

Tax Aggressiveness, Accounting Fraud, and Annual Report Readability

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Abstract Purpose: There are some proofs provided by previous research that when a management wants to hide something (i.e: earning management), the firm's annual report becomes less readable. This research would like to reaffirm such notion by examining the impact accounting fraud and tax aggressiveness of a firm on its annual report readability. **Methodology:** This study uses data from companies listed in Indonesia Stock Exchange in 2016. To prove that tax aggressiveness and accounting fraud do reduce annual report readability, this study uses multiple regression that is run by SPSS 22 software. **Finding:** From the output of multiple regression analysis, it is proven that tax aggressiveness has a negative relation with annual report readability. Tax aggressiveness is a "grey area" action that could be considered as illegal activity altogether. That being said, the more aggressive a firm's tax planning is, the more management has to hide to avoid the possibility of being questioned or even punished by financial authorities. With so much to hide, the annual report becomes more complex and thus, increase the Fog Index number. Accounting fraud however, has no significant impact on annual report readability. There are two reasons why this hypothesis cannot be proven. First, out 558 companies listed in Indonesia Stock Exchange, there are only 37 companies that restated their financial reports in 2016 so restatement's effect on annual report readability cannot be defined clearly. Second, there are many reasons why management restates their financial report and not all of them are bad. Some restatements are done purely because of unintentional error. In this paper there is no measure that could determine management's intention therefore, the increase Fog Index reading could happen with or without restatement. **Originality:** This is the first study that researches the relation between tax aggressiveness, accounting fraud, and annual report readability.

Keywords: *tax aggressiveness, accounting fraud, annual report readability, effective tax rate, tax shelter, restatement, Indonesia*

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1. Introduction

Panama papers, the leak of more than eleven million files from an offshore law firm, Mossack Fonseca, shows how rich people utilize the loophole in tax rules to do tax avoidance by using offshore tax havens. The document reveals so many politicians and country leaders from all around the world, including Indonesia, to have been using the tax havens. About 800 Indonesian business people and politicians are on the list. Faced by the fact that there are so many major tax payers who avoid paying tax, Indonesian government employs a policy called Tax Amnesty, which encourage people to report the true extend of their wealth to the government and in return, the government will annul the tax subject's tax payable, administration sanction, and criminal sanction upon the unreported wealth from 2015 backward. This phenomena is a reflection of how much tax is avoided by business people in Indonesia. It is consistent with Chen et al's description of firms' perception toward tax, which is a

burden [1]. That being said, it is no wonder if firms take some measures to reduce their taxable income through tax planning which is called tax aggressiveness [1].

The challenge in this paper is to differentiate between tax aggressiveness and tax avoidance. Gerrit Lietz presents a figure that unifies conceptual framework of corporate tax planning [2]. In that figure, tax avoidance is defined as an act of reducing firm's explicit tax. The figure shows that in term of legality, tax avoidance has a larger scope than tax aggressiveness; tax avoidance covers all activities to reduce explicit tax from 'perfectly legal' to 'clearly illegal' (also called tax evasion) whereas tax aggressiveness covers more limited scope of actions from 'clearly illegal' to 'having more than 50% chance of being upheld under audit'. The same thing goes with compliance. A previous research states that the difference between tax avoidance and tax aggressiveness lies on its compliance to rules. Furthermore, they explain that tax aggressiveness is more unlikely to survive the scrutiny of any financial institution involved. So in other words, tax aggressiveness has higher possibility of being illegal and/or disobedience [3].

A research about tax aggressiveness and financially transparency concludes that the more firm becomes tax aggressive, the volume of disclosure increases in MD&A section [4]. Another research about relations between earning management and annual report readability proved that the more a firm manages its earnings, the more complex their annual reports become [5].

Managing earnings to get a certain result is common. There are many definitions in earnings management. Scott defines earning management as the act of choosing an accounting policy from a set of policies that serves firm's interest the best [6]. While another defines earnings management as an intentional act that affect external financial reporting process for the interest of that person [7]. However if taken too far, earning management could turn into fraudulent act. Accounting fraud has the same goal with earnings management. However, the measures taken in fraudulent actions is not in line generally accepted accounting principles (GAAP) while earnings management is done within GAAP [8].

Indonesia is no stranger to fraud. Notorious for its corruption rate, in 2016 Indonesia's score of Corruption Perception Index (CPI) was 36, which was below world average score of 43. According to a survey conducted by Association of Certified Fraud Examiner [9], only 2% of 229 respondents think of financial report fraud as the fraud that happen most frequently in Indonesia and only 4% of respondents choose financial report as the type of fraud that causes the biggest loss. Even so, the loss caused by financial report fraud is quite significant. Four out of ten people in the survey stated that the loss caused by financial report fraud is higher than Rp 10 billion. Statement on Auditing Standards No. 99 (SAS 99) issued by Auditing Standards Board of the American Institute of Certified Public Accountant defines accounting fraud as an intentional act that results in a material misstatement in financial statements.

