International Journal of Economics, Management, Business and Social Science (IJEMBIS)
Peer-Reviewed – International Journal
Volume 2, Issue 2, May 2022
E-ISSN: 2774-5336
https://cvodis.com/ijembis/index.php/ijembis

Effect Of Gender, Educational Background, And Age of The CEO on Funding Policies and Investment Policies in Manufacturing Companies Listed on The Indonesia Stock Exchange During 2013-2017

Achmad Galang Santoso [1)] Lintang Venusita[2)]
State University of Surabaya[12]
E-mail: Agalangsantoso@gmail.com , lintangvenusita@unesa.ac.id

Received: May 2, 2022
Accepted: May 20, 2022
Published: May 28, 2022

Citation: Santoso, A. G., & Venusita, L. (2022). Effect Of Gender, Educational Background, And Age of The CEO on Funding Policies and Investment Policies in Manufacturing Companies Listed on The Indonesia Stock Exchange During 2013-2017. INTERNATIONAL JOURNAL OF ECONOMICS, MANAGEMENT, BUSINESS AND SOCIAL SCIENCE (IJEMBIS), 2(2), 249-258. https://cvodis.com/ijembis/index.php/ijembis/article/view/65

Abstract
This research aims to determine the influence of gender, educational background, and age of the CEO on funding policies and investment policies in manufacturing companies listed on the Indonesia Stock Exchange. Population and sample research are manufacturing companies that publish annual reports on the Indonesia Stock Exchange from 2013 to 2017. The sample used is 105 samples. The statistical method used is linear regression analysis with the help of SPSS. Results of the study prove that the CEO's background does not affect funding policies and investment policies. CEO age has a negative effect on funding policy but does not affect investment policy. CEO gender has a negative impact on funding and investment policies.

Keywords: *Gender, Educational Background, Age of CEO, Investment Policies, Funding Policies*

1. Introduction

A company is always required for continued performance increases every year. The company strives to be superior in its business segments with various strategies. In these strategies, the company weighs the risks involved in the design. Specific individuals determine this pattern of risk-taking within the company that has greater authority and responsibility in what is commonly called the CEO's risk preference. According to Copeland (2010), the classification of risk preference is divided into three groups, the bold type of risk or risk-taker, the type who fears or is reluctant to take risks called the risk averter, and the type who only dares to take or endure risks comparable to the expected return.

A person's efficacy also influences the preference for one's risks. According to Bandura in Feist & Gregory (2010), self-efficacy is a belief in a person's ability to control the person's function and the events in the environment. Risk preference in companies is also variable; of course, all these policies are determined by someone who has the responsibility and authority as the main director or CEO. With various conditions inside and outside the company, a CEO provides policies to ensure the sustainability of his company, as for issuing policies, such as funding policies and investment policies. An investment policy is a crucial decision to determine the company's overall assets. In theory, put forward by Hambrick & Mason (1996), it also says that gender, age, work experience, level of education, social background, and characteristics of the group in which leaders are present are characteristics of a CEO that can influence CEO decisions to be used in the company. In this research, the factors that will be used as research objects are gender, educational background, and the age of the CEO.

World Bank data in 2018 showed that companies led by a woman decreased from 31% in 2009 to 22% in 2015. Even Deloitte Public Accountant data in 2016 stated that female CEOs led only eight companies from 64 companies. The leading cause of the gender gap phenomenon in Indonesia is the absence of regulations governing women's quotas as company leaders. The data above shows that female CEO is less attractive to companies as company leaders. According to a study conducted by Beber & Fabbri (2012), a man in processing information tends to be overconfident, whereas a woman is more careful in managing data. According to Donkey (2001), women will take safety options rather than risks.

