Assessing Model of Tax Evasion and Firm's Value: Moderating Role of Corporate Governance and Company Characteristics

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A B S T R A C T

This study aims to examine the effect of tax evasion and corporate governance on firm value. This model uses governance and company characteristics as moderating variables of the relationship between tax evasion and firm value. This study uses panel data consisting of 18 companies in the mining sector from 2016 to 2020. The approach used is panel data using Eviews 12. This research proves that tax evasion does not have a significant direct effect on firm value. This research finds that family management and ownership concentration have a significant influence on firm value. Family management has a direct negative impact on firm value. Ownership concentration and leverage have a direct positive effect on firm value. Return on assets and company size do not have a significant influence on firm value. Governance and company characteristics are found not to moderate the relationship between tax evasion and firm value. This research presents an initial study that focuses on the relationship between tax evasion efforts and firm value in mining companies, using six analyzed models.

A B S T R A K

Studi ini bertujuan untuk menguji efek penggelapan pajak dan tata kelola perusahaan pada firm value. Model ini menggunakan tata kelola dan karakteristik perusahaan sebagai variabel pemoderasi dari hubungan tax evasion dan firm value. Studi ini menggunakan data panel yang terdiri dari 18 perusahaan di bidang pertambangan selama tahun 2016-2020. Pendekatan yang digunakan adalah data panel dengan menggunakan Eviews 12. Penelitian ini membuktikan bahwa penggelapan pajak tidak memiliki pengaruh langsung yang signifikan terhadap nilai perusahaan. Penelitian ini menemukan adanya pengaruh yang signifikan manajemen keluarga dan konsentrasi kepemilikan pada firm value. Manajemen keluarga mempunyai dampak negatif langsung terhadap nilai perusahaan. Konsentrasi kepemilikan dan leverage berpengaruh positif langsung terhadap nilai perusahaan. Pengembalian aset dan ukuran perusahaan tidak memberi pengaruh signifikan pada nilai perusahaan. Tata kelola dan karakteristik perusahaan tidak memoderasi hubungan antara penggelapan pajak dan nilai perusahaan. Penelitian ini menyajikan studi awal yang berfokus pada hubungan antara upaya penggelapan pajak dengan nilai perusahaan pada perusahaan pertambangan, dengan menggunakan enam model yang dianalisis.

1. INTRODUCTION

Reducing the amount of income tax by an entity can be categorized as tax avoidance or tax evasion. Some researchers distinguish the two terms. Nafti et al. (2020) use the term tax evasion to refer to efforts by companies to reduce taxes, not distinguishing between what is permissible and what is contrary to tax provisions. In contrast, Crocker & Slemrod (2004) distinguish the two: tax avoidance refers to legally permitted practices, while tax evasion refers to illegal practices. Other studies (Apriyanti & Arifin, 2021; Chen et al., 2010; Hanum & Zulaikha, 2013; Hasyim & Jiwayana, 2021; Hidayati et al., 2021; Indradi, 2018; Martinez & Paste Junior,

2019; Salman et al., 2018; Subarnas & Gunawan, 2019; Suyono, 2018; Zemzem & Ftouhi, 2013) uses the term tax aggressiveness. The current study uses the term tax evasion (Nafti et al., 2020) to examine its impact on firm value.

Companies in developing countries cut taxes more aggressively than rich countries (Akcigit et al., 2016; Landier & Plantin, 2017; Thomsen & Watrin, 2018). The tax evasion behavior of US firms and 12 European countries shows that the average ETR of US firms is similar to the average effective tax rate (ETR) of large European nations such as France and Germany. These results suggest that, on average, tax evasion by EU companies may have declined over time (Thomsen & Watrin, 2018). In the UK, there are tax evasion requirements. Tax reporting provides information to tax authorities, and tax policy requirements are disclosed, whereas large companies include tax policy information as public information (Oats & Tuck, 2019). In Indonesia, no study comprehensively measures the practice of tax evasion, whether increasing or decreasing. However, tax regulations in Indonesia have regulated various tax policies that companies must comply with, such as which expenses can be charged as expenses and which expenses cannot be charged as expenses. This policy is expected to minimize the practice of companies reducing taxes.

Wealthy taxpayers may respond to taxation economically impractically, such as sophisticated tax planning and international tax arbitration. Landier & Plantin (2017) studied the behavior of taxpayers who have access to tax evasion practices for a fee and can shape their income risk profile as they see fit. While tax avoidance practices involve costly migration between two fiscally competitive countries, Landier & Plantin (2017) have shown an increase in endogenous inequality because risk-taking makes progressive taxation more fragile and, in turn, justifies risk-taking and can lead to a balance with regressive tax rates. In addition, wealth will be highly migrated from rich taxpayers to poorer countries. This is in line with the aggressive tax practices carried out by mining companies in Indonesia. Aggressive tax practices can possibly be used to engineer the applicable tax policy. Taxation policy regarding mining businesses in Indonesia is regulated in Article 22 of the Income Tax Law, where purchases of coal, metallic minerals, and non-metallic minerals from entities or individuals holding mining business permits by industries or business entities are subject to a rate of 1.5% of the purchase price does not include value added tax.

Tax evasion negatively impacts financial performance (Thanjunpong & Awirothananon, 2019). Illegal tax evasion impacts decreasing firm value through the capital market response. There is an interesting study by Blaufus et al. (2019). From 2003 to 2016, they investigated 176 tax messages on German companies, and this study found anomalous returns for tax evasion messages to be negative. On the other hand, this current study finds a favorable market price response to tax planning. The findings demonstrate the differential impact of tax avoidance practices on capital market investor responses. Mocanu et al. (2020), supported by Blaufus et al. (2019), used another sample object, namely 472 public companies in Romania for 2013-2017; 236 compliant companies and 236 companies were convicted of tax evasion. Mocanu et al. (2020) found that larger companies with lower financial performance and debt ratios tended to avoid taxes. Minh Ha et al. (2021) found contrasting results with studies (Blaufus et al., 2019; Mocanu et al., 2020). Minh Ha et al. (2021) used another sample object, i.e., 209 public non-financial enterprises in Vietnam from 2010 to 2018. Tax evasion has a negative impact on corporate value, while other factors such as return on investment, debt, and firm size have a positive effect on firm value. Government ownership and gross inflows negatively affect firm value (Minh Ha et al., 2021). The inconsistent study results are a research gap in testing tax evasion on firm value, thus encouraging this research to be carried out.

