifying Managerial Ability: A New Measure and Validity Tests. *Management Science*. 58 (7), 1229–48.
- Demsetz, H., and K. Lehn. 1985. The Structure of Corporate Ownership: Causes and Consequences. *Journal of Political and Economy*. 93 (6).
- Ditta, A. S. A., and D. Setiawan. 2019. Corporate Governance in Indonesia: One Decade Perspective. *Jurnal Keuangan Dan Perbankan*. 23 (1), 58–72.
- Dwiyanti, K. T., and M. Astriena. 2018. Pengaruh Kepemilikan Keluarga Dan Karakteristik Komite Audit Terhadap Manajemen Laba. *Jurnal Riset Akuntansi Dan Bisnis Airlangga*. 3 (2), 447–69.
- Eduardo, M., and B. Poole. 2016. CEO Age and Gender: Subsequent Market Performance. *Cogent Business & Management*. 3, 1–8.
- Effiong, S. A., A. I. Asuquo, and E. F. Enya. 2020. Discretionary Accruals and Going Concern of Manufacturing Companies. *International Journal of Scientific & Technology Research*. 9 (2), 2976–83.
- Enofe, A. O., C. Iyafekhe, and J. O. Eniola. 2017. Board Ethnicity, Gender Diversity, and Earnings Management: Evidence from Quoted Firms in Nigeria. *International Journal of Economics, Commerce and Management*. 5 (6), 78–90.
- Fahmia, M., and Y. O. Mulyono. 2015. Pendidikan, Human Capital Ataukah Signaling? Studi Kasus Indonesia. *Jurnal Ekonomi Dan Pembangunan Indonesia*. 15 (2), 113–20.
- Fakhroni, Z., I. Ghozali, P. Harto, and E. Nur Afri Yuyetta. 2018. Free Cash Flow, Investment Inefficiency, and Earnings Management: Evidence from Manufacturing Firms Listed on

- the Indonesia Stock Exchange. *Investment Management and Financial Innovations*. 15 (1), 299–310.
- Fatimah, D. 2019. Pengaruh Board Diversity Terhadap Manajemen Laba. *Journal of Applied Accounting and Taxation*. 4 (2), 223–33.
- Gibbons, R., and K. J. Murphy. 1992. Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence. *Journal of Political Economy*. 100 (3), 468–505.
- González-Cruz, T. F., and S. Cruz-Ros. 2016. When Does Family Involvement Produce Superior Performance in SME Family Business? *Journal of Business Research*. 69 (4), 1452–57.
- Gopalan, R., and S. Jayaraman. 2012. Private Control Benefits and Earnings Management: Evidence from Insider Controlled Firms. *Journal of Accounting Research*. 50 (1), 117–57.
- Gottesman, A. A., and M. R. Morey. 2010. CEO Educational Background and Firm Financial Performance. *Journal of Applied Finance*. 20 (2), 1–13.
- Grimaldi, F., and A. L. Muserra. 2017. The Effect of the Ownership Concentration on Earnings Management: Empirical Evidence from the Italian Context. *Corporate Ownership and Control*. 14 (3), 236–48.
- Hambrick, D. C. 2007. Upper Echelons Theory: An Update. *The Academy of Management Review*. 32 (2), 334–43.
- Hambrick, D. C., and P. A. Mason. 1984. Upper Echelons: The Organization as a Reflection of Its Top Managers. *Academy of Management Review*. 9 (2), 193–206.
- Healy, P., and J. Wahlen. 1999. A Review of Earnings Management Literature and Its Implication for Standard Setting. *Accounting Horizons*. 13 (4), 365–83.
- Heminway, J. M. 2007. Sex, Trust, and Corporate Board. *Hastings Women's Law Journal*. 18, 173–93.
- Hsieh, Y.-T., T.-K. Chen, Y.-J. Tseng, and R.-C. Lin. 2018. Top Management Team Characteristics and Accrual-Based Earnings Management. *The International Journal of Accounting*. 53 (4), 314–34.
- Idris, M. 2020. Jejak Hitam PT Hanson International, Manipulasi Laporan Keuangan 2016. Kompas.Com. 2020. <https://money.kompas.com/read/2020/01/15/160600526/jejak-hitam-pt-hanson-international-manipulasi-laporan-keuangan-2016?page=all>.
- Institute of Management Accountants. 2018. *The Naughty List or the Nice List? Earnings Management in the Days of Corporate Watchdog Lists*. New Jersey: Institute of Management Accountants.
- Islam, M. A., R. Ali, and Z. Ahmad. 2011. Is Modified Jones Model Effective in Detecting Earnings Management? Evidence from A Developing Economy. *International Journal of Economics and Finance*. 3 (2), 116–25.