Contrary to Adam & Funk (2012), women are not always risk-averse, changing according to conditions in the company. Moreover, the CEO's other personal characteristics can also influence the company's policy: the CEO's educational background. The most popular master's degrees in Indonesia are Master of Business Administration (MBA) and magister management. This education is considered the most appointed as the CEO of the company. But in Indonesia, only a minority of CEOs have the title; of the 156 CEOs with the title Magister Management or Master of Business Administration, only 32 people or 20.51%, researchers provided an option for proxy by replacing the background proxy education with general education background: economic or non-economic educational experience.

The CEO's age is one of the personal characteristics of a CEO that can affect the company's risk-taking policies (Serfling,2014). According to (Serfling,2014), the CEO in the United States indicates that the CEO's age is a positive influence on diversification levels but has a negative effect on financial leverage and company risk. CEOs who are getting older tend to issue policies to reduce the company's financial leverage level so that the company's risk level is automatically low. CEOs who are younger tend to make more aggressive investment policies and are willing to take more significant risks to demonstrate their ability to analyze company conditions and make decisions.

Characteristics of companies and industry types also affect the direction of company policy. The company's factors with total significant assets have more excellent capabilities. According to Ozkan (2011), companies in the same industry face the same conditions. Using samples from the same sector would control industry variation. This study uses an example of manufacturing industries listed on the Indonesia Stock Exchange from 2013 to 2017. The

manufacturing industry is fascinating to use as a sample in this research, as it has a variety of industrial sectors expected to represent other industries.

Based on the above background, the researcher is interested in conducting further research and proving whether the characteristics of the CEO (gender, educational location, age) influence the funding and investment policies of the manufacturing company. Therefore, this study took the title "Effect of Gender, Educational Background, and Age of the CEO on Funding Policies and Investment Policies in Manufacturing Companies Listed on the Indonesia Stock Exchange in 2013-2017".

2. Research Method

This research uses secondary data using the quantitative method. Data collection uses the documentation method. The data source used is the financial statements of going public manufacturing companies that certain Public Accounting Firms have audited. The form of the documentation method is from annual reports and financial reports published in the company's annual report for the 2016 - 2018 period published through the Indonesia Stock Exchange website. The population of this study is companies listed on the Indonesia Stock Exchange from 2013 to 2017. The selection of the research year was based on the decline in women as company leaders based on World Bank data in 2015. According to the American-based electronic media Fortune.com (2018), 2017 was the year with the highest number of female CEOs from Fortune 500 companies compared with previous years, so the year 2017 is referred to as the year of female-friendly. The research sample is 105 manufacturing companies listed on the Indonesia Stock Exchange from 2013 to 2017. Data analysis used a simple linear regression analysis technique with SPSS software. The first analysis estimates the regression model for panel data and classical assumption testing, including normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Further, multiple regression analysis was performed, t-test (partial test) and the coefficient of determination (R-Square).

2.1. Funding Policies

Funding policies are used to determine the sources of funds used to fund the company's operations and investment needs. The funding policy in this research is measured using leverage. Leverage is a company's ability to use debt to finance an investment. This means that the company's assets are financed with debt (Faccio et al., 2016). Leverage can be calculated using the formula:

$$\text{Leverage} = \frac{\text{Long-term debt}}{\text{Total Equity}}$$

2.2. Investment Policies

The investment policy is a decision issued by the company related to the company's activities to release funds at present in hopes of generating future flows of money in much more significant amounts than those released at the time of initial investment, so the company's expectation of growth and development will be more noticeable and deliberate. The company's capital expenditure measures investment policies. Capital expenditures are spent on purchasing fixed assets to increase fixed assets' operating efficiency and productive capacity and extend a permanent asset benefits period (Faccio et al., 2016). Capital expenditure can be counted using a formula:

CAPEX = Investment Cash Flow

2.3. Gender

A man processing information tends to be overconfident, whereas a woman has a more careful disposition toward managing information (Beber & Fabbri, 2012). The gender of the CEO in this study was categorized into two categories as well. The first category is the board of directors which has female members of the gender, while the second is a board of directors with no female members. The grouping is measured using a dummy, which is:

JK = Dummy 1 = female CEO; 0 = male CEO

Description: JK is the gender of the company CEO

2.4. Educational Background

Education is a vital factor in choosing a CEO because it is a quality signal from a CEO. The higher the educational level of the CEO, the higher the quality of the CEO. The educational background of the CEO in this study is categorized into two categories. The first category is a CEO with an experience in economics & business education. In contrast, the second category is a CEO who does not have an economic & business education background (Custódio & Metzger, 2014). The grouping is measured using a dummy, namely:

EDUit = Dummy 1 = CEO with economics & business education background; 0 CEO has no educational background in economics & business.