Considering the results from previous researches, we conclude that the more firm tampers their business process, be it taxes, earnings, assets, the more complex the annual report become, thus reducing the level of its readability. Annual report is a tool of communication for companies. It tells companies' achievements and set backs throughout the year. The purpose of annual report is to provide clear depiction of how firm operates its business throughout the year. However there are many annual reports these days that use complicated language that might not be common for average person. This betrays the goal of annual report itself as it reduces the level of reader's comprehension of annual report contents. Considering the previous research results, in this paper we assume that the higher firm's level of tax aggressiveness and accounting fraud, the lower annual report's level of readability in Indonesia.

2. Hypothesis Development

An annual report readability research shows that the lower the earnings, the higher the Fog index, where the higher reading on Fog index indicates higher difficulty in reading it [10]. The index shows the minimum age of a person with full time education who can read the text. However it is unclear whether the index is caused by

complex report in order to hide bad news or difficulty in conveying bad news [5]. To avoid that confusion, Lo, Ramos and Rogo's research on earning management and annual report readability focuses on events in which firms manage their earnings in order to meet targets or to surpass last year's earning. It concludes that the more a firm manages its earnings, the less readable annual report becomes. From these researches, we can conclude that annual report tends to be more complex when firm has something to hide. This theory is further enhanced by researches on costs and benefits of disclosing business information. Voluntary disclosure does have its own advantages such as increasing firm transparency which leads to information risk and cost of capital reduction. This will eventually leads to share price increase [11]. However, voluntary disclosure also present some disadvantages to management such as loss of competitive advantage, possibility of litigation, and direct cost of collecting, processing, and disseminating the information [12]. The risk of litigation is highlighted in this paper. When a firm's business activities runs on grey area or even downright illegal, it is understandable for firm to try to cover up things that could arouse questions from authorities.

Tax aggressiveness is an act of reducing firm's amount of tax payable through activities that fall on illegal to grey area category [2]. It means that even though it doesn't always count as illegal or fraudulent, the measure taken to reduce taxable income might not be compliant to the law. Even with the clear consequences (of being questioned and even sued), when a firm is under massive potential of bankruptcy or financial distress, it is incentivized to engage in tax aggressiveness and this relation between financial distress and tax aggressiveness is even more encouraged by the existence of global financial crisis [13]. If that is the case then it is understandable for firms to try to hide the actual process of achieving the taxable income because they are aware that tax aggressiveness could land them in court. One way to achieve that is to create a more complex report in order to create confusion and hide the underlying truth [14]. That being said, we assume that tax aggressiveness and annual report Fog index have positive relationship since firm has to cover up some things that could potentially arouse many questions from auditors and legal authorities.

H1: firms with tax aggressiveness produce less readable annual report.

While tax aggressiveness could count as legal activity, fraud definitely falls on illegal category. There are two types of fraud: fraudulent financial reporting and misappropriation of assets [15]. Fraudulent financial reporting involves manipulation of source documents from which financial reports are made, intentional alteration of significant events or transactions, and intentional misapplication of accounting policies. On the other hand, misappropriation of assets involves assets and cash theft, also activities that cause firm to pay for services or goods it never receives [15].

The second hypothesis in this paper will be based on fraud risk triangle. There are a three major factors that drive management to do fraudulent act known as fraud risk triangle. It consists of incentive/pressure to do fraudulent act, opportunity to carry out the fraud, and rationalization to justify the fraudulent act [15].

Incentive/Pressure

Lokanan [16] concluded that the pressure to commit fraud at work can be divided in two categories: financial pressures and non-financial pressures. Non-financial pressures can be further categorized in a few groups: work related pressure, pressure created by gambling and drug addiction, and pressure created by desire for luxurious lifestyle.

Opportunity

Opportunity to commit fraudulent act arises from weak internal control [17]. This opportunity is further enhanced by people who have knowledge and skills about the computer system and assets that allow them to commit fraud and conceal it [18]. Such opportunity could be sponsored by seniors at work as well. According to fraud survey, 49% of employees get mixed signal from their seniors regarding ethical behavior because even though the seniors object bribery, they encourage employees to commit dishonest act in order to achieve corporate targets [19].

Rationalization

Some people have an attitude or values that allow them to justify a dishonest act [15]. 44% of senior managers feel that offering cash payment to ensure business' wellbeing is justified and 45% of them think it is okay to bring forward sales in order to achieve corporate short term target [19].

