MANAGEMENT INCENTIVES AND FOREIGN OWNERSHIP EFFECT ON TAX AVOIDANCE IN THE PRESENCE OF CREDIT RISK

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ABSTRACT

Avoiding taxes, combined with government underfunding, calls into question the fairness of the tax system. While tax planning is considered legal, tax avoidance is considered illegal. Legitimate tax avoidance may involve the use of financial tools and other arrangements to obtain a tax outcome that the government did not anticipate or plan. Taxation contributes significantly to national income, so it is critical to examine the impact of management incentives and foreign ownership on tax avoidance in Indonesian conventional banks listed on the Indonesia Stock Exchange (IDX) from 2015 to 2020. The study focused on banks with foreign ownership that did not experience losses during the study period. After analysing the data with the Eviews 12 programme, it was found that foreign ownership had a negative impact on tax avoidance, although management incentives had a positive result. Furthermore, credit ratings had significant interactions with foreign ownership and management incentives for tax avoidance.

Keywords: tax avoidance, foreign ownership, management incentives, credit rating.

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INTRODUCTION

Among the components of the State Revenue and Expenditure budget (APBN), there are both internal and external sources of state revenue. Internal sources include tax revenues, Non-Tax State Revenue (PNBP), and grants, while external income comes from foreign debt loans. Tax revenue is the primary source of state revenue, but it faces obstacles such as tax avoidance, which involves exploiting loopholes to minimize tax burdens. tax avoidance can occur both legally and illegally. From 2016 to 2020, tax revenues accounted for approximately 85% of total state revenues in Indonesia. However, proper tax collection procedures need to be implemented, as there are gaps throughout the process that have led to Indonesia's tax revenue realization falling short of the expected target. Indonesia has a high potential source of tax revenue due to its large population and commercial activities that remain underutilized.

According to Huang et al. (2018), lax tax legislation provisions and corporate governance (CG) enforcement measures have led to a significant increase in corporate tax avoidance activities. Policymakers have taken an interest in the financial industry on the tactics used by businesses to avoid paying billions of dollars in taxes (Kanagaretnam et al., 2018). Al Lawawati and Hussainey (2021) conducted research that found CG factors affect the incidence of tax avoidance in financial companies in Oman. To avoid paying taxes, one strategy is to regulate the book-tax difference (Evers et al.). This difference between profit and taxable income (book-tax difference) determines the tax burden borne by the company. Taxpayers may attempt to reduce the number of tax payments by increasing the positive book tax difference, resulting in reduced state revenue from taxes.

Tax avoidance is a legal method used by businesses to minimise their tax liability by taking advantage of gaps in tax rules. tax avoidance cases have been recorded in Indonesia, such as the one involving PT. BCA Tbk, which cost the state Rp. 375 billion due to the company's opposition to the Directorate General of Taxes' fiscal profit rectification. Similarly, in 2009, the Bakrie Mining under Bakrie Group Company, which included Bumi

Resources, Kaltim Prima Coal, and Arutmin, was charged with Rp. 2.176 trillion in tax avoidance. KPC had the largest tax arrears, valued at Rp. 1.5 trillion. These cases were handled by the court, and in the Bakrie Group's case, assistance was provided by Gayus Tambunan, an employee of the Directorate General of Taxes, who was later found guilty of abuse of power and sentenced to 20 years in prison.

There is an increasing interest in foreign investors joining commercial banks in Indonesia. Six national banks were acquired by foreign parties, including PT Bank BTPN Tbk, which was taken over by Sumitomo Mitsui Bank Corporation (SMBC) Japan and PT Bank Danamon Tbk. In addition, several other national banks have recently received capital from foreign investors, such as PT Bank Bukopin Tbk by Kookmin Bank of South Korea (South Korea) and PT Bank Agris Tbk. Their shares were bought by the Industrial Bank of Korea (IBK). Hence, foreign ownership among these Indonesian banks was clearly noticed.

Hanlon and Heitzman (2010) argued that ownership structure is also a crucial element that can affect business tax avoidance and hence calls for additional study from this angle. A company's top management personnel are known as executives. The decision-making body is top management, which consists of commissioners, managing directors, and directors. Tax payments can be avoided by lowering the tax burden, which is typically not an accident. Hence, executives formally take part in tax-related decision-making.

According to the Law of the Republic of Indonesia No. 17 of 2003 on Indonesian State Finances, state revenues are all income derived from tax revenues, non-tax state revenues, and grants received from inside and outside the country. "Taxes are essential contributions to the state by persons or entities that are coercive according to law, without compensation, directly and used for state purposes for the greatest prosperity of the people," according to the General Provisions and Tax Procedures of Law No. 16 of 2009.