Description: EDUit is the educational background of the CEO of the company I year t

2.4. Age of The CEO

The CEO's age indicates the life span of the CEO from birth to the year t of the company's financial statements used by research. The greater the value, the older the CEO said that CEO age affects one's risk preferences. Behavioral finance theory shows that younger CEO tend to be risk-takers, and more senior CEO tended the risk-averse. The CEO's age is measured by the age of the CEO found in the company's annual reports.

AGE = Age of CEO

Description: AGE is the age of the CEO of the company I years t

3. Results and Discussion

3.1. Results

The normality test is intended to test whether variables, confounders, or residuals have a normal distribution in the regression model. Researchers used statistical tests with the parametric Kolmogrorov-Smirnow test (K-S) using the SPSS program to test normality in this study. The results of the data processing look like Table 1 below:

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		Conclusion
Model	Asymp. Sig. (2-tailed)	
Model I	0.200	Normally Distributed
Model II	0.071	Normally Distributed

Source: Output SPSS (processed, 2022)

Based on Table 1 on the normality test results, it is known that the significance value of Asymp. Sig. (2-tailed) all research variables Model I and II > 0.05. So, according to the basis of decision making in the normality test with Kolmogorov-Smirnov (K-S), it can be concluded that H0 is accepted, which means that the residual data is normally distributed or can be said to have passed the normality test.

The multicollinearity test tests whether there is a correlation between the independent variable (free) and the dependent variable (bound) in a regression model. The multicollinearity test in this study was carried out by looking at the value of the variance inflation factor (VIF), and the following results were obtained:

Table 2. Multicollinearity Test

Coefficients[a]			Conclusion
Model	Collinearity Statistics		
	Tolerance	VIF	
Model I			
Gender	.863	1.158	Multicollinearity Free
Age	.785	1.274	Multicollinearity Free
Education	.866	1.155	Multicollinearity Free
Model II			
Gender	.897	1.115	Multicollinearity Free
Age	.845	1.183	Multicollinearity Free
Education	.775	1.290	Multicollinearity Free

Source: Output SPSS (processed, 2022)

Table 2 shows that all independent variables have tolerance values above 0.1 and VIF values below 10, so it can be concluded that the regression model in this study does not occur multicollinearity.

A Heteroscodesity test was conducted to test whether there was a difference in variance from the existing data residuals in a regression model. Spearman's rho test was used to regress the absolute value of the residual on the independent variable. Detect the presence or absence of heteroscedasticity using a 5% confidence level; if the confidence level is more than 5%, then there are no heteroscedasticity symptoms and vice versa. The test results are obtained as follows:

Table 3. Heteroscodesity Test

Coefficients[a]		Conclusion
Model	Sig. (2-tailed)	
Model I		
Gender	.791	Heteroscodesity Free
Age	.804	Heteroscodesity Free
Education	.682	Heteroscodesity Free
Model II		
Gender	.270	Heteroscodesity Free
Age	.715	Heteroscodesity Free
Education	.360	Heteroscodesity Free

Source: Output SPSS (processed, 2022)

The Spearman's rho test carried out in Table 3 shows that there is not a single independent variable that is statistically significant in affecting the dependent variable. This can be seen from the significance probability above the 5% confidence level. So it can be concluded that the regression model does not contain heteroscedasticity (no heteroscedasticity).

