

The Effect of CEO Narcissism and Firm Size on Tax Avoidance: The Moderating Role of Profitability

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Abstract. Tax avoidance is an issue involving the interests of companies in maintaining profits and the interests of the state in maintaining tax revenues. This study aims to analyze the effect of CEO narcissism and firm size on tax avoidance and to examine the role of profitability as a moderating variable. The study employs a quantitative approach using secondary data from manufacturing companies listed on the Indonesia Stock Exchange during 2020–2024. Based on the research draft, the sample consists of 36 companies with 180 observations. CEO narcissism is proxied by the prominence of the CEO's photograph in annual reports, firm size is measured using the natural logarithm of total assets, profitability is measured by after-tax income relative to total assets, while tax avoidance is calculated as one minus the effective tax rate. The results reported in the draft indicate that CEO narcissism has a positive and significant effect on tax avoidance, firm size has a negative and significant effect, profitability has a positive and significant effect, and profitability strengthens the effect of CEO narcissism while weakening the negative effect of firm size on tax avoidance. The research model has an R-squared value of 0.447.

Keywords: CEO narcissism, firm size, tax avoidance, profitability, Upper Echelons Theory, moderated regression.

1 Introduction

Taxes play an important role in state financing because tax revenues are used to fund public services, development, and various government obligations. Indonesia's tax revenue realization in 2024 reached IDR 1,932.4 trillion, or 100.5 percent of the target set in the State Budget (APBN). The substantial role of tax revenues means that corporate tax policies have implications beyond the issue of cost savings at the entity level. When companies seek to reduce their tax burden by utilizing options available under the applicable regulations, such decisions remain within the legal framework as long as they do not violate the relevant provisions [1].

Within the corporate environment, tax decisions are influenced by economic considerations, governance mechanisms, investor pressure, and the characteristics of decision makers. Policy directions may differ among companies with similar financial conditions because strategic decisions depend on how leaders perceive the benefits, costs, and risks of each option. CEO characteristics are important because narcissism is associated with a need for recognition, high self-confidence, and a tendency to emphasize personal achievements [2].

To explain these relationships, this study uses Upper Echelons Theory as its sole overarching theoretical framework. The theory states that the characteristics of top managers can help explain strategic choices and organizational outcomes [3]. Accordingly, tax decisions can be viewed as a form of strategic choice that may reflect the characteristics of decision makers.

In the Indonesian context, previous studies on CEO narcissism and tax avoidance have produced mixed findings. Putri, Abbas, and Hidayat found that CEO characteristics are among the relevant factors to examine alongside firm conditions [4]. Meanwhile, other research indicates that the relationship between CEO narcissism and tax avoidance should be considered together with governance mechanisms and firm characteristics [5].

Firm size is also an important factor. Large firms have greater resources for tax planning, but at the same time face greater visibility and scrutiny. Previous research indicates that the relationship between firm size and tax avoidance may differ across sectors and observation periods [6].

Profitability is positioned as a moderating variable because firm profits may alter the economic benefits of tax management strategies. Previous studies have also reported inconsistent directions in the relationship between profitability and tax avoidance [7]. Therefore, this study examines not only the direct effects but also whether profitability changes the strength of the relationships between CEO narcissism and firm size and tax avoidance.

Based on this background, this study aims to examine: (1) the effect of CEO narcissism on tax avoidance; (2) the effect of firm size on tax avoidance; (3) the effect of profitability on tax avoidance; (4) the role of profitability in strengthening the effect of CEO narcissism; and (5) the role of profitability in weakening the negative effect of firm size on tax avoidance.

2 Theoretical Framework

2.1 Upper Echelons Theory

Upper Echelons Theory was introduced by Hambrick and Mason in 1984. The theory explains that organizations are, in part, reflections of the characteristics of their top managers. The demographic characteristics, experiences, values, and perspectives of top managers may influence how problems are interpreted and how strategic choices are made [3].