There must be certain objectives that have to be achieved at every business period. With rapidly changing business environment (change in technology, product obsolescence, interest rate), highly competitive market, it could be hard for management to keep up with it especially with pressure from shareholders to deliver great business performance. Such expectation and the ever increasing difficulty to meet those expectations create an immense pressure for management which could lead to fraudulent act especially if their performance affect their salary. Supported by previous research results, we assume that management who commits fraudulent act will produce more complicated annual report since they have to take good measure to hide their wrongdoing and somehow justify their actions.

H2: firms with management who commits fraudulent act produce less readable annual report.

3. Research Design

Readability

As many previous researches, to measure annual report readability we use Gunning Fog Index which calculates the weighted average of number of words per sentence and amount of long words [5,10]. As mentioned before, the index shows the minimum age of a person with full time education who can read the text. It is computed as follows:

$$\text{Fog} = 0.4 \times \left(\begin{array}{l} \text{words per sentence} \\ + \text{percent of complex words} \end{array} \right)$$

Complex words are words with three or more syllables. The more words and complex words used in a report, the higher the index will be, meaning less readability.

Tax aggressiveness

Following prior researches example, we use a more than one measurement to calculate firm's tax aggressiveness

since each measurement has its own limitations [20]. The first one is firm's effective tax rate ($\text{ETR}_{i,t}$). It is measured in five ways:

- ETR 1 [21]
 $\text{ETR} = (\text{tax expense} - \text{deferred tax expense}) / \text{operating cash flow}$
- ETR 2 [22]
 $\text{ETR} = (\text{tax expense} - \text{deferred tax expense}) / \text{profit before interest and tax}$
- ETR 3 [22]
 $\text{ETR} = \text{tax expense} / \text{operating cash}$
- ETR 4 [23]
 $\text{ETR} = \text{tax expense} / (\text{profit before tax} - (\text{deferred tax expense} / \text{statutory tax rate}))$
- ETR 5 [24]
 $\text{ETR} = (\text{tax expense} - \text{deferred tax expense}) / (\text{profit before tax} - (\text{deferred tax expense} / \text{statutory tax rate}))$

ETR is a proxy for aggressive tax planning through permanent book-tax difference. Tax aggressiveness could be accomplished through a few activities such as using tax havens with lower tax rates, investments in tax exempt or tax-favored assets, and tax sheltering that create loss for tax purpose but not book purpose [1,2].

Other than effective tax rate, tax sheltering is another indication of tax aggressiveness which is calculated using the following model [25]:

$$\begin{aligned} \text{SHELTER} = & -4.30 + 6.63 * \text{BTD} - 1.72 * \text{LEV} \\ & + 0.66 * \text{SIZE} + 2.26 * \text{ROA} \\ & + 1.62 * \text{FOREIGN_INCOME} + 1.56 * \text{RD}. \end{aligned}$$

BTD = book-tax difference; LEV = long-term debt scaled by total assets; SIZE = log of total assets; ROA = net-income scaled by total assets; FOREIGN_INCOME = a dummy variable, coded with 1 for firms with foreign income, otherwise 0; RD = research and development expenses scaled by total assets.

Accounting Fraud

In this paper, we do not measure fraud level of a firm. Rather, we use restatement as a proxy of accounting fraud. The key factor that distinguishes error from fraud is whether the actions that cause misstatement is intentional or unintentional (AICPA, AU Section 316.01). There are restatements that do not indicate accounting irregularities, but GAO further includes aggressive accounting practices, intentional and unintentional misuse of facts in financial statements, oversight of or misinterpretation of accounting rules and fraud [26].

There are a few researches about restatement factors. One research concludes that restating firms are more likely to increase their additional capital during the time of their alleged manipulation [27]. Also, they find that firms that restate their financial reports have higher price-earnings and market-to-book multiples, higher level of debts, and more consecutive positive earnings growth and consecutive quarterly earnings surprises [27]. From all these evidences, they conclude that capital market pressure is the key motivator of restatement. The likelihood of misstatement is also encouraged by sensitivity of CEO's option holdings to stock price changes [28]. A research proves that misstatement that contains accounting irregularities tend to happen in firms whose CEO has significant amount of in-the-money options and firms that

have interest coverage debt covenant, that raise new debt or equity capital or that have CEO who also serves as board chair [29].

Considering the definition of misstatement given by GAO and the nature of misstatement occurrence proven in previous researches, restatement is a valid proxy for accounting fraud.

4. Discussion and Analysis

Table 1. Descriptive Statistics

		Statistics			
		fog_index	restatement	avg_etr	tax_shelter
N	Valid	276	276	276	276
	Missing	0	0	0	0
Mean		17.3183	.08	.4815	9.4543
Median		17.3150	.00	.2650	8.7150
Std. Deviation		.83463	.266	1.72044	23.52159
Minimum		15.25	0	-6.85	-35.24
Maximum		19.05	1	23.06	359.08

Table 1 shows the descriptive statistics output of the whole data. The mean and median for Fog Index are 17.3183 and 17.3150 respectively. Which means that 2016's annual reports in Indonesia are generally difficult to read. As Li explained, Fog Index of 14-18 indicates difficulty in reading a text [10].

