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FACTORS AFFECTING TAX AVOIDANCE IN INDONESIA AND SINGAPORE PRACTICES: A VIEW FROM AGENCY THEORY

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ABSTRACT

Extant studies highlight that an act of illegally tax planning by the tax manager in companies is due to the information asymmetry allowing managers to hide actual information in seeking substantial compensation from the profit gained by companies for his/her own benefit. The main objective of the research is to investigate the tax avoidance model from two neighbor countries: Indonesia and Singapore, that have a different weight of Effective Tax Rate (ETR) reflecting an agency theory perspective in the tax avoidance practice. The multiple regression test in analyzing the influence of capital intensity, leverage, institutional ownership, compensation for fiscal losses, and firm size on tax avoidance was applied to 90 and 82 public listed manufacturing companies in Indonesia and Singapore, respectively. Analysis of the data used is quantitative using secondary data. More specifically, the result of the study indicates that capital intensity, leverage, and tax incentive are established as three important factors affecting tax avoidance in Indonesia. As for Singapore practice, except for firm size, none of the mentioned variables found as major determinants of tax avoidance in Singapore. The implications of this study provide information for shareholders and the government to further look performance and value of the company(s) in relation to the tax planning related-activities.

JEL classification: *H21, H71, M41, M48*
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1. INTRODUCTION

Taxes are regarded as an essential source of government revenue gained from individuals and business entities in financing the development of a country (Irianto and Wafirli, 2017; Ilaboya et al., 2016; Aghouei and Moradi, 2015; Kholbadalov,

2012). More specifically, the implementation of tax regulations in a country has a significant impact on the amount of revenue received by the government (Lee, 2010).

From the tax payee perspective, however, tax is perceived as expenses that are further deducting net income earned both individual and business entities. Managers in companies, in particular, have set a commitment with the shareholders to increase the value of the company through increasing company profits. And yet, as highlighted by Palanca and Zamudio (2013), managers are seeking ways for companies to pay taxes at its least amount without violating the applicable tax regulations. In addition, the increase in profits tends the company's owners to promise managers with large compensation. Thus, the motivation puts forward the managers to do tax planning by minimizing the amount of tax paid. The difference manifestation of this interest between managers and owners of the company emerges a conflict that is reflected in the agency theory perspective (Bauer et al., 2018; Desai and Dharmapala, 2015; Aliani, 2013; Lim 2011). With regards to the tax planning, several studies have concluded (e.g., Hong et al., 2017; Kim and Im, 2017; Lee et al., 2015) that differences of interests between agents and principals in the agency theory forces managers to practice a legal tax avoidance applying an earning management that further resulting less paid taxes and increasing net income likewise.

Tax avoidance practices are formed into legal and illegal actions (Nengzih, 2018; Irianto and Wafirli, 2017; Lee et al., 2015; Akinyomi and Okpala, 2013). Illegal tax avoidance related-practices are carried out by reducing paid taxes that are against existing regulations. Likewise, legal tax avoidance is defined as an activity to reduce the amount of tax paid by looking for tax loopholes in accordance with existing regulations allowing a legitimate tax deductions practice (Bauer et al., 2018; Pasternak and Rico, 2008). This action is arguable as a legal activity but can also be considered as an unethical act at the same time (Putra and Merkusiwati, 2016). Tax avoidance is perpetrated by accounting relevant adjustments on recognition and measurement methods that have a large impact on maximizing potential expenses, therefore, reducing the company's operating income and tax related-expenses (Utomo et al., 2012; Noor et al., 2010; Noor et al., 2008).

Each country in this world has different tax regulations accommodating strategic policies by companies toward expanding their businesses in other countries that have lower tax rates (Utomo et al., 2012). Henceforth, the business expanding decision influences further strategical actions in terms of implementing tax avoidance practices that follow suit the designated in-country taxes related-regulations.

The main objective of this paper is to examine the influence of tax avoidance practices on taxation regulations in both observed countries. This study is intended to analyze factors that influence tax avoidance practices in Indonesia and Singapore. This research is inspired by a study conducted by Hong et al. (2017) investigating the tax avoidance practice in 19 countries. The result of the study shows that, in general, weaker shareholder rights would have a negative impact on tax avoidance. In a more specific way, Oktaviyani and Munandar (2017) determine the tax avoidance practice based on the Effective Tax Rate (ETR) score of ≤ 25%, indicating the amount of tax payments is smaller than the amount of net income before tax. The initial observation of this research focusing on the investigation of ETR scores in public listed manufacturing companies in Indonesia and Singapore showed that a different outlook of tax avoidance performance based on the measure used by Oktaviyani and Munandar (2017). Based on this prior descriptive analysis of ETR, it can be concluded

that there is a significant gap on tax avoidance practices between Indonesian and Singaporean manufacturing companies (an average of 51% of Indonesian manufacturing companies have ETR of ≤ 25% against an average of 68% of its Singaporeans' counterpart having ETR ≤ 25%). Moreover, to some extent, the practical gap of tax avoidance between two neighbor countries provides an important research area of interest towards displaying best practices of tax avoidance that can further construct determinants of tax avoidance based on Indonesia and Singapore practices.

