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Female CEO and Market Reaction

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INFO ARTIKEL	Abstract
Sejarah Artikel: Diterima : 2021 Diperbaiki : 2021 Disetujui : 2021	This study aims to examine market reaction to the announcement of female CEOs appointment at companies listed on the Indonesia Stock Exchange (IDX) over the period 2010-2018. The first test uses event study analysis
Keywords: Female CEO; Market Reaction; Characteristics of Female CEO.	through t-tests using the one-sample t-test method. It was found that the market reacts negatively to the announcement of the appointment of a female CEO. Moreover, further tests are carried out to determine the factors which influenced the negative reactions, such as the characteristics of the female CEOs themselves coupled with the characteristics of the company as the control variable. The results of the regression analysis show that the characteristics of female CEOs in the form of family relations with the board of commissioners have a negative effect on market reaction. While other characteristics such as age and education of the female CEOs do not affect the market reaction. Other additional information shows that company size also has a negative effect to market reaction. Things that need to be considered by companies when they want to appoint a woman as CEO is if the candidate for CEO has a family relationship with the board of commissioners. The size of the company also needs to be considered. The bigger the size of the company, the presence of a female CEO is also increasingly in doubt because it is considered to interfere with the company's existing operations and strategy.
	Abstraks
Kata Kunci: CEO Wanita; Reaksi Pasar; Karakteristik CEO Wanita.	Penelitian ini bertujuan untuk menguji reaksi pasar terhadap pengumuman pengangkatan CEO wanita pada perusahaan yang terdaftar di Bursa Efek Indonesia (BEI) periode 2010-2018. Pengujian pertama menggunakan analisis <i>event study</i> yang dilakukan melalui uji-t meng-
DOI:	gunakan metode <i>one-sample t test</i> . Ditemukan hasil bahwa pasar bereaksi negatif terhadap pengumuman pengangkatan CEO wanita. Lebih lanjut, dilakukan pengujian lanjutan untuk mengetahui faktor yang memengaruhi reaksi negatif tersebut yaitu karakteristik dari CEO wanita itu sendiri ditambah dengan karakteristik perusahaan sebagai variabel kontrol. Hasil analisis regresi menunjukan bahwa karakteristik CEO wanita berupa hubungan keluarga dengan dewan komisaris berpengaruh negatif terhadap reaksi pasar. Sementara karakteristik lain berupa usia dan Pendidikan CEO wanita tidak berpengaruh terhadap reaksi pasar. Informasi tambahan lain menunjukkan bahwa ukuran perusahaan juga berpengaruh negatif terhadap reaksi pasar. Hal yang perlu dipertimbangkan oleh perusahaan ketika ingin mengangkat wanita sebagai seorang CEO adalah jika calon CEO tersebut memiliki

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	perlu dipertimbangkan. Semakin besar ukuran perusahaan keberadaan CEO wanita juga semakin diragukan, karena dianggap mengganggu operasi dan strategi perusahaan yang sudah berjalan.	
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INTRODUCTION

The existence of women as leaders in the world of work is still an interesting thing to discuss. Gender inequality assumes that women who can work independently are women who are not feminine and are not socially accepted, because they are considered to forget their nature as a woman to gain freedom (Lennon, K. & Alsop, 2020).

Women are also under-represented at corporate decision-making levels despite their significant contribution to the economy in general (Ku Ismail & Abdul Manaf, 2016). The reason is that women are considered to have unstable emotional levels. In addition, research shows that women have an intellectual power or *Intelligence Quotient* (IQ) that is 4 points lower than that of men (Khaleefa, O.; Amer, Z. & Lynn, 2014). This evidence adds to the community's belief that men are considered more capable of being leaders and can make better decisions than female leaders.

Based on the *upper echelon theory*, strategic decision-maker of an organization is the top manager or Chief Executive Officer (CEO). CEO in Indonesia is also known as Managing Director (Direktur Utama) or President Director (Presiden Direktur).

The important role of the CEOs in the decision making of an organization or company is certainly a concern for people in the capital market or investors, especially if there is a CEO turnover event in which the position is then held by a woman. Important events that occur in a company, according to *signaling theory*, will be information and signals for investors. The market is expected to give a negative reaction to the announcement of the appointment of a female CEO because of the negative stereotypes inherent in women. The market reaction will be seen in the form of abnormal stock returns happening around the events (Hartono, 2015).