In this study, the CEO is positioned as part of top management and as an individual who can influence the direction of corporate policies. CEO narcissism is viewed as an individual characteristic that may influence how CEOs assess the benefits and risks of decisions. When a CEO has a strong orientation toward achievement and recognition, decisions that generate improved financial performance may become more attractive.

Upper Echelons Theory also explains that the influence of CEO characteristics operates within an organizational context. Firm size and profitability may shape the CEO's decision-making space. Large firms face different levels of visibility and scrutiny, whereas profitability determines the magnitude of the economic benefits that may be obtained from tax management. Accordingly, the theory is used to explain both the direct and moderating relationships examined in this study.

2.2 Tax Avoidance

Tax avoidance refers to corporate strategies for reducing tax burdens through transaction choices, recognition, or treatments available within the tax framework. In empirical research, the effective tax rate (ETR) is frequently used as an indicator. The lower the ETR, the greater the indication of a reduction in the tax burden relative to pre-tax income [5].

This study measures tax avoidance as $TA = 1 - ETR$, where $ETR = \text{income tax expense} / \text{pre-tax income}$. Under this formula, a higher TA value indicates a higher level of tax avoidance.

2.3 CEO Narcissism

CEO narcissism is understood as a character tendency characterized by a need for recognition, attention, prestige, and high self-regard. Because direct psychological measurement of CEOs is difficult using secondary data, corporate research employs several observable behavioral proxies. One such proxy is the prominence of the CEO's photograph in annual reports [8].

The use of a photographic indicator should be understood as an indirect proxy rather than a psychological diagnosis. Cao and Xu show that CEO narcissism can be examined using indicators derived from CEO communication and representation in corporate documents [2].

2.4 Firm Size

Firm size represents the scale of the economic resources controlled by a company. Total assets are among the measures commonly used to represent firm size. In this study, firm size is calculated using the natural logarithm of total assets. Large firms may have greater tax-planning capabilities, but they also face greater transparency requirements and scrutiny [6].

2.5 Profitability

Profitability indicates a firm's ability to generate profits from the resources it controls. This study uses Return on Assets (ROA), calculated as after-tax income divided by total assets. Profitability is used as a moderating variable because the level of profit may alter the magnitude of the economic benefits of tax management [7].

3 Hypothesis Formulation

3.1 Narsisme CEO dan Penghindaran Pajak

Berdasarkan Upper Echelons Theory, karakteristik CEO dapat tercermin dalam keputusan strategis perusahaan. CEO yang memiliki kecenderungan narsistis dapat lebih menekankan pencapaian yang terlihat dan hasil finansial. Penghematan pajak dapat meningkatkan laba setelah pajak sehingga berpotensi menjadi salah satu keputusan yang menarik bagi CEO dengan orientasi pencapaian tinggi [3]. Penelitian Araújo et al. juga secara khusus menunjukkan hubungan CEO narcissism dan corporate tax avoidance [9].

H1: CEO narcissism has a positive effect on tax avoidance.

3.2 Large Firm and Tax Avoidance

Large firms have greater resources but also face higher levels of visibility and scrutiny. This study assumes that monitoring pressure is more dominant, leading large firms to be more cautious about risky tax strategies [6].

H2: Firm size has a negative effect on tax avoidance.

3.3 Profitability and Tax Avoidance

High profitability means that a firm generates greater profits. If the tax rate remains at a given level, higher profits also imply a greater potential tax burden. This condition increases the economic benefits of tax management strategies [7].

H3: Profitability has a positive effect on tax avoidance.

3.4 Profitability Moderates CEO Narcissism

When a firm generates high profits, the financial benefits of tax savings become greater. If the CEO has narcissistic tendencies and a strong achievement orientation, this condition may strengthen the incentive to adopt policies that generate financial benefits. Therefore, profitability is expected to strengthen the relationship between CEO narcissism and tax avoidance [3], [9].

H4: Profitability strengthens the positive effect of CEO narcissism on tax avoidance.

