DOES ENVIRONMENTAL UNCERTAINTY PLAY MODERATING ROLE IN RELATION BETWEEN BUSINESS STRATEGY AND TAX AVOIDANCE?

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Abstract:

This research aims to analyze the effect of implementing a company's business strategy on the level of tax avoidance with environmental Uncertainty as a moderating variable. The population in this research is manufacturing companies on the Indonesia Stock Exchange in 2019-2022. The sampling technique used purposive sampling and obtained 91 companies. This quantitative research uses secondary data in the form of annual reports of manufacturing companies. The model used is panel data regression with a Random Effect (RE) testing model. This research produced three critical findings. First, the prospector strategy has a significant positive effect and is more aggressive in tax avoidance than the defender and analyzer strategies. Second, the defender strategy negatively and less aggressively influences tax avoidance compared to the prospector and analyzer strategies. Third, the relationship between business strategy and tax avoidance is moderated by environmental Uncertainty because it can strengthen the relationship between prospector strategy and tax avoidance and weaken the relationship between defender and analyzer strategies and tax avoidance. (weakening) Moreover, it can positively moderate the relationship between prospector strategy and tax avoidance (strengthening).

Keywords: Defender, Prospector, Tax Avoidance, Uncertainty

INTRODUCTION

The phenomenon of tax avoidance in Indonesia can be seen from the tax ratio, which is the ratio of tax revenue to gross domestic product. The tax ratio shows the government's ability to collect tax revenue or reabsorb gross domestic product through taxes. In Indonesia, from 2019 to 2022, the tax ratio experienced decreases and increases, and the realization was still low in the range of 8.3% to 10.4% (Ministry of Finance of the Republic of Indonesia, 2023). This shows that Indonesia's tax avoidance level is still relatively high.

During et al. (2008) define tax avoidance as explicit tax reduction, which represents a series of tax planning strategies starting from tax management, tax planning, tax aggressiveness, tax evasion, and tax sheltering. Tax avoidance is always interpreted as a legal activity. However, it can be categorized as illegal if the transaction is carried out solely for tax evasion or if it does not have a good business.

In starting a business process, company managers must first make decisions regarding business strategy to achieve performance through competitive advantage amidst environmental Uncertainty, so the company needs to choose the right business strategy. A company's business-level strategy will determine how it competes in its chosen market. The business strategy chosen by the company will influence all activities within the company because all decisions taken by managers must be in line with the business strategy, including tax activities inherent in business activities so that every business decision made by managers has consequences for taxes (Arieftiara et al., 2019; Higgins et al., 2011).

Miles & Snow (1978) categorize business strategies into 4 (four): defender, prospector, analyzer, and reactor. The characteristics of the business strategy are identified with several indicators that can reflect the business strategy used by the company (for example, research and development activities, growth, capital intensity, etc.) (Miles & Snow, 1978). The difference between the level of corporate tax avoidance defender and prospector depends on the characteristics of these two strategies against the benefits and costs of tax avoidance (Higgins et al., 2011).

On the other hand, companies always face environmental UncertaintyUncertainty, which consists of three components: competitive UncertaintyUncertainty, market uncertainty, and unpredictability technology (Desarbo et al., 2005). In an uncertain environment, a manager's company finds it difficult to predict all social and physical factors in a way that is accurate later , which will directly impact the manufacturing process decision. Moment managers cannot predict all these factors, leading to behavior and possible opportunism . Managers report that finances align with their interests, including business strategy decisions closely related to tax avoidance activities (Carolina et al., 2020).

In ten year final only several studies link business strategy, including performance (Safitri et al., 2019; Farida & Setiawan, 2022; Handoyo et al., 2023; Jukka, 2022; Thoumrungroje & Racela, 2022), financial distress (Agustia et al., 2020; Habib et al., 2023), environmental (Arieftiara et al., 2017; Putri et al., 2021), management control systems (Rehman et al., 2023), and audit fees (Bentley et al., 2013). However, research has linked tax avoidance still little (Arieftiara et al., 2019; Higgins et al., 2015; Hsu et al., 2018; Husnain & Hashmi, 2021; Sadjiarto et al., 2020; Zhang et al., 2022).

