



## The effect of organizational capital on tax avoidance with gender diversity and CEO overconfidence as moderator

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### Abstract

The number of companies that report losses to avoid taxes increases significantly. This becomes a concern of the government. The purpose of this study is to examine the effect of organizational capital on tax avoidance with gender diversity and CEO overconfidence as moderators. The samples used in this study were manufacturing companies listed on the Indonesia Stock Exchange (IDX) during 2016-2021 through a purposive sampling method. This data is analyzed by using ordinary least squares (OLS) regression. The results indicate that organizational capital increases tax avoidance, and gender diversity affects organizational capital on tax avoidance, but CEO overconfidence does not affect the relationship between organizational capital on tax avoidance. This study shows that less confident CEOs tend to take less risk because they put companies' long-term contingent risk at stake.

**Keywords:** Organizational Capital; Gender Diversity; CEO Overconfidence; Tax Avoidance

### Abstrak

Jumlah perusahaan yang melaporkan kerugian untuk menghindari pajak meningkat secara signifikan. Hal ini menjadi perhatian pemerintah. Tujuan dari studi ini adalah untuk memeriksa efek modal organisasi pada penghindaran pajak dengan keragaman gender dan kepercayaan diri eksekutif yang berlebihan (CEO *overconfidence*) sebagai moderator. Sampel yang digunakan dalam penelitian ini adalah perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia (IDX) selama 2016-2021 melalui metode sampling khusus. Data ini dianalisis dengan menggunakan regresi persegi terendah biasa (OLS). Hasilnya menunjukkan bahwa modal organisasi meningkatkan penghindaran pajak, dan keanekaragaman gender mempengaruhi modal organisasi terhadap penghindaran pajak, tetapi kepercayaan diri eksekutif yang berlebihan tidak mempengaruhi hubungan antara modal organisasi dengan penghindaran pajak. Studi ini menunjukkan bahwa CEO yang kurang percaya diri cenderung mengambil risiko yang lebih sedikit karena mereka mempertaruhkan risiko kontinjensi jangka panjang perusahaan.

**Kata Kunci:** Modal Organisasi; Keanekaragaman Gender; CEO Overconfidence; Penghindaran Pajak

## INTRODUCTION

Tax avoidance is still a concern for the government because it reduces state revenue (Edeline & Sandra, 2018). One of the corporate taxpayer actions to carry out tax avoidance is reporting a loss in their financial statement. The number of corporate taxpayers which

reported losses for five consecutive years has increased. Nevertheless, these taxpayers could still operate and even develop their business in Indonesia (Investor, 2021). The following table reports the number of corporate taxpayers which reported losses for five years in a row.

**Table 1. Corporate Taxpayer Reported Loss Consecutively for Five Years**

Year	Number of Corporate Taxpayers
2012-2016	5,199
2013-2017	6,004
2014-2018	7,110
2015-2019	9,496

Source: Investor (2021), ddtc (2021)

Table 1 shows that the number of corporate taxpayers who reported losses from 2015-2019 reached 9,496, an 83% increase compared to 2012-2016. This condition indicates that taxpayers which report losses do not pay taxes; potentially avoiding the tax expense.

Hassan and et al. (2022) explained that tax avoidance was carried out by companies due to the support of organizational capital. Organizational capital is a collection of knowledge, skills, culture, design, and business processes that enable a company to achieve efficient production and stable business operating activities to increase productivity and performance (Hasan & Cheung, 2018; Li et al., 2018). This condition indicates that organizational capital is a specific advantage to achieve competitive advantages. Boubaker et al. (2022) explained that these specific advantages provided opportunities for shareholders to claim cash flows obtained from the organizational capital.

Higher organizational capital indicates higher manager compensation (Eisfeldt & Papanikolaou, 2013; Lev et al., 2009). Atkeson and Kehoe (2005) explained that organizational capital could consist of more than 40% of intangible asset cash flow. Eisfeldt & Papanikolaou (2014) explained that organizational capital was a company's investment in resources. Therefore, managers will try to manage organizational capital optimally because it relates to the company's productivity and compensation for managers.

Organizational capital as a codified and integrated company-specific knowledge can help in understanding complex tax regulations. Hence, companies can take advantage of differences in tax rates, tax preferences, and tax status in a more efficient way to reduce the company's tax expenses (Hasan et al., 2021). Gallemore and Labro (2015) explained that tax planning, compliance, and implementation were expensive efforts that required time, intensive knowledge, and quite large economic resources. Therefore, companies with high organizational capital tend to be more capable of doing tax avoidance and achieving greater tax efficiency.

