International Journal of Multidisciplinary Education and Research
ISSN: 2455-4588
Impact Factor: RJIF 5.12
www.educationjournal.in
Volume 3; Issue 1; January 2018; Page No. 05-10

Tax aggressiveness and accounting fraud practice, an evidence in ASEAN countries

Ida Farida Adi Prawira, Yana Setiawan
Department of Accounting, Faculty of Economic and Business Education, Indonesia Education University, Bandung, Indonesia

Abstract
The purpose of this study is to analyze the relationship between tax aggressiveness with accounting fraud in ASEAN countries. Using financial statement data from companies listed on the stock exchanges of three ASEAN countries, namely Indonesia, Malaysia, and Thailand. Measurement of tax aggressiveness by using Cash ETR and measuring accounting fraud by using Beneish M-Score model, and processed using panel data. The results show that there is no relationship between tax aggressiveness and accounting fraud, which is indicated by the value of Pearson Correlation of 0.001 and the significance value greater than 0.05. The finding of this study is useful to both financial and tax authorities in understanding the correlation between financial and tax reporting decisions.

Keywords: tax aggressiveness, accounting fraud, ASEAN countries

1. Introduction

Cooperation among ASEAN countries implemented in 2015 has demanded every economic actor in ASEAN member countries to develop business in order to win the competition. Various ways in business development is to expand the network marketing through the utilization of information technology to expand business to various countries through the opening of branch companies in other countries. For a company, taxes are considered as costs so that efforts or strategies are needed to mitigate them (Mangoting, 1999). It is further explained that tax management is a means to fulfill the correct tax obligations but the tax amount can be reduced or suppressed as low as possible to obtain the profit and liquidity expected by management. Tax management is done by utilizing the hole / slit of the tax legislation so that its action does not violate the law (tax avoidance).

Recent research motivates our analysis of whether aggressive tax positions are related to accounting fraud occurrences allegedly committed by U.S. public companies. Some trends spanning the mid-1990s into the early 2000s suggest that aggressiveness of taxation begins to routinely accompany the aggressiveness of financial reporting (Lennox *et al*., 2013) [18]. There has been an increase in the frequency of accounting fraud and decreasing corporate tax compliance during this period such as, the press spotlight that more than 50 U.S. public companies the big ones were in the investigation of accounting fraud or other financial irregularities in 2002 alone (Stoller, 2002).

This study investigates the relationship between accounting fraud and tax aggressiveness. Previous studies have yielded mixed and contradictory findings that companies will report aggressive financial statements as well as their tax returns (Frank *et al*., 2009; Heltzer *et al*., 2012; Lennox *et al*., 2013) [14, 17, 18]. For example, several studies have examined trade-offs between financial decisions and fiscal reports, including stock price reactions, compensation, intertemporal income shifts, capital structure decisions, and prefer reporting higher earnings to shareholders and reporting lower fiscal revenues to the tax authorities. Nonetheless, other researchers claim that the company does not need to trade-off its financial decisions and tax reports (Frank *et al*., 2009) [14]. As a company that is the subject of making commercial financial reports with different fiscal reports, book-tax gap growth has been deemed to indicate an increase in aggressive behavior of tax reporting (Manzon & Plesko, 2002) [19]. According to Frank *et al*. (2009) [14], an increase in the book-tax gap may reflect improved earnings management as well as tax planning. Similarly, Dhaliwal *et al*. (2004) [11] argue that corporate managers increasingly see the tax department as profit centers responsible for increasing their cash flow through aggressive tax reporting and managing their earnings through estimated tax expense. Therefore, consistent with this view, it can be expected that firms may become aggressive in both their financial and tax reporting (Frank *et al*., 2009) [14]. The study supports Desai's (2005) and Desai & Dharmapala (2006) statements, that managers are exploiting complex tax avoidance strategies, to lower taxes to divert company resources, which they then hide by distorting the company's financial statements.

