



# The Effect of Leaders with Narcissism and Overconfidence Characteristics on Corporate Risk-Taking

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**Abstract** The characteristics of a leader in a company significantly impact the organization's sustainability. This study aims to investigate the influence of the narcissistic character of the CEO and Board, as well as managerial overconfidence in corporate risk-taking. The data in this study were collected from 22 manufacturing companies listed on the Indonesia Stock Exchange from 2014-2020. The data in this study is secondary data, tested using the regression data panel method using E-Views 12 software. These research findings indicate a significant negative relationship between Board Narcissism and Corporate Risk Taking and a critical negative relationship between Management Overconfidence and Corporate Risk Taking. Leverage as a variable control has a significant positive relationship with Corporate Risk Taking. Research provides implications for investors and the industry to understand better the role of narcissism and the overconfidence of CEOs, boards, and company management in making rational decisions about company risk-taking. This research is expected to be a positive reference for all company stakeholders and contribute to developing literature on leader narcissism, overconfidence, and corporate risk-taking.

**Keywords:** Board Narcissism, CEO Narcissism, Corporate Risk-Taking, Leverage, Management Overconfidence.

## 1 Introduction

One of the problems that affect the performance of companies and shareholders is the company's risk-taking level [1]. Corporate risk-taking is the process of choosing decisions from various available options. In contrast, decision-making theory is influenced by satisfaction in that individuals can determine the increase or decrease in company utility by prioritizing personal satisfaction [2]. Based on this concept, each management action aims to maximize profit and attain the company's goal by managing the level of risk-taking of the company. Meanwhile, as we know, a manager can decide with a relatively high level of risk. Their decision can increase shareholders' wealth or even put the company in an unsafe condition. Corporate risk-taking is influenced by individual satisfaction driven by narcissism and overconfidence. That can bring a chance of success

in making a profit. Besides that, it can have negative or dangerous consequences [3]. Previous research conducted by [1] and [4] showed that narcissism and overconfidence have a positive and significant relationship with corporate risk-taking. Therefore, it can be known that activities and personality traits influence reasonable corporate risk-taking but still pay attention to the facts that exist. Investors should know how the company managers make rational decisions about the company's risk-taking. This study is expected to prove or even strengthen previous research in this area. This research can be a positive reference for all stakeholders related to the literature on narcissism, overconfidence, and corporate risk-taking.

The manufacturing sector in this study is used as a researcher's consideration because manufacturing is an industry that plays a critical role in every country and can be used as a reference to see the expansion and growth in that country. The manufacturing industry development in Indonesia has experienced much improvement from year to year despite the COVID-19 pandemic in the past two years. The GDP growth rate of the manufacturing industry is relatively stable. In 2021, it rose by 3.39% [5]. Therefore, the manufacturing sector is a fascinating sector to be researched.

## **2 Literature Review**

### **2.1 Corporate Risk-Taking**

Corporate risk-taking has always been an inseparable part of all business activities. The level of risk is an important subject matter and interest for management and shareholders, whereas shareholders always prefer an investment with a higher return that requires higher risk [1]. Furthermore, this has always been associated with the individual behavior or personal traits of a company's leader or manager. The influence of narcissism and overconfidence on decision-making in a company is an exciting thing for researchers to do. Research carried out by [1], where the samples used were as many as 150 manufacturing companies listed in the Tehran Stock Exchange, indicates that narcissism and overconfidence have a positive and significant effect on company risk-taking. Leader's narcissism and overconfident character have a positive and significant impact on corporate risk-taking because their character tends to show unlimited power, arrogance, desire for praise, and feeling more substantial push them to work hard to achieve success. Thus praised for their accomplishment [1]. On the other hand, the effectiveness of team management will help companies prevent financial problems by carrying out capital budgeting and improving the decision-making process when taking a decision. Organizational risk is often interpreted as a decline in profit or a systemic / non-systemic change in returns that determines the performance factors of the enterprise. Thus, risk can be considered as the effect of uncertainty on the organization [6]. Other factors, such as narcissism and overconfidence, are internal factors that influence a manager to make decisions about the company's well-being.