Some previous researches which study the impact of the announcement of the appointment of a female leader on the market reaction have been

carried out in the country of Spain, Singapore, and China. The results showed that, in fact, the markets reacted positively to the appointment of female CEOs since investors in those countries believed that women could increase the value of the companies (Campbell & Vera, 2010; Ding & Charoenwong, 2013; Liu et al., 2014). Other studies with similar results also suggest that women CEOs could make important decisions well in a company as women are more careful in making decisions compared to men (Huang & Kisgen, 2013; Levi et al., 2014).

On the other hand, research in Norway shows that the market would react negatively to the existence of women as a leader because it is considered to reduce the value of the company. This is influenced by the age and experience of the woman who is considered too young and inexperienced as a director (Ahern & Dittmar, 2012). In line with the previous study, also stated that the negative reactions exhibited by the market are indeed influenced by characteristics possessed by these women such as age, education, and family relationships (Ku Ismail & Abdul Manaf, 2016). As a matter of fact, other research stated that the characteristics possessed by female CEOs need to be further investigated to find out what characteristics could help women to become better if they want to be in a top management position (Cabrera-Fernandez et al., 2016). This is then supported by the upper echelon theory which states that the characteristics of the CEO also has an important role in an organization or company because it would influence the decisions they make.

Thus, this study is conducted to examine the market's reaction to the announcement of the appointment of female CEOs at companies listed on the Indonesia Stock Exchange (IDX). After knowing the market reactions that occurred around the appointment of a female CEO, Furthermore, the researcher assumes that if the market reacts, then the reactions are influenced by characteristics possessed by women themselves such as age, education, and family relationships.

THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES

Appointment of Female CEOs and Market Reactions

Studies on the role of women in the world of work have begun to be carried out along with the increasing proportion of women in the top positions of corporate management. In Indonesia alone, in 2017 the percentage of the number of female leaders ranked second in the world, reaching 46% and occupying the top position in the Asia Pacific (Reeves, 2016). Moreover, throughout 2018 the position of women in top management increased by 12% globally (Bodin & Schmidt, 2019).

However, women with all negative stereotypes attached to themselves are still considered less competent to become leaders. The stereotypes assume that women are less assertive, are too careful in making decisions, have a greater emotional level than rational, and tend to avoid risks where risky decisions are sometimes needed for the success of a company (Wulandaru, 2012).

A company or organization will not run smoothly without the managers who have a stake in controlling and making corporate decisions. The role of managers as decision-makers for the viability of a company is usually referred to as the Chief Executive Officer (CEO) or in Indonesia known as the President Director (*Presiden Direktur*) or Managing Director (*Direktur Utama*). Hambrick and Mason (1984) as the originators of the upper echelon theory stated that the CEOs have a very important role in an organization because the decisions they make will directly affect the organizational outcomes.

Given the importance of a CEO in a company and the increasing proportion of women in top management, there may be more and more women occupying the position of CEO. However, the negative stereotypes inherent in women often become a barrier for them to reach the top position in a company. The market is still skeptical and less belief in the women's performance if they serve as CEOs of a company. Therefore, if an appointment of a female CEO occurs, according to signaling theory, the information will become an important moment for the market or potential investors (Hartono, 2015). Based on the stereotypes the market is likely to react negatively to that information so that the hypothesis can be formulated as follows.

 H_1 : There is a negative market reaction around the announcement of the appointment of a female CEO.

Age of a Female CEO and Market Reaction

Some previous studies state that the reactions given by the market to the announcement of the appointment of a female CEO are influenced by characteristics possessed by women themselves such as age, education, and family relationships (Ahern & Dittmar, 2012; Ku Ismail & Abdul Manaf, 2016). Women are less trusted in decision making so the market reaction will be negative to the announcement of the appointment of the female CEOs. The results of the previous studies show that this is because the elected women CEOs are too young and inexperienced as directors (Ahern & Dittmar, 2012).

On the other hand, the *upper echelon theory* states that younger leaders can help increase company growth better compared to older leaders. The reason is that younger leaders with their young blood tend to be more willing to take a more risky decision or strategy (Hambrick & Mason, 1984). Young leaders also tend not to accept the status quo but to accept new ideas (Cheng et al., 2010). Based on these theories, the younger leaders are assumed to have better strategies and decisions for the company so that the next hypothesis can be formulated as follows.

H₂: The age of the female CEOs negatively influences the market reaction.