Although Frank *et al*. (2009) [14] highlights current watershed accounting scandals when constructing their predictions, they measure aggressive financial reporting with earnings management in general, a very difficult construct to measure (eg, Dechow *et al*., 1995; Dechow *et al*., 2010; Guay *et al*., 1996; Healy & Wahlen, 1999; Hribar & Collins, 2002; Wysocki, 2004). Hanlon and Heitzman [2010] [10] raised some concerns about the regression variables used in Frank, Lynch, and Rego [2009] [14] derived from the discretionary accrual model. In addition, Blaylock, Shevlin, and Wilson [2012] [7] provide inconsistent evidence with Frank, Lynch, and Rego [2009] [14] that aggressive corporate financial reporting tends to pursue aggressive tax reporting strategies.

This research contributes to strengthening the previous premise of accounting fraud and tax aggressiveness by expanding the scope of research in 3 ASEAN countries, namely Malaysia, Thailand and Indonesia taking into account the business environment in the three countries where the Self-Assessment System (SAS) has long been implemented. SAS has initiated a new agenda for companies in planning their tax activities. According to Chen *et al*. (2010) [7], the government receives a share of more than a third of the company's pre-tax profits. Tax aggressiveness, which may reduce taxes paid by firms, could have significant tax implications because of the possibility of further tax evasion resulting in a loss of government revenue. In addition, this study contributes to the literature using the Beneish model as a proxy for accounting fraud in measuring financial aggressiveness rather than using a profit management model.

2. Literature Review

For a company, taxes are considered as costs so that efforts or strategies are needed to mitigate them (Mangoting, 1999). Measurement of tax aggressiveness is a very interesting issue to be investigated by researchers. There are 9 measurements of tax aggressiveness of firms and they all measure the same or something similar from the level of corporate tax aggressiveness (Dunbar *et al*., 2010) [12]. Cash Effective Tax Rate (CETR) and the book effective tax rate (BETR), as one of the tax aggressiveness tools has been widely used by previous researchers in measuring the level of corporate tax aggressiveness (Derashid & Hao, 2003; Zimmerman, 1983 [30]; Richardson & Roman, 2007; Hanlon & Heitzman, 2010 [16]; Noor *et al*., 2010 [21]; Bernad, 2011; Chiou *et al*., 2012 [6]; Darmadi and Zulaikha, 2013; Prakash, 2015) [22]. However, measurement with ETR has two important disadvantages (Dunbar *et al*., 2010) [12], the first being that the total tax expense consists of current taxes and deferred taxes. Secondly, CETR may undermine a company's rate of tax aggressiveness if the company records contingencies related to the tax-uncertainty arising from taking an aggressive tax position (De Waegenaere *et al*., 2010) [11].

Implementation of the self-assessment system increases voluntary compliance and lowers tax non-compliance (Hafiza *et al*., 2016) [15]. Several studies have investigated whether firms will report higher taxes if it allows them to report better accounting earnings. Sometimes, companies are willing to report higher taxes in order to achieve certain financial accounting objectives (Hafiza *et al*., 2016) [15]. Examples such as research conducted by Erickson *et al*. (2004) [13] suggest that firms are willing to pay taxes on engineering profits to reduce the likelihood of fraudulent identification in their financial statements. They examined 27 companies presenting their financial statements as a consequence of allegations of accounting fraud, including non-existent reporting and counterfeit revenue, recording counterfeit supplies, and fraudulent schemes to inflate their assets, revenues and net income from 1999 to 2002. Likewise Dyreng (2009) reveals that firms make a choice of financial reporting higher when they face breach of debt agreement. They pay taxes on these advantages to avoid costs associated with breach of the debt agreement.

Other studies have shown an increase in book-tax differences that focus on tax shelter behavior. As research Manzon & Plesko (2002) [19] examined the financial statements 1988-1999 to show the difference between commercial income and taxable income. They found that the difference between commercial income and taxable income generally increases over time. This is in line with the suggestion that few things can explain the increase in book-tax differences. Desai (2002) [8] specifies that the increase in book-tax differences is consistent with an increase in tax shelter activity in the late 1990s, but also partly due to increases in fixed assets, foreign operations, employee stock options and management activity earnings.