To test the influence of restatement and tax aggressiveness on annual report readability, the data is processed through multiple regression analysis in SPSS. Table 2 shows the result of multiple regression analysis which includes R square value, F value, and t value. The significant value used in this analysis is 5%.

Table 2. Multiple Regression Output

Variable	Beta	t-value
Constant	17.303	310.956
Restatement	-0.176	-0.974
Avg_etr	-0.096	-3.419*
Tax_shelter	0.008	3.873*
R-square	0.098	
Adj R-square	0.088	
F-test	9.872	
Durbin-Watson	2.136	
p-value	0.000003	

4.1. Result for Hypothesis 1

The first assumption in this journal is that level of tax aggressiveness reduces annual report readability. The result of this research provides evidence that support that theory. As can be seen in Table 2, both average effective tax rate (avg_etr) and tax shelter (tax_shelter) have significant influence on report readability, shown by significance level of 0.001 and 0.000135 respectively. The numbers are less than 0.05 level of significance set for this research, meaning that both variables have significant influence on Fog Index which represents level of readability.

The result of multiple regression shows that if average effective tax rate increases by one percent, the Fog Index

will reduce by 9.6%. Effective tax rate is a ratio that describes the tax paid by a firm based on its commercial profit before tax [30]. Since tax aggressiveness is meant to reduce tax paid to the country, smaller effective tax rate indicates higher tax aggressiveness level [1]. Therefore, the level of readability increases as effective tax rate rises.

According to multiple regression output, if tax shelter increases by one unit, the Fog Index will increase by 0.8% which means the readability level reduces by that number. This result is in line with our hypothesis. Tax shelter is an indication of tax aggressiveness [2]. Therefore, according to our hypothesis, the more a firm do tax sheltering, the less readable its annual report becomes.

From this result we can conclude that firms do incline to have more complicated reports when they have something to hide. Tax aggressiveness is firm's attempt to reduce taxable income that falls on grey to illegal area, meaning if taken too far, the act could be categorized as something noncompliance altogether [2]. The possibility of being questioned by authorities and getting punished if their tax planning is indeed illegal gives management the incentive to hide the actual activity. This is also supported by a research that gives empirical evidence that telling the truth is easier than telling lies [31]. It is difficult because in order to be convincing, portrayed "facts" need to be consistent throughout the whole narrative. This result is in line with previous research on earning management and annual report readability which concludes that even though managing earnings do not necessarily mean lying, it involves management's attempt to create a more desirable report through accruals or other means [5].

4.2. Result for Hypothesis 2

The second hypothesis assumes that accounting fraud, represented by restatement, enforces the declining level of readability. The multiple regression analysis provides no evidence that restatement has a significant impact on level of readability. Moreover, it proves that instead of reducing level of readability, restating financial report actually decreases the Fog Index of the report. As can be seen in Table 3, if a company restate their financial report, Fog Index will decline by 17.6%. The reason why the null hypothesis is accepted is because out of all companies listed in Indonesia Stock Exchange in 2016, only 37 companies restated their financial statements. GAO explains that the reason behind misstatement is not always bad. In fact, some restatements are done frequently and have no indication of accounting irregularities [26]. Since there is no mechanism to distinguish the intent of misstating financial report in this paper, there is no telling if 21 restating companies in this research misstated their financial information on purpose or not. The purpose of this research is to prove that if management take any measure that is not within GAAP or any existing regulations to achieve firm's target or fulfill their personal interest, the firm's annual report will be less readable. Therefore, in this case, because there is no management's intention measure, the increase of Fog Index could happen with or without restatement factor and thus, cannot prove that accounting fraud has any significant impact on level of readability.

5. Conclusion

There is a positive relation between annual report readability and firm's tax aggressiveness. Firms with higher tax aggressiveness have annual reports that are more difficult to read than other firms listed in Indonesia Stock Exchange, represented by the increase of Fog Index number. This result is consistent with previous researches' output and further affirm that firms with something to hide (earning management, aggressive tax planning, fraud, etc) tend to produce more complex annual reports. On the other hand, this paper provides no proof that accounting fraud significantly increase Fog Index number of firm's annual report due to small amount of restating companies listed in Indonesia Stock Exchange in 2016 and lack of management intention measure.

The limitation in this paper is the small amount of restating companies in 2016. Therefore, for future researches, it would be better if other accounting fraud measure is used. For example, using audit opinion as accounting fraud indication. The result for tax aggressiveness could also be improved by using more models. Each model has its own flaw so the more models used in a research, the better it is because they cover more areas. For future researches on tax aggressiveness, Dessai and Dharmapala model could be used for better result.

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