Education of a Female CEO and Market Reaction

Upper echelon theory states that education can make a person's potential developed so as to create the personality, skills, and intelligence needed. Education is also one proxy that is often used by researchers to evaluate human capital (Eisfeldt & Kuhnen, 2013). The higher the level of one's education, the more complex the knowledge and experience they have so that the contribution to the company will be better. This is in line with the research of Cheng, Chan, & Leung (2010) which stated that education has a positive effect on company performance. Therefore, based on upper echelon theory and some of the above studies, the following hypotheses can be formulated as follows:

H₃: The education of female CEOs has a positive effect on market reactions.

Family Relationship and Market Reactions

A survey conducted by an American audit company, Price Waterhouse Cooper (PwC), in 2014 shows that more than 95% of businesses in Indonesia were owned by families, where 87% of these companies placed one of their family members as company managers (Prince Water

House Coopers Indonesia (PwC), 2014). This was done to avoid conflicts between managers and shareholders (agency problem) and to reduce agency This contrasts with the results of Komalasari's research (Komalasari & Nor, 2014) which states that family relationships could reduce company performance. This is because the CEO is chosen on the basis of family relations with the commissioner or with shareholders, not based on the quality or ability of the CEO itself so that it is considered inappropriate to serve as the company's CEO. Thus, the researcher assumes that the market will react negatively to the appointment of female CEOs who have family relations with the board of commissioners or with the largest shareholder. Hence, the hypothesis can be formulated as follows:

H₄: Female CEOs who have family relations with the board of commissioners have a negative effect on market reactions.

METHODS

This study uses *event study* analysis to examine reactions that occur around the appointment of a female CEO. The market will react to information that is considered important

and affect the value of the company, and the reaction is indicated by abnormal stock returns (Hartono, 2015).

After it has been proven that there were market reactions to the announcement of the appointment of a female CEO, the next step is to examine what factors might influence the market reactions. Testing of the characteristics of selected female CEOs, such as age, education, and family relationships is therefore carried out using regression analysis.

Data and Sample

The sample of this research is all of the companies listed on the Indonesia Stock Exchange (IDX) announcing the appointment of female CEOs over the period 2010-2018. The research data are obtained from the Indonesia Stock Exchange (IDX) website, Osiris database, Bloomberg, and the official website of the companies concerned. Sample selection uses *purposive sampling* method, which is sample selection based on certain criteria determined by the researcher (Cooper & Schindler, 2014). These criteria are as follows.

Table 1. Sample Criteria

No.	Criteria		
1.	The company that appointed female CEOs over the period 2010-2018		
2.	The first appointment of a female CEO is conducted after the company goes public		
3.	The company's shares must be actively traded during the observation period		
4.	The company does not make other announcements around the announcement of the appointment of a female CEO that can cause <i>confounding effects</i> , such as announcements of stock splits, mergers, and acquisitions		

Observation Period

The observation period is an observation made during a certain period. The observation period is divided into two structures which are the window period and the estimation period. However, since this study uses the market adjusted model method as an estimate to calculate abnormal stock returns, an estimated period is unnecessary. The market adjustment model assumed that the best predictor for estimating stock returns is the return of the market index in the same period (Hartono, 2015).

The window period in this study was 31 days, i.e. 15 days before the appointment (preevent), 1 day at the appointment (event date), and 15 days after the appointment (post-event). These periods depend on the kind of events. if the economic value of the occurring event can be easily determined by investors, for example, dividend announcements, then the window period can be short because investors will quickly react. However, if the economic value of events that occur is difficult to determine such as the announcement of CEO turnover, investors will need a long time to react and the window period can be long (Hartono, 2015). The window period can be described as follows.

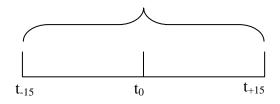


Figure 1. Window Period with a Length of 31 Days

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Operational Definition

Dependent Variable

The dependent variable of this study is the market reaction which is proxied by Cumulative Average Abnormal Return (CAAR) during the window period with the following formula (Hartono, 2015).

$$CAAR(t_1,t_n)_i = \sum_{t=t_1}^{t_n} AAR_{i,t}$$

Where:

 $CAAR(t_1,t_n)_i$ = Securities *i*-th on day-*t* is accumulated from the average abnormal return of the securities *i*-th started from the

beginning of the event period (t1) to day tn.

 $AAR_{i,t}$ = Average abnormal return for the securities *i*-th on day t.

Independent Variable

The independent variables of this study are the characteristics of selected female CEOs, namely age, education, and family relationship. The three independent variables are proxied using dummy variables.