In this research, we investigate relevant factors relevant to tax avoidance in Indonesia and Singapore consisted of capital intensity, leverage, institutional ownership, compensation for fiscal losses, and company size. These factors are taken into consideration following prior studies within tax avoidance practices area such as Irianto and Wafirli (2017), Putra and Merkusiwati (2016), Aliani (2013), and Kholbadalov (2012) as well as those that are associated with conflict of interest in agency theory (Bauer et al., 2018; Rani et al., 2018; Desai and Dharmapala, 2015; Hong et al., 2017). In particular, according to Lee et al. (2015) and Hanlon and Heitzman (2010), the principal and agent perspectives tend to portray the motives of tax avoidance (as well as tax evasion) from interaction amongst managers, shareholders and tax authorities. Thus, investigating proxies for tax avoidance, as mentioned in manufacturing companies, is expected to improve our understanding of the corporate tax avoidance policy and strategy. This research was carried out in manufacturing companies due to their complex operational levels and business units that further lead to a greater possibility of engaging with tax avoidance practice.

This study applies short-term data collection covering 2015-2016 from 90 Indonesian companies and 82 Singaporean counterparts. The data is then analyzed using the multiple linear regression in testing the agency related-model of tax avoidance in both Indonesia and Singapore. To the authors' knowledge, the current study is considered as the first attempt to comparatively analyze factors relevant to tax avoidance practices in two countries in the same economic region: Indonesia and Singapore. The following section emphasizes the theoretical concept that justifies the tax avoidance practice in the view of agency perspective. The discussion of research methods is presented in the next section. Accordingly, the discussion is continued with disclosing descriptive statistics as well as the tested statistical model. The final section concludes the overall discussion of the research that also underlines limitations and possible implications for future references.

2. LITERATURE REVIEW

2.1 Agency theory

In carrying out its operations, the manager is entrusted by the owner of the company to carry out his responsibilities in increasing the value of the company. The task of the manager here utilizes the resources owned by the company to the maximum extent possible in improving the performance and value of the company for the benefit of the owner. On the other hand, managers have an interest in obtaining the promised incentives when they succeed in improving the performance and value of the company. So that there is a conflict of interest between the manager and the owner of the company called agency conflict.

In agency theory explained that agency conflicts occur because of differences in interests between agents and principles because they have an interest in obtaining their

respective benefits. So the principle forces agents as executors of the company to carry out in accordance with the principle's wishes by promising substantial compensation (Lee et al., 2015). While the agent as the executor of the company knows the limited resources owned by the company so that if legally, it is difficult to achieve the desire of the principle. Therefore, managers seek ways to improve the performance and value of the company in order to obtain the compensation promised by the owner.

In this case, one of the factors that need to be considered is net income which is an indicator of the company's performance determinant. A company that has good performance can be seen with an increase in profit that is the view of the owner and investor. Particularly for companies listing listings on securities, net income is the element most viewed by owners and investors. On the other hand, net profit is also affected by operating expenses that have an impact on the reduction. This operational burden is related to operational activities carried out by the company so that if the operating expenses are reduced to increase net income, it will have an impact on the company's operational activities. Therefore, managers look for legal or illegal ways to increase the amount of income the company receives (Annuar et al., 2014a). One of them is by reducing the amount of tax paid through an increase in operating expenses to obtain a low pre-tax income. The action is a tax planning that is carried out by the manager using a method of measurement and valuation of the company's financial elements. This is because, for companies, tax is a burden that is not directly benefited the company but has a significant impact on company revenue (Otieno, 2014). The research that practices the theory of agencies related to tax planning, such as research conducted by Desai and Dharmapala (2015), and Yuniarwati et al. (2017). In the research conducted by Desai and Dharmapala (2015) explained the compensation promised by the owner of the company is done by reducing the amount of resources that will be given to the state against the increase in net income obtained and this result is also supported by Yuniarwati et al. (2017) where conflicts of interest occur on agency theory causes managers to find ways to reduce the tax burden paid to the state (Akinyomi and Okpala, 2013). Therefore, agency theory shows the difference in fundamental interests between managers and business owners to achieve their respective interests.

2.2 Tax avoidance

As explained in the previous section, to fulfill the principle's importance, the manager takes actions, one of which is tax planning (Gaaya et al., 2017). The tax planning here is that the manager plans the amount of tax paid to the state so that the profits earned by the company can increase, which affects the performance and value of the company, which ultimately relates to the compensation obtained. These actions are called tax avoidance practices. In its implementation, the important role is top managers as activity planners (Graham et al., 2014).