Good governance carried out by the company also moderates the relationship between tax evasion and firm value. Tax evasion impacts firm value for companies that implement good governance. The argument is based on the results of empirical studies from several studies that showed that tax evasion does not stand alone in influencing firm value. Desai & Dharmapala (2009) proved that the effect of tax avoidance on corporate value is a function of corporate governance. The results of this study also show that the effect of tax avoidance on firm value is not significant. Tax avoidance has a significant impact on the corporate value of well-governed companies. This is supported by Wang et al. (2014), who explained that tax evasion can increase corporate value. A more transparent company with fewer agency issues can avoid taxes better than its counterparts. Indonesia is a country that has great potential in terms of mineral resources such as mining products, including coal, oil and natural gas, tin ore, copper, gold, and others. State revenue for the mining sector as of December 10, 2021, amounted to IDR 70.05 trillion or 179 percent of the 2021 target of IDR 39.1 trillion. The realization of state revenue from stone and coal mining in 2021 is the largest compared to the

previous year's realization (Pajakku.com, 2022). This data shows a large contribution from the mining sector to tax revenues in Indonesia.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

For this study, tax evasion is an act or practice to reduce taxes. Tax evasion is a clear reduction in the company's tax payable (Dyreng et al., 2008). Tax relief can be achieved using tax planning and methods that may or may not qualify for tax evasion (Salman, 2019). Agency theory separates ownership and control, keeping agents from their principal's best interests (Jensen & Meckling, 1976). Tax evasion can increase the value of a company, as tax savings can be diverted for shareholders. Tax evasion, on the other hand, can lead to opportunistic management behavior by supporting agency costs and ultimately reducing corporate value (Wahab & Holland, 2012; Desai & Dharmapala, 2009). Tax evasion can also be motivated by incentives for managers who can reduce tax obligations by reducing taxable income. Furthermore, the low tax burden raises investors' suspicions, decreasing the credibility of information in the company's financial reports (Desai & Dharmapala, 2006). Concerning the credibility of financial reports, there is a significant relationship between tax deductions and accounting aggressiveness (Carolina et al., 2021; Frank et al., 2009).

In agency theory, it allows corporate tax decisions to reflect the personal interests of management (Jensen & Meckling, 1976; Jensen & Meckling, 2012). Thus, it is important in this agency theory to carry out effective control mechanisms and provide reasonable incentives to agents to minimize agency costs. Inadequate tax planning activities can also mask the diversion of corporate pensions and reduce firm value (Desai & Dharmapala, 2009). Tax evasion in contractual relationships between shareholders and managers focuses on the effectiveness of tax sanctions imposed on principals and agents (Crocker & Slemrod, 2004, 2005). Regulatory and CSR theories focus on companies and multiple economic factors such as tax authorities, political parties, workers, and the general public. Tax avoidance can reduce state revenue from the tax sector in the context of stakeholders. If a company practices tax avoidance that is contrary to the applicable laws and regulations, the consequences are subject to interest, fines, and various other penalties given by the tax authority of a country. Thus, companies that practice tax avoidance must bear a high reputational cost.

The existing literature on tax avoidance is very limited, so research on this topic is still quite interesting, which is evident from the increasing trend of research on this topic. Several empirical studies have been conducted with inconclusive results (Wahab & Holland, 2012; Desai & Dharmapala, 2009). Indonesia has its characteristics that distinguish it from other countries. It is characterized by a people-based economy, centralized ownership, mostly family businesses, and business tax incentives. Based on the literature review previously explained, the following research hypothesis can be formulated:

H1. The tax evasion practice implemented by the company affects firm value.

H2. The governance implemented by the company moderates the effect of tax evasion practices on firm value.

H3. Profitability, firm size, and leverage moderate the effect of tax evasion practices on firm value.

3. RESEARCH METHOD

The research population is all companies in the mining sector during the 2016-2020 period. Panel data was used to research 18 companies in the mining sector listed on the Indonesia Stock Exchange from 2016 to 2020. Panel data was processed with Eviews 12, which had stages including model selection analysis, classical assumption testing, and estimation of the research model with the selected model.

This study tested several moderating variables, such as family management, concentration of ownership, return on assets, firm size, and leverage. Firm value (FV) is investors' assessment of company performance as reflected in the share market price. Tobin's Q measures firm value as equal to total market value plus the total book value of liabilities divided by the total book value of assets. Tax evasion is an effort by companies to reduce taxes, not distinguishing between what is permissible and what is contrary to tax provisions. Tax evasion is measured by the effective tax rate (ETR) equal to total tax charges divided by pre-tax income, referring to one of the measures used by Wang et al. (2014). Meanwhile, family management (FAM) involves several members of the same family as main managers, either simultaneously or over time. Family management is measured by a dummy variable where 1 indicates family management and 0 vice versa. Ownership concentration (OC) is an internal governance mechanism where concentrated owners can control and influence managers to protect their interests (Madhani, 2016). Ownership concentration is measured by the percentage of common shares the major shareholder owns. Return on Assets (ROA) is a profitability ratio that compares the net profit generated with the capital invested in an asset. ROA is measured by pre-tax

income divided by total assets. Firm size (SIZE) is a scale that classifies the company's size. Firm size is measured by the natural logarithm of total assets. Leverage (LEV) is a loan or debt used to generate profits for a company or investment. Leverage is measured by long-term debt divided by total assets.