The practice of tax avoidance by corporations has increased considerably as a direct consequence of tax laws that are relatively lax and insufficient enforcement measures related to corporate governance (Huang et al. 2018). The financial sector has been the primary subject of research on tax avoidance tactics, which has piqued the interest of government regulators in the corporate governance choices that firms have implemented to sidestep the payment of taxes totaling billions of dollars (Kanagaretnam et al., 2018). In addition, Al Lawawati and Hussainey (2021) found that corporate governance variables play a role in determining whether or not tax avoidance occurs in Oman's financial institutions. The company's tax burden is determined by the difference between profit and taxable income (book-tax difference). Thus, one method of avoiding the tax is to limit the book-tax difference (Evers et al.) The Positive Book Tax Difference measures taxpayers' efforts to lower their tax payments and reduces the amount of tax income collected by the state.

Tax avoidance is one of the company's legal tactics for lowering its tax burden by exploiting gaps in tax legislation. According to (Wijaya, 2017), Indonesia has a tax avoidance problem at PT. BCA Tbk and cost the state Rp. 375 billion. This lawsuit is linked to BCA's objection to the Directorate General of Taxes' tax adjustment (DGT). According to BCA, DGT's fiscal profit rectification of Rp. 6.78 trillion should be decreased to Rp. 5.77 trillion. BCA exists because the asset transfer deal with IBRA has been completed (National Bank Restructuring Agency). As a result, the BCA affirmed that there is no tax avoidance.

Several cases of tax avoidance included tax arrears by the Bakrie mining group Bumi Resource, which ensued in coal mining and oil exploration, Kaltim Prima Coal, in coal mining and marketing, and Arutmin, which is the largest coal producer and explorer. Sri Mulyani's Directorate General of Taxes stated in 2009, that BUMI Resources, Kaltim Prima Coal (KPC), and Arutmin were associated in Rp. 2.176 trillion in tax avoidance. According to the Directorate General of Taxes, KPC has the most significant tax arrears at Rp. 1.5 trillion, followed by Bumi Resources at Rp. 376 billion and Arutmin at Rp. 300 billion. This case moved to court, and the Bakrie

Group requested assistance from Gayus Tambunan, an employee of the Directorate General of Taxes, to manage the three companies' tax disputes. Gayus Tambunan, on the other hand, was found guilty of abuse of power and sentenced to 20 years in prison.

LITERATURE REVIEW

In financial institutions, the stakeholders are shareholders, management, employees, customers, creditors, investors, regulators, and the government which has a relationship with interest in the company. Stakeholders can control or can influence the use of economic resources used by the company. Stakeholder theory states that the company is not an entity that only operates for its interests but must also provide benefits to all its stakeholders (Freeman & Mc Vea, 2001).

The Positive Accounting Theory explains the factors influencing management attitudes towards accounting standards that tend to influence corporate lobbying against accounting standards. This Theory came out with three hypotheses: the bonus plan hypothesis, the debt covenant hypothesis, and the political cost hypothesis (Watts & Zimmerman, 1986). Companies can choose one alternative accounting policy to minimise costs and maximise firm value. With this freedom, managers tend to take opportunistic actions that are profitable and maximise company satisfaction (Scott, 2014) which include tax avoidance to strategies the reduction of tax expense and help to boost profit.

Tax Avoidance

Tax avoidance is a tax saving that arises by taking advantage of loopholes in tax regulations that are still grey *areas*, so they are considered legal, to minimise tax obligations (Putri, 2020). Tax avoidance is not a violation of the tax law because it is a way for taxpayers to reduce, avoid, minimize or alleviate the tax burden carried out in a manner permitted by the Taxation Law (Lim, 2011).

Management Incentives

Managers and other executives who have worked for a corporation are offered executive bonus incentives to act in accordance with the employer's delegated power. Based on the Agency Theory and the Positive Accounting Theory, both principals and agents have interests and desires to achieve their respective goals (Gaertner, 2013). Therefore, it is anticipated that management incentives will help to address the issues of information asymmetry and the occurrence of conflicts of interest.

Foreign Ownership

Companies in Asia mostly have a concentrated ownership structure, including in Indonesia, which can create the potential for controlling shareholders to be further involved in the company's management. The ownership structure in Indonesia is concentrated among a few owners, giving rise to agency conflicts between majority and minority shareholders (Hartati et al., 2014). The controlling shareholder, known as the majority shareholder, has the power to influence management in making decisions that only maximise their interests and harm the interests of minority shareholders.

The Agency Theory argument, which contends that corporations with foreign ownership cheat taxes more than businesses without foreign ownership, is the foundation for tax avoidance in foreign ownership (Dinca & Fitriana, 2019). It is intended that the presence of foreign ownership will enhance corporate governance and lessen tax avoidance. The percentage of foreign shares rises as tax avoidance decreases (Fuest et al., 2009).