## 2.2 Narcissism

Narcissism is the degree to which an individual views himself more (inflated self-view), always wants affirmation about it, and has a clinical psychological dimension where the individual is always centered on himself [7]. These characteristics have long been researched, and it can be seen that individual tends to be overconfident about their intelligence and judgments, generally resulting in people who look arrogant, feel superior, and react aggressively to criticism [8]. CEOs with narcissistic characteristics tend to make bold and attention-grabbing decisions, such as large acquisition mergers, and are more responsive to social praise [9] & [1]. CEOs with a narcissistic nature tend to be aggressive and behave like that because they are predicted to attract attention and praise [10]. Some studies have also shown that the characteristics of narcissism in CEOs, such as self-confidence and intense charisma, have a positive impact that helps them lead the company [7].

## 2.3 Overconfidence

Overconfidence is one of the characteristics that significantly influences a manager's decision [1]. Overconfidence can be gained by the reaction of the audience or frequent experiences of success in the past. Those experiences can give confidence and make the individual believe he is at a higher level than others [11]. Overconfident managers consider their information more important or valuable than others, therefore exaggerating the return on investment and maintaining a positive perspective on risks and returns where this is sufficient evidence to prove riskier choices [1]. Overconfident individuals tend to overestimate the expected profit from uncertain investments, either because of the general tendency to expect good results or because they overestimate their ability to bring success [11].

Corporate risk-taking itself is not only influenced by narcissism or overconfidence alone but also influenced by several control variables. These variables are generally consistent with previous studies; therefore, companies can control corporate risk-taking by constantly evaluating hiring managers and employees with high narcissism and overconfidence to stay within a certain level of sensibility, which affects a wide variety of people, including shareholders, creditors, companies and the government [1].

## 2.4 Return On Asset

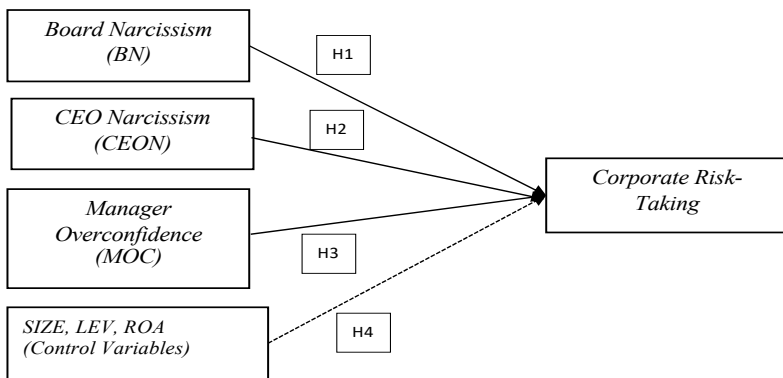
Return on assets (ROA) is a financial ratio related to profitability, which means the company can generate profits. Companies with a high ROA can make creditors interested in lending capital to the company because the company is considered to have a high profit [12]. The rate of return on assets is a ratio to assess profit percentage or profit earned by a company related to resources or total assets so that the efficiency of a company in managing its assets can be seen from the percentage of this ratio. The lower ratio indicates that the company could be more efficient in generating profit from the assets it manages and vice versa.

## 2.5 Leverage

Leverage is the amount of debt used by the company to carry out the company's operational activities. A company with a high leverage ratio means that the company carries out high funding sourced from debt. The leverage ratio also shows the amount of debt used to finance the assets used by the company to carry out the company's operational activities. Leverage can determine how much of a company's assets are financed by debt compared to its capital and also reflects the company's dependence on debt in financing its operations [12]. The greater the level of dependence of the company on external parties, the greater the cost of debt that the company will bear.