The age variable is assumed to be a value of 1 for the age of female CEOs \leq 50 years and a value of 0 for the age > 50 years. This is because the people in the age group of 34-50 years are the quietest, able to control themselves, and can be most responsible (Santrock, 2012).

For the Education Variable, it is assumed that the value of 1 is a female CEO who has a business education background, and the value of 0 if not.

This is because by having economic and business knowledge, the CEO at least has the ability to manage the business and can make decisions well rather than not having business knowledge at all (Kusumastuti & Sastra, 2007).

In the case of family relationship, it is assumed that the value of 1 is a female CEO who has a family relationship with the board of commissioners, and the value of 0 if not. This is because the board of commissioners as representatives of shareholders has the function to supervise and advise the board of directors or managers so as not to deviate from the wishes of the shareholders.

Control Variable

Based on previous studies, company characteristics such as size and profitability can also influence market reactions (Campbell & Vera, 2010; Ku Ismail & Abdul Manaf, 2016; Levi et al., 2014). Investors will react negatively to the appointment of a female CEO when the company is at high profitability. Investors assume that the appointment of a new CEO can disrupt the company's operations and strategies that are already running well.

Therefore, the control variable of size will be proxied using the log of total assets, and profitability will be proxied by Return on Equity (ROE). Furthermore, the operational definition of a variable can be seen in the following table.

Table 2. Definition of Variable Operations

KIND OF VARIABLES	VARIABLE	INDICATORS	SCALA
KIND OF VARIABLES		INDICATORS	SCALA
	NAMES		
Dependent Variable	Market Reaction	Cumulative Abnormal Return (CAR)	Ratio
Independent Variables	Age	1= Under or equal to 50 years	Nominal
(The CEOs Characteristics)		0 = More than 50 years	
	Education	1 = Having a business education back-	Nominal
		ground	
		0 = Not	
	Family Relations	1 = Having family relations with the board	Nominal
	-	of commissioners	
		0 = Not	
Control Variables	Size	Log of total assets	Ratio
(Characteristics of the	Profitability	Return on Equity (ROE)	Ratio
Company)	, in the second	, , , ,	

Hypothesis Test and Empirical Model

Event study

Hypothesis 1 is tested by performing difference-test using *one-sample t-test* method. The

one-sample t-test is used to test whether certain values differ significantly or not from the average of a sample. The hypothesis is accepted if t-count > t-table or if the results of data processing show a significance level below 5%.

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SIZE_i

Multiple regression

Hypotheses 2 through 4 are tested using multiple regression analysis. CAAR as the dependent variable, female CEO characteristics as the independent variables (age, education, and family relations), and company characteristics as the control variables (size & profitability), with the following empirical model.

CAAR_i = α - β_1 AGE_i + β_2 EDUC_i - β_3 FAM_i - β_4 SIZE_i - β_5 PROF_i + ε_i

Where:

CAAR_i = cumulative average abnormal return of the company during the

event period for securities i.

AGE_i = dummy variable, 1 if female CEO is below or equal to 50 years, 0 if above 50 years, for securities i.

EDUC_i = dummy variable, 1 if the female CEO has a business education

background, 0 if not, for securities

FAM_i = dummy variable, 1 if the female CEO has a family relationship with the board of commissioners, 0 if

not, for securities i. company size measured by log of

total assets, for securities i.

PROF_i = company profitability measured by

return on equity (ROE), for securities i.

RESULTS AND DISCUSSION

Data Collection Results

Total companies listed on the IDX until the end of 2018 are 649 companies. In the observation period from 2010 to 2018, there were 72 female CEOs from 68 companies. Based on the sample selection criteria, of the 72 women CEOs, only 17 people or 17 companies qualified as samples with the following selection process.

Table 3. Sample Selection Process

Information	Count
Number of female CEOs over the period 2010-2018	72
The first appointment before 2010	(22)
The first appointment before the company goes public	(15)
Stocks that are not actively traded	(16)
Confounding event	(2)
Number of Samples during 2010-2018	17

Source: Indonesia Stock Exchange (2019)

The number of female CEOs during the period of 2010-2018 was initially 72 samples. However, 22 samples are excluded (Table 3) because the first appointment of the female CEOs is announced out of the study period, which is before 2010. Hartono (2015) stated that an event is likened to a surprise. In that case, if there is an announcement of the reappointment of a CEO or an extension of the CEO's term, then the event is no longer a surprise for investors so that it will not cause a reaction.

