Indonesian Journal of Sustainability Accounting and Management
ISSN 2597–6214 | e–ISSN 2597–6222
DOI: 10.28992/ijsam.v6i1.469

Tax Aggressiveness and Audit Report Timeliness: The Role of Ownership Structure and Audit Committee

Vionna Lievia[1] | Antonius Herusetya[2] *

[1]*Universitas Pelita Harapan, Department of Accounting, Tangerang, Indonesia*
[2]*Universitas Pelita Harapan, Department of Accounting, Tangerang, Indonesia*

*Correspondence to: Antonius Herusetya, Universitas Pelita Harapan, Department of Accounting, Tangerang, Indonesia.
E-mail: antonius.herusetya@uph.edu

Abstract: Companies that engage in tax aggressiveness (TAG) are considered socially irresponsible and problematic from the perspective of tax authorities. This study examines the impact of TAG on audit report timeliness and the role of corporate governance using ownership structure and audit committee on the relationship between TAG and audit report timeliness. We use the tax planning prediction model to uncover TAG. The data for our sample is obtained from the manufacturing companies listed on the Indonesia Stock Exchange and was obtained using the purposive sampling method. Using multiple linear regression analysis, we discover a positive relationship between TAG and audit report timeliness. However, we also find that corporate governance mechanisms affect this positive relationship through ownership structure and audit committee competence. Our findings suggest that the delay of independent auditors due to audit processes may expose the activities of TAG's clients, which may have economic consequences for tax authorities, companies, and other stakeholders.

Keywords: audit committee, audit report timeliness, corporate governance mechanisms, ownership structure, tax aggressiveness.

Article info: Received 21 September 2021 | revised 17 March 2022 | accepted 7 April 2022

Recommended citation: Lievia, V., & Herusetya, A. (2022). Tax Aggressiveness and Audit Report Timeliness: The Role of Ownership Structure and Audit Committee. *Indonesian Journal of Sustainability Accounting and Management, 6*(1), 119–132. https://doi.org/10.28992/ijsam.v6i1.469

INTRODUCTION

A firm that engages in tax avoidance is regarded as socially unacceptable and could be legally problematic (Zeng, 2019; Supriati & Anggraini, 2021). Tax avoidance is a tax planning strategy to avoid paying taxes, while tax aggressiveness (hereafter TAG) is a more extreme tax avoidance with a level of uncertainty in the results associated with reductions in taxes (Higgins et al., 2015). Previous studies found that TAG positively affects financial reporting aggressiveness (Herusetya & Stefani, 2020; Frank et al., 2009; Kamila, 2014). TAG is an act of tax avoidance or reducing taxes that must be paid legally under the applicable tax regulations (Frank et al., 2009). This relationship arises because of differences between financial reporting standards and tax laws and regulations, thus enabling companies to report higher income in their financial statements than those reported to tax authorities. Frank et al. (2009) concluded that the more aggressive a firm performs its financial statements, the more aggressive its tax reporting will be. In addition, companies that engage in aggressive tax activities are

more likely to adjust and misstated financial statements by manipulating their taxes, such as valuation reserve accounts, contingent tax reserves, and estimates of taxes to be paid (Goh et al., 2013; Frank et al., 2009). Firms engaging in tax shelter practices engage in aggressive financial reporting by manipulating earnings and concealing company-specific information through tax planning (Kim et al., 2011; Frank et al., 2009).

These previous findings concluded that companies that carry out aggressive financial reporting show that the management has manipulated the financial statements (Herusetya & Stefani, 2020; Kamila, 2014; Frank et al., 2009). Manipulation by managers in the aggressiveness of financial reporting can be in the form of earnings management because "tax avoidance and managerial diversion can be complimentary" (Kim et al., 2011). Management engages in earnings management within the framework of selected accounting policies to achieve certain goals, such as earnings targets (Scott, 2009). Examples of earnings management can be done by shifting costs and income for a certain period, changing the accounting method used, and taking advantage of opportunities to make accounting estimates (Dwiharyadi, 2017).

Management may be involved in the aggressiveness of financial reporting if there is no effective internal control because internal control may prevent financial statement misstatements, including aggressive tax reporting. Prior research found that the effectiveness of internal control negatively affects tax avoidance (e.g., Bimo et al., 2019). In other words, weak internal control can increase both financial reporting and tax reporting aggressiveness. Furthermore, studies have found that weak internal control can lead to delays in audit reporting, i.e., the total number of days from the first day after the balance sheet date to the audit report date (Ettredge et al., 2006; Mitra et al., 2015). The argument is that auditors who conduct financial statement audits require more procedures to detect firm activities, including TAG, which results in a longer audit time and may cause delays in audit reporting. In addition, managers who hide complex and unclear tax avoidance activities will make it increasingly difficult for auditors to reveal accounting irregularities attached to these tax avoidance activities (Goh et al., 2013; Kim et al., 2011).