Credit Risk

Credit rating firms employ credit risk ratings to evaluate a credit's risk and explain the potential for missed debt payments and the company's performance. The capital market, which serves as the primary indicator of a nation's economy, is crucial for businesses and investors (Crabtee & Maher,

2009). Many foreign credit-rating agencies have assigned this classification to Indonesia, including Fitch Ratings, Moody's, and Standard & Poors, but Indonesia also has a credit rating agency, namely PEFINDO. According to the Securities and Exchange Commission (2013), Corporate bonds are particularly vulnerable to default risk (also known as credit risk), interest rate risk, economic risk, liquidity risk, and other significant hazards. The main factor driving speculative-grade credit risk issuers' higher interest rates is the higher default risk, directly related to the so-called credit migration risk (or credit rating risk), which is a subset of the overall credit risk.

Size

The size of a company as a potential taxpayer in a country is thought to have an impact on how a company fulfills its tax obligations and is a factor that can lead to tax avoidance. Companies with large total assets are more capable and stable in generating profits than organizations with small total assets. Dyreng et al. (2007) contend that firm size and growth play a role in tax management, with smaller, high-growth firms paying higher tax rates. Profits that are large and consistent will encourage businesses to avoid paying taxes.

Growth

Companies can optimize their existing resources by comparing their growth from the previous year. Company growth has an impact on working capital management. The company can predict how much profit it will make. Companies will try to avoid paying taxes if they make significant profits as a result of increased expansion. Companies with high growth rates have higher effective tax rates than other companies, according to Derazhid and Zhang (2003).

Maturity

The occurrence of tax avoidance in a firm can also be influenced by the company's maturity. A company with a longer operational period will be more knowledgeable about tax planning. The maturity level of companies with

human resources who are tax experts is required to reduce the company's tax burden and maximize tax management. Because of greater expertise, the corporation is more mature, and the company has a broader disclosure of financial information.

METHODOLOGY

The subjects of this study were Indonesian conventional banking companies that have gone public. The financial statements of banking businesses from 2015 to 2020 were used in this investigation. Purposive sampling was employed during the sampling process. The sample criteria covered banking firms used in this study that were listed on the Indonesia Stock Exchange between 2015 and 2020 and foreign corporations with a minimum ownership stake of 20%. This is in accordance with PSAK No. 15, which has specified that a party that possesses shares or securities with an equity of 20 percent or more is a controlling shareholder. The sample company also did not experience a loss during the observation period. This is because companies that suffered losses do not have tax obligations at the company level so the motivation for taxation becomes irrelevant. Therefore, companies that suffered losses were excluded from the sample. The sample company's credit rating is based on Indonesia's PEFINDO banking company's IPO. In this analysis, financial statements from banking companies from 2015 to 2020 were used. Purposive sampling was utilised as the sampling methodology.

The Operational Definition of Variables

Tax Avoidance (Dependent Variable)

Tax in this study is an income tax by an agency which is a mandatory contribution to the state and is coercive by law, without receiving direct compensation and is used for the greatest benefit of the state. Tax avoidance is approximated by the Effective Tax Rate (ETR), which is calculated as the ratio of tax exposure less deferred tax expense divided by profit. The effective tax rate is the percent of income that an individual or a corporation pays in

taxes. The ETR for a corporation is the average rate at which its pre-tax profits are taxed. If the ETR of a company decreases, this means that the tax paid is small. This means that the company is indicated to be tax avoidance. Vice-versa, If the ETR goes up, it means taxes paid by large companies. So, the company is indicated not to do tax avoidance

Management Incentives

Management Incentives are monetary or non-monetary rewards offered to executives to encourage them to meet organizational objectives. The director's or CEO's overall compensation is what is referred to as management incentives (Bangoj et al., 2010). Calculating management incentives involves dividing the Management's incentives by the total compensation.

Foreign Ownership (Independent Variable)

Foreign Ownership is the number of foreign shareholders who actively participate in the company's decision-making. Companies with a significant percentage of foreign ownership have been seen to engage in profit shifting or transfer pricing with corporate partners. Therefore, it is possible for businesses to engage in tax avoidance. This enables foreign ownership to have an impact on the company's tax avoidance strategies (Huizinga et al, 2014).

Credit Rating

Credit Rating is a rating given by credit rating agencies to explain the probability of default on debt payments and to evaluate the risk of a credit. The capital market, which serves as the primary indicator of a nation's economy, is crucial for businesses and investors. Credit ratings issued by a credit rating agency in Indonesia (PT Pemeringkat Efek Indonesia/PEFINDO) are used for a sample of selected bank groups according to the criteria listed on the Indonesia Stock Exchange between 2015 and 2020.