The practice of tax avoidance is an issue that has long been carried out by company managers that aims to improve the performance of the company, but with the renewal of tax regulations by the government, every year the company changes the method used (Annuar et al., 2014a; Pratama, 2017). Tax avoidance is also related to reducing the amount of tax which is the transfer of resources owned by the company to the state through the weaknesses of the legislation that applies to a country so that the company will not violate the applicable law (Armstrong et al. 2015; Harrington and Smith, 2012; Lisowsky et al., 2013; Thai Ha and Quyen, 2017). So it was concluded that tax

avoidance is generally an attempt for companies to find ways to reduce the amount of tax paid in order to obtain large income through compensation received (Dyreng et al., 2008; Hanlon and Heitzman 2010; Kim and Im, 2017; Lisowsky et al., 2013). This effort is an action taken by the manager to increase the value of the company as compensation provided by the company owner to the manager. Nevertheless, this action is less ethical in terms of reporting because managers hide important information related to the company so that reporting on the financial statements is not in accordance with what happened. This tax avoidance is also related to one's attitude because the lack of openness that provides information owned by the company is only due to the incentives received (Aliani, 2013; Armstrong et al. 2015; Bauer et al., 2018; Palanca and Zamudio, 2013). However, in the research conducted by Akinyomi et al. (2013) found the results that companies in carrying out tax avoidance practices due to lack of government attention in providing public facilities so that loss of public trust in the use of taxes paid. This is also supported by research conducted by Kanagaretnam and Lee (2013), which shows that the level of public trust influences tax avoidance practices.

The practice of tax avoidance in each country is very different. Because of the tax regulations that apply to the country. As the tax regulations adopted in Indonesia will be different from Singapore. This also caused different treatment from tax avoidance practices in the country. Therefore, research needs to be done to compare tax avoidance practices carried out between the two countries with different tax regulations. It is hoped that the results of this study indicate a difference in tax avoidance practices.

Basically, the practice of tax avoidance is the company's effort to choose the method of valuation and reporting on financial statements so that the tax burden is paid small. Companies use many factors in carrying out this tax avoidance practice, such as greater fixed asset use, compensation for fiscal losses, corporate debt, or net income. In the study conducted by Lim (2011), Lee et al. (2015), Annuar et al. (2014), Kerr et al. (2016), Saputra (2017), Thai Ha and Quyen (2017), Nengzih (2018) which shows that institutional ownership negatively affects tax avoidance practices means that supervision from external parties will reduce tax avoidance practices because this practice does not provide benefits to shareholders or vice versa due to information hidden by management (Hong et al., 2017; Palanca and Zamudio, 2013). In contrary with studies conducted by Khan et al. (2017), the study results indicated that institutional ownership has a positive effect on tax avoidance practices, though research conducted by Armstrong et al. (2015) and Kholbadalov (2012) show that institutional ownership does not affect tax avoidance practices.

Research conducted by Irianto dan Wafirli (2017), Putra and Merkusiwati (2016), Pratama (2017) show that firm size has a positive effect while leverage and capital intensity do not affect tax avoidance practices. A research conducted by Yuniarwati et al. (2017) shows that company size does not affect tax avoidance practices. These results are also supported by the research of Kim and Im (2016), Kim and Im (2017), and Rani et al., (2018) that firm size, profitability, leverage, capital intensity, cash flow and growth rate affect tax avoidance practices. Research conducted by Lee (2010) shows that the presence of incentives influences tax avoidance practices. Based on the factors of previous researchers, the factors that will be seen are capital intensity, leverage, institutional ownership structure, fiscal/tax incentive compensation, and

company size. The aim is to find out the dominant factors that companies use in the countries of Indonesia and Singapore in carrying out tax avoidance practices.

3. METHODOLOGY

In this section, we will explain the research methods used, including the tests performed, the use of the type of company, and the number of samples.

3.1 Research sample

The types of companies used in this study are manufacturing companies listed on the Indonesia Stock Exchange and Singapore Stock Exchange. Sampling was conducted for two years: 2015 and 2016. Samples were selected using a purposive sampling method with certain criteria. This type of research is quantitative. Data obtained from secondary data sample company financial statements.

3.2 Research model

This study uses multiple regression linear method, which examines the factors that influence tax avoidance practices in Indonesia and Singapore as well as knowing the dominant factors of the country. The research model can be described as follows:

$$TA_{it} = \alpha_0 + \beta_1 CI + \beta_2 LV + \beta_3 IO + \beta_4 TI + \beta_5 FS + \varepsilon$$

The information from the above model is the practice of tax avoidance (*TA*) measured by comparing the amount of tax expense obtained by the company with the company's net profit before tax (Lanis and Richardson 2013), capital intensity measured by the ratio of fixed assets to total assets, leverage measured by total debt smooth compared to total assets, institutional ownership is measured by the number of institutional ownership in a company, tax incentives are measured using the presence or absence of incentives provided by the government to companies by giving a value of 1 or 0, and firm size is measured using the natural logarithm of total assets. All measurements of these factors can be seen in the research conducted by Annuar et al. (2014), Irianto and Wafirli (2017), Kholbadalov (2012), Lee (2010), Nengzih (2018), Pratama (2017), Putra and Merkusiwati (2016), Rani et al. (2018), Saputra (2017), Thai Ha and Quyen (2017), and Yuniarwati et al. (2017).