Our study investigates the effect of corporate governance mechanisms on the association between TAG and audit report lag. Corporate governance theory emphasizes that there are conflicts of interest between agents and principals, with agents seeking to maximize private benefits at the expense of the principal (Jensen & Meckling, 1978). Effective corporate governance can reduce agency costs. Therefore, corporate governance mechanisms regulate the stakeholders (employees, suppliers, investors, and other interested parties) associated with the company. Each corporate entity has various governance mechanisms[1]. Herusetya (2017), for example, found that the moderating role of the board of commissioners and audit committees weakens the positive association of the likelihood to meet the earnings benchmarks and the audit report timeliness. In contrast, Goh et al. (2013) found that external supervision (proxied by institutional ownership and analyst following) that is less effective makes it increasingly difficult for the auditor to disclose accounting irregularities related to TAG and can cause the resignation of auditors. In sum, an effective corporate governance mechanism can reduce agency costs arising from TAG and aggressive financial reporting because it affects the performance of the auditors so that it directly results in lower auditor reporting delays and vice versa.

The presence of an ownership structure serves as a supervisory function toward management's actions. According to Chen et al. (2010), the ownership structure regulates the company's operations which can help avoid TAG because if the authorities know the action, the entity can be subject to fines for such actions. Thus,

1 Our study is limited to the moderating role of certain governance mechanisms, i.e., ownership structures and audit committees. Another study, for example Herusetya (2017) use the moderating role of governance in the form the BOC and the AC on the relationship on the likelihood to attain earnings benchmarks and the delay of audit report.

there is a possibility that the ownership structure has a moderating effect on the relationship between TAG and audit report timeliness. In addition, the audit committee in the corporate governance structure is considered a group whose function is to supervise the process of financial statements reporting (Dwiharyadi, 2017). Audit committees who have competency in accounting and finance can understand the complexities of accounting and financial reports.

Our study is urged and important for several reasons. First of all, Indonesia's low tax ratio and tax compliance can be reflected in the number of days required by the auditor in conducting a financial statement audit, as measured by the audit report timeliness[2]. In addition, delays in submitting audited financial statements can cause economic consequences to the capital market players, e.g., sanctions in suspending stock transactions on the stock exchange floor. As far as the author's knowledge, very few studies examine TAG in the form of tax avoidance at an extreme level using tax shelters (Herusetya & Stefani, 2020) on the audit report timeliness. Second, our study uses the moderating role of corporate governance as an internal monitoring mechanism that can weaken the relationship between TAG and audit report timeliness. If this mechanism is effective, the involvement of corporate governance through the ownership structure and audit committee can help lower agency costs associated with aggressive tax and financial reporting, as seen by the audit reporting time delay.

With TAG activities containing earnings management, the auditor requires higher audit efforts to carry out the financial statement audit process to minimize audit risk. Higher audit efforts are needed because the greater the TAG, the higher the level of aggressiveness of the financial statements, affecting the reliability of financial reporting. In addition, auditors need to verify the existence of TAG and earnings management. Thus, independent auditors who conduct audits require more complex audit techniques, more thorough observations, special audit processes, documentation, and consulting with tax experts.

Previous studies have found that audit quality negatively correlates with TAG (e.g., Richardson et al., 2013; Kanagaretnam et al., 2016). In addition, this relatively large number of audit procedures can slow down the audit process of the client's financial statements, which can indirectly affect the audit report lag. Therefore, based on the above arguments, we conclude that the greater the possibility of the TAG, the longer the audit completion time required by the auditor (audit report lag).

Previous studies found evidence that governance mechanisms through the proportion of the board of commissioners and audit committees negatively affect tax avoidance or TAG (Sandy & Lukviarman, 2015; Richardson et al., 2013). Furthermore, Kusumawati & Hermawan (2013) found that the audit committee's effectiveness negatively affects accounting fraud. This condition can happen because the proportion of boards of commissioners and audit committees that work effectively can increase the company's management oversight.

Companies with foreign ownership have better performance so that the published financial statements will be more reliable (Chen et al., 2010). In addition, the study of Richardson et al. (2013) found the moderating role of the corporate governance mechanism through the proportion of independent directors to the board, the application of risk management, and effective internal control to reduce TAG. Thus, TAG activities that have the potential results for delays in audited financial statements can be minimized because the audit efforts of independent auditors are reduced. Based on the arguments above, we assume that if the companies have effective corporate governance mechanisms (e.g., through the audit committee and ownership structure), these mechanisms weaken the positive relationship between TAG and audit report lag.

2 Audit report timeliness in this study is used interchangeably with the terminology of audit delay or audit report lag.

METHODS

We use a purposive sampling method to get our sample from the listed companies in the Indonesia Stock Exchange for 2012 to 2017. Financial data are taken by non-probabilistic method from the audited financial statements. We selected a sample from manufacturing companies and obtained 144 companies with 594 firm-year observations as our final sample. Table 1 shows the description of the sample selection. Table 2 reports the details of sample composition based on the sub-industry in the manufacturing industry.