Research by Higgins et al. (2011) and Arieftiara et al. (2020) states that business strategy is influential against tax avoidance. Companies that use a prospector strategy are more aggressive in tax avoidance activities than defender companies. Study Wardani & Khoiriyah (2018) own different results from the studies of Higgins et al. (2011) and Arieftiara et al. (2020), who stated that business strategy does not influence tax avoidance activities company; this is because of no consistency in the business strategy used company from year to year.

A study by Arieftiara et al. (2017) tested the influence of environmental UncertaintyUncertainty on business strategy. They proved that certain companies are likelier to choose the prospector strategy over the analyzer in an environment that does not. Research by Huang et al. (2017) proves that environmental UncertaintyUncertainty influences tax avoidance.

This research aims to analyze the influence of companies' implementation of business strategies on tax avoidance activities by using environmental Uncertainty as a moderating variable. This research differs from previous studies because of the difference in environmental UncertaintyUncertainty moderating variables. The environmental uncertainty variable is selected as moderating because it is a factor contingency in making decisions, including business strategy (Venkatraman et al., 1990).

This research felt important because existing research related to business strategy generally concerns the suitability of business strategy with various contextual factors like accounting management systems, measurement performance, and adaptation processes in the environment organization; however, no attention is paid to the consequence of tax on the business strategy implemented. Previous research has included many factors influencing tax avoidance, such as the company's characteristics, size, profitability, liquidity, and capital intensity. However, the study previously linked tax avoidance with business strategy.

Agency Theory and Contingency Theory. Agency theory was first introduced by Jensen and Meckling (1976), explaining the relationship between shareholders and company management (agent), where information asymmetry often occurs between the two parties due to differences in interests they have. Agency theory is closely related to corporate tax avoidance practices because, in achieving personal interest, managers can carry out various strategies to maximize profits, such as tax avoidance activities. However, tax avoidance activities can give rise to agency problems due to information asymmetry between the agent and the principal. Tax avoidance carried out aggressively by companies is not necessarily in line with shareholders' wishes. Contingency theory explains the relationship between a company's internal organizational structure and the environmental demands placed on that organization (Lawrence & Lorsch, 1967). This theory states that there is no universally best design for management accounting systems but that everything depends on situational factors (Otley, 1980). Based on contingency theory, a business strategy that is appropriate to environmental conditions will produce different output from a strategy that is not appropriate (Otley, 1980).

Tax Avoidance. Tax avoidance is effective tax planning by minimizing the tax burden through transaction schemes regulated in tax regulations, which do not cause disputes between taxpayers and tax authorities because they exploit weaknesses in a country's tax provisions (Hanlon & Heitzman, 2010).

Tax avoidance is carried out to increase cash flow and reduce tax payments. Under certain circumstances (e.g., tax credits and permanent book-tax differences), tax avoidance activities increase cash flow and accounting profits (Higgins et al., 2011).

Typology of Business Strategy. Miles and Snow (1978) categorize a company's competitive strategy based on how the company decides to address fundamental problems in the adaptive cycle, namely entrepreneurial, engineering, and administrative problems. The business strategy introduced by Miles & Snow (1978) consists of four categories, namely defender, prospector, analyzer, and reactor. Three of these strategies are viable and can be placed on a continuum where the defender is at one end and the prospector is at the other, while the analyzer is between the defender and prospector strategies (Miles & Snow, 1978).

Defender and prospector have different and opposing characteristics, while the analyzer is a strategy that combines the characteristics of both. Defender is a highly cost-focused strategy emphasizing efficiency, narrow product domains and a stable organization. Defender companies invest more capital in asset purchases and limited product development. On the other hand, the prospector is a strategy often followed by companies with vast product domains that could be more focused on costs and are flexible organizations. Prospector companies invest their capital in diverse products with pervasive product development activities.

Analyzer is a strategy that seeks to minimize cost risks and maximize opportunities for profit by combining the strengths of defenders and prospectors. Reactor is a strategy that is not included in a continuum and is considered less feasible to generalize in an organization because this strategy has a pattern of adapting to an inconsistent and unstable environment. The reactor's adaptive cycle

consists of inappropriate responses to environmental change, Uncertainty, poor performance, and reluctance to act aggressively in the future (Miles & Snow, 1978).

