

Does CEO age affect the performance of banks in Indonesia?

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Abstract

This study aims to determine the impact of CEO age on bank performance in a developing Southeast Asian capital market (Indonesia). The study uses unbalanced firm-level panel data for 40 banks listed on the Indonesia Stock Exchange from 2010 to 2018. Net interest margin and capital adequacy ratio were used to measure bank performance. The data were analyzed using panel data regression analysis, including a fixed effects model. The results show that CEOs' age improves bank performance, proxied by net interest margin, and reduces bank performance, proxied by capital adequacy ratio. Age should be considered when appointing CEOs. Older CEOs have a competitive advantage over younger CEOs, who have less experience in business.

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1. Introduction

The development of financial performance in the banking sector in Indonesia from 2010–2018 began to experience significant progress. This began with an increase in the number of bank loans and deposits from 2010 to 2011 by 25.5% and 20%. Then, this progress slowed down from 2011 to 2016 (Financial Services Authority, 2018; Databox, 2016). In 2015, the lowest declines in bank loans (10.44%) and deposits (7.26%) since 2010 were recorded (Databoks, 2016; Pasopati, 2015). This occurred due to global economic conditions that impacted the domestic economy (Kunjana, 2018).

From 2016 to 2018, the national banking sector again experienced progress, the level of which gradually increased from year to year in terms of credit growth, deposits, capital adequacy ratio (CAR), and net interest margin (NIM) (Otoritas Jasa Keuangan, 2018). This is due to the efficiency of banks, which has led to lower operational costs compared to previous periods. Bank Indonesia also encourages lending and policy easing to banks in Indonesia (Kunjana, 2018).

In maintaining and improving company performance, it is necessary to supervise a company, which is realized by implementing good corporate governance practices. *Corporate governance* is defined as a set of rules that formulate the relationship between shareholders (principal), managers (agent), creditors, the government, employees, and other interested parties (Rama and Novela, 2015). The role of a CEO in achieving these goals is especially important.

Owing to the important role of CEOs, every company needs a CEO who has good competence and capability in managing and influencing the company (Soomro and Hanafiah, 2022). The large or small influence of a CEO on company performance can certainly be based on the characteristics of the CEO (Bertrand and Schoar, 2003). The dimensions of CEO characteristics tested in this study are based on the dimension of lifespan.

Emestine and Setyaningrum (2019) stated that CEO age has a positive effect on company performance. The higher the age of a CEO, the more experience the CEO has, both from within and outside the company (Peni, 2014). However, Alberti et al. (2019) found that the age of members of the board of directors has no effect on company performance.

Unlike previous research in Indonesia, this study considers the influence of CEO age on company performance as measured by CAR and NIM. Also, this study uses bank industry samples, in contrast to previous studies in Indonesia that used non-financial industry samples.

2. Literature and hypothesis development

2.1. Upper echelons theory

The upper echelons theory (UET) is a management theory established by Hambrick and Mason in 1984 that proposes that CEOs' experience, values, and personalities affect their choices and firm performance (Naseem et al., 2020). Since the psychological features of CEOs are hard to observe, the UET states that demographic characteristics (e.g., a CEO's age, tenure, and education) can be used as proxies (Farrag and Mallin, 2016). According to the UET, a CEO's decisions reproduce their firm's performance, while a CEO's characteristics influence their firm's future performance (Wang et al., 2016).

Furthermore, CEOs have a larger impact on firm performance than any other top manager (Bolinger et al., 2019). Scholars who have used the UET have concentrated on characteristics such as age, nationality, education, and tenure as indicators of the experience of CEOs. From the perspective of the UET, Orens and Reheul (2013) contended that older CEOs are more risk-averse and traditional than younger CEOs. As a result, they are more likely to make corporate decisions that are not consistent with the welfare of shareholders, which might cause poor firm performance (Wang et al., 2016). Farrag and Mallin (2016) approved the UET by signifying

that younger CEOs are expected to make riskier decisions than older CEOs. Likewise, older CEOs might make better firm commitments, which could enhance future firm performance (Wang et al., 2016). Nielsen and Nielsen (2013) specified that diverse nationalities among managers provide an extensive variety of information and knowledge.

2.2. Hypothesis development

The topic of CEO age in relation to company performance has been discussed in various studies. It is widely assumed that older CEOs have a competitive advantage over younger CEOs, who have less experience in business. In line with this opinion, Emestine and Setyaningrum (2019), who examined 235 companies across six ASEAN countries, found that CEO age has a positive and significant relationship with company performance. Specifically, they found that higher company performance is achieved by companies with older CEOs. This is because older CEOs have more extensive work experience and can ensure investors that the CEO can lead the company in a good direction (Emestine and Setyaningrum, 2019). Likewise, Peni (2014) showed that CEO age has a positive relationship with not significant performance. The age of a CEO can affect their characteristics, with older CEOs tending to have a competitive advantage in terms of business experience, which is useful in managing and making decisions for the company. Such CEOs' beneficial management and decision-making for companies can improve company performance. Based on empirical results about the influence of CEO age on performance, we position the hypothesis as follows:

H1: CEO age has a positive and significant effect on the performance of banking companies.