Company managers who use resources efficiently in managing business activities can help to increase high organizational capital and use the opportunities to avoid tax. The managers can allocate company profits from various profit centers better and take advantage of tax credits or transfer pricing that leads to a lower corporate tax expense.

The agency theory, which represents a conflict of interest between tax authorities and company managers, motivates the managers to act opportunistically in fulfilling their interests through tax avoidance. This condition is caused by tax avoidance which can increase cash flow and profit after tax, thereby motivating companies with high organizational capital to carry out tax avoidance to maximize the benefits for both company managers and shareholders. Hanlon and Heitzman (2010) explained that companies used intangible assets, such as patents and trademarks, through offshore financial centers (tax

havens) that had low tax rates to increase after-tax cash flow income. Based on the description above, this study proposes the following hypothesis.

**H<sub>1</sub>:** Organizational capital has a positive effect on tax avoidance.

Tehupuring and Rossa (2016) explained that tax avoidance showed the use of loopholes in tax regulation to reduce the company's tax expense. It is necessary to involve women on the board of directors to reduce tax avoidance. Women on the boards of directors are believed to have a more independent mindset and facilitate better decision-making (Kamul & Riswandari, 2021). The presence of women can increase the transparency of the board of directors, and hence the stakeholders increase their confidence in the board of directors. Women prefer to avoid risk and take more caution when it comes to tax planning.

Ambrose and Schminke (1999) explained that women showed a lower tolerance for opportunism in decision-making than men. Riguen et al. (2019) explained that the differences between men and women could be detected in the level of tax compliance and tax expense payment strategies. Women as part of the board of directors tend to reduce manipulated financial reports because women are more inclined towards honesty, prudence, and conservatism (Nehme & Jizi, 2018). Mustafa & Che-Ahmad (2018) explained that women's boards of directors could increase an effective monitoring mechanism for companies.

The results of the study by Aliani and Zarai (2012), Hoseini et al. (2019), Jarboui et al. (2020) found that women on the board of directors could reduce tax avoidance. Based on the description, this study proposes the following hypothesis.

**H<sub>2</sub>:** Gender diversity moderates the effect of organizational capital on tax avoidance.

Overconfidence is one of the important factors that affect tax avoidance (Rossa, 2022). CEO's overconfidence plays an important role in setting the regulations and decisions of a company. CEO has an important role in the company's strategic decision-making. Huang et al. (2011), Yang (2015), and Koo & Yang (2018) explained that CEOs' overconfidence became more popular in relation to excessive investment in behavioral finance. CEOs who overestimated future performance were seen to be overconfident (Malmendier & Tate, 2005). Strategic policies and decisions regarding the company's future performance involve managers' abilities, judgments, skills, and success rates that are inherently cognitive biased due to the tendency of managers to overestimate the company's future performance.

Olsen & Stekberg (2016) explained that overconfident CEO tended to involve in tax evasion, which was reflected in the low effective tax rate. In addition, Ferrish et al. (2013) explained that CEOs' overconfidence tended to occur during company mergers and acquisitions, especially in low tax rate countries. Based on this description, this study proposes the following hypothesis.

**H<sub>3</sub>:** CEO's overconfidence moderates the effect of organizational capital on tax avoidance.

## **METHOD**

This quantitative study examines the effect of organizational capital on tax avoidance with gender diversity and CEO overconfidence as moderators. The independent variable in this study is organizational capital. The dependent variable is tax avoidance. This study used moderating variables: gender diversity and CEO's overconfidence.

The organizational capital is a comparison of selling, administrative, and general expenses to the previous total assets (Hasan et al., 2021). Tax avoidance is a comparison of

tax expense to profit before tax (Hanlon & Heitzman, 2010; Jihene & Moez, 2019). Gender diversity utilized a dummy variable of 1 when there were women on the board of directors, otherwise 0 (Lenard et al., 2014). Lastly, CEO's overconfidence was measured from the residual regression of asset growth on sales growth. The estimated residual value  $> 0$  indicated an overconfident CEO, and vice versa (Kouaib & Jarboui, 2017).