- Ittner, C. D., D. F. Larcker, and M. V. Rajan. 1997. The Choice of Performance Measures in Annual Bonus Contracts. *The Accounting Review*. 72 (2), 231–55.
- Jadiyappa, N., P. Jyothi, B. Sireesha, and L. E. Hickman. 2019. CEO Gender, Firm Performance and Agency Costs: Evidence from India. *Journal of Economic Studies*. 46 (2), 482–95.
- Jalbert, T., M. Jalbert, and K. Furumo. 2013. The Relationship between CEO Gender, Financial Performance, and Financial Management. *Journal of Business & Economics Research*. 11 (1), 25–33.

- Jang, S., and K. Park. 2011. Inter-Relationship between Firm Growth and Profitability. *International Journal of Hospitality Management*. 30 (4), 1027–35.
- Jara-Bertin, M., and J. P. Sepulveda. 2016. Earnings Management and Performance in Family-Controlled Firms. *Academia Revista Latinoamericana de Administración*. 29 (1), 44–64.
- Jensen, M. C., and W. H. Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*. 3 (4), 305–60.
- Jones, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research*. 29 (2), 193–228.
- Juenke, E. G. 2005. Management Tenure and Network Time: How Experience Affects Bureaucratic Dynamics. *Journal of Public Administration Research and Theory*. 15 (1), 113–31.
- Jungmann, C. 2006. The Effectiveness of Corporate Governance in One-Tier and Two-Tier Board Systems – Evidence from the UK and Germany –. *European Company and Financial Law Review*. 3 (4), 426–76.
- Kalm, M., and L. R. Gomez-Mejia. 2016. Socioemotional Wealth Preservation in Family Firms. *Revista de Administração*. 51 (4), 409–11.
- Khalil, M., A. Ozkanc, and Y. Yildiz. 2020. Foreign Institutional Ownership and Demand for Accounting Conservatism: Evidence from an Emerging Market. *Review of Quantitative Finance and Accounting*. 55 (1), 1–27.
- Kothari, S. P., A. J. Leone, and C. E. Wasley. 2005. Performance Matched Discretionary Accrual Measures. *Journal of Accounting and Economics*. 39 (1), 163–97.
- Kutluk, F. A. 2017. Behavioral Accounting and Its Interactions. In *Accounting and Corporate Reporting - Today and Tomorrow*. London: InTech.
- Le, S., and M. Kroll. 2017. CEO International Experience: Effects on Strategic Change and Firm Performance. *Journal of International Business Studies*. 48, 573–95.
- Lestari, G. M. I., and S. Harindahyani. 2017. Pengaruh Perusahaan Keluarga Dan Peran Komisaris Independen Terhadap Praktik Manajemen Laba Di Indonesia. *Jurnal Akuntansi Dan Teknologi Informasi*. 11, 1–16.
- Leuz, C., D. Nanda, and P. D. Wysocki. 2003. Earnings Management and Investor Protection: An International Comparison. *Journal of Financial Economics*. 69 (3), 505–27.
- Lindorff, M., and E. Prior Jonson. 2013. CEO Business Education and Firm Financial Performance: A Case for Humility Rather than Hubris. Edited by Thomas Clarke. *Education + Training*. 55 (4/5), 461–77.
- Lindrianasari, Nurdiono, and E. Ivana. 2011. Accounting Performance as an Antecedent Factor of Chief Executive Officer Turnover in Indonesia. *Journal of Indonesian Economy and Business*. 26 (2), 266–76.
- Litt, B., D. S. Sharma, and V. D. Sharma. 2014. Environmental Initiatives and Earnings Management. *Managerial Auditing Journal*. 29 (1), 76–106.
- Mallin, C. A. 2016. *Corporate Governance*. 5th ed. Oxford: Oxford University Press.
- Mathieu, J., and D. Zajac. 1990. A Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organizational Commitment. *Psychological Bulletin*. 108 (2), 171–94.
- Mubeen, R., D. Han, J. Abbas, S. Álvarez-Otero, and M. S. Sial. 2021. The

- Relationship Between CEO Duality and Business Firms' Performance: The Moderating Role of Firm Size and Corporate Social Responsibility. *Frontiers in Psychology*. 12 (December), 669715.
- Muslim, A. I. 2020. The Effect of Firm Value and Financial Performance on Earnings Management in Sharia Issuers: Evidence from the Indonesia Stock Exchange. *Journal of Business and Finance in Emerging Market*. 3 (1), 13–22.
- Nadkarni, S., and P. Herrmann. 2010. CEO Personality, Strategic Flexibility, and Firm Performance: The Case of the Indian Business Process Outsourcing Industry. *Academy of Management Journal*. 53 (5), 1050–73.