The Autocorrelation test is carried out to see whether there is an influence between the confounding variables in each independent variable. This study used the autocorrelation test using the Durbin Watson test in the regression equation Model I & II. The results of the autocorrelation test are presented as follows:

Table 4. Autocorrelation Test Model I and II

Model	du	4-du	D-W Value	Conclusion
Model I	1.799	-17.986	1.896	Autocorrelation Free
Model II			1.986	Autocorrelation Free

Source: Output SPSS (processed, 2022)

As this study has a sample size of n = 314, = 0.05 and the number of independent variables k = 3, then the critical values are dL = 1.7382 and dU = 1.799. Based on Table 4.5 above, it can be seen that in Model I, the multiple regression equation obtained the results of the calculation of the Durbin-Watson value of 1.896, which means the value is between du<dw<4-du where du = 1.896 and 4-du = 4-1.799 = -17.986. This shows that there is no autocorrelation. While the Model II multiple regression equation obtained the results of the calculation of the Durbin-Watson value of 1.986, which means the value is between du<dw<4-du where du = 1.799 and 4-du = 4-1.799 = -17.986. This shows that there is no autocorrelation. The following are the results of hypothesis testing with regression as follows:

Table 5. Results of Hypothesis Testing with Regression

Variable	Constanta	Regression Coefficient	r-square	t-value	Sig.
Gender → LEVERAGE	-.262	-.302	.038	-2.267	.024
Educational Background → LEVERAGE	-.262	-.099	.038	-.745	.457
Age → LEVERAGE	-.262	-.016	.038	-2.280	.023
Gender → CAPEX	13.610	-.742	.037	-2.459	.015
Educational Background → CAPEX	13.610	-.017	.037	-1.104	.271
Age → CAPEX	13.610	.158	.037	.530	.597

Source: Output SPSS (processed, 2022)

The result of the R-SQUARE analysis is 0.038, which means that the gender of the CEO can influence the company's funding policy (Leverage) by 38%; there are still 62% influenced by other factors or variables that may affect the company's funding policy (Leverage).

The analysis results showed an R-Square of 0.038; meaning that the CEO's educational background can influence the company's funding policy (Leverage) by 38%; there are still 62% influenced by other factors or variables that may affect the company's funding policy (Leverage).

The analysis results showed an r-square of 0.038; meaning that the age of the CEO can influence the company's funding policy (Leverage) by 38%; there are still 62% influenced by other factors or variables that may affect the company's funding policy (Leverage).

The results of the analysis showed an r-square of 0.037; which means that the gender of the CEO can influence the company's investment policy (CAPEX) by 37%; there are still 63%

influenced by other factors or variables that may affect the company's investment policy (CAPEX).

The results of the analysis showed an r-square of 0.037; which means that the CEO's educational background can influence the company's investment policy (CAPEX) by 37%; there are still 63% influenced by other factors or variables that may affect the company's investment policy (CAPEX).

The analysis results showed an r-square of 0.037; meaning that the age of the CEO can influence the company's investment policy (CAPEX) by 37%; there are still 63% influenced by other factors or variables that may affect the company's investment policy (CAPEX).

The t-test for the CEO gender variable obtained a regression coefficient value with a negative direction of -0.302 and a significance value of 0.024 < 0.05; it can be concluded that the first hypothesis states, "CEO gender has a negative effect on the company's funding policy."

The t-test for the CEO's educational background variable obtained a regression coefficient value with a negative direction of -0.099 and a significance value of 0.457 > 0.05; it can be concluded that the second hypothesis states that "CEO's educational background does not affect the company's funding policy."

The t-test for the CEO age variable obtained a regression coefficient value with a negative direction of -0.016 and a significance value of 0.023 < 0.05; it can be concluded that the third hypothesis states that "CEO age has a negative effect on the company's funding policy."

The t-test for the CEO gender variable obtained a regression coefficient value with a negative direction of -0.742 and a significance value of 0.015 < 0.05; it can be concluded that the fourth hypothesis states, "CEO's gender has a negative effect on the company's investment policy."