The samples in this study were manufacturing companies listed on the Indonesia Stock Exchange during 2016–2021, selected purposively. The year 2016 was used as the base year to measure variables that require data from the prior year. The data were obtained from published financial reports on the website [www.idx.co.id](http://www.idx.co.id) and each company's website.

The Ordinary Least Squares (OLS) regression was used in this study to test the hypotheses using version 12 of Eviews. Therefore, this study required several assumption tests, such as multicollinearity, heteroscedasticity, and autocorrelation tests. This study did not use the normality test because the amount of data met the central limit theorem (Cooper & Schindler, 2013). The multicollinearity test used a correlation value. If the correlation is  $> 0.80$  a multicollinearity problem exists (Ghozali & Ratmono, 2017). The heteroscedasticity test used white's heteroscedasticity-consistent variance and standard error to correct the standard error, t-stat, and significance values, while the coefficient values were fixed and could be directly used for hypothesis interpretation (Ghozali & Ratmono, 2017). Lastly, this study used Durbin-Watson suggested by Winarno (2015), with no autocorrelation detected if the DW range is between 1.54 and 2.46. The regression equation models of this study are as follows.

$$\text{TAVA} = a + b_1 \text{ORCA} + e \quad (1)$$

$$\text{TAVA} = a + b_1 \text{ORCA} + b_2 \text{KRG M} + b_3 \text{ORCA} * \text{KRG M} + e \quad (2)$$

$$\text{TAVA} = a + b_1 \text{ORCA} + b_2 \text{OVER} + b_3 \text{ORCA} * \text{OVER} + e \quad (3)$$

$$\text{TAVA} = a + b_1 \text{ORCA} + b_2 \text{KRG M} + b_3 \text{OVER} + b_4 \text{ORCA} * \text{KRG M} + b_5 \text{ORCA} * \text{KRG M} + e \quad (4)$$

## RESULT AND DISCUSSION

This study aims to fill in the gaps in the prior studies and answer the phenomenon of tax avoidance that occurs in Indonesia's manufacturing companies. Therefore, this study was conducted on 17 manufacturing companies listed on the Indonesia Stock Exchange during 2016-2021 with several criteria. Based on the number of samples, there were 90 observations used in this study.

Before testing the hypothesis, firstly, this study tests the classical assumptions. The test results in Table 2 show that the multicollinearity test used a correlation value with parameters if the correlation value  $> 0.80$  indicates a multicollinearity problem (Ghozali & Ratmono, 2017). The heteroscedasticity test used white's heteroscedasticity-consistent variance and standard error to correct the standard error, t-stat, and significance values, while the coefficient values were fixed and could be directly used for hypothesis interpretation (Ghozali & Ratmono, 2017). Lastly, this study used Durbin-Watson suggested by Winarno (2015), with a range of 1.54-2.46 which showed no autocorrelation problems.

The results of the H1 test found that organizational capital had a coefficient of -0.208; a t-statistic of -2.353; and a significance of  $0.021 < 0.05$ . This condition indicates that organizational capital increases tax avoidance because the effective tax rate becomes lower. Therefore, **H1 was supported**. The higher organizational capital indicated a higher compensation for the managers (Eisfeldt & Papanikolaou, 2013; Lev et al., 2009). Atkeson & Kehoe (2005) explained that organizational capital could consist of more than 40% of

intangible asset cash flow. Einfeldt & Papanikolaou (2014) explained that organizational capital was a company's investment in resources. Therefore, managers try to manage organizational capital optimally because it relates to the company's productivity and compensation given to managers.

The results of the H2 test find that organizational capital\*gender diversity had a coefficient of -0.504; a t-statistic of -2.631; and a significance of  $0.010 < 0.05$ . This condition indicated that organizational capital could increase tax avoidance with the involvement of a female board as directors. Therefore, **H2 was supported**. The results of this study found that the strength of organizational capital as codified and integrated company-specific knowledge could help companies to understand complex tax regulations. Therefore, companies could take advantage of differences in tax rates, tax preferences, and tax status more efficiently to reduce tax expenses (Hasan et al., 2021). Women on the board of directors actually had the opportunity to reduce the effective tax rate because they were considered to understand complex tax regulations and able to take advantage of differences in tax rates, tax preferences, and tax status in a more efficient way to reduce the company's tax expense.

## CONCLUSION

The phenomenon of tax avoidance is still the main concern of various researchers. A recent study found that high corporate tax avoidance was due to organizational capital. The results of this study confirm that organizational capital could increase tax avoidance. CEOs try to manage organizational capital optimally because it is related to the company's productivity and compensation given to them, and hence, it motivates them to reduce the effective tax rate.