Several studies investigate the relationship between tax aggressiveness and accounting fraud. Like Frank *et al*. (2009) [14] who investigated that companies that are accounting fraud were also involved in tax aggressiveness, they found that there was a significant and positive relationship between accounting fraud and tax aggressiveness. On the other hand, Lennox *et al*. (2013) [18] provides contrasting evidence. Based on some proxies for tax aggressiveness, they found that tax-aggressive companies tend to do fraud accunting in the United States. On the other hand, Heltzer *et al*. (2012) [17] reported no evidence of a link between accounting fraud and tax aggressiveness. Based on a sample of Houston Arthur Andersen clients who have an aggressive financial reporting culture, their results support the willingness to pay taxes for overstated earnings or persistent aggressiveness in tax reporting. Therefore, given the above-mentioned arguments and mixed results from previous studies, this study extends previous research by examining the relationship between accounting fraud and tax aggressiveness of firms in 3 ASEAN countries namely Malaysia, Thailand and Indonesia.

3. Methodology

This research uses quantitative research method design with causal study approach. The object of this research consists of Tax Aggressiveness and Accounting Fraud. This study uses panel data analysis to examine the correlation of accounting fraud and tax aggressiveness. Panel data analysis was adopted by previous accounting studies (eg, Banker *et al*., 2002; Bhattacharya, Daouk, and Welker, 2003; Ballesta and Meca, 2007; Ming and Gee, 2008; Schiehll, 2006) [3, 5, 2, 20, 28].

The unit of analysis refers to the level of unity of data collected during the data analyst stages and furthermore, in this study the unit of analysis is the company's financial statements. The population of this study are all companies listed on the ASEAN Stock Exchange in 2014 and 2015 with no category of the financial industry included. For the three countries that have been identified the number of companies is Indonesia, Thailand and Malaysia. The number of companies listing in Indonesian securities in 494 companies is 2 years ie 988 Financial Statements. While in Bursa Malaysia 840 companies as much as 2 years ie 1680 Financial Statements. On the Thailand Stock Exchange is 933 companies as much as 2 years ie 1866 Financial Statements.

Tax Aggressiveness (TA) measured using the effective tax rate (ETR). This measurement is used in the previous accounting literature as an appropriate measure to measure tax aggressiveness (Callihan 1994; Chen *et al*. 2010; Phillips *et al*. 2003) [7, 12]. TA is calculated as the ratio of tax expense to

income before tax. lower effective tax rates reflect higher tax aggressiveness (Ariff and Hashim, 2014; Chen *et al*., 2010) [1, 7]. The independent variables of this study are Accounting Fraud (AF), measured using the Beneish model, to develop accounting fraud measurements. AF, which is formed from eight financial ratios, describes the level of profit manipulation. The reasoning behind the variables is that the probability of profit manipulation is greater with the unusual rise in receivables, worsening gross margins, decreasing asset quality, slowing sales growth, and increasing accruals. More specifically, AF is developed from the following calculations:

AF = -4.840 + (DSRI + GMI + AQI + SGI + DEPI + SGAI + LVGI + TATA)

Which:
DSRI = Days Sales Receivable Index
GMI = Gross Margin Index
AQI = Asset Quality Index
SGI = Sales Growth Index
DEPI = Depreciation Index
SGAI = Selling General and Administrative Expense Index
LVGI = Leverage Index
TATA = Total Accruals to Total Assets
Other independent variables in this model are financial information, as a control variable consisting of profitability (EARN), leverage (LEV), size (SIZE), and growth (INT). EARN is earnings before extraordinary items, and LEV is measured by debt to equity. SIZE is represented by total assets while INT refers to tangible assets. The study also involves year variables (YEAR) to control the likelihood that outcomes are affected by the year difference in the data.