Table 1 Sample Description

Description	Total
Total number of firms in the manufacturing industry at Indonesia Stock Exchange	144
Less:	
Number of firms publish the financial statements using foreign currencies in US Dollar	(31)
Missing financial data or incomplete data	(14)
Total sample in number of firms	99
Number of observations during 2012 – 2017 (in firm-years)	594

Table 2 Detail Composition of the Sample

No.	Sub-Industry	Number of Observation (Firms)	Population (Firms)	Percentage (%)
1	Cement	5	5	3,47
2	Ceramics, Glass, Porcelain	6	6	4,17
3	Metal and Allied Products	11	16	11,11
4	Chemicals	6	10	6,94
5	Plastics & Packaging	9	12	8,33
6	Animal Feed	4	4	2,78
7	Wood Industries	1	2	1,39
8	Pulp & Paper	5	9	6,25
	Total Basic Industry and Chemicals	47	64	44,44
1	Food and Beverages	13	14	9,72
2	Tobacco Manufacturers	3	4	2,78
3	Pharmaceuticals	9	11	7,64
4	Cosmetics and Household	5	6	4,17
5	Hauseware	2	3	2,08
	Total Consumer Goods Industry	32	38	26,39
1	Mechinery and Heavy Equipment	0	2	1,39
2	Automotive and Components	9	13	9,03
3	Textile and Garment	4	18	12,5
4	Footware	3	2	1,39
5	Cable	5	6	4,17
6	Electronics	0	1	0,69
	Total Miscellaneous Industry	20	42	29,17
	Total	99	144	100

We develop our empirical model to test the H1 hypothesis and use the audit report timeliness, ARL (Ln), as our dependent variable. The study uses the TAG (TAXAGGR) as our main predictor following the tax shelter prediction model from Wilson (2009). To test hypothesis H1, we use the main model as follows:

$$ARL(Ln)_{it} = \beta_0 + \beta_1 TAXAGGR_{it} + \beta_2 ROA_{it} + \beta_3 \Delta ROA_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 GROWTH_{it} + \beta_7 AGE_{it} + \beta_8 DMLOSS_{it} + \beta_9 DMGCO_{t-1} + \beta_{10} DAC_{it} + \varepsilon_{it} \quad \text{(Model 1)}$$

Where ARL(Ln) is the natural logarithm of the number of days from the first day after the date of the statement of financial position, i.e., January 1 to the date of the audit report, and TAXAGGR is the natural logarithm of the number of days from the first day after the date of the statement of financial position, i.e., January 1 to the date of the audit report. In order to support our H1 hypothesis, we expect that the coefficient of β_1 from TAG (TAXAGGR) is positive and significant. We include variables controls in Model 1 that might affect the dependent variable, audit report timeliness, ARL(Ln) such as ROA, ΔROA, SIZE, LEV, GROWTH, AGE, DMLOSS, DMGCO, DAC. Please see the variable definitions in Appendix A for detail.

While to test the H2 hypothesis, we use the following model:

$$ARL(Ln)_{it} = \beta_0 + \beta_1 TAXAGGR_{it} + \beta_2 TAXAGGR*BOC_{it} + \beta_3 TAXAGGR*PROP_{it} + \beta_4 TAXAGGR*DMFOR_{it} + \beta_5 TAXAGGR*KA_{it} + \beta_6 ROA_{it} + \beta_7 \Delta ROA_{it} + \beta_8 SIZE_{it} + \beta_9 LEV_{it} + \beta_{10} GROWTH_{it} + \beta_{11} AGE_{it} + \beta_{12} DMLOSS_{it} + \beta_{13} DMGCO_{t-1} + \beta_{14} DAC_{it} + \varepsilon_{it} \quad \text{(Model 2)}$$

Following Utama et al. (2010), the ownership structure is measured by: (i) board of commissioners' share ownership, (ii) largest shareholder ownership in percentage, and (iii) foreign investor's share ownership. Therefore, we expect that the interaction variables of TAXAGGR*BOC, TAXAGGR*PROP, TAXAGGR*DMFOR, and TAXAGGR*KA are all negative and significant to meet the H2 hypothesis. Variable definitions of Model 2 are also defined in Appendix A.

TAG (TAXAGGR) in this study was measured using the tax shelter prediction score (SHELTER), which was developed by Wilson (2009) and has been used by previous researchers (Kim et al., 2011). Measurements using the tax shelter in Equation (1) are as follows:

$$SHELTER_{it} = -4.86 + 5.20 * BTD_{it} + 4.08 * DAC_{it} - 1.41 * LEV_{it} + 0.76 * SIZE_{it} + 3.51 * ROA_{it} + 1.72 * FOREIGN\_INCOME_{it} + 2.43 * R\&D_{it} \quad \text{(Eq. 1)}$$

After obtaining the estimated value of SHELTER from Equation (1), then to find the value of TAXAGGR, the estimated value of SHELTER is ranked first based on the company-year data, then converted into deciles within the range 0.00- 1.00 based on the ranking. Thus, the decile value of SHELTER will be the value of TAXAGGR. Please see Appendix A for variable definitions in Equation (1).

The absolute discretionary accrual variable (DAC) in this study was measured using the performance-adjusted modified Jones model in Equation (2), which was used by Rego & Wilson (2012) as follows:

$$TACCR_{it} = \beta_0 + \beta_1 1/AT_{it} + \beta_2 SSA_{it} + \beta_3 SPPENT_{it} + \beta_4 ROA_{it} + \varepsilon_{it} \quad \text{(Eq. 2)}$$

We can calculate the discretionary accrual (DAC) from the above Equation by deducting the actual accruals and the estimated value of non-discretionary accruals. All variable definitions are defined in Appendix A.