The t-test for the CEO's educational background variable obtained a regression coefficient value with a negative direction of -0.017 and a significance value of 0.271 > 0.05; it can be concluded that the fifth hypothesis, which states that "CEO's educational background does not affect the company's investment policy."

The t-test for the CEO age variable obtained a regression coefficient value with a positive direction of 0.158 and a significance value of 0.597 > 0.05; it can be concluded that the sixth hypothesis states that "CEO age does not affect the company's investment policy."

3.2. Discussion

Effect of CEO's Gender on Company's Funding Policy

The statistical results of the t-test for the CEO gender variable obtained a regression coefficient value with a negative direction of -0.302 and a significance value of 0.024 <0.05; it can be concluded that the first hypothesis which states "CEO gender has a negative effect on the company's funding policy."

These results are in line with research conducted by Faccio et al. (2016) and Huang & Kisgen (2013), companies led by female CEOs tend to be risk-averse to debt, and a woman tends to be risk-averse. Men tend to be risk-takers (Barber dan Odean, 2001), and women tend to take the safe option rather than the risky option (Donkers et al., 2001).

Effect of CEO's Educational Background on Company's Funding Policy

The statistical results of the t-test for the CEO educational background variable obtained a regression coefficient value with a negative direction of -0.099 and a significance value of 0.457 > 0.05; it can be concluded that the second hypothesis which states that "CEO's educational background does not affect the company's funding policy."

In terms of education, the higher the educational level of a CEO, the more sophisticated the CEO is in managing his policies (Custódio & Metzger, 2014). CEOs with high education will tend to speculate and be aggressive and risk takers (Beber & Fabbri, 2012). This is because they have more information about the business, so they can predict conditions accurately (Beber & Fabbri 2012) and adjust the use of debt to an optimal point (King et al., 2016).

Effect of CEO's Age on Company's Funding Policy

The results of the regression analysis for the CEO age variable obtained a regression coefficient value with a negative direction of -0.016 and a significance value of 0.023 <0.05; it can be concluded that the third hypothesis, which states "CEO age has a significant negative effect on the company's funding policy."

The test results of this study support the research of Faccio et al. (2016), which explains that age has a negative effect on company debt. Meanwhile, in their research, Ferris et al. (2017) said that CEO age has a positive impact on company debt; namely, CEOs with older age will increase the deficit.

Effect of CEO's Gender on Company's Investment Policy

The results of the regression analysis for the CEO gender variable obtained a regression coefficient value with a negative direction of -0.742 and a significance value of 0.015 <0.05; it can be concluded that the fourth hypothesis which states "CEO's gender has a significant negative effect on the company's investment policy."

According to Faccio et al. (2016) and Huang & Kisgen (2013), companies led by female CEOs tend to be risk-averse to investment and will invest at a lower rate than companies led by males.

Effect of CEO's Educational Background on Company's Investment Policy

Statistical results show that the educational background of the CEO obtained a regression coefficient value with a negative direction of -0.017 and a significance value of 0.271 > 0.05; it can be concluded that the fifth hypothesis which states, "CEO's educational background does not affect the company's investment policy."

CEO with higher education so they feel better than CEOs who do not get a special MM or MBA degree; such circumstances make CEO behave better than average and often take irrational policies. CEO with higher education will tend to speculate and be aggressive. and risk takers (Beber & Fabbri, 2012).

Effect of CEO's Age on Company's Investment Policy

Statistical results with regression test showed that the age of the CEO obtained a regression coefficient value with a positive direction of 0.158 and a significance value of 0.597 > 0.05; it can be concluded that the sixth hypothesis which states, "CEO age does not affect the company's investment policy."

This study is in line with Ferris et al. (2017) in their research; companies led by CEOs of a younger age tend to have different investment policies. Younger CEOs have an open mind and tend to have big ambitions to achieve their goals.