Environmental Uncertainty Uncertainty relates to the degree of variability in an organization's external environment, which primarily consists of customers, competitors, government regulations and labor unions (Freel, 2005). Environmental UncertaintyUncertainty is a situational factor in decision-making (Otley, 1980). A changing environment will lead managers to look for more cost-saving opportunities to stabilize cash flow.

From the organizational literature, environmental UncertaintyUncertainty consists of several components that are faced by many companies, especially in Indonesia, namely competitive Uncertainty, market uncertainty, and technological Uncertainty (Arieftiara et al., 2017.; Desarbo et al., 2005).

Hypotheses Development. Previous research found that companies' business strategies influence corporate tax avoidance activities (Higgins et al., 2011; Husnain & Hashmi, 2021; Zhang et al., 2022). Prospector companies tend to carry out tax avoidance activities more than those using defender and analyzer strategies (Higgins et al., 2011).

Arieftiara et al. (2019) and Sadjiarto et al. (2020) found that the prospector strategy significantly influenced tax avoidance, while the defender strategy had a negative influence.

Prospector companies have an aggressive culture towards innovation and market development; for prospectors, maintaining a reputation as an innovator in product development is very important (Miles & Snow, 1978). A prospective company's research and development costs will undoubtedly affect the tax paid because these are deductible expenses. In contrast to prospectors, defenders invest more resources to solve technical problems, focusing on production assets and high capital intensity (Miles & Snow, 1978).

Asset investments made by defender companies aim to reduce production costs. The high production assets of defender companies certainly have an asset depreciation value that can be used as a deductible expense. However, from a tax perspective, calculating asset depreciation has its own rules, so the amount of the deductible expenses must comply with tax regulations. This differs from costs incurred for research and development, which do not need specific rules regarding the amount of deductible expenses that can be recognized as a deduction from the company's taxable profit. Based on this description, it can be concluded as a hypothesis as follows:

H_{1a}: **The prospector strategy has a significantly positive and more aggressive effect on tax avoidance.**

H_{1b}: **The defender strategy has a significantly negative and less aggressive effect on tax avoidance.**

Based on contingency theory, a business strategy appropriate to its environment will produce appropriate results through effective decision-making. Companies usually prefer to adapt to high-intensity competition using defender and prospector strategies rather than analyzers (Higgins et al., 2011). The research conducted by Arieftiara et al. (2017) examined the suitability factors of business strategy when environmental Uncertainty occurs. This proves a company's probability of choosing a prospector strategy is higher than an analyzer. Based on agency theory, a high level of environmental Uncertainty will encourage managers to consider legal ways to manage taxes, including tax avoidance. Studies on environmental UncertaintyUncertainty show that highly uncertain environments result in significantly increased planning activity, including tax planning activity, as evidenced by low effective corporate tax rates (Huang et al., 2017)

In both strategic management and contingency theory, it is widely acknowledged that a single strategy cannot be universally effective in all situations (Otley, 1980). It is essential to consider various situational factors in developing appropriate strategies in certain situations, including environmental Uncertainty (Venkatraman et al., 1990). The match between structural and environmental factors determines the success of a business strategy (Handoyo et al., 2023). In an unfavorable business environment, the effectiveness of business strategies can decrease. This will impact the business decision-making process, including company tax activities. Based on this description, it can be concluded as a hypothesis as follows:

H$_2$: The relationship between business strategy and tax avoidance is moderated by environmental UncertaintyUncertainty.

METHODS

Samples. This research population comprises manufacturing companies on the Indonesia Stock Exchange from 2019 to 2022. Purposive sampling was used to obtain 91 companies. This research is quantitative, using secondary data from manufacturing company annual reports. The model used is panel data regression with a random effect regression model.

Table 1. Samples Criteria

No.	Samples Criteria	Total
1.	Population	229
2.	Registered manufacturing company after 2019 on the Indonesian Stock Exchange	(44)
3.	Companies that do not have complete financial reports for 2019-2022	(12)
4.	A company that owns profit before negative tax	(82)
5.	Number of Companies after sample selection	91
6.	Number of Years (n)	4
7.	Total research sample (number of companies selected*n)	364
8.	Outliers	(154)
9.	Total sample after outliers	210

Operational Variables. The dependent variable in this research is tax avoidance, measured by the Cash Effective Tax Ratio (CETR). The CETR value is obtained from the total cash tax paid by the company, divided by net profit before tax. The Cash Effective Tax Ratio measurement can capture all tax avoidance activities using cash taxes paid to authorized parties (Higgins et al., 2011). The formula for calculating CETR is as follows:

$$CETR = \frac{\text{Cash Tax paid company}}{\text{Net Profit Before Tax}}$$

Business strategy is the independent variable in this study. Use typology. Miles & Snow's (1978) business strategies are defender, analyzer, and prospector. That strategy can be measured using the five-business strategy ratio suggested by Bentley et al. (2013). There are five business strategy ratios as follows.