The formula indicates the moderating effect in this study: FAM*ETR: interaction between tax evasion and family management; OC*ETR: interaction variable between tax evasion and ownership concentration; ROA*ETR: interaction variable between tax evasion and return on assets; SIZE*ETR: interaction variable between tax evasion and firm size; and LEV*ETR: interaction variable between tax evasion and leverage. A high effective tax rate ratio indicates a low level of tax evasion, whereas a low effective tax rate ratio indicates a high level of tax evasion. Therefore, the way to interpret the ETR value is inversely proportional to the level of tax evasion carried out by the company. Each model is constructed to examine all direct and mitigation effects. Model 1 is used to test the first hypothesis. Model 2 and 3 are used to test the second hypothesis. Model 4, 5, and 6 test the third hypothesis.

Model 1:
$$FV = \alpha_0 + \alpha_1\, ETR_{it} + \alpha_2\, FAM_{it} + \alpha_3\, OC_{it} + \alpha_4\, ROA_{it} + \alpha_5\, SIZE_{it} + \alpha_6\, LEV_{it} + \varepsilon_{it}$$
Model 2:
$$FV = \alpha_0 + \alpha_1\, ETR_{it} + \alpha_2\, FAM_{it} * ETR_i + \alpha_3\, FAM_{it} + \alpha_4\, OC_{it} + \alpha_5\, ROA_{it} + \alpha_6\, SIZE_{it} + \alpha_7\, LEV_{it} + \varepsilon_{it}$$
Model 3:
$$FV = \alpha_0 + \alpha_1\, ETR_{it} + \alpha_2\, OC_{it} * ETR_i + \alpha_3\, FAM_{it} + \alpha_4\, OC_{it} + \alpha_5\, ROA_{it} + \alpha_6\, SIZE_{it} + \alpha_7\, LEV_{it} + \varepsilon_{it}$$
Model 4:
$$FV = \alpha_0 + \alpha_1\, ETR_{it} + \alpha_2\, ROA_{it} * ETR_i + \alpha_3\, FAM_{it} + \alpha_4\, OC_{it} + \alpha_5\, ROA_{it} + \alpha_6\, SIZE_{it} + \alpha_7\, LEV_{it} + \varepsilon_{it}$$
Model 5:
$$FV = \alpha_0 + \alpha_1\, ETR_{it} + \alpha_2\, SIZE_{it} * ETR_i + \alpha_3\, FAM_{it} + \alpha_4\, OC_{it} + \alpha_5\, ROA_{it} + \alpha_6\, SIZE_{it} + \alpha_7\, LEV_{it} + \varepsilon_{it}$$
Model 6:
$$FV = \alpha_0 + \alpha_1\, ETR_{it} + \alpha_2\, LEV_{it} * ETR_i + \alpha_3\, FAM_{it} + \alpha_4\, OC_{it} + \alpha_5\, ROA_{it} + \alpha_6\, SIZE_{it} + \alpha_7\, LEV_{it} + \varepsilon_{it}$$

4. DATA ANALYSIS AND DISCUSSION
4.1. Data Analysis
The Chow test results indicate that the selected model is a fixed effects model, as the probability value (p) for the cross-section F and the Chi-square of the cross-section is 0.000 (p<0.05) (see Table 1). Therefore, the data check continues with the Hausmann test. The Hausmann test results indicate that the random effects model is the best. This is because the cross-sectional random probability value is 0.0528 (p > 0.05) (see Table 2). Based on the Lagrange multiplier test results, a Breusch-Pagan probability value of 0.0000 (p<0.05) was obtained (see Table 3), so the null hypothesis was rejected, and the best model used was the random-effects model.

A multicollinearity test is used to show no high correlation greater than 0.900 between the independent variables (Ghozali, 2016). There is no multicollinearity between the independent variables (see Table 4 estimating functional coefficient model (Model 1). The R-squared for Model 1 was 23.92%. The F-test result showed a probability of 0.000727 (p<0.05) (see Table 5).

Table 1. Chow test

	Statistic	Prob.
Cross-section F	48.942644	0.0000
Cross-section Chi-square	234.94888	0.0000

Table 2. Hausman test

	Chi-Sq. Statistic	Prob.
Cross-section random	12.442724	0.0528

Table 3. Lagrange multiplier test

	Cross-section	Time	Both
Breusch-Pagan	130.2512	1.352719	131.6039
	(0.0000)	(0.2448)	(0.0000)

Table 4. Multicollinearity test

FAM	LEV	OC	ROA	SIZE
1.000000	0.079661	0.840102	0.142483	-0.206766
0.079661	1.000000	0.144985	-0.105325	-0.092772
0.840102	0.144985	1.000000	-0.014065	-0.235756
0.142483	-0.105325	-0.014065	1.000000	0.011404
-0.206766	-0.092772	-0.235756	0.011404	1.000000
-0.203258	0.072721	-0.162595	-0.132456	0.120558

Table 5. Results of model 1

Model 1	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.236461	1.629192	-0.758942	0.4500
ETR	0.042430	0.031490	1.347427	0.1815
FAM	-2.150281	1.189655	-1.807483	0.0743*
OC	1.756417	1.036218	1.695027	0.0938*
ROA	0.092505	0.501121	0.184597	0.8540
SIZE	0.076163	0.069366	1.097978	0.2754
LEV	0.115955	0.030704	3.776579	0.0003***
R^2	23.92%			
Adjusted R^2	18.42%			
F-statistic	4.348538			
Prob(F-statistic)	0.000727			

Notes: ***Significant at the 1% threshold; **significant at the 5% threshold; *significant at the 1% threshold