4. Results and Discussion

Based on sample selection criteria conducted by purposive sampling method, this study used a sample of 573 companies. The total number of research observations is 1146 samples (2014 & 2015). Table 1 below is a sample selection description:

Table 1: Sample Selection Description

Criteria	Amount of Sample
Total population of companies listed on the Stock Exchange	2267
Banks & Other Financial Institutions as well as companies that do not have complete data	(1694)
Number of Companies Sample	573
Total Data for 2 years of research	1146

4.1 Descriptive *Analysis*

Table 2 illustrates the mean and standard deviations of all variables used in this study. Table 2 shows that the average value of Cash ETR (Tax Aggressiveness) is 119.7452, and standars deviation of 7338.05347. The average amount of Days Sales Receivable Index (DSRI) is 100.4276, and standard deviation of 3246.91089. The average amount of Gross Margin Index (GMI) is -86.0361, and standard deviation of 1623.30377. The average amount of Sales Growth Index (SGI) is 1.5496, and standard deviation of 35.19118. the average amount of Asset Quality Index (AQI) is -196.8682, and standard deviation of 6318.22944. The average amount of Depreciasion Index (DEPI) is 1.0745, and standard deviation of 1.10208. The average amount of Leverage Index (LVGI) is 1118.3692, and standard deviation of 31668.08381. And the average amount of Total Accruals to Total Assets (TATA) is 207.6213, and standard deviation of 6585.24933.

Table 2: Descriptive Statistics

	Mean	Std. Deviation	N
ETR	119,7452	7338,05347	1146
DSRI	100,4276	3246,91089	1146
GMI	-86,0361	1623,30377	1146
SGI	1,5496	35,19118	1146
AQI	-196,8682	6318,22944	1146
DEPI	1,0745	1,10208	1146
LVGI	1118,3691	31668,08381	1146
TATA	207,6213	6585,24933	1146

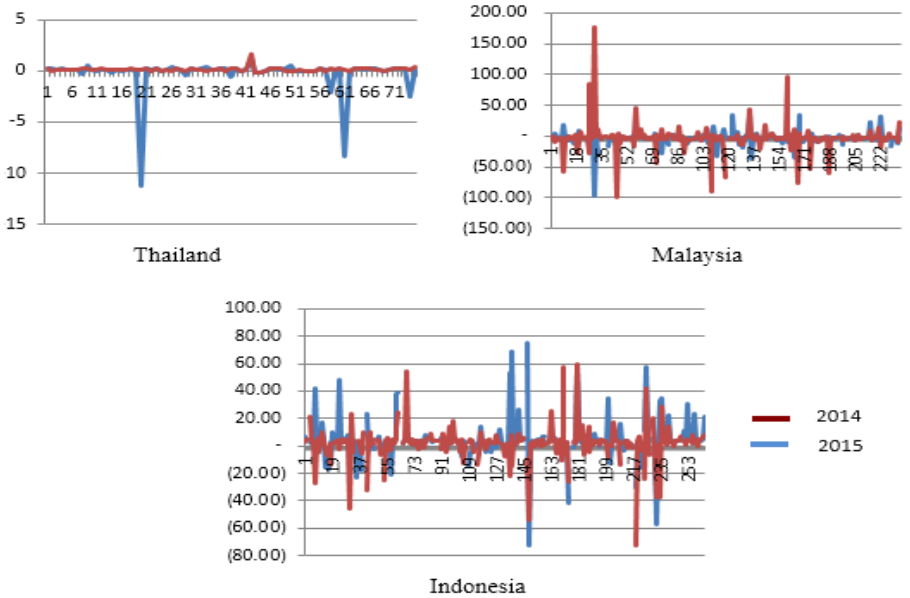

Fig 1: ETR

Figure 1 show us the development of tax aggressiveness in the three countries from 2014 and 2015. Thailand tax aggressiveness indicates a decline in the value of ETR, it can be interpreted that the tax aggressiveness of companies in Thailand more aggressive in 2015. Meanwhile, which occurred in Malaysia and Indonesia shows that tax aggressiveness of some companies is more aggressive in 2015, and some show tax aggressiveness that decreases the level of aggressiveness.