4. RESULTS AND DISCUSSION

4.1 Results

According to Oktaviani and Munandar (2017), in general, a company that practices tax avoidance is seen as a difference where the amount of tax burden paid with income before tax is quite large, which has a comparison value below 25%. Based on the results of comparisons in the two countries, see the figure below:

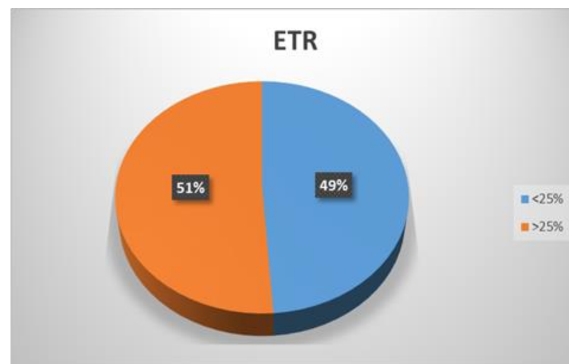

Figure 1: ETR score of Indonesian manufacturing companies.

Figure 1 shows that almost half the number of manufacturing companies in Indonesia have ETR values lower than 25% while the other half have higher ETR values, indicating that some companies tend to engage with tax avoidance practices while others obey tax payments.

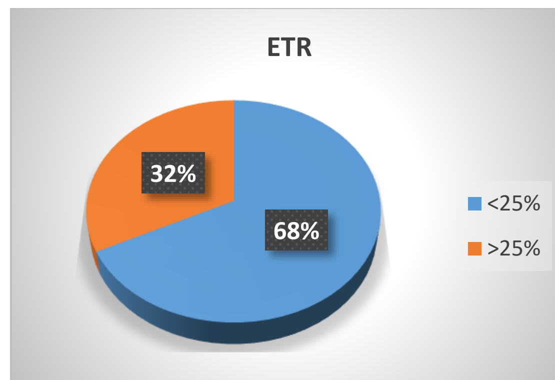

Figure 2: ETR score of Singapore manufacturing companies.

Whereas Figure 2 shows that 68% of companies in Singapore have ETR rates lower than 25% so that tax avoidance practices underlining a greater number of tax compliance among manufacturing companies than the Indonesians'. Therefore, it is necessary to consider what factors the company has done in both countries in carrying out tax avoidance practices.

The descriptive statistics of research variables, which include the average, minimum, maximum, and frequency of research data on manufacturing companies on the Indonesia Stock Exchange, are summarized in Table 1.

Table 1. Descriptive statistics of research variables in Indonesia's manufacturing companies.

Variable	Minimum	Maximum	Mean
ETR	0.00	1.07	0.3160
Capital Intensity	0.01	0.80	0.3629
Leverage	0.04	0.83	0.2909
Institutional Ownership	0.14	0.99	0.6669
Company Size (IDR'000,000)	133,783,000	261,855,000	11,589,164.94

Source: Data processed by SPSS

Based on Table 1, it can be seen the minimum value of ETR is equal to 0.00, where the comparison between the tax burden paid with net income before tax is quite far so that the resulting ETR results are also very small. The ETR shows a measure of tax avoidance as measured by the tax burden shared with the amount of net income before tax. This description is accordingly supported by research conducted by Oktaviyani and Munandar (2017) that company companies that have ETR values less than 25% indicate that the company practices tax avoidance. While the maximum value is obtained at 1.07, this is possible for the company to pay the tax payable amount. The average obtained by companies in Indonesia is 0.32 or 32%. Where indicated that the company made a tax payment of 32% of the total income before tax obtained. Whereas the capital intensity variable that shows the amount of fixed assets investment in the company shows the amount of capital intensity percentage of 1% where the fixed asset amount in the sample company is at least 1% of the total while the maximum value is 0.80, which means 80% of total assets consists of fixed assets. This indicates that the company can only practice tax avoidance, where fixed assets are used to increase the amount of the company's depreciation expense. The average fixed assets in the sample companies were 36%.

The next descriptive variable is the leverage that measures the amount of the company's short-term debt to total assets. The minimum number of sample companies is 4%, which means that the amount of current debt is compared to the total assets of the company of 4% of the total. While the maximum value obtained is 83%, so that of the total current debt of 83% is covered by the total assets. The average sample company's leverage value is 29%. The next factor is institutional ownership, which shows the amount of institutional ownership in a company. The minimum amount of institutional ownership is 14%, which means that the number of institutional ownership in the company is very weak as a company supervisor, where this statement is supported by Leip's (2017) research that institutional ownership below 40% causes weak supervision of the company. While the maximum value of 99% means that the majority of institutional ownership is 99%, so that supervision is very strict. The average institutional ownership in the sample companies was 67%. The next factor is the size of the company measured by the number of assets owned by the company. The smallest company size is worth IDR 133,783,000,000 while the highest value is IDR 261,885,000,000,000. The average company size in the sample company is Rp. 11,589,164,944,444.