3.5 Profitability Moderates Firm Large

Large firms face greater scrutiny and are therefore expected to exhibit lower tax avoidance. However, as profitability increases, the economic benefits of tax management and the resources available for tax planning also increase. Therefore, profitability is expected to weaken the negative effect of firm size on tax avoidance [7].

H5: Profitability weakens the negative effect of firm size on tax avoidance.

4 Research Method

4.1 Design and Sampel

This study employs a quantitative approach using secondary data from manufacturing companies listed on the Indonesia Stock Exchange during 2020–2024. Based on the research draft, the initial population consisted of 47 companies. Eleven companies did not meet the criteria, resulting in a final sample of 36 companies observed over five years, or 180 observations. The criteria included the availability of annual reports, CEO photographs, total asset data, pre-tax income, and income tax expense [10].

4.2 Operationalization of Variables

Table 1. Operationalization of research variables

Variable	Indicator	Measurement	Scale
CEO Narcissism	CEO photograph prominence	Score 1–5	Rasio
Firm Size	Total Assets	Ln(total assets)	Rasio
Profitability	ROA	After-tax income / total assets	Rasio
Tax Avoidance	Inverse ETR	1 – (tax expense / pre-tax income)	Rasio
Leverage	Debt to assets	Total debt / total assets	Rasio
Sales Growth	Change in sales	(Sales _t – Sales _{t-1}) / Sales _{t-1}	Rasio

CEO narcissism was coded using a scale from one to five: a score of 1 if no CEO photograph was present; a score of 2 if the CEO appeared together with other leaders; a score of 3 if the CEO appeared alone and the photograph occupied less than half a page; a score of 4 if the CEO appeared alone and the photograph occupied more than half a page; and a score of 5 if the CEO photograph occupied a full page [11].

4.3 Analysis Technique

The analysis included descriptive statistics, regression assumption tests, and moderated regression analysis. Interaction variables were formed from NARC×ROA and SIZE×ROA. The model used was:

$$TA = \alpha + \beta_1 NARC + \beta_2 SIZE + \beta_3 ROA + \beta_4 (NARC \times ROA) + \beta_5 (SIZE \times ROA) + \beta_6 LEV + \beta_7 GROW + \varepsilon \quad (1)$$

Notes: TA is tax avoidance; NARC is CEO narcissism; SIZE is firm size; ROA is profitability; LEV is leverage; and GROW is sales growth.

5 Result

5.1 Descriptive Statistic

Table 2. Descriptive statistics of the research variables (N=180)

Variable	N	Minimum	Maximum	Mean	Standard Deviation
CEO Narcissism	180	1,00	5,00	2,61	0,84
Firm Size	180	26,35	32,88	29,42	1,43
Profitability	180	0,20%	28,10%	8,70%	6,10%
Tax Avoidance	180	0,042	0,522	0,248	0,096
Leverage	180	0,071	0,861	0,441	0,180
Sales Growth	180	-0,318	0,641	0,073	0,151

5.2 Regression Assumption Tests

The research draft reports a normality-test probability value of 0.118, VIF values ranging from 1.44 to 3.62, a minimum heteroscedasticity-test probability of 0.167, and a Durbin–Watson value of 1.91. Based on the criteria used in the draft, the model was considered to satisfy the tested assumptions.

5.3 Moderated Regression Result

Table 3. Moderated regression results

Variable	Coefficient	t-statistic	Probability	Decision
Constant	0,371	4,18	<0,001	Significant
CEO Narcissism	0,028	2,39	0,018	H1 accepted
Firm Size	−0,016	−2,72	0,007	H2 accepted
Profitability	0,214	3,34	0,001	H3 accepted
NARC × ROA	0,352	2,51	0,013	H4 accepted
SIZE × ROA	−0,118	−2,16	0,032	H5 accepted
Leverage	0,041	1,10	0,273	Not significant
Sales Growth	0,009	0,83	0,411	Not significant

R² sebesar 0,447, adjusted R² sebesar 0,423, dan uji F sebesar 21,36 dengan probabilitas <0,001.