RESULTS AND DISCUSSION

Table 3 shows the results of descriptive statistics. Based on Table 3, the average number of days of audit report timeliness (ARL(Days), audit report lag in days) is 79 less than 90 days. Based on the Financial Services

Authority of Indonesia (OJK) Regulation No 44, article 7 of 2016, the maximum day to submit audited financial statements[3] is 90 days. Table 3 also shows the shortest and the longest length of time is 22 days and 276 days, respectively. The number of observations exceeding 90 days is 30 firm-year observations (untabulated), or 5 percent of the 594 firm-years observations. The ARL(Ln) variable has a mean, minimum, and maximum of 11.44, 0.10, and 20.64, respectively. The ARL(Ln) variable has a mean, median, minimum, and maximum of 4.33, 4.39, 3.09, and 5.62, respectively.

Table 3 Descriptive Statistics

Variables	Mean	Median	Minimum	Maximum	Std. Deviation
ARL(Days)	79.31	81	22	276	24.32
ARL(Ln)	4.33	4.39	3.09	5.62	1.68
SHELTER	7.55	7.69	2.53	12.38	1.74
TAXAGGR	0.57	0.58	0.14	1.00	0.14
BOC	0.04	0.00	0.00	9.00	0.38
PROP	0.56	0.53	0.00	0.99	0.22
DMFOR	0.45	0.00	0.00	1.00	0.49
KA	0.80	1.00	0.00	1.00	0.40
ROA	0.06	0.05	-0.21	0.36	0.10
ΔROA	0.20	-0.10	-215.97	408.52	19.32
ASSETS (in mio IDR)	7,997,199	1,340,862	36,412	295,646,000	2,660,007
SIZE	14.32	14.11	10.50	19.50	1.62
LEV	0.48	0.47	0.04	1.36	0.26
GROWTH	0.08	0.07	-1.00	2.82	0.28
AGE	19.82	21.00	0.00	36.00	7.38
DMLOSS	0.21	0.00	0.00	1.00	0.41
DMGCO	0.02	0.00	0.00	1.00	0.15
DAC	0.07	0.05	0.00	0.75	0.07

Notes: n= 594. Variable definitions are presented in Appendix A.

The main variable of concern, namely TAXAGGR, has a mean and median value of 0.57 and 0.58, with the minimum and maximum are 0.14 and 1.00, respectively, while the estimated value of SHELTER based on the Wilson equation (2009) has a mean, median, minimum, and maximum of 7.55, 7.69, 2.53, and 12.58, respectively. Ownership structure variables consist of BOC, PROP, DMFOR have mean/proportion of 4.09 percent, 0.56, and 0.45, respectively, while the competence of the audit committee (KA) has a proportion of 0.80 on a scale of 1.00.

3 OJK Regulation (POJK) Number 44 article 7 (2) of 2016 and the previous regulation "Decision of the Chairman of the Capital Market Supervisory Agency No KEP-346/BL/2011" states that annual financial statements must be submitted to the Financial Services Authority no later than 90 (ninety) days from the end of the financial year (Financial Services Authority, 2016). The deadline for submitting the 2020 annual financial statements has been extended by two months in regards of the COVID-19 pandemic "Financial Services Authority Letter Number S-92/D.04/2020 dated March 18, 2020."

We treat all continuous variables in Models 1 and 2 with winzorization procedures using two standard deviations from the mean to avoid data outliers so that all data are distributed within the range of 95 percent of the overall data distribution. Our preliminary tests for Models 1 and 2 do not find any heteroscedasticity problems.

Table 4 presents the correlation matrix. The results of the correlation analysis between the main variable, TAG (TAXAGGR), and the length of audit time, ARL(Ln), have a negative correlation (-0.13) and significant at $p < 0.01$, different from our early prediction. There is no indication of multicollinearity problems in the correlation analysis. Also, based on the variance inflation factor (VIF) test, all independent variables have a VIF mean of 1.57 for Model 1 and 1.54 for Model 2, indicating no multicollinearity problem. Please see Tables 5 and 6 for details of VIF and Tolerance values.

Table 4 Correlation Matrix

Variables	ARL(Ln)	TAXAGGR	BOC	PROP	DMFOR	KA	ROA	ΔROA
ARL(Ln)	1.00							
TAXAGGR	-0.15***	1.00						
BOC	0.04	-0.01	1.00					
PROP	-0.20***	0.09**	-0.04	1.00				
DMFOR	0.05	0.01	0.03	0.08**	1.00			
KA	-0.03	-0.09**	0.03	-0.14***	-0.02	1.00		
ROA	-0.20***	0.43***	-0.05	0.23***	0.07*	-0.21***	1.00	
DROA	0.01	-0.00	-0.00	-0.07*	-0.02	-0.00	0.04	1.00

Notes: ***,**,** refer to significant levels at 0.01, 0.05, and 0.10. All variable definitions are presented in Appendix A.

Table 4 Correlation Matrix (continued)

Variables	SIZE	LEV	GROWTH	AGE	DMLOSS	DMGCO	DAC
SIZE	1.00						
LEV	-0.00	1.00					
GROWTH	0.26***	0.01	1.00				
AGE	0.13***	-0.07	0.08**	1.00			
DMLOSS	-0.10**	0.38***	-0.06	-0.08**	1.00		
DMGCO	-0.05	0.32***	-0.02	-0.02	0.28***	1.00	
DAC	0.01	0.02	0.05	0.08*	0.01	0.05	1.00

Notes: ***,**,** refer to significant levels at 0.01, 0.05, and 0.10. All variable definitions are presented in Appendix A.