Table 2. Statistical frequency of fiscal loss compensation for manufacturing companies in Indonesia.

		Frequency	Percent
Valid	Non Fiscal Loss Compensation	137	76.1
	Fiscal Loss Compensation	43	23.9
	Total	180	100.0

Source: Data processed by SPSS

Based on Table 2, it is obtained a quantitative description of fiscal loss compensation, which shows the compensation given by the government because the company experienced operational losses. Whereas during the study year, 43 companies were given fiscal loss compensation, while 137 companies were not compensated.

The results of descriptive statistical research variables that explain the average, minimum, maximum, and frequency of research data on manufacturing companies on the Singapore Stock Exchange:

Table 3. Descriptive statistics of research variables in Singapore's manufacturing companies.

	Minimum	Maximum	Mean
ETR	0.00	1.48	0.2612
Capital Intensity	0.00	1.01	0.2735
Leverage	0.03	0.83	0.3027
Institutional Ownership	0.01	0.98	0.5723
Company Size (SGD)	90,564	132,701,477,176	3,018,305,463

Source: Data processed by SPSS

Based on Table 3 above obtained the results of ETR values on manufacturing companies in the Singapore Stock Exchange with a minimum value of 0.00 which means the amount of tax burden paid is very small compared to the net profit before tax where according to Oktaviyani and Munandar (2017) that if the ETR value is below 25% then most likely the company practices tax avoidance while the maximum value obtained is 1.48 while the sample company's average ETR is 26%. The next factor is capital intensity. The minimum value of the sample company is 0.00 in which means that the fixed asset value of the company is 0.00% while the highest value is 1.01 or 101% and the average fixed assets of the sample company is 27%. While the next factor is leverage, the minimum value obtained is 3%, while the maximum value is 83%. The average value of leverage in the sample company is 30%.

Institutional ownership shows that the number of shares held by the institution in the company shows that the minimum value of the sample company is 1%, which means that there is a weakness in institutional supervision of the company's operations (Leip 2017). The maximum value is 98%, and the average value of institutional ownership is 57%. The last factor is the size of the company. The minimum number of company size is SGD 90,564, while the maximum is SGD 132,701,477,176. The average value of company size in the sample company is SGD 3,018,305,463.

Table 4. Frequency statistics of fiscal compensation for manufacturing companies in Singapore.

		Frequency	Percent
Valid	Non-Fiscal Loss Compensation	109	66.5
	Fiscal Loss Compensation	55	33.5
	Total	164	100.0

Source: Data processed by SPSS

Based on Table 4, it is obtained statistical descriptive regarding the fiscal loss compensation provided by the government in the form of tax incentives to companies on the Singapore Stock Exchange. The amount of compensation given to the company was 55 companies, and no compensation was given to 109 companies.

4.2 Hypothesis test results

The research model was tested using multiple regression analysis. The number of companies in Indonesia is 90 companies and in Singapore 82 companies. The observation year is 2015 and 2016 so the number of observations in companies in Indonesia is 190, and companies in Singapore are 184. The test results can be seen in Table 5.

Table 5: Hypothesis test results of manufacturing companies in Indonesia.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.118	0.639		-0.185	0.854
	Capital Intensity	0.192	0.046	0.270	4.148	0.000
	Leverage	0.254	0.049	0.339	5.159	0.000
	Institutional Ownership	0.110	0.182	0.039	0.603	0.548
	Compensation on Fiscal Lose	0.220	0.078	0.185	2.831	0.005
	Company Size	-0.026	0.021	-0.081	-1.240	0.217
a. Dependent Variable: *ETR*						

Source: Data processed by SPSS

Based on Table 5, the research model on manufacturing companies listed on the Indonesia Stock Exchange is as follows:

$$TA_{it} = -0.118 + 0.192CI + 0.254LV + 0.110IO + 0.220TI - 0.0026FS$$

Hypothesis testing results on manufacturing companies listed on the Indonesia Stock Exchange obtained results that factors that influence the company in carrying out tax avoidance practices are capital intensity, leverage, and fiscal loss compensation. It is seen that the significant level obtained is less than 5%, whereas institutional ownership and company size show no significant effect on tax avoidance practices.