Table 6. Results of model 2

Model 2	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.106363	1.419651	-0.779321	0.4380
ETR	0.429549	0.276357	1.554328	0.1240
FAM*ETR	-1.310929	0.928512	-1.411860	0.1618
FAM	-1.583055	1.199973	-1.319242	0.1908
OC	1.845333	1.014837	1.818354	0.0727*
ROA	-0.027374	0.500359	-0.054709	0.9565
SIZE	0.054428	0.058820	0.925329	0.3575
LEV	0.112447	0.030369	3.702728	0.0004***
R^2	24.09%			
Adjusted R^2	17.61%			
F-statistic	3.716512			
Prob(F-statistic)	0.001534			

Notes: ***Significant at the 1% threshold; **significant at the 5% threshold; *significant at the 1% threshold

Table 7. Results of model 3

Model 3	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.077395	1.419610	-0.758938	0.4501
ETR	0.460585	0.339723	1.355767	0.1789
OC*ETR	-1.267039	1.023634	-1.237785	0.2193
FAM	-1.930007	1.152051	-1.675279	0.0977*
OC	2.132074	1.055733	2.019521	0.0467**
ROA	-0.010552	0.500482	-0.021083	0.9832
SIZE	0.053779	0.058738	0.915573	0.3626
LEV	0.112734	0.030415	3.706524	0.0004***
R^2	23.69%			
Adjusted R^2	17.17%			
F-statistic	3.635850			
Prob(F-statistic)	0.001832			

Notes: ***Significant at the 1% threshold; **significant at the 5% threshold; *significant at the 10% threshold

Table 8. Results of model 4

Model 4	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.466835	1.680794	-0.872704	0.3854
ETR	0.069687	0.037976	1.835000	0.0701*
ROA*ETR	-7.209480	5.604988	-1.286262	0.2020
FAM	-1.966261	1.210219	-1.624714	0.1081
OC	1.812579	1.043321	1.737316	0.0861*
ROA	1.941237	1.517302	1.279400	0.2044
SIZE	0.080120	0.071689	1.117605	0.2670
LEV	0.115801	0.030839	3.755062	0.0003***
R²	25.61%			
Adjusted R²	19.26%			
F-statistic	4.032240			
Prob(F-statistic)	0.000768			

Notes: ***Significant at the 1% threshold; **significant at the 5% threshold; *significant at the 10% threshold

Table 9. Results of model 5

Model 5	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.207161	1.749713	-0.689919	0.4922
ETR	-0.490053	1.931998	-0.253651	0.8004
SIZE*ETR	0.024384	0.088441	0.275711	0.7835
FAM	-2.133775	1.211702	-1.760973	0.0820*
OC	1.750685	1.048358	1.669930	0.0987*
ROA	0.097165	0.505600	0.192177	0.8481
SIZE	0.075257	0.076025	0.989895	0.3251
LEV	0.116545	0.031009	3.758468	0.0003***
R²	24.25%			
Adjusted R²	17.79%			
F-statistic	3.751042			
Prob(F-statistic)	0.001422			

Notes: ***Significant at the 1% threshold; **significant at the 5% threshold; *significant at the 1% threshold

Table 10. Results of model 6

Model 6	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.946616	1.562205	-0.605948	0.5462
ETR	-0.342633	0.290642	-1.178882	0.2419
LEV*ETR	0.233880	0.175573	1.332096	0.1865
FAM	-2.056046	1.180046	-1.742344	0.0852*
OC	1.737462	1.032844	1.682211	0.0963*
ROA	0.010379	0.504517	0.020573	0.9836
SIZE	0.064843	0.065997	0.982519	0.3287
LEV	0.054199	0.054955	0.986247	0.3269
R²	24.95%			
Adjusted R²	18.54%			
F-statistic	3.894354			
Prob(F-statistic)	0.001038			

Notes: ***Significant at the 1% threshold; **significant at the 5% threshold; *significant at the 1% threshold

Model 2 has an R-squared value of 24.09% higher than Model 1. The F-test result showed a probability of 0.001534 ($p<0.05$) (see Table 6). Then, the R-squared for Model 3 is 23.69%, lower than Models 1 and 2. The F-test result showed a probability of 0.001832 ($p<0.05$) (see Table 7). Next, model 4 has the largest R-squared of 25.61% among the other models. The F-test result showed a probability of 0.000768 ($p<0.05$) (see Table 8). Subsequently, the R-squared for Model 5 is 24.25%. The F-test result showed a probability of 0.001422 ($p<0.05$) (see Table 9). Lastly, the R-squared for Model 6 is 24.95%. The F-test result showed a probability of 0.001038 ($p<0.05$) (see Table 10).

Table 11. Comparison of research models

Variables	Model 1 C	p-value	Model 2 C	p-value	Model 3 C	p-value	Model 4 C	p-value	Model 5 C	p-value	Model 6 C	p-value
ETR	0.042430	0.1815	0.429549	0.1240	0.460585	0.1789	0.069687	0.0701	-0.490053	0.8004	-0.342633	0.2419
FAM	-2.150281	0.0743	-1.583055	0.1908	-1.930007	0.0977	-1.966261	0.1081	-2.133775	0.0820	-2.056046	0.0852
OC	1.756417	0.0938	1.845333	0.0727	2.132074	0.0467	1.812579	0.0861	1.750685	0.0987	1.737462	0.0963
ROA	0.092505	0.8540	-0.027374	0.9565	-0.010552	0.9832	1.941237	0.2044	0.097165	0.8481	0.010379	0.9836
SIZE	0.076163	0.2754	0.054428	0.3575	0.053779	0.3626	0.080120	0.2670	0.075257	0.3251	0.064843	0.3287
LEV	0.115955	0.0003	0.112447	0.0004	0.112734	0.0004	0.115801	0.0003	0.116545	0.0003	0.054199	0.3269
ETR*FAM			-1.310929	0.1618	-	-	-	-	-	-	-	-
ETR*OC					-1.267039	0.2193	-	-	-	-	-	-
ETR*ROA							-7.209480	0.2020	-	-	-	-
ETR*SIZE									0.024384	0.7835	-	-
ETR*LEV											0.233880	0.1865