The results of the H1 hypothesis testing are shown in Table 5. Before testing the H1 hypothesis, we performed the preliminary tests covering the normality, multicollinearity, heteroscedasticity, and model specification tests. Preliminary test results show that the research model is free from these problems. For example, model 1, in , has an F-value of 7.14, significant at the $p < 0.001$ level, with an R-squared value of 10.44 percent and an adjusted R-squared of 8.99 percent.

Table 5 Regression Result of H1 Hypothesis

Model 1						
$ARL(Ln)_{it} = \beta_0 + \beta_1 TAXAGGR_{it} + \beta_2 ROA_{it} + \beta_3 DROA_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 GROWTH_{it} + \beta_7 AGE_{it} + \beta_8 DMLOSS_{it} + \beta_9 DMGCO_{t-1} + \beta_{10} DAC_{it} + \varepsilon_{it}$						
Independent variable	Dependent variable: ARL(Ln)					
	Pred.	Coef.	t-stat	Sig.	VIF	TOL
Constant	?	13.636***	21.26	0.000		
TAXAGGR	+	1.256*	1.85	0.065	2.65	0.378
ROA	-	-2.206***	-3.17	0.002	1.86	0.537
ΔROA	-	0.001	0.16	0.875	1.01	0.989
SIZE	-	-0.251***	-4.78	0.000	2.24	0.446
LEV	+	0.428*	1.87	0.062	1.32	0.760
GROWTH	-	-0.089	-0.49	0.624	1.10	0.911
AGE	-	0.028**	2.24	0.025	1.18	0.847
DMLOSS	+	0.517**	2.43	0.015	1.64	0.611
DMGCO	+	0.200	0.53	0.595	1.16	0.865
DAC	+	-0.732	-0.98	0.328	1.01	0.986
Number of observations				594		
R-Squared (%)				10.44		
Adj. R-Squared (%)				8.99		
F-value				7.14		
Sig.				<0.001		

Notes: Coefficient value and t-statistics are shown with robust standard errors clustered at the company level. ***, **,* refer to significant levels at 0.01, 0.05, and 0.10, respectively, at the two-tailed test (one-tailed if predicted). All variable definitions are presented in Appendix A.

The TAXAGGR variable (b1) has a coefficient of 1.26, significant at the 0.10 level (t-test = 1.85, $p < 0.065$) with the two-tailed test, or it is significant at the 0.05 level using the one-tailed test following the direction of the H1 hypothesis. The hypothesis result of this test finds evidence that TAG (TAXAGGR) has a positive effect on audit report lag (ARL(Ln)), consistent with our initial prediction of the hypothesis. These findings interpret that the TAG activities cause the auditors to require higher audit efforts in the financial statement audit to detect irregularities related to extreme tax avoidance that caused the auditors to take extra time, as reflected in the audit report lag. Thus, the H1 hypothesis is supported.

The results of this study are in line with studies conducted by Frank et al. (2009) and Herusetya & Stefani (2020), which found a positive relationship between the aggressiveness of financial reporting and tax reporting, and vice versa. Management can perform earnings management related to TAG, e.g., managers can use various accounts to exercise TAG in carrying out valuation reserve accounts, contingent tax reserves, and estimates of taxes to be paid (Goh et al., 2013). In addition, managers who hide complex and unclear tax avoidance activities will make it increasingly difficult for auditors to reveal accounting irregularities attached to these tax avoidance activities. However, several previous studies found that audit quality negatively affects TAG activities (e.g., Kanagaretnam et al., 2016). Auditors with a high reputation can increase the credibility of financial statements by producing higher quality financial reports, which can impede management actions in

TAG. In other words, TAG increases audit risk for auditors, so auditors with high audit quality will maintain their reputation (Kanagaretnam et al., 2016; Richardson et al., 2013), thus requiring more time in gathering audit evidence and audit efforts.

We performed additional tests by separating the sample into sub-samples with the number of days of audit report timeliness, ARL(Days) up to 90 days (n= 564), and the number of days ARL(Days) exceeding 90 days (n=30). Additional test results (untabulated) with a sub-sample of days up to 90 days found evidence that TAG positively affects the audit report timeliness at a significance level of 0.01 (t-test=2.54, p=0.011). In comparison, testing with a sub-sample of the number of days exceeding 90 days found no evidence (t-test= -1.66, p= 0.113) (Untabulated). This additional test confirms that the number of days exceeding 90 days in the audit report timeliness is not automatically relevant to TAG. An alternative explanation for this is the possibility that the composition of non-Big Four auditors still dominate the Big Four auditors in our sample. However, consistent with our main results, the length of the audit report timeliness days of up to 90 days is positively associated with TAG at an extreme level using Wilson's tax shelter prediction model. The interpretation in these results is consistent with our understanding that due to the aggressive tax firms, the auditor needs more time to scrutinize these activities than non-tax aggressive firms. Auditors are not only accountable for producing timely and high-quality audit reports but also for their social responsibilities and professional ethics (Zeng, 2019; Hermawan et al., 2021).

Several control variables have associations with audit report lag. The variables ROA and SIZE have negative and significant associations at 0.01 for ARL, respectively. Companies with better performance and larger sizes have a better reputation, integrity, and internal control, making it easier for external auditors to carry out the audit process and reduce audit risk. The variables LEV, AGE, and LOSS have positive and significant associations with ARL at the levels of 0.10, 0.05, and 0.05, respectively, indicating that entities with high borrowing rates, incurring losses, and a longer age tends to have auditors with longer working hours that increase the audit report lag.