Table 6: Hypothesis test results of manufacturing companies in Singapore.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.435	0.698		-2.054	0.042
	Capital Intensity	-0.356	0.354	-0.083	-1.004	0.317
	Leverage	0.395	0.317	0.102	1.245	0.215
	Institutional Ownership	0.139	0.258	0.045	0.539	0.591
	Compensation on Fiscal Loss	-0.095	0.135	-0.056	-0.708	0.480
	Company Size	-0.016	0.037	-0.036	-0.429	0.669
a. Dependent Variable: *ETR*						

Source: Data processed by SPSS

Based on Table 6 above, the research model for manufacturing companies on the Singapore Stock Exchange is as follows:

$$TA_{it} = -1.435 - 0.356CI + 0.395LV + 0.139IO - 0.095TI - 0.016FS$$

The results of hypothesis testing in this study found that all factors of the study did not show a significant influence, namely capital intensity, leverage, institutional ownership, compensation for fiscal losses, and the size of the company against tax avoidance practices. This is seen by the significant level obtained by the company greater than 5% so that the manufacturing companies listed on the Singapore Stock Exchange do not show factors that influence tax avoidance practices.

4.3 Discussion

4.3.1 Effect of capital intensity on tax avoidance

Testing the first hypothesis to see the effect of capital intensity on tax avoidance practices both in Indonesia and in Singapore. Capital intensity shows the amount of comparison between fixed assets owned by the company compared to total assets. The implication is that the amount of the composition of fixed assets owned by a company that causes depreciation expenses has an impact on net income before tax.

As a comparison between the two countries to see the practice of tax avoidance. Based on testing the hypotheses in Tables 5 and 6 above, there is a comparison where in Indonesia, the capital intensity factor has a significant effect on tax avoidance practices (Kim and Im 2016) while in Singapore, there is no significant effect. This indicates that companies in Indonesia have more fixed assets whose purpose is to increase depreciation expense, which affects net income before tax (Bauer et al., 2018). The depreciation expense used is one of the declining balance method in which the initial depreciation amount is greater than the final depreciation so that the depreciation expense becomes greater. If we look at the description of the statistics of companies in Indonesia and Singapore, it can be seen that Indonesia has average fixed asset ownership that is greater by 36% while in Singapore it averages 27% so that it can be seen that companies in Indonesia have more fixed asset composition compared to Singapore. These results contradict research (Irianto and Wafirli 2017; Putra and Merkusiwati 2016, Putra 2017)

4.3.2 Effect of leverage on tax avoidance

Testing the next hypothesis to examine the effect of leverage on tax avoidance. In general, leverage shows the ratio of total debt owned by a company compared to company assets. The higher this ratio indicates the greater the debt that the company has. In tax planning for tax avoidance, the leverage ratio is very useful as said in the tradeoff theory (Miller, 1977) that a company that aims to reduce the amount of tax carried out by increasing the amount of debt due to the impact on interest expense reduces the amount of tax paid (Harrington and Smith 2012). The results of hypothesis testing show that leverage has a significant effect on tax avoidance, where the debt owned by the company will cause an interest expense, which affects the amount of tax paid. This result is supported by (Kim and Im, 2016; 2017). Whereas in Singapore, leverage has no significant effect on tax avoidance practices. If we compare the average leverage between companies in Indonesia and Singapore, they have a small comparative value. It further indicates that the opportunity of taxation regulations in

Indonesia is an opportunity for companies to increase debt so that the impact on the tax burden paid. These results contradict the result of research from Irianto and Wafirli (2017) and Rani et al. (2018).

4.3.3 Effect of institutional ownership on tax avoidance

Institutional ownership factors indicate the number of financial and non-financial institutions that have ownership in the company. The existence of institutional ownership within the company indicates supervision from external parties on the running of the company's operational activities, one of which is tax avoidance due to the detriment of the company's owners (Hong et al., 2017). As explained in the agency theory that ownership of the institution is representative of the principle that wants the performance and value of the company to benefit from the company. In this theory also explains the conflict of interest between the principle that wants the performance and value of an increasing company and the agency that wants compensation from the company (Graham et al., 2014; Lee et al., 2015). So that there are differences in interests that cause the company's operations to be based on the interests of only a few parties. Based on hypothesis testing obtained results in both Indonesia and Singapore, the existence of institutional ownership in the company does not have a significant effect on tax avoidance practices (Nengzih, 2018). This means that the supervision in the company by external parties will not affect the company to practice tax avoidance. This result is seen from the number of institutional ownership in Indonesia with an average of 67%, while in Singapore, 57% exceeds the total ownership in general. This result also shows that it does not affect the management's decision to practice tax avoidance, where institutional ownership is expected to encourage tax payment (Saputra, 2017). The test contradicts Leip's (2017) research that the amount of institutional ownership that exceeds 40% will lead to the strict supervision of the implementation of tax avoidance practices. This test indicates that the manager practices tax avoidance aims to improve the performance and value of the company so that potential investors are interested in investing in the company. In line with the research conducted (Kholbadalov, 2012; Lim, 2011; Putra et al., 2017) which shows that the presence of supervision from outside parties will not have an impact on managers in tax avoidance practices, but ownership of these institutions is useful as a limiting action of managers in conducting practices that harm the company (Lim, 2011).