## 2.6 Conceptual Framework

Based on previous studies, the conceptual framework of this study is as follows:



**Fig. 1.** Conceptual framework.

Based on previous studies, the effect of narcissistic boards and CEOs on corporate risk-taking is very close because narcissism is an intrinsic factor in risky decision-making. Narcissism is a complete personality trait influencing thinking, feelings, and behavior [3]. This is why narcissistic managers inspire their followers to expend more of the resource capabilities possessed by each of their employees [13]. Previous study shows that managers with a high level of narcissism will positively affect corporate risk-taking on a reasonably large company scale but will have a negative effect on small-scale companies [4]. Overconfident managers themselves are believed to be able to increase return on investment and maintain a positive perspective on risks and profits. These reasons are enough to make them make risky choices [1]. Based on such research, the first hypothesis can be formulated as follows:

**H1: There is an influence of the Narcissism Board on Corporate Risk-Taking.**

Considering that decisions related to corporate risk-taking have potential value, both for the company and stakeholders [14]. The characteristics of the CEO play an essential role in evaluating and addressing external contextual factors, which ultimately influence

decision-making on the implementation of corporate risk-taking in the company [15]. CEOs with a narcissistic character can increase access to certain parties, and this effect becomes more vital for corporate risk-taking [1]. In addition, CEOs who have narcissism are always so intent on competing, so they tend to take risks and dare to do what they want to achieve [13]. Based on the study, the second hypothesis can be formulated as follows:

**H2: There is the influence of CEO Narcissism on Corporate Risk-Taking.**

Overconfidence can increase perseverance and determination, mental facilities, and risk tolerance. In other words, overconfidence can help promote professional performance [6]. A previous study by [16] found that overconfident managers pursue innovation and take advantage of growth opportunities. In addition, overconfident managers consider better information since it prioritizes the return on investment and maintains a positive perspective on risks and profits; these reasons are enough to make them make a risky choice [1]. So that we can know that overconfidence can strengthen efficient corporate risk-taking, based on the study, the third hypothesis can be formulated as follows:

**H3: There is an influence of Manager Overconfidence on Corporate Risk-Taking.**

Control variables in this research (Company Size, Financial Leverage, and Return on Assets [ROA]) have a positive effect on corporate risk-taking, according to previous studies by [6], [1], [4]. However, many researchers still need to be made aware of this because they are considered interesting to be studied more deeply so that the results obtained are more in-depth and exposed to subsequent researchers. Based on the study, the fourth hypothesis can be formulated as follows:

**H4: There is an influence of control variables (Company Size, Financial Leverage, and Return on Assets) on Corporate Risk-Taking.**

### 3 Research Methods

This research was conducted using the panel data analysis method. The population includes manufacturing companies in the consumer goods sub-sector, the basic and chemical industry sub-sector, and various industries listed on the Indonesia Stock Exchange. The samples in this study have been obtained from as many as 22 companies in the consumer goods sub-sector, basic chemical industry sub-sectors, and various industries based on predetermined criteria. Where to use the criteria - the following criteria: Based on the last seven years, the company must be listed on the Indonesia Stock Exchange, which is from 2014 – 2020. The company must have clear data on the source and not have an operational break during 2014 - 2020. The company has the availability of data related to the measurement of each variable in each company, such as financial statements, annual reports, and other supporting data. This study used secondary data from financial statements and annual reports for manufacturing companies listed on the IDX during the 2014-2020 period obtained from the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) and the company's official website from the research sample. The population of the study is manufacturing enterprises. Using the purposive sampling method, a research sample of 22 companies in the manufacturing sector was obtained and listed on the Indonesia Stock Exchange (IDX) in 2014-2020.