The results of the H2 hypothesis testing are presented in Table 6. The regression results from Model 2 show that the regression model has an F-value of 7.90, significant at 0.01 ($p<0.001$), and has an R-squared of 12.83 percent and adjusted R-squared of 10.72 percent. Furthermore, the regression model shows that the moderating role of the corporate governance mechanism is represented by the interaction variables TAXAGGR*BOC, TAXAGGR*PROP, TAXAGGR*DFOR, and TAXAGGR*KA[4] .

From Table 6, the coefficient of the interaction variable TAXAGGR*BOC (b_2) is 0.18, positive and significant at 0.01 ($p<0.01$) in contrast with our early prediction; then for TAXAGGR*PROP has a coefficient b_3 of -1.79, negative and significant at the level of 0.01 ($p<0.01$), consistent with our prediction; while the TAXAGGR*DMFOR coefficient (b_4) is not significant at 0.10; and finally, the TAXAGGR*KA coefficient (b_5) is negative and significant at 0.05 (-0.62, p=0.029), consistent with our early prediction. In addition, several control variables in the Model 2 regression results are consistent with the regression results in the previous model.

The hypothesis results of the moderating role of this regression model show that share ownership of the members of the board of commissioners has a moderating role that strengthens the positive relationship between TAG and audit report lag (TAXAGGR*BOC coefficient is positive and significant), in contrast to the expectations of our study. Our finding contrasts with Richardson et al. (2013), for example, who found the moderating role of the corporate governance mechanism through the proportion of independent directors that could reduce TAG. As an alternative to these results, we presume that the percentage share of ownership of the board of commissioner members also reflects a vested interest in aggressive tax avoidance activities.

4 Model 2 does not include the BOC, PROP, DMFOR, and KA variables but only the interaction variables due to the multicollinearity problems that arise with these four interaction variables. We cannot do the centering procedures on these variables because they are discrete variables.

Table 6 Regression Result of H2 Hypothesis

Model 2

$$ARL(Ln)_{it} = \beta_0 + \beta_1 TAXAGGR_{it} + \beta_2 TAXAGGR*BOC_{it} + \beta_3 TAXAGGR*PROP_{it} + \beta_4 TAXAGGR*DMFOR_{it} + \beta_5 TAXAGGR*KA_{it} + \beta_6 ROA_{it} + \beta_7 DROA_{it} + \beta_8 SIZE_{it} + \beta_9 LEV_{it} + \beta_{10} GROWTH_{it} + \beta_{11} AGE_{it} + \beta_{12} DMLOSS_{it} + \beta_{13} DMGCO_{t-1} + \beta_{14} DAC_{it} + \varepsilon_{it}$$

Independent variable	Dependent variable: ARL(Ln)					
	Pred.	Coef.	t-stat	Sig.	VIF	TOL
Constant	?	13.432***	20.08	0.000		
TAXAGGR	+	2.624***	3.42	0.001	3.82	0.262
TAXAGGR*BOC	-	0.178***	4.29	0.000	1.01	0.989
TAXAGGR*PROP	-	-1.792***	-3.78	0.000	1.57	0.638
TAXAGGR*DMFOR	-	-0.093	-0.45	0.656	1.15	0.871
TAXAGGR*KA	-	-0.625**	-2.19	0.029	1.25	0.802
ROA	-	-1.801**	-2.34	0.020	2.12	0.472
ΔROA	-	-0.000	-0.17	0.865	1.02	0.984
SIZE	-	-0.231***	-4.08	0.000	2.69	0.372
LEV	+	0.423*	1.85	0.064	1.33	0.749
GROWTH	-	-0.106	-0.59	0.557	1.11	0.903
AGE	-	0.028**	2.20	0.028	1.27	0.786
DMLOSS	+	0.554***	2.55	0.011	1.67	0.598
DMGCO	+	0.175	0.45	0.654	1.16	0.859
DAC	+	-0.827	-1.10	0.272	1.02	0.981
Number of observations				594		
R-Squared (%)				12.83		
Adj. R-Squared (%)				10.72		
F-value				7.90		
Sig.				<0.001		

Notes: Coefficient value and t-statistics are shown with robust standard errors clustered at the company level. ***, **,* refer to significant levels at 0.01, 0.05, and 0.10, respectively, at the two-tailed test (one-tailed if predicted). All variable definitions are presented in Appendix A.

Next, our study found that corporate governance mechanisms have a role in reducing agency costs through the monitoring function of the largest share ownership and the expertise of audit committee members in finance and accounting, which weaken the positive relationship between TAG activities and audit efforts measured by audit report lag. These results are consistent with the prior findings (e.g., Richardson et al., 2013; Sandy & Lukviarman, 2015).

In sum, our study finds some evidence that corporate governance mechanisms through the largest share ownership structure and audit committee competence can weaken the positive relationship between extreme tax avoidance activities and audit report lag. The outcomes of this study suggest that the corporate governance mechanism can help minimize agency costs, which helps the auditor easier in auditing the financial statements and ensuring that the auditor publishes the audit report on time.