4.3.4 Effect of fiscal loss compensation on tax avoidance

The factor of fiscal loss compensation shows the compensation given by the government to reduce the amount of tax paid because the company gets a loss from its operational activities. This compensation is given if, in the previous year, the company had lost so that it could not pay taxes accordingly. Tables 4 and 5 show that in Indonesia, fiscal loss compensation has a significant effect on tax avoidance while not in Singapore. So that indicates that companies in Indonesia report operational losses aimed at obtaining tax compensation (Annuar et al., 2014a). With this compensation, the tax paid to the government will be reduced so that in the end, it has an impact on the increase in net income earned (Akinyomi and Okpala 2013). Weak tax regulations and conditions for applying for fiscal compensation in a country cause companies to find ways to reduce the company's operational losses in fiscal compensation. Companies in Singapore show that compensation provided in the form

of tax incentives does not affect / not aim to avoid tax so that compensation for fiscal losses does not affect tax avoidance practices. If we look at the fiscal loss compensation given during the two years of observation in Indonesia amounted to 24% while Singapore amounted to 34% of the total observations indicated that the fiscal compensation provided by the Indonesian government to manufacturing companies was an opportunity to practice tax avoidance (Aliani, 2013) and divert resources that are supposed to be for the country (Desai and Dharmapala, 2015) while in Singapore it is not a factor that influences tax avoidance.

4.3.5 Effect of company size on tax avoidance

The last factor that influences tax avoidance is the size of the company. The size of the company is measured by the total assets. The greater the size of the company, the greater the operational activities, the greater the profits obtained. Large companies become objects of large income for the government. Thus, the government supervises companies that have substantial assets. As for the company, the income earned by the company becomes an opportunity to develop the company and obtain substantial compensation from the principle as an implication of agency theory where the manager has an interest in obtaining compensation from the profits earned. So if it is associated with total assets as a reflection of the size of the company will be associated with capital intensity where the amount of assets owned by the company has the most composition is a fixed asset that aims to increase depreciation expenses that affect net income before tax.

Tables 4 and 5 show the results that the size of the company has no significant effect on tax avoidance in both Indonesia and Singapore. These results indicate that the larger a company does not aim to tax avoidance but has other goals, such as increasing the company's performance and value (Pratama, 2017; Rani et al., 2018; Yuniarwati et al., 2017). The purpose of this is to attract investors to invest in the company so that the profits obtained by the company from attracting investors are greater than tax avoidance. In addition, the size of the company also shows the sustainability of the company in the future to provide confidence to investors and creditors for the return that will be obtained. These results contradict research (Irianto and Wafirli, 2017; Lee, 2010; Otieno, 2014).

5. CONCLUSIONS

The results of tax avoidance model testing in two-neighbor countries show a different output reflecting determinants of tax avoidance in both countries. The tax avoidance in Indonesia, in particular at public listed manufacturing companies, is influenced by capital intensity, leverage, and compensation for fiscal losses while there is no effect of capital intensity, leverage, institutional ownership, compensation for fiscal losses and company size on the tax avoidance in the Singaporeans'. The study findings also show that the company utilizes the weaknesses of the taxation regulations using assessment and measurement methods that are consistent with Annuar et al. (2014a), Lisowsky et al. (2013), and Harrington and Smith (2012). Whereas in Singapore, there are no specific factors that dominantly influence the decision of companies practicing tax avoidance due to the strong regulations in the country.

More specifically, the findings from the Indonesian's model of tax avoidance, in particular, reflect the agency framework that focuses on motives from managers increasing their personal gain either due to the employment contract made between

shareholders and managers (increasing capital intensity and compensation for fiscal losses) or personal interest that has no tie with shareholders. Desai dan Dharmapala (2015), Lee et al. (2015), and Hanlon and Heitzman (2010) indicated that the aforementioned motives could result in a weaker corporate governance condition like in Indonesia. Although serious attempts have been taken into consideration, Indonesia is still struggling to promote good governance in all business sectors in comparison to Singapore, where it has been named as the top-tier and world-class standard of good governance.

The result of the study reemphasizes the importance of having strong and high public trust in the government towards applying tax avoidance practices effectively as a result of good tax governance. The current study has also gone beyond one-country mapping involving analyses on tax avoidance in two different countries that have a different level of good governance practices.

Despite the contributions to the body of knowledge related to tax avoidance, this study has several limitations. Firstly, the data collection was gathered from two years observation into financial statements of public listed manufacturing companies subjected to limited generalizability of findings. As recommended by Lee et al. (2010) other type of industries such as property, trade and service and construction companies are tend to visualize a more vivid picture of tax avoidance as these companies are more It would also be interesting to explore more proxies related to agency framework implying a more robust relationship between the application of good corporate governance and tax avoidance practice. Furthermore, an additional examination on the comparison of tax avoidance in between companies that have more subsidiaries and less one would present a more fruitful insight to reflect the agency theory in this loop.