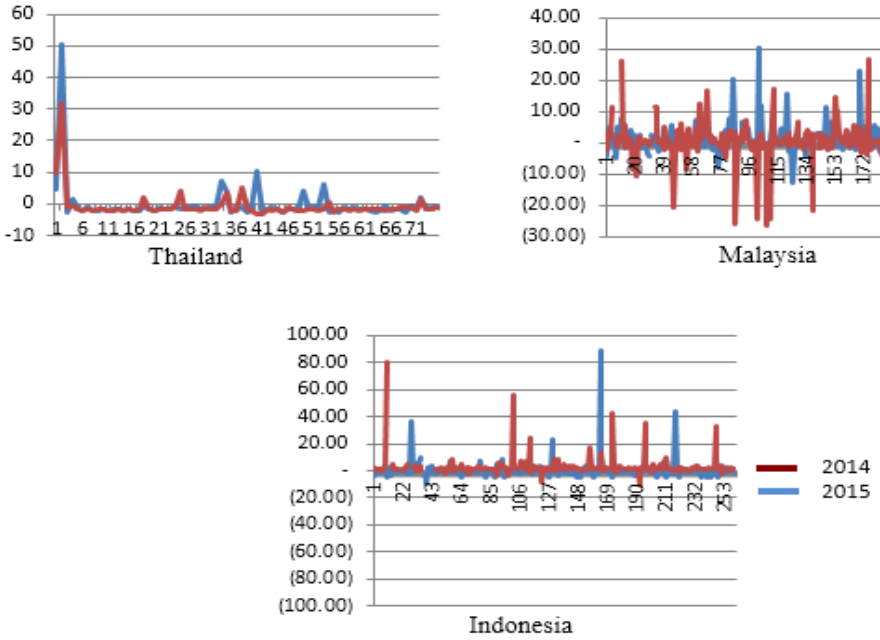

Fig 2: Accounting Fraud

Figure 2 shows the development of accounting fraud levels in these three countries in 2014 and 2015. AF some firms in Thailand show an increase in AF value and others decline, as well as those of AF companies in Malaysia and Indonesia.

4.2 Correlation Analysis

Based on the data on table 3, with the value of pearson correlation of 0.001 indicates that the relationship of Accounting Fraud and Tax Aggressiveness is very low even can be said no relationship. And it is also supported with the significance of 2-tailed value of 0.978 that is above the 5% significance, it shows that there is no relationship between Accounting Fraud with Tax Aggressiveness.

Several possible explanations are offered for this result. First, there is a complexity in the body of research on accounting irregularities and tax aggressiveness. Various motivations lie behind these two activities, with varying empirical evidence regarding the influence of involvement in accounting irregularities and / or tax aggressiveness (eg, Abdul Wahab and Holland, 2012; Ariff and Hashim, 2014; Desai and Dharmapala, 2009) [1, 9].

Secondly, our assumption that companies are aggressive in accounting and tax practices may not apply because companies find it difficult to report higher book revenues to investors and lower taxable income to tax authorities. Such practices are generally unlikely to occur because large book-tax differences will trigger greater scrutiny of the authorities (Frank *et al*., 2009 [12]; Lennox *et al*., 2012). Thirdly, this study may suffer from measurement problems because the tax effects of 'actual' corporate decisions are difficult to document (Hanlon and Heitzman, 2010) [16]. While understanding the 'real' tax decisions of taxes and how their impact on financial reporting decisions is important, but limitations in the availability of data hinder the development of the research approach. Fourth, corporate governance systems play an important role in reducing financial reporting and / or tax deviations (Abdullah *et al*., 2014; Ariff and Hashim, 2014) [1]; therefore, corporate governance systems can mediate relationships between accounting fraud and tax aggressiveness.

Table 3: Correlations

		AF	ETR
AF	Pearson Correlation	1	,001
	Sig. (2-tailed)		,978
	N	1146	1146
ETR	Pearson Correlation	,001	1
	Sig. (2-tailed)	,978	
	N	1146	1146

5. Conclusion

This study aims to investigate the relationship between accounting fraud and tax aggressiveness. This study extends the scope of previous research on accounting fraud and tax aggressiveness by considering the business environment in these three ASEAN countries where the Self-Assessment system is used for taxation. Systems that make companies accountable for calculating their own taxes, are said to give more flexibility to tax planning activities. While legal tax planning, to some extent this tool can also be used as a tool for

unethical actions. Furthermore, instead of looking at the commonly used trade-off theory in explaining the relationship between financial reporting and taxation aberrations, we tested whether firms with high accounting fraud also pointed to the possibility of high tax aggressiveness (Hashim *et al*., 2016) [16]. This argument is advanced on the view that unethical behavior is 'cancer' within the company. If one can manipulate financial reporting decisions, it is possible that one can also do so by tax reporting decisions. It is also possible that manipulation should be done for both reports as part of the 'cover-up' needed to avoid detecting such errors.