6 Discussion

6.1 The Impact of CEO Narcissism on Tax Avoidance

Koefisien narsisme CEO sebesar 0,028 dengan probabilitas 0,018 menunjukkan pengaruh positif dan signifikan sehingga H1 diterima. Temuan ini konsisten dengan Upper Echelons Theory karena karakteristik CEO dapat tercermin dalam keputusan strategis perusahaan [3]. Araújo et al. juga menemukan hubungan CEO narcissism dan corporate tax avoidance [9].

This positive relationship may be explained by CEOs' orientation toward visible outcomes. Tax savings can increase after-tax income without directly increasing sales. For CEOs who place strong emphasis on personal achievement, increased profits represent an observable outcome.

6.2 The Effect of Firm Size on Tax Avoidance

The firm size coefficient of −0.016 with a probability value of 0.007 indicates a negative and significant effect; therefore, H2 is accepted. One possible explanation is the greater visibility of large firms. The larger the firm, the more stakeholders are concerned with its reports and policies, thereby limiting the scope for risky tax decisions [6].

6.3 The Effect of Profitability on Tax Avoidance

The profitability coefficient of 0.214 with a probability value of 0.001 indicates a positive and significant effect; therefore, H3 is accepted. Higher profits increase the potential tax liability, thereby increasing the economic benefits of tax management. This finding differs from

some previous studies that reported a negative relationship, indicating that sector and observation-period contexts should be considered [7].

6.4 Profitability Moderation on the Relationship Between CEO Narcissism and Tax Avoidance

The interaction term $NARC \times ROA$ is 0.352 with a p-value of 0.013, indicating that profitability strengthens the positive effect of CEO narcissism on tax avoidance, thus supporting H4. The study draft also shows a slope coefficient of 0.006 at low profitability, 0.028 at moderate profitability, and 0.051 at high profitability."

"This pattern suggests that as earnings increase, executive traits become increasingly relevant in explaining corporate tax decisions. This finding aligns with Upper Echelons Theory, as leadership characteristics operate within the context of organizational conditions [3].

6.5 Profitability Moderation on the Relationship with Firm Size

The $SIZE \times ROA$ interaction of -0.118 with a probability value of 0.032 indicates that profitability weakens the negative effect of firm size on tax avoidance; therefore, H5 is accepted. Large firms continue to face high levels of scrutiny, but at higher levels of profitability, the economic benefits of tax management also become greater.

7 Implication

Secara teoritis, penelitian memperluas penerapan Upper Echelons Theory pada konteks keputusan perpajakan. Temuan menunjukkan bahwa karakter CEO dapat berkaitan dengan perilaku penghindaran pajak dan bahwa hubungan tersebut dipengaruhi kondisi profitabilitas.

Secara praktis, dewan komisaris, komite audit, auditor, dan investor dapat mempertimbangkan karakter pimpinan ketika menilai risiko kebijakan pajak. Perhatian lebih diperlukan ketika perusahaan mempunyai profitabilitas tinggi karena draf menunjukkan bahwa profitabilitas memperkuat hubungan narsisme CEO dengan penghindaran pajak.

8 Limitation

First, CEO narcissism is measured using photographic prominence and therefore represents an indirect proxy. Second, the sample is limited to manufacturing companies and the 2020–2024 period. Third, the reported results should be verified against the raw data and original statistical output. Fourth, future research could employ multiple tax avoidance proxies and several CEO narcissism indicators to conduct robustness tests.

9 Conclusion

Based on the results reported in the draft, CEO narcissism has a positive and significant effect on tax avoidance, firm size has a negative and significant effect, and profitability has a positive and significant effect. Profitability strengthens the positive effect of CEO narcissism and weakens the negative effect of firm size on tax avoidance.

The use of Upper Echelons Theory provides a consistent framework for explaining how CEO characteristics may be reflected in corporate strategic choices, while profitability and firm size constitute organizational conditions that influence the strength of these relationships [3].

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