The dependent variable used in this study was corporate risk-taking, whereas the independent variable used in this study included the following: board narcissism, CEO narcissism, and Manager Overconfidence. The control variable included the following: company size, financial leverage and return on asset. The following model was used to determine the relationship between the variables:

**Model:**

$$\text{CRT}_{it} = \beta_0 + \beta_1 \text{BN}_{it} + \beta_2 \text{CEON}_{it} + \beta_3 \text{MOC}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{LEV}_{it} + \beta_6 \text{ROA}_{it} \quad (1)$$

**Where,**

<b>CRT<sub>it</sub></b>	= Corporate Risk-Taking
<b>BN<sub>it</sub></b>	= Board Narcissism
<b>CEON<sub>it</sub></b>	= CEO narcissism
<b>MOC<sub>it</sub></b>	= Manager Overconfidence
<b>SIZE<sub>it</sub></b>	= Company's Size
<b>LEV<sub>it</sub></b>	= Financial Leverage
<b>ROA<sub>it</sub></b>	= Return on Asset

### 3.1 Identification of Variable Measurements

The measurements carried out in this study aim to determine the influence of independent variables and control variables on dependent variables with the following measurements:

**Table 1.** Identification and measurement of variables.

Description	Variables	Symbols	Measurements	References
Dependent Variable	Corporate Risk-Taking	CRT	Standard Deviation of Company's Stock Return	Yearly Salehi, et al., (2020) & (Kim et al., 2018)
Independent Variables	Board Narcissism	BN	Size of signature. If the signature of the CEO is out of the frame or their name is seen in their signature, one and otherwise is zero.	Salehi, et al., (2020)

	CEO Narcissism	CEON	<p>Photograph in Annual Report</p> <p>Rating of the prominence of the CEO's photograph in the annual report as follows:</p> <p>(1) No photograph of the CEO;</p> <p>(2) The CEO was photographed with other executives;</p> <p>(3) The CEO's photograph was of him or her alone and occupied less than half the page;</p> <p>(4) The CEO's photograph was of him or her alone and occupied more than half of the page with</p> <p>text taking up some space on the page, and</p> <p>(5) The CEO's photograph was of him or her</p>	Olsen et.al., (2014) <sup>[17]</sup> .
	Manager Overconfidence	MOC	<p>Surplus investments in assets. The index of surplus investments in assets, using the residual regression of the total asset growth on sales growth, is estimated for each industry year separately so that if the residual of the regression is greater than zero, this index equals one or zero.</p>	Salehi, et al., (2020) <sup>[11]</sup> .
Control Variables	Company's Size	SIZE	Sales Algorithm	Salehi, et al., (2020) <sup>[11]</sup> .
	Financial Leverage	LEV	The ratio of total debt to total assets.	Salehi, et al., (2020) <sup>[11]</sup> .
	Return on Asset	ROA	The ratio of net profit to book value of assets.	Salehi, et al., (2020) <sup>[11]</sup> .

## 4 Results and Discussion

Descriptive statistics is a data processing method that provides an overview or description of data from the minimum, maximum, mean, and standard deviations. The minimum value is the lowest value in each variable, while the maximum value is the highest value

for each variable in the study. The mean value is the average value of each variable in the study. Standard deviation is the distribution of research data used to reflect that data is heterogeneous or homogeneous, which is volatile.

**Table 2.** Statistical descriptive.

	CRT (Y)	BN	CEON	MOC	SIZE	ROA	LEV
Mean	0.3548 05	2.98701 3	3.06493 5	0.11450 1	12.5949 7	0.0868 81	0.3646 16
Median	0.3196 40	3.00000 0	3.00000 0	0.08220 0	12.5907 9	0.0707 30	0.3596 69
Maximum	1.0000 00	5.00000 0	5.00000 0	0.78660 0	14.5464 9	0.9209 97	0.7852 66
Minimum	0.0022 00	1.00000 0	1.00000 0	0.00200 0	10.4127 4	- 0.081060	0.0691 75
Std. Dev.	0.2820 05	0.75828 3	1.25596 8	0.16063 6	0.92378 6	0.0984 43	0.1761 31
Skewness	0.7037 39	0.02147 5	0.27451 1	3.08998 4	- 0.333158	4.1742 86	0.1734 73
Kurtosis	2.3673 99	6.04872 9	2.02604 8	12.4187 9	3.14809 9	34.814 51	1.9154 34
Jarque-Bera	15.279 23	59.6531 5	8.02087 5	814.310 5	2.98958 4	6941.9 48	8.3201 96
Probability	0.0004 81	0.00000 0	0.01812 5	0.00000 0	0.22429 5	0.0000 00	0.0156 06
Sum	54.639 99	460.000 0	472.000 0	17.6331 4	1939.62 5	13.379 69	56.150 89
Sum Sq. Dev.	12.167 60	87.9740 3	241.350 6	3.94802 4	130.567 2	1.4827 12	4.7463 75