1. The ratio of research and development to sales,
2. The ratio of employees to sales,
3. The geometric mean of the market value of assets (GMVA),
4. The ratio of marketing to sales,
5. Capital Intensity (Net PPE scaled by total assets).

All ratios were calculated and then grouped into quintiles to determine business strategy, with the highest quintile value from the business strategy ratio given a score of 4 and the lowest quintile given a score of 1. Notable For the Capital Intensity ratio, the quintile score is reversed so that the lowest quintile is given a score of 4 and the highest quintile is given a score of 1. Next is the measurement strategy business, which uses dummy variables: 1 (one) for the defender, analyzer, and prospector, while 0 (zero) for the defender analyzer or prospector.

The moderating variable, environmental Uncertainty, is measured using the environmental uncertainty index (EUI) suggested by Arieftiara et al. (2017). The EUI was obtained by combining the average of three components of environmental uncertainty measurement. A mean score of 0.5 indicates high Uncertainty (Arieftiara et al., 2017). The components of EUI measurements are as follows.

Competitive Uncertainty reflects the intensity of competition in an industry, which is measured using the Herfindahl Index (HI). The formula for calculating HI is as follows.

$$HI = \sum_{i=1} n \ (Market \ Share)^2$$

where HI is the Herfindahl Index, n is the total number of companies in the same industry, and i is the company in an industry. The market share value is obtained from total sales, which the company shares with the total sales of all companies in the same market, and then multiplied by 100%.

Market Uncertainty indicates changes in the increase or decrease of the tastes and preferences of consumers of goods or services in a market. It is measured using standard deviation from sales (Habib et al., 2011). The formula for calculating this measurement is as follows.

$$CV \ (Z_i) = \frac{\sqrt{\frac{\sum_{k=i}^{4} (Z_i - \bar{Z})^2}{4}}}{\bar{Z}}$$

CV is the coefficient of variation, Z_i is the observed annual sales for company I and $\bar{Z}$ is the average sales for the previous four years.

Technological UncertaintyUncertainty indicates the level of technological change a company faces based on the type of industry. Arieftiara et al. (2017) measure technological Uncertainty by using the intensity of innovation in an industry. A company gets a score of 2 if there is more than one innovation, one if there is at least one innovation, and 0 if there is no innovation.

Regression Model Analysis. The regression model used in this research is the random effect model. The formula is formulated as follows to test the hypothesis of the relationship between business strategy and tax avoidance with environmental Uncertainty as a moderating variable.

CETR = β_0 – XDEF + XPROS – XDEFMEUI + XPROSMEUI + ε

Explanation:

CETR	:	Cash taxes paid by the company are divided with profit before tax
β_0	:	Constant
XDEF	:	*Defender* business strategy
XPROS	:	*Prospector* business strategy
XDEFMEUI	:	Variable interaction *defender* moderation
XPROSMEUI	:	Variable interaction *prospector* moderation
ε		Error

RESULTS AND DISCUSSION

This research involved testing the random effect regression model, which includes a coefficient determination test (R^2), a simultaneous test (F test), and a partial test (t-test). In addition, descriptive statistics and a multicollinearity test were carried out.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
VAR YCETR	210	1.977469	7408639	D	6.165568
VAR XDEF	210	0857143 -	.2806106	a	1
VAR XANAL	210	.7714286	.4209159	D	1
VAR XPROS	210	1428571	.3507633	D	1
- VAR XDEFMEUI -	210	1056559	4752704	D	3.3921
VAR XANALM-I	210	1.558157	1.494251	a	5.681388
VAR XPROSM-I	210	.2264481	.7391626	D	4.008698

Source: Data processed with Stata, 2024

The results of descriptive statistics explain that the data used in the study, which was a total of 210, were derived from 91 manufacturing companies from 2019-2022. CETR has a maximum value of 616.5568% with a minimum value of 0, an average of 197.7469 %, and an error value of 74.08639%. The mean value is more significant than the standard deviation; this indicates that the company does not pay its taxes according to those set by the government because the value held each year during the research period varies and shows high tax avoidance practices.