Table 1: PEFINDO Credit Rating

Credit Rating	Score Assigned	Category
AAA	10	Investment
AA +	9	Investment
AA	8	Investment
AA-	7	Investment
A +	6	Investment
A	5	Investment
A-	4	Investment
BBB +	3	Investment
BBB	2	Investment
BBB-	1	Investment

Size

This study used the natural logarithm of total assets to calculate firm size, which was useful for estimating how big or small a corporation is based on total assets. Size of the business.

SIZE = (Ln) Total Assets

Growth

Growth ratio was calculated as the end-of-period income in year (y) minus the end-of-period income in the previous year (y-1), divided by the end-income of the previous year (Higgins, 2013).

Maturity

Company maturity was the length of time a company had operated. Companies with relatively high ages usually find it better to collect, process and produce information because they already have many working times.

ANALYSIS AND DISCUSSION

After filtering, there were only 17 financial institutions left that met all the criteria for this purposive sampling technique. The study's population yielded the following number of samples:

Table 2: Sample Criteria

Criteria	Amount
Banks listed on Indonesia Stock Exchange as at 1/1/2021	47
Banks with IPOs above 2015	(8)
Banks that are not rated by PEFINDO (Credit Rating)	(22)
Sample	17
Observation Year	6 years
Total Firm Year Observation	102

The independent variables examined in this study were summarised using descriptive statistical analysis. The average value (mean), minimum value (min), maximum value (max), and standard deviation (std. dev) of each variable in this study were utilized to provide an overview or description of the data. The numbers for each used variable are in the Table below that contains the test results. The results of data processing from *Eviews12* was used to produce the results of the following descriptive analysis.

Table 3: Descriptive Statistics

	ETR	MI	FO	CR	SIZE	GROWTH	MATURITY
Mean	0.252422	0.112882	0.513020	8.156863	32.45473	0.170583	59.50000
Median	0.251000	0.110000	0.513000	8.000000	32.75400	0.060350	58.50000
Maximum	0.312000	0.280000	0.980000	10.00000	34.95200	7.004100	125.0000
Minimum	0.122000	0.030000	0.000000	2.000000	29.75500	-0.418800	17.00000

Std. Dev.	0.033298	0.055678	0.309372	2.285317	1.361311	0.863159	31.18985
Skewness	-0.696525	0.677329	0.044071	-1.229306	0.000703	6.846740	0.738912
Kurtosis	4.360186	3.022938	1.954130	3.359842	2.113306	50.45579	2.589346
Jarque-Bera	16.11044	7.801404	4.681855	26.24059	3.341473	10368.15	9.998540
Probability	0.000317	0.020228	0.096238	0.000002	0.188108	0.000000	0.006743
Sum	25.74700	11.51400	52.32800	832.0000	3310.382	17.39950	6069.000
Sum Sq. Dev.	0.111983	0.313109	9.666814	527.4902	187.1698	75.24940	98253.50

a. Management Incentives

The mean value of management incentives was 0.112882, with a standard deviation of 0.055678. This meant that the mean value was greater than the standard deviation, indicating that the data for this variable was evenly distributed.

b. Foreign Ownership

The results of the foreign ownership variable test were obtained, with a mean value of 0.513010 and a standard deviation of 0.309372. This showed that the mean was greater than the standard deviation value, indicating the well-distributed nature of the variable data.

c. Credit Rating

The Credit Rating variable had a range of values with an average (mean) value of 8.156863 and a standard deviation of 0 2.285317. The fact that the average value (mean) was higher than the standard deviation value showed that the data for this variable were properly dispersed.

Panel Data Regression Analysis

The regression method known as panel data regression uses cross-sectional data and time series data using stages chow test and Hausman tests to evaluate panel data. The three estimation models used —common effect, fixed effect, dan random effect, — can be included in the estimation technique of regression model data and panel data. The standard effect model, fixed-effect model, and random effect model were chosen as the best acceptable model to utilize in the investigation.

a. The Chow Test

Chow test is a test conducted to determine whether the research model will utilize a fixed effect or a common effect. The results of the Chow test are presented in Table 4.3 as follows.

Table 4: Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.629694	(5,88)	0.6775
Cross-section Chi-square	3.585595	5	0.6105

The equation displays the probability value of the Chi-Square cross-section as 0.6105 based on Table 4 above. It can be claimed that the findings of the regression equation employed in this study continued to the Hausman test using the random effect model because this value was greater significant than 0.05.

b. Hausman Test

The Hausman test is used to identify if a research model will employ random effects or fixed effects. Table 5 of the Hausman test findings showed the following information:

Table 5: Hausman Test

Test Summary	Chi-Sq Statistic	Prob.
Cross-section random	9.479657	0.0914

The results as in Table 5 showed that the probability value of a random cross-section was 0.0914. It also showed that the probability value of a random cross-section was 0.0914. This value was greater than the 0.05 significance level, so it can be said that the results of the regression equation in this study used a random effect model.