(Source: Eviews Software Processing Results)

**Table 3.** T Statistic test result.

	<i>Corporate Risk Taking</i>		
	Coefficient	Probability	Decision
Constanta	-3.282487	-	-
BN	-0.048975	0.8501	Not Significant / H <sub>0</sub> Accepted
CEON	-0.150196	0.0000	Significant Negative
MOC	-1.300864	0.0308	Significant Negative
SIZE	0.151266	0.4285	Not Significant / H <sub>0</sub> Accepted
ROA	-0.362958	0.5329	Not Significant / H <sub>0</sub> Accepted
LEV	1.620504	0.0005	Significant Positive

(Source: Eviews Software Processing Results)



1. Board Narcissism (BN) has a probability value of  $0.8501 > 0.05$  (alpha 5%), which shows an insignificant influence. This study concluded that there was no significant influence between Board Narcissism and Corporate risk-taking.
2. CEO Narcissism (CEON) has a probability value of  $0.0000 < 0.05$  (alpha 5%), which shows a significant influence. The magnitude of the coefficient is  $-0.150196$ . The results of this study imply that CEO Narcissism had a negative and significant impact on Corporate risk-taking. That indicates that most CEOs with narcissistic character do not always personify being the risk taker because they can also have a high vulnerability that leads to a reduced willingness to accept challenges [1]. This vulnerability also led to the selection of more accurate and carefulness toward their decision. Most CEOs are rational if related to risk and especially to their action to achieve the company's goal.
3. Overconfidence Managers (MOC) have a probability value of  $0.0308 < 0.05$  (alpha 5%), which shows a significant influence. The magnitude of coefficients is  $-1.300864$ . The results of this study imply that there was a negative and significant influence between overconfident managers and Corporate Risk Taking. That indicates that most Manager with an overconfident character only sometimes personifies being the risk taker because many factors contribute to corporate risk-taking, such as the availability of internal fund and corporate investment policies [16], corporate governance level, and ethical aspects [1].
4. Size (SIZE) had a probability value of  $0.4285 > 0.05$  (alpha 5%), which showed an insignificant influence. This study concluded that there was no significant influence between Size and Corporate Risk Taking.
5. Return on Asset (ROA) has a probability value of  $0.5329 > 0.05$  (alpha 5%), which shows an insignificant influence. This study concluded that there was no significant influence between Return on Assets and Corporate risk-taking.
6. Leverage (LEV) has a probability value of  $0.0005 < 0.05$  (alpha 5%), which indicates a significant influence. The magnitude of the coefficient is  $1.620504$ . This study concluded that there is a positive and significant influence between Leverage and Corporate risk-taking. Leverage will directly relate to risk profile and capacity to meet company financial obligations [12]. Leverage also reflects the company's dependence on debt in financing its operations. Thus, managers are more careful in making decisions related to company risk-taking because it can burden the company's financial position even more.

## 5 Conclusion

A leader's character, behavior, and decisions significantly impact the company's performance and shareholders' interests. Therefore, the importance of financial and behavioral theory has increased recently due to its importance in modern life. Many studies in this area are critical to helping companies reflect on their psychological characteristics when selecting and hiring managers or leaders. Comprehension of how narcissism and overconfidence affect risk, company performance, and shareholder

interests will be beneficial. Investors, stockholders, CEOs, Board members, and managers are expected to be aware of psychological biases such as narcissism and overconfidence in making decisions, especially in risky decisions. On the other hand, organizations must create a reliable and thorough risk management technique, good governance, and ethical guidelines to direct leaders and management in the decision-making process.

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