While contrary to previous findings, our study adds mixed evidence on the relationship between aggressiveness of financial and tax reporting. These findings are important for financial and tax officials, and other capital market actors are interested in understanding the relationship between financial and tax reporting decisions.

This study, with its insignificant findings regarding the relationship between accounting fraud and tax aggressiveness, offers several implications. First, our research adds to the evidence involving the possibility that financial reporting manipulations may be related to tax reporting manipulations. The insignificant findings from this study imply that firms may have various motives behind unethical behavior involving financial reporting and / or taxation decisions. Thus, two key corporate decisions may or may not be correlated, and even if they are, correlations may not always be linear. Secondly, our research adds both research into financial reporting and taxation, primarily by linking together two reporting domains that have been generally investigated independently by many previous studies. The findings of this study indicate that a comprehensive analysis involving financial reporting should include a tax perspective, and vice versa. Despite the fact that both may differ in terms of user goals and targets, financial reporting and taxation decisions related to the way in which taxes affect the company's earnings (earnings) and cash balances (assets). Thirdly, our study is the first to link the aggressiveness of financial and tax reporting in the context of developing countries, such as Malaysia, Thailand and Indonesia. Thus, we take advantage of business systems in all three countries, primarily by considering that the Self-Assessment System has the potential to be a tool for manipulation. For policy makers in the field of financial reporting and taxation, knowledge of other domains is required as a 'red flag' because unethical behavior can emerge from outside their own territory.

Addressing some of the limitations of this study may be useful for future researchers in financial reporting and taxation. First, our measures for accounting fraud and tax aggressiveness, while being carefully developed, can be improved by using more accurate and relevant data sets. For example, the real case of public reprimands may be a better proxy for accounting fraud while tax shelters can represent tax aggressiveness more accurately. Second, future research may consider the effect of corporate governance structures on accounting fraud and / or tax aggressiveness. Utilizing the company's unique features in Malaysia, Thailand and Indonesia, such as institutional ownership and government-related status, can improve understanding of the practices of these three countries.

6. References

1. Ariff AM, dan HA Hashim. Governance and the Value Relevance of Tax Avoidance, Malaysian Accounting Review. 2014; 13(2):87-108.
2. Ballesta P, dan E Meca. Ownership Structure, Discretionary Accruals and the Informativeness of Earnings, Corporate Governance. 2007; 15(4):677-91.
3. Banker RS, Devaraj R. Schroeder, Sinha K. Performance Impact of the Elimination of Direct Labour Variance Reporting: A Field Study, Journal of Accounting Research. 2002; 40(4):1013-36.
4. Beneish MD. The Detection of Earnings Manipulation, Financial Analysts Journal. 1999; 55(5):24-36.
5. Bhattacharya U, Daouk H, dan M Welker. The World Price of Earnings Opacity, The Accounting Review. 2003; 78(3):641-78.
6. Chiou YC, Hsieh YC, Lin W. Determinants of Effect Tax Rates for Firm Listed on China's Stock Markets: Panel Model With Two-Sided Cencors. International Trade & Academic Research Conference (ITARC). 7-8th, 2012.
7. Chen S, Chen X, Cheng Q, Shevlin T. Are Family Firms More Tax Aggressive than Non-Family Firms, Journal of Financial Economics. 2010; 95(1):41-61.
8. Desai M. The Divergence between Book and Tax Income, Working paper. Harvard University, Cambridge MA, 2002.
9. _____, Dharmapala D. Corporate Tax Avoidance and High-Powered Incentives, Journal of Financial Economics. 2009; 79:145-79.
10. Derashid, Chek, Zhang, Hao. Effective tax rates and the industrial policy hypothesis: Evidence from Malaysia. Journal of International Accounting, Auditing and Taxation. 2013; 12(1):45-62. ISSN 1061-9518
11. Dhaliwal D, Gleason C, Mills L. Last Chance Earnings Management: Using the Tax Expense to Meet Analysts' Forecasts, Contemporary Accounting Research De Waegenaere, Anja, Richard Sansing, and Jacco Wielhouwer. Financial Accounting Measures of Tax Reporting Aggressiveness, Available at SSRN. 2004-2010; 21(2):431-57. http://ssrn.com/abstract=1697536
12. Dunbar, Amy, Higgins, Danielle M, Phillips, John D, *et al*. What Do Measures of Tax Aggresiveness Measure?, 103rd Annual Conference on Taxation, National Tax Association Proceedings, 2010.
13. Erickson M, Hanlon M, Maydew E. How Much Will Firms Pay for Earnings that Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings, The Accounting Review. 2004; 79(2):387-408.
14. Frank M, Lynch L, Rego S. Tax Reporting Aggressiveness and its Relation to Aggressive Financial Reporting, Accounting Review. 2009; 84(2):467-96.
15. Hashim, Hafiza, Aishah, Ariff, Akmalia, Mohamad, *et al*. Accounting irregularities and tax aggressiveness, International Journal of Economic, Management and Acoounting The International Islamic University Malaysia. 2016; 24(1):1-14.
16. Hanlon M, Heitzman S. A Review of Tax Research, Journal of Accounting and Economics. 2010; 50:127-78.
17. Heltzer W, Mindak MP, Shelton SW. The Relation between Aggressive Financial Reporting and Aggressive