The average value obtained for the defender strategy was 8.57%, the analyzer strategy was 77.14%, and the prospector strategy was 14.28%. This shows that many manufacturing companies use analyzer strategies compared to defenders and prospectors in Indonesia.

Table 3. Multicollinearity Test Results

	VAR_YC~R	VAR_XD EF	VAR_XA ~L	VAR_XP ~S	VAR_XD ~I	VAR_XA ~I	VAR_SP ~I
VAR YCETR	1.0000						
VAR XDEF	0.0361	1.0000					
VAR XANAL	-0.1211	-0.5625	1.0000				
VAR_XPROS -	0.1165	-0.1250	-0.7500	1.0000			
VAR XDEFMEUI	0.0319	0.7278	-0.4094	-0.0910	1.0000		
VAR XANALM-I	-0.0221	-0.3200	0.5690	-0.4267	-0.2329	1.0000	
VAR XPROSM-I	0.0449	-0.0940	-0.5642	0.7522	-0.0684	-0.3210	1.0000

Vif, uncentered

Variable	VIF	1/VIF
VAR XANAL -	3.09	0.323180
VAR XARALM-I	3.09	0.323180

VAR XDEF	2.23	0.448077
VAR XDEFMEUI	2.23	0.448077
VAR XPROSM-I -	1.00	1.000000
Mean VIF	2.33	

Source: Data processed with Stata, 2024

The partial correlation value in the table above is smaller than 0.8, whereas if seen from the mean VIF value is smaller than 10, and the VIF tolerance value is more significant than 0.10 so that the regression model does not occur multicollinearity problem (Gujarati, 2004).

Table 4. Results of Random Effect Model Testing

Random-effects GLS regression			Number of obs		= 210	
Group variable: ID			Number of groups		= 84	
R-sq:			Obs per group:			
Within	= 0.9855		Min		= 1	
Between	= 0.9920		Avg		= 2.5	
overall	= 0.9880		Max		= 4	
Corr (u_i, X)	= 0 (assumed)		Wald chi2 (6)		= 16689.11	
			Prob > chi2		= 0.0000	

Y	Coef.	Std. Err.	E	P>|z|	[95% Conf.	Interval]
VAR_XDEF	-.1311953	0127545	-10.29	0.000	-.1561936	-.106197
VAR_XANAL	-.3747531	0112722	-33.25	0.000	-.3968463	-3526599
VAR_XPROS	.0647631	0044558	14.53	0.000	.0560299	.0734963
VAR_XDEFMEUI -	-0103808	0037881	-2.74	0.006	-.0178054	-.0029562
VAR_XARALMEUI	-.0333461	.004101	-8.13	0.000	-.0413838	-0253083
VAR_XPROSMEUI	.239272	.0116438	20.55	0.000	.2164505	.2620935
_cons	2.238266	.0099592	224.74	0.000	2.218746	2.257785
Sigma_u	0					
Sigma_u	.04040226					
rho	0	(fraction of variance due to u_i				

Source: Data processed with Stata, 2024

Based on the results of testing the regression model in Table 4, the following regression model equation is as follows. CETR = 2.238266 – 0.1311953XDEF + 0.0647631XPROS – 0.0103808XDEFMEUI + 0.239272XPROSMEUI + ε

Coefficient of Determination Test (R²). Based on the random effect model regression test results in Table 4, value coefficient determination (R^2) is seen from R-sq overall value. The value (R^2) of 0.9880, or 98.8%, shows that independent variables business strategy defender, analyzer, prospector, and moderating environmental Uncertainty explain variable-dependent tax avoidance amounted to 98.8%. In contrast, the rest of the 1.2% is influenced by other variables not researched in this study.