CONCLUSION

This study finds evidence that TAG positively affects the audit report timeliness. These results indicate that accounting irregularities and earnings management are inherent in the TAG activities, as found in the previous studies (e.g., Frank et al., 2009; Herusetya & Stefani, 2020; Kamila, 2014; Kim et al., 2011). The existence of TAG, especially in extreme levels, furthermore, affects the auditors' performance in conducting financial statements audit so that auditors need longer time in the audit process reflected in the audit report timeliness or audit report lag. Our study also finds evidence, as predicted, that corporate governance mechanisms can moderate the positive relationship between TAG and audit report timeliness. Thus, the largest shareholding ownership and the accounting and financial expertise of the audit committee weaken this relationship, resulting in decreasing the audit report lag. Nevertheless, our study also finds that the board of commissioners' share ownership has a role that strengthens the relationship between the TAG and audit report timeliness. This study has important implications for auditors, investors, tax authorities, and other stakeholders regarding the importance of audit quality and corporate governance mechanisms to disclose and detect tax reporting and aggressive financial reporting. The findings of this study imply that the corporate governance mechanism can assist the auditors in minimizing agency costs, hence assisting the auditors in auditing the financial statements and guaranteeing the auditors deliver the audit report on time. Therefore, our results can have economic consequences to the tax authorities, other stakeholders and affect the auditors' performance in the timeliness of audit reports. Although Wilson (2009)'s tax shelter prediction model is rarely used in Indonesia, this study has limitations, including measuring the TAG only from the tax planning measurements at the most extreme level. Future studies can use various other measures of tax planning levels, from the lowest to the most extreme (e.g., using cash effective tax rate, BTD, permanent BTD, to tax shelter).

ORCID

Antonius Herusetya https://orcid.org/0000-0002-5649-4578

REFERENCES

Bimo, I. D., Prasetyo, C. Y., & Susilandari, C. A. (2019). The effect of internal control on tax avoidance: the case of Indonesia. *Journal of Economics and Development*, *21*(2), 131–143. https://doi.org/10.1108/jed-10-2019-0042

Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are Family Firms More Tax Aggressive than Non-Family Firms? *Journal of Financial Economics*, *95*(1), 41–61. https://doi.org/10.1016/j.jfineco.2009.02.003

Dwiharyadi, A. (2017). Pengaruh Keahlian Akuntansi dan Keuangan Komite Audit dan Dewan Komisaris terhadap Manajemen Laba (The Impact of Accounting and Finance Expertise of Audit Committee and Board of Commissioner on Earnings Management). *Jurnal Akuntansi Dan Keuangan Indonesia*, *14*(1), 75–93. http://jaki.ui.ac.id/index.php/home/article/view/646

Ettredge, M., Li, C., & Sun, L. (2006). The Impact of SOX Section 404 Internal Control Quality Assessment on Audit Delay in the Sox Era. Auditing: *A Journal of Practice & Theory, 25*(3): 1–23. https://doi.org/10.2308/aud.2006.25.2.1

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. https://doi.org/10.2308/accr.2009.84.2.467

Goh, B. W., Lim, C. Y., Shevlin, T. J., & Zang, Y. (2013). Tax Aggressiveness and Auditor Resignation. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2277336

Hermawan, S., Rahayu, D., Sarwenda, B., Rahayu, R. A., & Salisa, N. A. N. (2021). Determining Audit Quality in the Accounting Profession with Audit Ethics as a Moderating Variable. *Indonesian Journal of Sustainability Accounting and Management*, *5*(1), 11-22. https://doi.org/10.28992/ijsam.v5i1.138

Herusetya, A. (2017). Earning Benchmarks and Timeliness of Audit Reports: Corporate Governance Mechanism as Moderating Variable. *Proceeding Parahiyangan International Accounting & Business Conference 2017*, 627–640.

Herusetya, A., & Stefani, C. (2020). The Association of Tax Aggressiveness on Accrual and Real Earnings Management. *Journal of Accounting and Investment*, *21*(3), 434-451. https://doi.org/10.18196/jai.2103158

Higgins, D., Omer, T. C., & Phillips, J. D. (2015). The Influence of a Firm's Business Strategy on its Tax Aggressiveness. *Contemporary Accounting Research*, *32*(2), 674–702. https://doi.org/10.1111/1911-3846.12087

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/10.1016/0304-405X(76)90026-X

Kamila, P. A. (2014). Analisis Hubungan Agresivitas Pelaporan Keuangan dan Agresivitas Pajak pada Saat Terjadinya Penurunan Tarif Pajak. *Finance and Banking Journal*, *16*(2), 228–245.

Kanagaretnam, K., Lee, J., Lim, C. Y., & Lobo, G. J. (2016). Relation Between Auditor Quality and Tax Aggressiveness: Implications of Cross-Country Institutional Differences. *Auditing*, *35*(4), 105–135. https://doi.org/10.2308/ajpt-51417

Kim, J. B., Li, Y., & Zhang, L. (2011). Corporate Tax Avoidance and Stock Price Crash Risk: Firm-level Analysis. *Journal of Financial Economics*, *100*(3), 639–662. https://doi.org/10.1016/j.jfineco.2010.07.007

Kusumawati, S. M., & Hermawan, A. A. (2013). the Influence of Board of Commissioners and Audit Committee Effectiveness, Ownership Structure, Bank Monitoring, and Firm Life Cycle on Accounting Fraud. *Jurnal Akuntansi Dan Keuangan Indonesia*, *10*(1), 20–39. https://doi.org/10.21002/jaki.2013.02

Mitra, S., Song, H., & Yang, J. S. (2015). The Effect of Auditing Standard No. 5 on Audit Report Lags. *Accounting Horizons*, *29*(3), 507–527. https://doi.org/10.2308/acch-51052

Otoritas Jasa Keuangan. (2016). *Peraturan Otoritas Jasa Keuangan No. 44/POJK.04/2016 tentang Laporan Lembaga Penyimpanan dan Penyelesaian*. Republik Indonesia.