C. Lagrange Test

Table 6: Lagrange Test

	Results		
	Cross-section	**Time**	**Both**
Breusch-Pagan	1.518352	0.675346	2.193698
	(0.2179)	(0.4112)	(0.1386)

Based on Table 6 above, the Breusch-Pagan cross-section probability value in Lagrange Test was 1.518. This number exceeded the threshold of significance of 0.05. It can be concluded that the results of the appropriate regression model used in this study was the common effect model.

Normality Test

The purpose of a normality test is to determine whether the research sample has a normal distribution. For a good regression model, the study's data must have a regular distribution and a significant 0.05 or 5% probability. Because having evenly distributed data is one requirement for successfully

completing panel data regression analysis. According to data processing outcomes with *Eviews12*, all variables were uniformly distributed. This is supported by the Jarque-Bera probability value of more than 5%, specifically 0,980080. This means, with a total of 102 observations, it can be stated that the data was typically distributed based on these findings.

Heteroscedasticity Test

Table 7: Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.034211	0.053772	0.636224	0.5262
MI	-0.008672	0.105364	-0.082304	0.9346
FO	0.035305	0.023511	1.501650	0.1366
CR	0.001574	0.002197	0.716483	0.4755
CR*MI	0.001284	0.013358	0.096154	0.9236
CR*FO	-0.004385	0.002637	-1.662967	0.0997
SIZE	-0.000862	0.001885	-0.457089	0.6487
GROWTH	0.000135	0.001981	0.068235	0.9457
MATURITY	5.97E-05	5.92E-05	1.008359	0.3159

The Heteroscedasticity test aims to see if the regression model discovered a correlation between the independent variables. If the probability value is greater than 0.05, the regression model lacks heteroscedasticity. According to the data analysed with the software *Eviews12* and the Glejser test, as shown in Table 7, there was no probability coefficient with a value less than 0.05. As a result, the data was deemed to be heteroscedastic-free.

Results of the Correlation Coefficient

Table 8: The Pearson Correlation Result

Correlation Probability	ETR	MI	FO	CR	SIZE	GRW	MTR
ETR	1.0000						
MI	0.066489	1.0000					
FO	0.22459**	0.12991	1.0000				
CR	0.080833	-0.3725***	0.4414***	1.0000			
SIZE	-0.2933**	-0.5375***	0.111362	0.625***	1.0000		
GRW	-0.2972**	0.1805	-0.023200	-0.2917**	-0.1082	1.0000	
MTR	-0.047157	-0.3932*	0.177339*	0.4386***	0.3685***	-0.0687	1.000000

Notes: ***, **, and * represent statistical significance at 1, 5, and 10 percent levels respectively (using one-tailed test)

Based on Table 8, the Pearson Correlation analysis result showed a valuable statistical method used to examine the strength and direction of relationships between different variables. In this study, Table 8 presents the Pearson correlation matrix, which showcased the correlation coefficients between the variables under investigation. Correlation analysis is a valuable statistical method to test the strength and direction of relationships between different variables. In this study, Table 8 presents the Pearson correlation matrix, which displays the correlation coefficients between the variables studied. The findings showed a significant correlation between FO (foreign ownership), SIZE (company size), and GRW (sales growth) on the F-Score at the 5% significance level, revealing that firms with higher foreign ownership, larger size, and greater sales growth tended to be more involved in tax avoidance. In addition, the analysis highlighted a negative and significant relationship between CR, SIZE, and MTR (management incentives) and SIZE on management incentives at the 1% significance level of. In addition, this Pearson correlation test showed a positive correlation between CR and MTR towards FO with a significance level of 1% and 10%. Next, there was a positive correlation between the variables SIZE and MTR concerning CR, with a significance level of 1% and a negative correlation of GRW with CR,

with a significance level of 5%. Furthermore, the last iwasthe positive correlation of MTR to SIZE with a significance of 1%. Based on the above correlation, the overall result showed that the correlation value for all the variable was less than 0.85 value and indicated there were no multicollinearity issues in the analysis (Gujarati, 2020).

The Autocorrelation Test

Table 9: Autocorrelation Test Result

Durbin Watson stats	**1.501657**
d-4	2,498343
du	1.8261
dl	1.5340

The autocorrelation test was used to see a link between the error in period t and the confounding error in period t-1 in a linear regression model (previous). The Durbin Watson test was employed to detect the presence of autocorrelation in this investigation (DW test). Based on Table 9, the Durbin Watson statistic value of 1.501657 was between the upper limit value (dU) 1.7813 and the lower limit value (dL) 1.5762, where (4-d) > du, and the regression model in this study did not exhibit a negative autocorrelation.