- Oyer, P. 2008. The Making of an Investment Banker: Stock Market Shocks, Career Choice, and Lifetime Income. *The Journal of Finance*. 63 (6), 2601–28.
- Payne, J. L., and S. W. G. Robb. 2000. Earnings Management: The Effect of Ex Ante Earnings Expectations. *Journal of Accounting, Auditing & Finance*. 15 (4), 371–92.
- Peng, M. W., and Y. Jiang. 2010. Institutions Behind Family Ownership and Control in Large Firms. *Journal of Management Studies*. 47 (2), 253–73.
- Peni, E., and S. Vahamaa. 2010. Female Executives and Earnings Management. *Managerial Finance*. 36 (7), 629–45.
- Peni, Emilia. 2014. CEO and Chairperson Characteristics and Firm Performance. *Journal of Management & Governance*. 18, 185–205.
- Penman, S. H., and X.-J. Zhang. 2002. Accounting Conservatism, the Quality of Earnings, and Stock Returns. *The Accounting Review*. 77 (2), 237–64.
- Porta, R. La, F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 1999. The Quality of Government. *Journal of Law, Economics, & Organization*. 15 (1), 222–79.
- Pradono, N. S. H., and E. H. Widowati. 2016. Pengaruh Komisaris Asing, Direktur Asing Dan Kepemilikan Asing Terhadap Kinerja Intellectual Capital. *Kinerja*. 20 (2), 132–48.
- Prasetya, P. J., and Gayatri. 2016. Pengaruh Ukuran Perusahaan Terhadap Manajemen Laba Dengan Pengungkapan Corporate Social Responsibility Sebagai Variabel Intervening. *E-Journal Akuntansi Universitas Udayana*. 14 (1), 511–38.
- Putri, C. A. 2020. Kacau! BPK Sebut Jiwasraya Manipulasi Laba. CNBC Indonesia. 2020. <https://www.cnbcindonesia.com/market/20200108162637-17-128611/kacau-bpk-sebut-jiwasraya-manipulasi-laba>.
- Putri, E. A., and T. Rusmanto. 2019. The Impact of CEO Characteristics on Earnings Per Share and Earnings Management. *International Journal of Scientific & Technology Research*. 8 (10), 925–29.
- Qi, B., J. W. Lin, G. Tian, and H. C. X. Lewis. 2018. The Impact of Top Management Team Characteristics on the Choice of Earnings Management Strategies: Evidence from China. *Accounting Horizons*. 32 (1), 143–64.
- Rahman, M. M., F. N. Saima, and K. Jahan. 2020. The Impact of Financial Leverage on Firm's Profitability: An Empirical Evidence from Listed Textile Firms of Bangladesh. *Journal of Business Economics and Environmental Studies*. 10 (2), 23–31.
- Rasmussen, S. J. 2013. Revenue Recognition, Earnings Management, and Earnings Informativeness in the Semiconductor Industry. *Accounting Horizons*. 27 (1), 91–112.

- Richardson, S. A., R. G. Sloan, M. T. Soliman, and I. Tuna. 2005. Accrual Reliability, Earnings Persistence and Stock Prices. *Journal of Accounting and Economics*. 39 (3), 437–85.
- Roychowdhury, S. 2006. Earnings Management through Real Activities Manipulation. *Journal of Accounting and Economics*. 42 (3), 335–70.
- Ruderman, M. N., P. J. Ohlott, K. Panzer, and S. N. King. 2002. Benefits of Multiple Roles for Managerial Women. *Academy of Management Journal*. 45 (2), 369–86.
- Saidu, S. 2019. CEO Characteristics and Firm Performance: Focus on Origin, Education and Ownership. *Journal of Global Entrepreneurship Research*. 9 (1), 29.
- Salinger, M. A. 1984. Tobin's q, Unionization, and the Concentration-Profits Relationship. *RAND Journal of Economics*. 15 (2), 159–70.
- Santoso, R. D., and F. Rakhman. 2013. CEO Characteristics and Earnings Management. *The Indonesian Journal of Accounting Research*. 16 (3), 181–96.
- Sapienza, P., L. Zingales, and D. Maestripieri. 2009. Gender Differences in Financial Risk Aversion and Career Choices Are Affected by Testosterone. *Proceedings of the National Academy of Sciences*. 106 (36), 15268–73.
- Scott, W. R. 2014. *Financial Accounting Theory*. 7th ed. New Jersey, USA: Prentice Hall.
- Setiawan, D., L. K. Phua, H. K. Chee, and I. Trinugroho. 2017. CEO Turnover and Firm Performance In Indonesia. *Indonesian Capital Market Review*. 9 (1), 1–10.