Table 12. Probability value for all research model

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ETR	0.1815	0.1240	0.1789	0.0701	0.8004	0.2419
FAM	0.0743	0.1908	0.0977	0.1081	0.0820	0.0852
OC	0.0938	0.0727	0.0467	0.0861	0.0987	0.0963
ROA	0.8540	0.9565	0.9832	0.2044	0.8481	0.9836
SIZE	0.2754	0.3575	0.3626	0.2670	0.3251	0.3287
LEV	0.0003	0.0004	0.0004	0.0003	0.0003	0.3269
ETR*FAM		0.1618	-	-	-	-
ETR*OC			0.2193	-	-	-
ETR*ROA				0.2020	-	-
ETR*SIZE					0.7835	-
ETR*LEV						0.1865

Table 13. R Square and Adjusted R-Squared

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
R-Square	0.239169[5]	0.240850[4]	0.236861[6]	0.256072[1]	0.242545[3]	0.249500[2]
Adjusted R-squared	0.184169	0.176045	0.171715	0.192566	0.177885	0.185433

Based on the estimating model from Model 1 to Model 6, except for Model 4 (see Table 11 and Table 12), it is known that tax evasion has no significant effect on firm value. As for Model 4, which is a model where ROA as a moderator is found to have a significant influence from the effective tax rate on firm value. The greater the total effective tax rate, which indicates the lower the tax evasion by mining companies, the greater the company's value will be. Family management also has a negative effect on firm value in all four models, except for Model 2 and Model 4. Family-managed mining companies have been empirically proven to reduce firm value. Ownership concentration positively affects firm value for all research models (Model 1 to 6). This condition occurs because the larger the company's concentrated ownership, the more concerned it is with potential penalties and reputation damage due to tax audits than companies that are not concentrated (see Table 11 and Table 12).

The study also shows that all moderating variables (family management, ownership concentration, return on assets, size, leverage) do not moderate the relationship between tax evasion and firm value. The best model for explaining firm value is Model 4, where ROA is the moderating variable. The R-squared of Model 4 is 25.61%, the largest compared to all other models. In Model 4, three variables significantly affect firm value: tax evasion, ownership concentration, and leverage. The second best model is obtained by Model 6, where leverage is a moderating variable with an R-squared value of 24.95%. However, only family management and ownership concentration significantly affect firm value. The weakest model for explaining firm value is model 3, where the R-squared value is 23.69% (see Table 13).

4.2. Discussion

According to the calculations of research models, the study's outcomes reveal that the effective tax rate, which measures tax evasion, does not significantly impact the company's value. These conclusions support earlier research by Nafti et al. (2020) and Yorke et al. (2016), which also did not find a correlation between tax evasion and firm value. On the other hand, this study's results differ from the results of the two previous studies (Lestari & Wardhani, 2015; Nebie & Cheng, 2023), which found a significant effect of tax evasion on firm value. According to Lestari & Wardhani (2015) and Nebie & Cheng (2023), companies that practice tax evasion aim to reduce the effective tax rate and, on the other hand, to increase firm value so that there is a negative relationship between the effective tax rate and tax evasion. In other words, the greater the increase in ETR, the lower the firm value. Taiwanese companies are more interested in reducing their effective tax rates (Nebie & Cheng, 2023). These two different study results prove differences in the characteristics of companies in Taiwan and Indonesia. The results of this study also differ from those of Assidi et al. (2016) in the context of companies in Tunisia, where firm value can be increased through the utilization of tax policies implemented by public companies in Tunisia.

The findings of this research provide empirical evidence that family management has a negative impact on firm value. The findings of this study support previous research (Costa et al., 2014; Nafti et al., 2020; Sener, 2015). Family management has a negative effect on firm value, and the interaction between effective tax rates and family management significantly affects firm value in the case of business companies in Tunisia (Nafti et al., 2020). Family members who serve in top management as executive officers or board members lower firm value in the context of business companies in Brazil (Costa et al., 2014). Furthermore, there is a more detailed explanation that family ownership creates value only when the founder serves as CEO of the family company or as chairman of a recruited CEO. When his descendant was CEO, the company's value was destroyed (Villalonga & Amit, 2006). Family management can reduce the company's market value if a family member serves as CEO or chairman (Sener, 2015).

The results of this study also show that ownership concentration has a positive impact on firm value, with a probability value of 0.0938 (significant at 10%). This result is consistent with previous studies (Mandacä & Gumus, 2010; Vintilä & Gherghina, 2014; Yasser & Mamun, 2017) that found that ownership concentration positively impacts firm value. Ownership concentration has a positive effect on firm value, as in the case of companies in Turkey. This finding is based on the fact that corporate ownership in Turkey is highly concentrated, with unlisted parent companies owning the highest average percentage of shares, thus supporting the belief that individuals or families establish holding companies to control registered subsidiary companies (Mandacä & Gumus, 2010). Ownership structure positively impacts market-based performance measures and economic profits in companies in Pakistan due to effective monitoring by principals of agent behavior (Yasser & Mamun, 2017). The second largest shareholder's positive effect on firm value is strongly influenced by the undeveloped Romanian capital market context, with the ownership of the first largest

shareholder preventing other investors from holding significant shares (Vintilă & Gherghina, 2014). On the other hand, the results of this study are different from Novita & Sahrul (2020), who did not find an effect of ownership concentration on firm value in their study. Even though 64.79% of the shares have been concentrated, they cannot directly influence investors' assessment decisions. Concentrated ownership can improve company performance but does not affect investors' assessment of the company's share price (Novita & Sahrul, 2020).