The data used in this study is daily data from each company making an appointment of women CEOs. This data can only be accessed easily if the company is already listed on the Indonesia Stock Exchange or if the company has gone public. Therefore, there are 15 female CEOs who served in the company but their first appointments were done before their company went public causing the data was difficult to find,

so the 15 female CEOs are excluded from our study sample (Table 3).

Besides, 16 companies are excluded from the study sample (Table 3) because the company's shares in the observation period are not actively traded. One of the causes of shares not actively traded is because they are less attractive and not attractive to investors (Feirran, Eilis. & Ho, 2014).

If other events occur around the observation period, then the event is considered as a confounding event which can later cause a confounding effect, i.e. the market reaction that occurs is not caused by the event being observed, but due to other disturbing events. Based on the findings, 2 companies are excluded from the samples because there were confounding events in the form of announcements of stock split and dividends (Table 3).

T-Test Results

After processing the data using one-sample t-test method for 17 samples with the window period of 31 days, the following results are found.

Table 4. Test Results Using one-sample t-test method

thod			
N	AAR	Standard Deviation	t-Count
17	0.0044	0.0654	0.281
17	-0.0001	0.0394	-0.017
17	0.0028	0.0228	0.507
17	0.0004	0.0204	0.085
17	-0.0044	0.0166	-1.110
17	0.0005	0.0258	0.090
17	-0.0026	0.0390	-0.277
17	-0.0067	0.0166	-1.684
17	0.0123	0.0312	1.627
17	-0.0064	0.0319	-0.837
17	0.0108	0.0543	0.823
17	0.0097	0.0385	1.048
17	-0.0052	0.0143	-1.505
17	-0.0021	0.0240	-0.374
17	0.0023	0.0225	0.432
17	0.0047	0.0138	1.409
17	-0.0018	0.0272	-0.282
17	-0.0063	0.0190	-1.371
17	0.0022	0.0233	0.402
17	0.0040	0.0151	1.098
17	0.0007	0.0271	0.112
17	-0.0005	0.0313	-0.068
17	0.0078	0.0167	1.928
17	-0.0042	0.0211	-0.835
17	-0.0023	0.0109	-0.908
17	-0.0009	0.0188	-0.216
17	0.0002	0.0158	0.067
17	-0.0148	0.0211	-2.906***
17	-0.0052	0.0128	-1.674
17	0.0052	0.0207	1.034
17	0.0020	0.0239	0.356
	17 17 17 17 17 17 17 17 17 17 17 17 17 1	N AAR 17 0.0044 17 -0.0001 17 0.0028 17 0.0004 17 -0.0044 17 -0.0026 17 -0.0067 17 0.0123 17 -0.0064 17 0.0097 17 -0.0052 17 -0.0023 17 -0.0047 17 -0.0043 17 -0.0063 17 -0.0063 17 -0.0040 17 -0.0005 17 -0.0005 17 -0.0023 17 -0.0042 17 -0.0023 17 -0.0023 17 -0.0023 17 -0.0023 17 -0.0023 17 -0.0023 17 -0.0052 17 -0.0052 17 -0.0052 17 -0.0052 <td>N AAR Standard Deviation 17 0.0044 0.0654 17 -0.0001 0.0394 17 0.0028 0.0228 17 0.0004 0.0204 17 -0.0044 0.0166 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0046 0.0312 17 -0.0064 0.0319 17 0.0108 0.0543 17 -0.0052 0.0143 17 -0.0052 0.0143 17 -0.0021 0.0240 17 -0.0023 0.0225 17 -0.0047 0.0138 17 -0.0043 0.0190 17 -0.0063 0.0190 17 -0.0063 0.0190 17 -0.0040 0.0151</td>	N AAR Standard Deviation 17 0.0044 0.0654 17 -0.0001 0.0394 17 0.0028 0.0228 17 0.0004 0.0204 17 -0.0044 0.0166 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0026 0.0390 17 -0.0046 0.0312 17 -0.0064 0.0319 17 0.0108 0.0543 17 -0.0052 0.0143 17 -0.0052 0.0143 17 -0.0021 0.0240 17 -0.0023 0.0225 17 -0.0047 0.0138 17 -0.0043 0.0190 17 -0.0063 0.0190 17 -0.0063 0.0190 17 -0.0040 0.0151

Source: Secondary Data Processed (2019)

The results of the market reactions testing using the one-sample t-test method above show that there is a positive reaction toward the

announcement day of the appointment of a female CEO (t0) but does not prove to be significant. Nonetheless, 12 days after (A12) the announcement of the appointment of a female CEO occurred, there is a significant negative market reaction at the level of 1%.