- Setyawan, M. B., and V. Anggraita. 2018. The Effects of CEO Tenure on Earnings Management: The Role of CEO Career Origin and Affiliated Relationships. In *Proceedings of the 6th International Accounting Conference (IAC 2017)*. Paris, France: Atlantis Press.
- Shakir, R. 2009. Examining the Effect of Leadership Structure and CEO Tenure on Malaysian Property Firm Performance. *Journal of Real Estate Literature*. 17 (1), 45–62.
- Sloan, R. G. 1996. Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings? *The Accounting Review*. 71 (3), 289–315.
- Spencer Stuart. 2015. *Spencer Stuart Board Index*. Chicago: Spencer Stuart.
- Sulistiyawati, A. I., A. Santoso, S. Y. Widowati, and S. Farikah. 2019. Inventory Assesment Methods in Trading and Manufacturing Companies: An Empirical Study. *ACCRUALS (Accounting Research Journal of Sutaatmadja)*. 3 (2), 172–88.
- Sun, Y. 2019. Investor Relations, Ownership Concentration, and Company Profitability: Evidence from Chinese Listed Firms. *Advances in Economics, Business and Management Research*. 10, 362–69.
- Susanti, N., S. E. Saputra, and G. Harini. 2018. Pengaruh Diversifikasi Gender, Umur, Tenure, Dan Pendidikan Terhadap Profitabilitas Perusahaan Perbankan Di Bursa Efek Indonesia. *ECONOMICA: Journal of Economic and Economic Education*. 6 (2), 192–206.
- Tams, Y. 2013. Foreign-Born CEOs, Country Specific Skills, Selection, and Strategic Consequences. (Doctoral dissertation, Florida International University, Miami, USA). <https://digitalcommons.fiu.edu/etd/934>.

- The Auditing Practice Board. 2001. *Aggressive Earnings Management*. London: CCAB Limited.
- Tran, K. H., and N. H. Duong. 2020. Earnings Management to Avoid Earnings Decreases and Losses: Evidence from Vietnamese Listed Companies. Edited by David McMillan. *Cogent Economics & Finance*. 8 (1), 1–23.
- Tsao, C.-W., S.-J. Chen, and Y.-H. Wang. 2016. Family Governance Oversight, Performance, and High Performance Work Systems. *Journal of Business Research*. 69 (6), 2130–37.
- Vieira, E. F. S. 2014. The Effect on the Performance of Listed Family and Non-Family Firms. *Managerial Finance*. 40 (3), 234–53.
- Wachudi, E. J., and J. Mboya. 2012. Effect of Board Gender Diversity on the Performance of Commercial Bank in Kenya. *European Scientific Journal*. 8 (7), 128–48.
- Wang, D. 2006. Founding Family Ownership and Earnings Quality. *Journal of Accounting Research*. 44 (3), 619–56.
- Wani, M. A., and A. Masih. 2015. Emotional Maturity Accross Gender and Level of Education. *The International Journal of Indian Psychology*. 2 (2), 63–72.
- Ward, J. L. 1988. The Special Role of Strategic Planning for Family Businesses. *Family Business Review*. 1 (2), 105–17.
- Watts, R. L., and J. L. Zimmerman. 1978. Toward a Positive Theory of Determination of Accounting Standard. *The Accounting Review*. 53 (January), 112–34.
- Wei, L.-Q., C.-M. Lau, M. N. Young, and Z. Wang. 2005. The Impact of Top Management Team Demography on Firm Performance in China. *Asian Business & Management*. 4, 227–50.
- Wiersema, M. F., and K. A. Bantel. 1992. Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*. 35 (1), 91–121.
- Wijaya, P. C., and B. Suprasto. 2015. Pengaruh Persebaran Dewan Two Tier (Dewan Gabungan) Pada Nilai Perusahaan Sektor Keuangan. *E-Journal Akuntansi Universitas Udayana*. 12 (3), 722–34.
- Yang, T., and S. Zhao. 2014. CEO Duality and Firm Performance: Evidence from an Exogenous Shock to the Competitive Environment. *Journal of Banking & Finance*. 49 (December), 534–52.
- Yao, S., and Y. Liu. 2020. Air Quality Uncertainty and Earnings Management. *Sustainability*. 12 (15), 6098.
- Yasser, Q. R., A. Al Mamun, and M. Seamer. 2017. Do Corporate Boards Affect Firm Performance? New Evidence from an Emerging Economy. *International Journal of Productivity and Performance Management*. 66 (6), 724–41.
- Zalata, A. M., C. Ntim, A. Aboud, and E. Gyapong. 2019. Female CEOs and Core Earnings Quality: New Evidence on the Ethics Versus Risk-Aversion Puzzle. *Journal of Business Ethics*. 160 (2), 515–34.