The study results show that return on assets and company size do not affect firm value. The results of this study support Wahyudi & Sholahuddin (2022) and Yadav et al. (2022), who found no influence of return on assets and firm size on firm value. The results of this study show that initially, profitability increases along with company growth, but in the end, as time goes by and the size of the company increases, the increase in the level of profitability decreases, which shows that large size creates inefficiencies (Yadav et al., 2022). The study results are also consistent with Reschiwati et al. (2020), who proved no effect of profitability on firm value. On the other hand, this study's results differ from Reschiwati et al. (2020), who discovered the effect of firm size on firm value. Thus, the results of this study confirm that an increase in the level of profitability does not impact increasing firm value because a larger portion of the profitability distribution is distributed to the same holders in the form of dividends compared to being distributed to retained earnings. The study results also support the idea that company size is not the main consideration for investors when making investment decisions, so it has no impact on firm value.

The research results show that leverage positively and significantly affects firm value in all research models except Model 6. Furthermore, the study results also show that leverage does not moderate the effect of tax avoidance on firm value. The study results support Alamgir & Cheng (2021), who also found the effect of leverage on firm value on the Karachi Stock Exchange (Pakistan). The study results are also in line with Wahyudi & Sholahuddin (2022), who found the effect of leverage on firm value in companies listed on the Jakarta Islamic Index (JII) in the 2015-2020 period. The results of this study confirm that the greater use of financial leverage has had a positive impact on firm value because the use of these funds increases the income received by the company in excess of the financial costs incurred. On the other hand, the results of this study are different from Anita et al. (2023), who did not find the effect of leverage on firm value because the company was unable to utilize debt funds to increase the company's income or profits, so the company bore a greater debt burden as explained by the trade-off theory. Likewise, according to signal theory, investors give negative signals indicating that they are experiencing financial difficulties for companies with a high level of leverage.

The study results also show that all moderating variables (family management, ownership concentration, return on asset, firm size, and leverage) do not moderate the effect of effective tax rates on firm value. The results of this study confirm that tax evasion practices are not strengthened or weakened by family management, ownership concentration, return on asset, firm size, and leverage in relation to firm value. Based on the results of this study, it is confirmed that mining sector companies managed by family member-owners in Indonesia are careful about carrying out tax evasion because they are more concerned about loss of company reputation and the possibility of tax audits for companies that carry out tax evasion. The results of this study also support Santana & Rezende (2016), who stated that family companies no longer care about tax evasion and are more concerned about potential fines and loss of reputation than non-family companies. Furthermore, private companies wholly owned and managed by families avoid taxes to a lesser extent than non-family private companies (Brune et al., 2019). The results of this study are different from Santana & Rezende (2016), who found that family management is a moderator that strengthens tax evasion on firm value. Family companies avoid more taxes than non-family companies (Kovermann & Velte, 2019). The ownership concentration as a moderator has no significant effect in moderating the relationship between tax evasion and firm value. The study findings are in line with those of Nafti et al. (2020), who suggested no effect of ETR*OC on firm value in Tunisia. In companies in Tunisia, the concentration of ownership is associated with major shareholder ownership exceeding 5 percent, and on average, family firms do not have good managerial skills and financial knowledge. This finding contradicts Santana & Rezende (2016), who succeeded in confirming the negative effect of ownership concentration in moderating the relationship between the effective tax rate and firm value. In the context of companies in Brazil, the study found that the higher the ownership concentration, the lower the firm value. The results of this study confirm that the effect of tax evasion is not significant on firm value either directly or through moderating variables.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

The study results showed that tax evasion had no significant impact on firm value in most research models, except for Model 4. Family management has been empirically proven to reduce firm value in most of the models used except for Model 2 and Model 4. These results indicate that mining companies managed by family management have lower firm values compared to non-family management. Likewise, ownership concentration is empirically proven to increase firm value in all research models. This indicates that in mining companies in Indonesia, the majority shareholder investors carry out supervisory duties properly and make decisions without being represented by management. This has a good impact on increasing firm value in the Indonesian context, especially in mining companies. The study results also show that the variables that are thought to be able to moderate tax evasion and firm value are, in fact, not proven empirically as moderating variables in the context of mining companies in Indonesia. It can be concluded that the governance aspect represented by family management and ownership concentration cannot mitigate the link between tax evasion and firm value. Likewise, firm characteristics, as represented by return on assets, firm size, and leverage, have yet to be proven empirically to moderate the relationship between tax evasion and firm value. Future research can be designed to continue current research by using samples from other industries and a larger number of samples over a longer period. In addition, future research can be designed using other aspects of governance and other company characteristics. Future research can separate the periods before and after the COVID-19 pandemic to examine differences in the impact of tax evasion on firm value.

REFERENCES

Abdul Wahab, N. S., & Holland, K. (2012). Tax planning, corporate governance, and equity value. *The British Accounting Review*, *44*(2), 111–124. https://doi.org/https://doi.org/10.1016/j.bar.2012.03.005

Akcigit, U., Baslandze, S., & Stantcheva, S. (2016). Taxation and the international mobility of inventors. *American Economic Review*, *106*(10), 2930–2981. https://doi.org/10.1257/aer.20150237

Alamgir, M., & Cheng, M. C. (2021). Effect of leverage on firm value and how the contextual variables affect this relationship: A case of Pakistan. *Proceedings of the International Conference on Electronic Business (ICEB)*, *21*, 144–153.