These results **support hypothesis** 1 in this study which states that the market will react negatively to the announcement of the appointment of a female CEO. These findings also support prior research that there is indeed a negative reaction around the announcement of the appointment of a female CEO (Ahern & Dittmar, 2012). This indicates that information regarding the appointment of women CEOs is considered to be unprofitable for the investors. Investors also assume that the existence of women as CEOs cannot increase the value of the company and cannot increase the welfare of the shareholders.

Regression Results

The market has been proven to have negative reactions to the information on the appointment of a female CEO, so this research could be further developed to figure out what factors influenced these negative reactions. These factors are the characteristics of the selected female CEOs in the form of age, education, and family relations. The analysis used is multiple regression analysis with data arranged in a crosssectional manner. The dependent variables are the CAAR of the market reactions, the independent variables are the characteristics of the female CEOs in the form of age, education, and family relations, and the control variables are the company characteristics in the form of size and profitability.

Table 5. Results of Regression Analysis

10010 07 1100 0110 01 11001 01011 111011 9 010			
Variables	В	t-Count	
Independent:			
Age	0.028	0.937	
Education	-0,053	-1.165	
Family	-0,075*	-1.920	
Control:			
Size	-0,027**	-2,776	
Profitability	0.001	0.541	
R Square (R ²)	0.043		
F-Count	3.139**		

Dependent Variable: CAAR

Source: Secondary Data Processed (2019)

^{***} Significant at the 1% level

^{**} Significant at the 5% level

^{*} Significant at the 10% level

Based on the results of the regression analysis above it was found that the age and education of female CEOs are proved insignificant so that these variables do not affect the market reactions, then hypotheses 2 and 3 are rejected. In contrast, in the case of family relations, the market reacts negatively and significantly to female CEOs who have family relations with the board of commissioners. This evidence supports hypothesis 4 in this study which assumes that the market will react negatively to the appointment of a female CEO.

This indicates that female CEOs who have family relations with the board of commissioners are considered unable to increase the value of a company or could reduce the company performance. In this case, the CEOs of the companies are chosen on the basis of family relations, not because of his abilities and qualities, so that they are deemed incompetent in managing the company or have not been deemed fit to assume the position of CEO of the companies.

This evidence also supports previous research which states that the company's performance would decline if the board of directors or CEOs of the company have a family relationship with the board of commissioners or shareholders (Komalasari & Nor, 2014).

Additional information from the results of this study is that company size as a control variable can also significantly influence market reactions. This also indicates that the larger the size of the company, the existence of women as CEO would be increasingly doubted because it is considered to be able to disrupt the company's operations and strategy. Meanwhile, profitability has no significant effect on market reactions.

CONCLUSION

Negative stereotypes towards women are still closely attached to the minds of investors in Indonesia. This is evidenced by the negative market reactions toward the announcement of the appointment of female CEOs at the companies listed on the Indonesia Stock Exchange over the period 2010-2018. Tests are carried out using one-sample t-test, and it was found that 12 days after the announcement of the appointment of a female CEO, the market reacts significantly and negatively to this information.

Besides, the negative market reactions are influenced by the characteristics of the women

CEOs themselves, which is the family relationship they have with the board of commissioners. While the other characteristics such as age and education of female CEOs do not affect the market reactions that occur. Investors are not interested in the age and education of female CEOs, but investor confidence decreases when the company appoints a female CEO who has a family relationship with the board of commissioners. The female CEOs who are chosen because of family relationships are considered incompetent as leaders or as decision-makers because the choice is not based on the ability and quality, but due to family relationships.

Also, the larger the size of a company, the more negative the reaction of investors to the appointment of a female CEO would be. All in all, negative stereotypes inherent in women make investors think that women cannot maintain the company's operations and strategies that have been running well if they are appointed as CEOs.

MANAGERIAL IMPLICATIONS

This research hopefully contributes to policymakers if they want to appoint a woman as a company CEO. The thing to be noticed and considered is the family relationship of a woman CEO because investors are not so interested in female CEOs who have a family relationship with the board of commissioners. Furthermore, policymakers also need to pay more attention to the size of a company, because if the company is already large, investors will also hesitate to invest their shares in companies that conduct CEO changes, especially if the CEO is a woman.

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