4. Conclusion

The educational background of the CEO does not affect the company's funding policy. The lower the CEO's education, the smaller the company's funding policy will be. In comparison, the background does not affect the company's investment policy. The less educated the CEO, the lower the company's investment policy.

A CEO's age has a significant negative effect on the company's funding policy. The higher the age of the CEO, the greater the company's funding policy will be. The age of the CEO does not affect the company's investment policy, so the younger generation of the CEO reduces the company's investment policy.

The CEO's gender has significant negative effects on company funding policies. The CEO's gender varies, and the larger the company's funding policies will be. The CEO's gender is significantly negative for company investment policies. If the CEO's gender is diverse, then the company's investment policy is getting bigger.

Investors should consider aspects of the CEO's educational background and age because it can increase management supervision. Investors who prefer to avoid risk are advised to invest in large companies because large companies already have stability in operational activities and a high enough sense of return. For further research, it is recommended to increase the number of research samples, use the types of companies included in one group of companies, and use a more extended research period to generalize the results according to the group of companies.

References

Adams, R. B., & Funk, P. (2012). Beyond the Glass Ceiling: Does Gender Matter?, *58*(2), 219–235.

Aliani, K. (2014). CEO characteristics and corporate tax planning evidence from US companies Khaoula Aliani. *International Journal Managerial and Financial Accounting*, *6*(1).

Beber, A., & Fabbri, D. (2012). Who times the foreign exchange market? Corporate speculation and CEO characteristics ☆. *Journal of Corporate Finance*, *18*(5), 1065–1087. https://doi.org/10.1016/j.jcorpfin.2012.07.004

Breadly, M., & Marcus. (2008). *Dasar-dasar Manajemen Keuangan Perusahaan* (Jilid 1). Jakarta: Erlangga.

Cline, B. N., & Yore, A. (2015). SC. *Journal of Empirical Finance*. https://doi.org/10.1016/j.jempfin.2015.11.002

Copeland. (2010). *Dasar–Dasar Manajemen Keuangan Jilid II*. Jakarta: Erlangga.

Custódio, C., & Metzger, D. (2014). Financial expert CEOs: CEO's work experience and firm's financial policies $. *Journal of Financial Economics*, *114*(1), 125–154. https://doi.org/10.1016/j.jfineco.2014.06.002

Donkers, B. A. S., Melenberg, B., & Soest, A. V. A. N. (2001). Estimating Risk Attitudes using Lotteries: A Large Sample Approach, 165–195.

Eagly, A. (2000). *Social Role Theory of Sex differences and similarities*.

Faccio, M., Marchica, M. T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, *39*, 193–209.

https://doi.org/10.1016/j.jcorpfin.2016.02.008

Feist, J., & Gregory, F. (2010). *Teori Kepribadian* (Buku 2). Jakarta: Salemba Humanika.

Ferris, S. P., Javakhadze, D., & Rajkovic, T. (2017). CEO social capital, risk-taking and corporate policies. *Journal of Corporate Finance*, *47*, 46–71. https://doi.org/10.1016/j.jcorpfin.2017.09.003

Franke, G. (1997). *Gender Differences in Ethical Perceptions of bussines practices : a social role theory perspective*.

Hambrick, D. C. (1996). Strategic leadership: Top executives and their effects on organizations. St. Paul. *West Educational Publishing*.

Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance : Are male executives overconfident relative to female executives ? $. *Journal of Financial Economics*, *108*(3), 822–839. https://doi.org/10.1016/j.jfineco.2012.12.005

King, T., Srivastav, A., & Williams, J. (2016). What' s in an education ? Implications of CEO education for bank performance. *Journal of Corporate Finance*, *44*. https://doi.org/10.1016/j.jcorpfin.2016.01.003

Meggison, W. . (1997). *Capital Finance Theory*. Addison-Wesley.

Serfling, M. A. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance*, *25*, 251–273. https://doi.org/10.1016/j.jcorpfin.2013.12.013