Anita, R., Abdillah, M. R., & Suseno, G. (2023). Leverage On Firm Value: The Role of Financial Performance Mechanisms. *Jurnal Aplikasi Bisnis Dan Manajemen*, *9*(3), 751–762. https://doi.org/10.17358/jabm.9.3.751

Apriyanti, H. W., & Arifin, M. (2021). Tax aggressiveness determinants. *Journal of Islamic Accounting and Finance Research*, *3*(1), 27–52. https://doi.org/10.21580/jiafr.2021.3.1.7412

Assidi, S., Aliani, K., & Omri, M. A. (2016). Tax optimization and the firm's value: Evidence from the Tunisian context. *Borsa Istanbul Review*, *16*(3), 177–184. https://doi.org/10.1016/j.bir.2016.04.002

Blaufus, K., Möhlmann, A., & Schwäbe, A. N. (2019). Stock price reactions to news about corporate tax avoidance and evasion. *Journal of Economic Psychology*, *72*(April), 278–292. https://doi.org/10.1016/j.joep.2019.04.007

Brune, A., Thomsen, M., & Watrin, C. (2019). Tax avoidance in different firm types and the role of non-family involvement in private family firms. *Managerial and Decision Economics*, *40*(8), 950–970. https://doi.org/10.1002/mde.3082

Carolina, V., Oktavianti, V., & Hidayat, S. (2021). Tax avoidance, tax reporting aggressiveness, tax risk & corporate risk. *Riset Akuntansi Dan Keuangan Indonesia*, *6*(1), 1–8.

Chen, S., Chen, X., Shevlin, T., Chen, S., Chen, X., & Shevlin, T. (2010). Are Family Firms more Tax Aggressive than Non-family Firms ? Are family firms more tax aggressive than non-family firms ? * University of Texas at Austin University of Wisconsin-Madison. *Research Collection School of Accountancy*, *91*(1), 41–61.

Costa, C. M., Galdi, F. C., & Motoki, F. Y. S. (2014). Family management: Creating or destroying firm value? *Economics Bulletin*, *34*(4), 2392–2302.

Crocker, K. J., & Slemrod, J. (2004). NBER WORKING PAPER SERIES CORPORATE TAX EVASION WITH AGENCY COSTS Corporate Tax Evasion with Agency Costs. August. http://www.nber.org/papers/w10690

Crocker, K. J., & Slemrod, J. (2005). Corporate tax evasion with agency costs. *Journal of Public Economics*, *89*(9), 1593–1610. https://doi.org/https://doi.org/10.1016/j.jpubeco.2004.08.003

Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, *79*(1), 145–179. https://doi.org/https://doi.org/10.1016/j.jfineco.2005.02.002

Desai, M. A., & Dharmapala, D. (2009). CORPORATE TAX AVOIDANCE AND FIRM VALUE. *The Review of Economics and Statistics*, *91*(3), 537–546. http://www.jstor.org/stable/25651357

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2008). Long-Run Corporate Tax Avoidance. *The Accounting Review*, *83*(1), 61–82. http://www.jstor.org/stable/30243511

Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax Reporting Aggressiveness and Its Relation to Aggressive Financial Reporting. *The Accounting Review*, *84*(2), 467–496. http://www.jstor.org/stable/27802660

Ghozali, I. (2016). Desain Penelitian Kuantitatif dan Kualitatif untuk Akuntansi, Bisnis dan Ilmu Sosial Lainnya.

Hanum, H. R., & Zulaikha. (2013). Pengaruh Karakteristik Perusahaan Corporate Governance Terhadap Effective Tax Rate. *Diponegoro Journal of Accounting*, *2*(2), 1–10.

Hasyim, F., & Jiwayana, A. K. (2021). TAX AGGRESSIVENESS IN MANUFACTURING COMPANIES IN INDONESI. 22(01), 26–38.

Hidayati, F., Kusbandiyah, A., Pramono, H., & Pandansari, T. (2021). Pengaruh Leverage, Likuiditas, Ukuran Perusahaan, Dan Capital Intensity Terhadap Agresivitas Pajak (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2019). *Ratio : Reviu Akuntansi Kontemporer Indonesia*, *2*(1), 25–35. https://doi.org/10.30595/ratio.v2i1.10370

Indradi, D. (2018). PENGARUH LIKUIDITAS, CAPITAL INTENSITY TERHADAP AGRESIVITAS PAJAK (Studi empiris perusahanManufaktur sub sektor industri dasar dan kimia yang terdaftar di BEI tahun 2012-2016.). *Jurnal Akuntansi Berkelanjutan Indonesia*, *1*(1), 147. https://doi.org/10.32493/jabi.v1i1.y2018.p147-167

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X

Jensen, M., & Meckling, W. (2012). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *The Economic Nature of the Firm: A Reader, Third Edition*, 283–303. https://doi.org/10.1017/CBO9780511817410.023

Kovermann, J., & Velte, P. (2019). The impact of corporate governance on corporate tax avoidance — A literature review. *Journal of International Accounting, Auditing and Taxation*, *36*, 100270. https://doi.org/https://doi.org/10.1016/j.intaccaudtax.2019.100270

Landier, A., & Plantin, G. (2017). Taxing the Rich. *The Review of Economic Studies*, *84*(3 (300)), 1186–1209. http://www.jstor.org/stable/45106776

Lestari, N., & Wardhani, R. (2015). The effect of the tax planning to firm value with moderating board diversity. *International Journal of Economics and Financial Issues*, *5*(2010), 315–323.

Madhani, P. M. (2016). Ownership Concentration, Corporate Governance and Disclosure Practices: A Study of Firms Listed in Bombay Stock Exchange. *The IUP Journal of Corporate Governance*, *15*(4), 7.