Simultaneous Test (F Test). Table 4 shows the simultaneous test results (F Test). The probability f (prob value > chi2) obtained is 0.000, which is smaller than alpha 5% (0.05). Thus, a linear relationship exists between independent variables, such as business strategy defender,

analyzer, prospector, moderating environmental UncertaintyUncertainty, and variable-dependent tax avoidance simultaneously.

Partial Test (T-Test). Based on the regression analysis results in Table 4, the significance values of each strategy are 0.000 for the defender, 0.000 for the analyzer, and 0.000 for the prospector. The significance value seen from column $p>|z|$ is smaller than the alpha value of 5% (0.05), so it can be concluded that there is a significant influence between the independent variable and the dependent variable partially.

The significance value of the environmental uncertainty variable for the defender strategy is 0.006 for the analyzer strategy 0.000 and the prospector strategy 0.000. This value is smaller than the alpha value of 5% (0.05), so it can be concluded that environmental uncertainty variables partially influence the relationship between the independent and dependent variables.

H_{1a}: The *prospector* strategy has a significantly positive and more aggressive effect on tax avoidance. Partial test results (T-Test) in Table 4 show the prospector strategy marks the significance of 0.000, which is smaller than alpha 5% (0.05), and the coefficient value marked vivacious (+), which indicates there is a significant positive relationship between prospector strategies and tax avoidance. Based on the calculated t value (z) regression analysis in Table 4, the prospector strategy has the mark of 14.53, which is greater than the values -10.29 and -33.25 for defender and analyzer strategies, so it can be concluded that the prospector strategy is more aggressive towards tax avoidance and H_{1a} is accepted. The higher the company strengthens its business strategy with prospector strategy, the higher the level of tax avoidance.

The research results are in line with research conducted by (Arieftiara et al., 2017 Higgins et al., 2015 Higgins et al., 2011 Hsu et al., 2018; Husnain & Hashmi, 2021 and Sadjiarto et al., 2020), which provides proof that business strategy has significant positive influence towards tax avoidance. The research results prove that trend prospector companies do higher tax avoidance activities than those using defender and analyzer strategies. This is caused by the cultural aggressiveness owned by the prospector company towards innovation development and markets. Prospectors often change an industry because of the unlimited activity of research and development (Miles & Snow, 1978). The amount of research and development cost the prospector company, of course, will affect the amount of tax paid by the prospector company because these costs are deductible expenses.

This differs from research conducted by Martinez & Ferreira (2019) and Zhang et al. (2022), which shows that business strategy does not significantly influence tax avoidance behavior. The results prove that company defenders tend to be more aggressive in committing tax avoidance than company prospectors. Prospector companies tend to have lower levels of tax avoidance due to high income from market share and great product sales, so the cost of tax avoidance is not significant for the prospector company (Zhang et al., 2022).

H_{1b}: The defender strategy has a significantly negative and less aggressive effect on tax avoidance. Based on the partial test (T-Test) in Table 4, the defender strategy has a mark significance of 0.000, smaller than alpha 0.05 and the coefficient value marked (-), indicating a significant negative relationship between defender business strategies and tax avoidance. Based on the calculated t value (z) regression analysis in Table 4, the defender business strategy has the mark of -10.29, which is smaller than the value of 14.53 for the prospector strategy and greater than -33.25 for the analyzer strategy, so it can be concluded that the defender strategy is less aggressive towards tax avoidance and H_{1b} is accepted. The higher the company strengthens its business strategy with a defender strategy, the lower the level of tax avoidance carried out.

The results align with research by Arieftiara et al. (2019) and Sadjiarto et al. (2020), proving that the defender strategy significantly influences tax avoidance. Defender companies tend to focus more on efficiency cost as a basis of competition and have a narrow product domain compared to prospector companies (Miles & Snow, 1978). Defender company tends to invest more in power sources for technical problems, namely, how to produce and distribute goods or services as efficiently as possible. Defender companies are very focused on asset production, so defender companies have high capital intensity (Miles & Snow, 1978).

Asset investments made by defender companies aim to reduce the company's production costs. The high-production assets owned by defender companies certainly have an asset depreciation value, which can be used as a deductible expense. However, from a tax perspective, calculating asset depreciation has rules by tax provisions. This differs from costs incurred for research and development, which do not have specific rules regarding the amount of deductible expenses the company can recognize.