Tax Reporting: Evidence from Ex-Arthur Andersen Clients, Research in Accounting Regulation. 2012; 24:96-104.
18. Lennox C, Lisowsky P, Pittman J. Tax Aggressiveness and Accounting Fraud, Journal of Accounting Research. 2013; 51(4):739-78.
19. Manzon G, Plesko G. The Relation between Financial and Tax Reporting Measures of Income, Tax Law Review. 2002; 55:175-214.
20. Ming T, Gee C. The influence of Ownership Structure on the Corporate Performance of Malaysia Public Listed Companies, ASEAN Economic Bulletin. 2008; 25(2):195-208.
21. Noor RM, Fadzillah NS, Matsuki N. Corporate Tax Planning: A Study on Corporate Effective Tax Rates of Malaysian Listed Companies. Internationl Journal of Trade, Economics, and Finance, 2010.
22. Prakash, Alok. Tax Planning vs Tax Management, UNI Journal of Research, 2015, 2. ISSN 2394-4706
23. Prawira, Ida, Farida, Adi. Pemberian Tax Amnesty Dalam Upaya Meningkatkan Penerimaan Pajak, Jurnal Bisnis, Manajemen & Ekonomi Universitas Widyatama, 2012, 11(1). ISSN 1693 -8305
24. ----------Upaya Pemerintah dalam Meningkatkan Rasio Kepatuhan Pajak, Sudah Efektifkah?, Jurnal KIAT AL Khairaat, 2012, 6(1). ISSN 0216-7530.
25. ----------Optimalisasi Pemeriksaan Pajak dalam Upaya Pencegahan terjadinya Tax Evasion (Review), Call For Paper & Seminar Nasional Asean Economic Community Lust or Trust?, Prosiding, 2014. ISBN 978-602-17225-2-7.
26. ---------- The Effect of Granting Tax Amnesty to Tax Revenues, Research Journal of Finance and Accounting (RJFA), 2015, 6(4), ISSN 2222-1697 (paper), 2222-2847 (online)
27. ---------- Organizational Culture, Law Enforcement, and Indonesian Tax Revenue, International Journal of Accounting and Economic Studies (IJAES), 2016, 4(2). DOI: 10.14419/ijaes.v4i2.6706
28. Schiehll E. Ownership Structure, Large Inside/Outside Shareholders and Firm Performance: Evidence from Canada, Corporate Ownership & Control. 2006; 3(3):96-112.
29. Wooldridge JM. Introductory Econometrics: A Modern Approach (2nd ed), Ohio: Thompson, 2003.
30. Zimmerman, Jerold. Taxes and Firm Size. Journal of Accounting and Economics. 1983; 5:119-149.