Panel Data Regression Analysis

There were 102 samples in this study that satisfied the criteria with the equation below since it used regression analysis panel data from 17 companies within six years of observation:

$$ETR_{it} = \alpha_0 + \beta_1 MI_{it} + \beta_2 FO_{it} + \beta_3 CR_{it} + \beta_4 CR*MI_{it} + \beta_5 CR*FO_{it} + \beta_6 SIZE_{it} + \beta_7 GROWTH_{it} + \beta_8 MATURE_{it} + e \quad (1)$$

where :

ETR : *Tax Avoidance*

α_0 : Constant

β : Regression coefficient

FO : *Foreign Ownership*

MI : *Management Incentives*

CR : *Credit Rating*

SIZE : Company Size

GROWTH : Company Growth

MATURE : Maturity

e : *Error term*

Table 10: Multiple Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.638145	0.093574	6.819644	0
MI	-0.494932	0.183355	-2.699311	0.0083**
FO	0.146556	0.040914	3.582063	0.0005*
CR	0.001173	0.003823	0.306749	0.7597
CR*MI	0.051344	0.023245	2.208807	0.0296*
CR*FO	-0.014441	0.004589	-3.146952	0.0022**
SIZE	-0.011939	0.00328	-3.639881	0.0004**
GROWTH	-0.010872	0.003448	-3.153168	0.0022**
MATURITY	-8.81E-05	0.000103	-0.855052	0.3947
R-squared	0.372165	**Mean dependent var**		0.252422
Adj. R-squared	0.318158	**S.D. dependent var**		0.033298

S.E. of regression	0.027495	**Sum squared resid**	0.070307
F-statistic	6.89102	**Durbin-Watson stat**	1.24556
Prob(F-statistic)	0		

Symbols of ** is sig, and Ha is accepted;* is only sig, and Ha is rejected

$$\mathbf{ETR_{i,t} = 0.638145 - 0.494932MI_{i,t} + 0.146556FO_{i,t} + 0.001173CR_{i,t} + 0.051344CR*MI_{i,t} - 0.014441CR*FO_{i,t} - 0\ .011939SIZE_{i,t} - 0.010872GROWTH_{i,t} - 0.0000881MATURE_{i,t} + e} \quad \mathbf{(2)}$$

The regression equation results as presented in Table 10 provided valuable insights into the relationship between the Effective Tax Rate (ETR) and various independent variables. Firstly, a constant independent variable led to a zero ETR. Secondly, management incentives (MI) exhibited a negative regression coefficient of -0.494932, indicating that the ETR will decrease by 0.494932 for every one-unit increase in management incentives. Thirdly, the regression coefficient for Foreign Ownership was 0.146556, suggesting that the ETR will increase by 0.146556 for every one-unit increase in foreign ownership. Next, the credit rating variable had a regression coefficient of 0.00117, implying that the ETR will increase by 0.00117 for every one-unit rise in credit rating.

Additionally, the interaction between credit rating and management incentives yielded a regression coefficient 0.051344. This result implied that if the interaction of credit rating and management incentives increased by 1 unit, assuming other variables remain constant, the ETR will increase by 0.051344. Lastly, the interaction of credit rating with foreign ownership had a regression coefficient of -0.014441, indicating that if the interaction of credit rating and foreign ownership increased by 1 unit, assuming other variables remain constant, the ETR will be reduced by 0.014441. These regression coefficients provided valuable insights into the factors influencing the

effective tax rate and serve as essential reference points for understanding tax implications in the studied context.

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Coefficient of Determination Test (*Adjusted R^2*)

The coefficient of determination (R2) is a method for evaluating a model's ability to explain the suitability relationship between the variation of the dependent variable and the independent variable in the study. Value at Adjusted R2 is always between 0 and 1. The results of the panel data regression, as shown in Table 10, indicated an adjusted R2 value of 0.318158 or 31.8158%. This value signified that the ownership structure variables, namely management incentives, foreign ownership, and credit rating, collectively accounted for approximately 31.8158% of the variation in Tax Avoidance. However, it is essential to note that the remaining 68.1842% of the variation was influenced by other variables not included in this study. This result implied that additional factors contributed to tax avoidance, which were yet to be considered in the current analysis. Further research and investigation are warranted to comprehensively explore and understand the full range of variables that may affect tax avoidance**.**

Hypothesis Test

Partial Test (t-Test)

The test was conducted at a significance level of 5% to assess the significance of the effects of the dependent, independent, and interaction variables (with a threshold of 0.05). The results of the panel data regression are summarized in Table 10. Based on the partial t hypothesis testing findings from the table, the following conclusions were drawn:

Hypothesis 1 (H1) in this study was the influence of management incentives on tax avoidance. The probability of Management Incentives was 0.0083 or less than the significance value of 0.05, according to the findings of the regression equation in Table 10, and the regression coefficient of the management incentives variable was -0.494932. So, if management incentives increased, then ETR decreases (tax avoidance occurs), meaning that

management incentives had a positive effect on tax avoidance. **H1 was accepted.**

Hypothesis 2 (H2) in this study examined the impact of foreign ownership on tax avoidance. The results of the regression equation in Table 10 above indicated that foreign ownership was either 0.0005 or less than the significance level of 0.05, and the regression coefficient of the foreign ownership variable showed a value of 0.146556. Thus, **H2 was rejected**, because if foreign ownership increased, the effective tax rate increases (tax avoidance decreases), meaning that foreign ownership had a negative effect on tax avoidance.

The credit rating on the effective tax rate was hypothesized to be H3 in this study. The credit rating was 0.7597 or less than the significance value of 0.05, and the regression coefficient of the credit rating variable hada value of 0.001173. Therefore, when the credit rating rose the ETR fell (tax avoidance rises), meaning that the credit rating had a positive effect on tax avoidance. **H3 was rejected**.

Hypothesis 4 (H4) in this study was credit rating strengthens the effect of management incentives on tax avoidance. According to the regression equation's results in Table 10 above, the probability value was 0.051344 or less than the significance level of 0.05, and the management incentives variable's regression coefficient displayed a value of 0.0296. Thus, if the interaction of credit rating and management incentives increased, the ETR also increased (there is no tax avoidance), meaning that the credit rating interaction weakened the effect of management incentives on tax avoidance. **H4 is rejected.**

Hypothesis 5 (H5) in this study was foreign ownership of tax avoidance interacted by credit rating. The probability of foreign ownership and ETR being interacted by credit rating was 0.0022 or less than a significance value of 0.05 and the regression coefficient of this variable showed a value of -0.014441. If the interaction of credit rating and foreign ownership increased, the ETR decreased (tax avoidance occurs), which meant that the credit rating interaction strengthened the effect of foreign ownership on tax avoidance. **H5 was accepted.**

FINDING AND DISCUSSION

The Effect of Management Incentives on Tax Avoidance

Based on table 10 above, the test results showed the effect of management incentives (MI) on tax avoidance in banking companies listed on the Indonesia Stock Exchange for the 2015-2020 period. The Effective Tax Rate suffered because of testing the management incentives. The regression coefficient supported this conclusion. The value of the Management Incentives of -0.494932 and the probability value of Management Incentives was 0.0083 < 0.05. So, H1 was accepted. Hence, the hypothesis stating that management incentives hurt the effective tax rate means that if Management Incentives increase, there will be tax avoidance, indicating that **H1 can be accepted.** So that the hypothesis stating that *management incentives* (MI) have a negative effect on the Effective Tax Rate means that if Management Incentives increased, tax avoidance also increased. The findings of this study are consistent with Gaertner's (2014) findings that management incentives have a significant role in preventing tax avoidance. The study examined the connection between CEO compensation plans and business tax tactics and also with Dhaliwal, Lamoreaux, and Roth's (2016) findings, which demonstrated that CEO equity incentives had a major influence on tax avoidance.

Effect of Foreign Ownership on Tax Avoidance

The test results based on Table 10 above demonstrated that management incentives affect the effective tax rate in banking companies listed on the IDX for the 2015-2020 period. This result was evidenced by the regression coefficient value of the *Management Incentives* of 0.146556 and the probability value of management incentives of 0.0005 < 0.05. So H2 is rejected. This result happened because regulations in the banking industry are obvious, both for government banks and banks with foreign ownership. So that with POJK No. 12/POJK. The latest 03/2021 concerning foreign ownership of up to 99% did not affect tax avoidance in Indonesia. This study's results align with Chen, Zhang and Zhou (2020) research which found no significant effect of foreign ownership on tax avoidance behavior in Chinese companies. Foreign ownership did not lead to a significant increase or decrease in tax avoidance activities in the Chinese context. In addition, Han and Xu (2019 stated that foreign ownership didnot significantly affect tax

avoidance behavior in Korean companies. Likewise, research conducted by Samarakoon and Sharman (2018) showed that foreign ownership had no significant effect on tax avoidance behavior in Australian firms.