The results contrast those conducted by Martinez & Ferreira (2019) and Zhang et al. (2022), which provide evidence that companies that use a defender strategy tend to be more aggressive in tax avoidance. This is because, in this research, many companies classified as analyzers need to be more consistent in responding to market competition than defenders.

H_2: **The relationship between business strategy and tax avoidance is moderated by environmental UncertaintyUncertainty.** Partial test results (T-Test) in Table 4, the environmental uncertainty variable has a mark significance for the defender strategy of 0.006; the analyzer strategy is 0.000 and the prospector strategy of 0.000; this value is smaller than alpha 0.05. The coefficient value obtained from the environmental uncertainty variable for the defender strategy is negative (-), the analyzer strategy negative (-), and the prospector strategy positive (+); therefore, environmental UncertaintyUncertainty has a significant negative influence (weakening) the relationship between defender strategies as well as analyzer strategies with tax avoidance. Meanwhile, environmental Uncertainty has a significant favorable influence (strengthening) relationships between these variables for the prospector strategy relationship with tax avoidance. Therefore, environmental Uncertainty has a moderating role (strengthening and weakening) in relationships between business strategies with tax avoidance and $H_{2, which}$ is accepted.

The role of the moderation variable environmental uncertainty is in line with the influence of business strategy variables on tax avoidance. A business strategy influences significantly positively, namely a prospector strategy, moderated by environmental uncertainty variables that have a positive relationship direction. Defenders and analyzers have a significant negative influence on tax avoidance, moderated by environmental uncertainty variables that have a negative relationship direction. This is because environmental UncertaintyUncertainty is a contingency factor in decision-making (Venkatraman et al., 1990).

An uncertain environment will result in significantly increased planning activity. Environmental UncertaintyUncertainty is a situational condition that can influence planning activities carried out by companies, including business strategy decision-making and company tax avoidance activities. Based on contingency theory, a business strategy that is appropriate to its environment will produce different output from a strategy that is not appropriate (Otley, 1980).

CONCLUSION

This research aims to analyze the effect of implementing a company's business strategy on the level of tax avoidance with environmental Uncertainty as a moderating variable. The model used is

panel data regression with a random effect model testing. This research generates three salient findings. First, the prospector strategy has a significantly positive and more aggressive influence on tax avoidance than the defender and analyzer strategies. Second, the defender strategy has a significantly negative and less aggressive effect on tax avoidance than the prospector and analyzer strategies. Third, the relationship between business strategy and tax avoidance is moderated by environmental Uncertainty because it can strengthen the relationship between a prospector and tax avoidance and weaken the relationship between defender and analyzer strategies and tax avoidance.

The results have several implications for company managers and regulators, such as the Directorate General of Taxes. Company managers, especially in developing countries like Indonesia (generally, environmental Uncertainty is higher in developing countries than in developed countries), must consider contingency factors when making decisions regarding business strategies and tax avoidance activities. Furthermore, the results show that company managers must pay attention to the impact of the business strategy on tax avoidance while also considering environmental uncertainty contingency factors that can influence these decisions to provide optimal results for the company.

The Directorate General of Taxes, as a regulator, needs to understand the conditions of environmental UncertaintyUncertainty to issue various policies that can ease the burden on taxpayers to remain in business, especially when facing turbulent economic conditions, so that it can prevent companies from carrying out illegal practices which in the end can reduce the number of tax evasion and increase tax ratio.

This research has several limitations. First, the observation period is limited, only four years from 2019-2022. Many companies have negative profits before tax and outlier data, so the sample is significantly reduced. Second, the research sample only comprises manufacturing sector companies listed on the Indonesia Stock Exchange. Due to the limited availability of data on companies not listed on the Indonesia Stock Exchange, this research only uses data on listed companies to measure market and competitive Uncertainty. Third, in measuring tax avoidance, this research only uses the Cash Effective Tax Ratio (CETR) as a proxy for tax avoidance.

As a better contribution, future research should use a more extended observation period to see more prolonged effects. Future research could add samples from non-financial companies other than the manufacturing industry and use data from companies not listed on the Indonesia Stock Exchange to have broad coverage in measuring market and competitive Uncertainty. Further research can use proxies such as the Book Effective Tax Ratio, long-run CETR, and Book Tax Difference to measure tax avoidance. If there are other better measurements, they can be used to obtain more varied results.

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