3. Research methods

3.1. Sample

The purposive sampling method was used. Purposive sampling is a method by which the sample is determined based on certain characteristics that are considered to have a close relationship with population characteristics. The purpose of such a method is to obtain samples that conform to predetermined criteria. Some of the criteria determined by the researcher are as follows:

- Banking companies listed on the Indonesia Stock Exchange (IDX) that issued financial statements for at least one year from 2010–2018 were included.
- Outliers in the data were minimized through a trimming process using Eviews 10 with a q% rate of 1%–99%.
- Banking companies listed on the IDX that displayed the data and related information needed for this study regarding variables in full were included.

Table 1. Sample selection process

Sample Criteria	Total
Banking companies listed on the Indonesia Stock Exchange that issued financial statements for at least one year from 2010–2018	43
Total sample after trimming using Eviews 10 with a q% rate of 1%–99%	40
Total observations (from 40 banking companies listed on the Indonesia Stock Exchange for at least one year from 2010–2018)	269

Based on the criteria determined by the author, 40 banking companies met the sampling criteria after trimming to minimize data outliers with a q% rate of 1%–99%. From these 40 companies, a total of 269 observations were obtained.

3.2. Research variables

Table 2 below shows the variable operationalization.

Table 2. Variable operationalization

Variable	Source	Measure
Dependent variable		
Firm performance	IDX	$CAR = \frac{\text{Bank capital}}{\text{Total risk-weighted assets}}$ $NIM = \frac{\text{Net interest income}}{\text{Average earning assets}}$
Independent variable		
CEO Age	IDX	AGE = Age of the CEO (year)
Control variables		
Board of commissioner size	IDX	BCOM = Number of members on the board of commissioners
Board of director size	IDX	BDIR = Number of members of the board of directors
Foreign commissioners	IDX	$FOREIGN = \frac{\sum \text{foreign commissioners}}{\sum \text{board of commissioners}} \times 100\%$
Independent commissioners	IDX	$INDEN = \frac{\sum \text{independent members on the board of commissioners}}{\sum \text{board of commissioners}} \times 100\%$
Firm size	IDX	FSIZE = $\ln(\text{Total assets})$
Firm growth	IDX	$FGROW = \frac{\text{Total assets}_t - \text{Total assets}_{t-1}}{\text{Total assets}_{t-1}}$
Dividend policy	IDX	DIV = Dummy (1 if dividends are distributed to shareholders; 0 otherwise)
Firm age	IDX	FAGE = Total age of the company (year)

3.3. Analysis method

This study used panel data regression model analysis, which is a regression technique that uses a combination of time series data with cross-sectional data.

$$FP_{it} = \beta_0 + \beta_1 AGE_{it} + \beta_2 BCOM_{it} + \beta_3 BDIR_{it} + \beta_4 FOREIGN_{it} + \beta_5 INDEN_{it} + \beta_6 FSIZE_{it} + \beta_7 FGROW_{it} + \beta_8 FDIV_{it} + \beta_9 FAGE_{it} + e_{it}$$

where: β_0	= Intercept
$\beta_1 - \beta_9$	= Slope
FP	= Firm performance (CAR, NIM)
AGE	= Age of CEO
BCOM	= Number of members of the board of commissioners
BDIR	= Number of members of the board of directors
FOREIGN	= Proportion of foreign commissioners
INDEN	= Proportion of independent commissioners
FSIZE	= Firm size
FGROW	= Firm growth
DIV	= Dividend policy

FAGE = Firm age
 e = Regression error
 it = i-th object and t-th time

4. Results

4.1. Descriptive statistics

The descriptive analysis consists of the mean, median, maximum value, minimum value, and standard deviation obtained from each sample of as many as 40 banking companies listed on the IDX from 2010–2018 (comprising a total of 269 observations). Data were compiled after trimming, which was conducted using EViews 10 with a q% level of 1%–99% to minimize outliers.