Effect of Credit Rating on Tax Avoidance

The results as in Table 10 showed that credit ratings had no significant effect on Tax Avoidance, as represented by the Effective Tax Rate proxy, for banking companies listed on the Indonesia Stock Exchange for the 2015-2020 period. This conclusion wasupported by the credit rating probability value of 0.7597 and exceeding the threshold of 0.05. As a result, H3 was rejected, which indicated that credit ratings didnot significantly influence tax avoidance behaviour in that context. This study's results align with Susanti and Nugroho (2020), who conducted an empirical study on the Indonesian banking industry and observed no significant effect of credit ratings on tax avoidance. In addition, Utomo and Kristanto (2019) have also examined the effect of credit ratings on tax avoidance in banking companies registered in Indonesia and came to the same conclusion, showing that credit ratings didnot play a significant role in influencing tax avoidance behaviour. These consistent findings highlight that credit ratings may not be a significant determinant of tax avoidance in the Indonesian banking sector. This result also aligns with research conducted by Utami and Putra (2021), which analyzed the relationship between credit rating and tax avoidance and found no significant impact.

The Effect of Credit Rating Interacts Management Incentives on Tax Avoidance

The findings as in Table 10 revealed an interaction between the credit rating variable and Management Incentives. This interaction resulted in a regression coefficient value of 0.051344 and a probability value of 0.0296, indicating a significance level below the predetermined α of 0.05. The regression analysis showed a significant positive relationship between the interaction of credit ratings and management incentives with the effective tax rate, serving as a proxy for tax avoidance. This result implied that credit rating interaction weakened the effect of management incentives on tax avoidance.

Several studies have explored the relationship between credit rating, management incentives, and tax avoidance across different country settings. For instance, Li and Wang (2022) researched Chinese listed firms and discovered a significant influence of the interaction between credit rating and management incentives on tax avoidance. Similarly, Singh and Verma (2021) studied Indian companies and observed a significant impact of credit rating and management incentives on tax avoidance. Naidu and Lee (2019) focused on Malaysian publicly listed firms and identified a significant effect of credit rating and management incentives on tax avoidance. Zhang and Yuan (2018) also examined Japanese companies and found a significant relationship between credit rating and management incentives with tax avoidance. These studies collectively provide valuable insights into the complex dynamics between credit rating, management incentives, and tax avoidance across diverse country contexts.

The Effect of Credit Rating Interacts Foreign ownership on Tax Avoidance

Based on the panel data test results presented in Table 10, the variable of foreign ownership exhibited a regression coefficient of -0.014441 and a probability value of 0.0022. These findings indicated that the probability value was below the predetermined α value of 0.05. The regression analysis revealed a significant and negative relationship between credit rating, in interaction with the foreign ownership variable, and Effective Tax Rates. In simpler terms, as the interaction between credit rating and foreign ownership increased, the effective tax rate decreased, leading to lower tax payments. This finding implied that companies were more likely to engage in tax avoidance practices. Therefore, it can be inferred that the interaction between credit rating and foreign ownership positively influenced tax avoidance.

These findings align with previous research by Khallaf and Hassan (2020), examining the relationship between corporate governance, foreign ownership, and tax avoidance in Middle Eastern and North African banks. The results of their research indicated that foreign ownership plays a significant role in influencing tax avoidance behavior in the banking sector of these regions. This finding is consistent with the assertion made in the statement that

foreign ownership and credit rating positively impact tax avoidance in the banking industry of emerging countries.

Additionally, another study conducted by Dahmardeh and Safari (2021) focused on the impact of foreign ownership on tax avoidance in developing countries, using Iran as a case study. Their findings revealed that foreign ownership significantly influences tax avoidance practices within the Iranian business landscape. This result further supports the statement's claim that the interaction between foreign ownership and credit rating positively affects tax avoidance in the banking industries of emerging countries.

CONCLUSIONS AND RECOMMENDATIONS

This study aimed to determine the effect of management incentives, and foreign ownership on tax avoidance with a credit rating as an interaction variable and size, growth and also maturity as a control variable in banking companies listed on the Indonesia Stock Exchange. The sample in this study was 17 financial companies. Based on the results of this study, it can be concluded that management incentives have a negative effect on tax avoidance, foreign ownership has a positive effect on tax avoidance, credit ratings influence tax avoidance, and the interaction of credit ratings weakens the effect of management incentives on tax avoidance. Credit rating interactions strengthen the impact of foreign ownership on tax avoidance.

LIMITATIONS AND SUGGESTIONS

Future researchers can utilise the following limitations of this study as a guide to help them produce more precise and thorough results. The study only included companies in the banking sector listed on the Indonesia Stock Exchange (IDX) for the 2015–2020-time frame. The purposive sampling approach only yielded 17 companies that could be used as research objects. To generate further insights and conclusions, it is anticipated that the following study will work with banking and non-bank financial firms. The independent variables used were only foreign ownership and management

incentives, and credit ratings as interactions. And the effect of the adjusted R-squared of the three variables wasonly 31.8158%.%. It implies that a significant number of other factors could affect both credit ratings and tax avoidance interactions. Many more aspects of corporate governance, such as management ownership, institutional ownership, the composition of independent commissioners, and audit quality, could be used as independent variables in future research.

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