Rego, S. O., & Wilson, R. (2012). Equity Risk Incentives and Corporate Tax Aggressiveness. *Journal of Accounting Research*, *50*(3), 775–810. https://doi.org/10.1111/j.1475-679X.2012.00438.x

Richardson, G., Taylor, G., & Lanis, R. (2013). The impact of Board of Director Oversight Characteristics on Corporate Tax Aggressiveness: An empirical Analysis. *Journal of Accounting and Public Policy*, *32*(3), 68–88. https://doi.org/10.1016/j.jaccpubpol.2013.02.004

Sandy, S., & Lukviarman, N. (2015). Pengaruh Corporate Governance terhadap Tax Avoidance: Studi Empiris pada Perusahaan Manufaktur. *Jurnal Akuntansi & Auditing Indonesia*, *19*(2), 85–98. https://doi.org/10.20885/jaai.vol19.iss2.art1

Scott, W. R. (2009). *Financial Accounting Theory* (Fifth). Canada: Prentice Hall.

Supriati, S., & Anggraini, D. D. (2021). Sustainability Reporting and Tax Aggressiveness: Evidence from a Public Company in Indonesia. *Indonesian Journal of Sustainability Accounting and Management*, *5*(1), 71-80. https://doi.org/10.28992/ijsam.v5i1.249

Utama, S., Utama, C. A., & Yuniasih, R. (2010). Related Party Transaction - Efficient or Abusive: Indonesia Evidence. *Asia Pacific Journal of Accounting and Finance*, *1*(December), 77–102.

Wilson, R. (2009). An Examination of Corporate Tax Shelter Participants. *The Accounting Review*, *84*(3), 969–999.

Zeng, T. (2019). Relationship between Corporate Social Responsibility and Tax Avoidance: International Evidence. *Social Responsibility Journal*, *15*(2), 244–257. https://doi.org/10.1108/SRJ-03-2018-0056

Appendix A. Variable Definitions

Model 1 and 2		
ARL(Ln)	=	Natural logarithm of the number of days from the first day after the date of the statement of financial position, i.e., January 1 to the date of the audit report
TAXAGGR	=	TAG is measured using the tax shelter prediction model (SHELTER) from Wilson (2009) as follows: $SHELTER_{it}$ = - 4.86 + 5.20*BTD_{it} + 4.08*DAC_{it} – 1.41*LEV_{it} + 0.76*$SIZE_{it}$ + 3.51*ROA_{it} + 1.72*FOREIGN_INCOME$_{it}$ + 2.43*$R\&D_{it}$ (Eq. 1)
ROA	=	Return on assets
ΔROA	=	Change in return on assets
SIZE	=	Natural logarithm of total assets
LEV	=	Total debt divided by total assets
GROWTH	=	One year sales growth rate, (sales t – sales t-1)/sales t-1
AGE	=	Number of years since the IPO
DMLOSS	=	Dummy variable, equals 1 if the company report net loss in year t; 0 if otherwise
DMGCO	=	Dummy variable, equals 1 if the company receive going concern opinion in year t; and 0 otherwise
DAC	=	Absolute discretionary accruals. We follow Rego & Wilson (2012) using the performance-adjusted modified Jones model as follows: $TACCR_{it} = \beta_0 + \beta_1 1/AT_{it} + \beta_2 SSA_{it} + \beta_3 SPPENT_{it} + \beta_4 ROA_{it} + \varepsilon_{it}$ (Eq. 2)
BOC	=	Share ownership of the member of the board of commissioners in percentage
PROP	=	The largest shareholding ownership in percentage
DMFOR	=	Dummy variable, equals 1 if there is share ownership of foreign investors; 0 otherwise
KA	=	Audit committee competence, dummy variable, equals 1 if audit committee has competence in accounting and finance; 0 otherwise
Equation (1)		
BTD	=	Income before tax – taxable income, scaled by lag total assets
DAC	=	Absolute discretionary accruals using the performance-adjusted modified Jones model
LEV	=	Long-term debt divided by total assets
SIZE	=	Natural logarithm of total assets
ROA	=	Return on assets
FOREIGN_INCOME	=	Dummy variable, given a score of 1, if the company has foreign income; and 0 otherwise
R&D	=	Research and development expense, scaled by lag total assets

Equation (2)		
TACCR	=	Net income – operating cash flow, scaled by lag total assets
AT	=	Total assets
SSA	=	Change in Sales – Change in Account Receivable, scaled by lag total assets
SPPENT	=	Property, plant, and equipment- net amount, scaled by lag total assets
ROA	=	Return on assets
i,t	=	Subscripts for identification firm i, and year t