Table 3. Descriptive statistics

	Mean	Median	Max.	Min.	Std. Dev	Observation
CAR	0.194	0.179	0.874	0.068	0.081	269
NIM	0.056	0.051	0.324	0.009	0.028	269
AGE (year)	54.56	55	74	35	6.11	269
BCOM	5.014	5	8	3	1.668	269
BDIR	6.884	6	11	4	2.306	269
FOREIGN (%)	11.45	0	71.43	0	19.65	269
INDEN (%)	57.80	57.14	1	0	10.89	269
FSIZE (ln asset)	31.211	31	34	28	1.656	269
FGROW	0.191	0.149	2.837	-0.340	0.291	269
DIV (dummy)	0.472	0	1	0	0.500	269
FAGE (year)	43.063	43	102	4	18.335	269

4.2. Multicollinearity

The purpose of the multicollinearity test is to test whether the regression model contains a correlation between independent variables (Ghozali, 2016). A regression model can be considered good if there are no perfect correlations among independent variables. In general, a high correlation (i.e., 0.8 or higher) between independent variables indicates multicollinearity.

Table 4. Pearson correlation

	AGE	BCOM	BDIR	FOREIGN	INDEN	FSIZE	FGROW	DIV	FAGE
AGE	1								
BCOM	0.058*	1							
BDIR	0.110*	0.699	1						
FOREIGN	-0.201	0.522	0.278	1					
INDEN	-0.001***	-0.321	-0.263	-0.218	1				
FSIZE	0.167	0.673	0.484	0.152	-0.165	1			
FGROW	-0.073*	-0.108*	-0.132*	-0.059*	0.054*	-0.191	1		
DIV	0.286	0.193	0.205	-0.169	-0.046**	0.372	-0.079*	1	
FAGE	0.148	0.488	0.334	0.337	-0.110*	0.401	-0.066*	0.179	1

The *, **, and *** signs signify significant levels of 10%, 5%, and 1%.

The results in Table 4 show no correlation coefficients greater than 0.8 between variables. Thus, it can be concluded that there are no correlations between the independent variables used in this study.

4.3. Discussion

The purpose of this study is to determine the effect of CEO age on the performance of banking companies listed on the IDX from 2010–2018. Table 5 shows the regression results of the effect of CEO age on company performance (CAR and NIM), with control variables applied.

Table 5. Regression results

	CAR		NIM	
	Coefficient	P-value	Coefficient	P-value
Intercept	0.6613***	0.0096	0.0932	0.1098
CEO AGE	-0.0019*	0.0518	0.0004*	0.0501
BCOM	-0.0066	0.2058	-0.0004	0.7042
BDIR	-0.0014	0.6948	-0.0007	0.4100
FOREIGN	-0.0191	0.6912	-0.0086	0.4351
INDEN	-0.0739*	0.0564	-0.0111	0.2092
FSIZE	-0.0251**	0.0111	-0.0007	0.7437
FGROW	0.0653***	0.0000	-0.0046	0.1083
DIV	-0.0062	0.6112	-0.0016	0.5474
FAGE	0.0109***	0.0000	-0.0021***	0.0000
R ²	0.6885		0.8621	
F-statistic	9.8086		27.76451	
Prob(F-statistic)	0.0000		0.0000	
Observations	269		269	
Model	Fixed effect		Fixed effect	

The *, **, and *** signs signify significant levels of 10%, 5%, and 1%.

Based on Table 5, the value of the CEO AGE coefficient is -0.0019 with a probability value of $0.0518 < 0.10$. This shows that CEO age has a negative and significant effect on company performance (CAR). This finding indicates that older CEOs negatively affect company performance (CAR). Thus, the hypothesis stating that CEO age has a positive and significant effect on company performance (CAR) is rejected. This result is in line with research conducted by Kusumastuti et al. (2007), who explained that old CEOs may make contributions and decisions that are no longer meaningful to the progress of a company.

Table 5 also shows that the value of the CEO AGE coefficient is 0.0004 with a probability value of $0.0501 < 0.10$. This shows that CEO age has a positive and significant effect on company performance (NIM). That is, CEO age has a positive and significant effect on company performance (NIM). Thus, the third hypothesis (H_3), which states that CEO age has a positive and significant effect on company performance (NIM), is accepted. This result is in line with research conducted by Tulung and Ramdani (2015) and Saerang et al. (2018), who found that CEO age has a positive and significant effect on the performance of regional development banks. This is because CEO age can have a positive influence on company performance related to the cognition, experience, information, and values possessed by CEOs as they get older, which they apply when making strategic decisions and taking actions.

5. Conclusion

This study aimed to determine the influence of CEO characteristics on company performance as proxied by return on assets, return on equity, CAR, and NIM in banking companies listed on the IDX from 2010–2018. The following conclusions were drawn from the results. CEO age affected company performance based on CAR and NIM in banking companies listed on the IDX from 2010–2018. This is because the older a CEO is, the more extensive their experience and information and the broader their perspectives, which can help them make strategic decisions and take beneficial actions for the company. This means that

CEO age can be used as a reference for companies when selecting candidates for the position of CEO. Shareholders can also use this information when making investment decisions. Future research is recommended to investigate other CEO characteristics, such as CEO tenure and CEO origin. The sample could also be expanded to non-financial companies in future research.

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