Mandacä, P., & Gumus, G. (2010). Ownership concentration, managerial ownership and firm performance: Evidence from Turkey. *South East European Journal of Economics and Business*, *5*(1), 57–66. https://doi.org/10.2478/v10033-010-0005-4

Martinez, A. L., & Paste Junior, E. (2019). The Relation Between Operational Efficiency and Tax Aggressiveness in Brazil. *SSRN Electronic Journal*, *December*. https://doi.org/10.2139/ssrn.3327787

Minh Ha, N. M., Tuan Anh, P., Yue, X. G., & Hoang Phi Nam, N. (2021). The impact of tax avoidance on the value of listed firms in Vietnam. *Cogent Business and Management*, *8*(1). https://doi.org/10.1080/23311975.2021.1930870

Mocanu, M., Constantin, S. B., & Răileanu, V. (2020). Determinants of tax avoidance–evidence on profit tax-paying companies in Romania. *Economic Research-Ekonomska Istrazivanja* , *0*(0), 1–20. https://doi.org/10.1080/1331677X.2020.1860794

Nafti, O., Kateb, I., & Masghouni, O. (2020). Tax evasion, firm's value and governance: evidence from Tunisian Stock Exchange. *Journal of Financial Crime*, *27*(3), 781–799. https://doi.org/10.1108/JFC-02-2020-0023

Nebie, M., & Cheng, M. C. (2023). Corporate tax avoidance and firm value: Evidence from Taiwan. *Cogent Business and Management*, *10*(3). https://doi.org/10.1080/23311975.2023.2282218

Novita, S., & Sahrul, M. (2020). Ownership Structure, Firm Value and Mediating Effect of Firm Performance. *Jurnal Akuntansi*, 24(2), 219. https://doi.org/10.24912/ja.v24i2.692

Oats, L., & Tuck, P. (2019). Corporate tax avoidance: is tax transparency the solution? *Accounting and Business Research*, 49(5), 565–583. https://doi.org/10.1080/00014788.2019.1611726

Pajakku.com. (2022). *Peran Sektor Pertambangan Dalam Perpajakan*. https://www.pajakku.com/read/62d8c3d0a9ea8709cb18b2ea/Peran-Sektor-Pertambangan-Dalam-Perpajakan

Reschiwati, R., Syahdina, A., & Handayani, S. (2020). Effect of liquidity, profitability, and size of companies on firm value. *Utopia y Praxis Latinoamericana*, 25(Extra 6), 325–332. https://doi.org/10.5281/zenodo.3987632

Salman, K. R. (2019). *Pengantar Perpajakan: Cara Meningkatkan Kepatuhan Pajak*. Penerbit Indeks. https://eprints.perbanas.ac.id/6522/

Salman, K. R., Amir, Farid, M., & Budiana, K. M. (2018). New Evidence of the Effect of Tax Aggressiveness and Corporate Characteristics on the Level of Corporate Social Responsibility Disclosure. *International Journal of Civil Engineering and Technology (IJCIET)*, 9(9), 1263–1272. http://www.iaeme.com/ijciet/issues.asp?JType=IJCIET&VType=9&IType=9

Santana, S. L. L., & Rezende, A. J. (2016). Corporate Tax Avoidance and Firm Value: Evidence from Brazil. *SSRN Electronic Journal*, 55(16). https://doi.org/10.2139/ssrn.2803993

Sener, P. (2015). Influence of Family Ownership and Management on Firm Performance: Evidence from Public Firms in Turkey. *Revue de l'Entrepreneuriat*, Vol. 13(3), 143–169. https://doi.org/10.3917/entre.133.0143

Subarnas, D., & Gunawan, Y. (2019). Effect of Good Corporate Governance on Profitability. *Journal of Auditing, Finance, and Forensic Accounting*, 7(2), 90–96. https://doi.org/10.21107/jaffa.v7i2.6721

Suyono, E. (2018). External Auditors' Quality, Leverage, and Tax Aggressiveness: Empirical Evidence From The Indonesian Stock Exchange. *Media Ekonomi Dan Manajemen*, 33(2). https://doi.org/10.24856/mem.v33i2.711

Thanjunpong, S., & Awirothananon, T. (2019). The Effect of Tax Planning on Financial Performance in the Stock Exchange of Thailand. *International Journal of Trade, Economics and Finance*, 10(1), 25–29. https://doi.org/10.18178/ijtef.2019.10.1.632

Thomsen, M., & Watrin, C. (2018). Tax avoidance over time: A comparison of European and US firms. *Journal of International Accounting, Auditing and Taxation*, 33(C), 40–63. https://econpapers.repec.org/RePEc:eee:jiaata:v:33:y:2018:i:c:p:40-63

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417. https://doi.org/https://doi.org/10.1016/j.jfineco.2004.12.005

Vintilă, G., & Gherghina, Ş. C. (2014). The Impact of Ownership Concentration on Firm Value. Empirical Study of the Bucharest Stock Exchange Listed Companies. *Procedia Economics and Finance*, 15, 271–279. https://doi.org/https://doi.org/10.1016/S2212-5671(14)00500-0

Wahyudi, F. A., & Sholahuddin, M. (2022). The Effect of Profitability, Leverage, and Firm Size on Firm Value (Case of Registered Company In Jakarta Islamic Index 2015-2020 period). *Proceedings of the International Conference on Economics and Business Studies (ICOEBS 2022)*, 655(Icoebs), 380–385. https://doi.org/10.2991/aebmr.k.220602.050

Wang, Y., Campbell, M., & Johnson, D. (2014). Determinants of effective tax rate of China publicly listed companies. *International Management Review*, 10(1), 10–20. http://www.scholarspress.us/journals/IMR/pdf/IMR-1-2014/v10n1-art-2.pdf

Yadav, I. S., Pahi, D., & Gangakhedkar, R. (2022). The nexus between firm size, growth and profitability: new panel data evidence from Asia–Pacific markets. *European Journal of Management and Business Economics*, 31(1), 115–140. https://doi.org/10.1108/EJMBE-03-2021-0077

Yasser, Q. R., & Mamun, A. Al. (2017). The Impact of Ownership Concentration on Firm Performance: Evidence from an Emerging Market. *Emerging Economy Studies*, 3(1), 34–53. https://doi.org/10.1177/2394901517696647

Yorke, S. M., Amidu, M., & Agyemin-Boateng, C. (2016). The effects of earnings management and corporate tax avoidance on firm value. *International Journal of Management Practice*, 9(2), 112–131. https://doi.org/10.1504/IJMP.2016.076741

Zemzem, A., & Ftouhi, K. (2013). The Effects of Board of Directors ' Characteristics on Tax Aggressiveness. *Research Journal in Finance and Accounting*, 4(4), 140–148.