This study shows that gender diversity moderates the effect of organizational capital on tax avoidance. Women on the board of directors have the opportunity to reduce the effective tax rate because they are considered to understand complex tax regulations and are able to take advantage of differences in tax rates, tax preferences, and tax status in a more efficient way with the aim to reduce the company's tax expense.

The findings of this study show that CEOs' overconfidence fails to moderate the effect of organizational capital on tax avoidance. Hanlon & Heitzman (2010) explained that tax avoidance referred to company activities that resulted in an explicit reduction of tax expense including adopting different regulations with the aim of achieving a tax strategy. CEOs who are less confident tend to take less risk because they put the company's long-term contingent risk at stake.

This study was conducted only on the manufacturing sector because of its complex sector. The measurement of the overconfidence variable required a minimum sample size of 8 companies in each sub-sector, but our sample size did not fulfill that requirement. For this reason, this study cannot be generalized to any companies other than the manufacturing sector. Future research can use other sectors that are relevant to the research issue and pay attention to the measurement of variables that require a minimum number of companies in the sub-sector. The conclusions made of this study are limited by using proxies to explain the variables in this study; hence the future research can use other proxies to explain the same variable.

This study finds that the CEO tries to manage organizational capital optimally to achieve productivity. Organizational capital is defined as a collection of knowledge, skills, culture, design, and business processes that enable a company to achieve efficient production and stable business operation activities, increasing the productivity and

performance of the company. The CEO uses his ability as part of organizational capital to reduce the effective tax rate; hence his interest in maximizing personal profit is achieved. Therefore, this study confirms agency theory in fulfilling the CEO's interests.

The presence of women in the board of director structure is considered to influence behavior in decision-making. The findings show that the involvement of women in decision making increases the low effective tax rate. This condition can be caused by the important role of the board of directors in making decisions. The board of directors have the opportunity to reduce the effective tax rate because they are considered to understand complex tax regulations. Hence, the company can take advantage of differences in tax rates, tax preferences, and tax status in a more efficient way.

CEO's overconfidence cannot affect organizational capital on tax avoidance because CEO is considered less courageous in making decisions that can affect the company's contingency risk. CEO with lack the courage to take risks will act carefully by considering the risks they will face because they will affect the company's long-term performance.

Table 2. Hypothesis Test Result

Independent Variable	Dependent Variable: TAVA OLS Regression Model I			Dependent Variable: TAVA OLS Regression Model II			Dependent Variable: TAVA OLS Regression Model III			Dependent Variable: TAVA OLS Regression Model IV		
	Coef.	t-stat.	Sig.	Coef.	t-stat.	Sig.	Coef.	t-stat.	Sig.	Coef.	t-stat.	Sig.
	Constant	0.349	9.049	0.000	0.242	29.812	0.000	0.358	6.340	0.000	0.233	6.267
ORCA	-0.208	-2.353	0.021	0.013	1.044	0.300	-0.265	-1.902	0.061	-0.003	-0.043	0.965
KRGM				0.197	2.834	0.006				0.205	2.923	0.004
ORCA * KRGM				-0.504	-2.631	0.010				-0.538	-2.774	0.007
OVER							-0.016	-0.215	0.830	0.019	0.278	0.781
ORCA * OVER							0.105	0.607	0.545	0.034	0.216	0.829
F-Stat.		4.428			4.720			1.584			2.951	
Sig.		0.038			0.004			0.201			0.018	
Adjusted R <sup>2</sup>		4.6%			13.5%			2.4%			12%	
Durbin-Watson		1.987			1.998			1.979			1.991	
Obs.		72			72			72			72	

Note: TAVA (Tax Avoidance), ORCA (Organizational Capital), KRGM (Gender Diversity), OVER (CEO Overconfidence). Multicollinearity model II shows correlation value of ORCA and KRGM (-0.154), ORCA and KRGM\*ORCA (0.285), and KRGM and KRGM\*ORCA (0.758). Model III shows the correlation value of ORCA and OVER (0.148), ORCA and OVER\*ORCA (0.534), and OVER and OVER\*ORCA (0.797). Correction of heteroscedasticity test using Huber-white. The Durbin-Watson three models are fulfilled because they are in the range of 1.54-2.46.

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