Based on the results of hypotheses testing that the conclusions of taxation regulations on a country can be strongly influenced by the company in carrying out tax avoidance practices. This can be seen from the comparison between the two countries: Indonesia and Singapore, wherein Indonesia's capital intensity, leverage, and fiscal loss compensation, have a significant effect on tax avoidance practices. The result of the study reemphasizes the importance of having strong and high public trust in the government towards applying tax avoidance practices effectively as a result of good tax governance. Subsequent research is expected to be able to explore the contribution of tax avoidance through other types of taxes such as value-added tax, environmental tax (Bauer et al., 2018) so that the implication of tax avoidance practices on various types of taxes is determined.

REFERENCES

Aghouei, M. V., & Mahdi, M. (2015). A study of the relationship of firm characteristics and corporate governance with the difference between declared and final taxes in Iran. *Mediterranean Journal of Social Sciences, 6*(4), 488–98.

Akinyomi, O. J., & Kenneth, O. (2013). Appraisal of factors influencing tax avoidance and avoidance in Nigeria. *International Journal of Research in Commerce & Management, 4*(5), 107–11.

Aliani, K. (2013). Does corporate governance affect tax planning? Evidence from American companies. *International Journal of Advanced Research, 1*(10), 864–73.

Annuar, H. A., Ibrahim A. S., & Obid, S. N. S. (2014a). Corporate ownership, governance and tax avoidance: An interactive effects. *Procedia - Social and Behavioral Sciences, 164* (October 2016), 150–60.

Annuar, H. A., Ibrahim A. S., & Obid, S. N. S.. (2014b). Corporate ownership, governance and tax avoidance: An interactive effects. *Procedia - Social and Behavioral Sciences, 164*(August), 150–60.

Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker., D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics, 60*(1), 1–17.

Bauer, T., Kourouxous, T., & Krenn, P. (2018). Taxation and agency conflicts between firm owners and managers: A review. *Business Research, 11*(1), 33–76.

Desai, M. A, & Dharmapala, D. (2015). Corporate tax avoidance and firm value. *The Review of Economics and Statistics, 91*(3), 537–46.

Dyreng, S. D., Hanlon, M. & Maydew. E. L. (2008). Long-run corporate tax avoidance. *Accounting Review*, *83*(1), 61–82.

Gaaya, S., Lakhal, N. & Lakhal, F. (2017). Does family ownership reduce corporate tax avoidance? The moderating effect of audit quality. *Managerial Auditing Journal, 32*(7), 731–44.

Graham, J. R, Hanlon, M., Shevlin, T., & Shroff, N. (2014). Incentives for tax planning and avoidance: Evidence from the field. *Accounting Review, 3*, 991–1023.

Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics, 50* (2–3), 127–78.

Harrington, C. & Walter, S.. (2012). Tax avoidance and corporate capital structure. *Journal of Finance and Accountancy, 11*, 144–65.

Hong, H. A., Kalcheva, I., & Srivastava, A. (2017). A reexamination of the theory of agency costs of tax avoidance. *EMMA*, 1–43.

Ilaboya, O. J., Izevbekhai, M. O. & Ohiokha., F. I. (2016). Tax planning and firm value: A review of literature. *Business and Management Research, 5*(2), 81–91.

Irianto, B. S., & Wafirli, A. (2017). The Influence of profitability, leverage, firm size and capital intensity towards tax avoidance. *International Journal of Accounting and Taxation, 5*(2), 33–41.

Kanagaretnam, K., & Lee, J. (2013). *Societal trust and corporate tax avoidance*. Research Collection School Of Accountancy (December).

Kerr, J. N., Price, R., & Roman, F. J. (2016). *The effect of corporate governance on tax avoidance evidence from governance reform*. Baruch College – City University of New York (646).

Khan, M. Srinivasan, S. & Liang, T. (2017). Institutional ownership and corporate tax avoidance: New evidence. *Accounting Review, 92*(2), 101–22.

Kholbadalov, U. (2012). The relationship of corporate tax avoidance, cost of debt and institutional ownership: Evidence from Malaysia. *Atlantic Review of Economics.*

Kim, J. H., & Im, C. C. (2016). Corporate tax avoidance in SME: The effect of listing. I*nternational Journal of u- and e-Service, Science and Technology, 9*(6), 283–94.

Kim, J. H., & Im, C. C.. (2017). The study on the effect and determinants of small- and medium-sized entities conducting tax avoidance. *Journal of Applied Business Research, 33*(2), 375–90.

Lanis, R., & Richardson, G. (2013). Corporate social responsibility and tax aggressiveness: A test of legitimacy theory. *Accounting, Auditing and Accountability Journal, 26*(1), 75–100.

Lee, B. B., Dobiyanski, A., & Minton, S. (2015). Theories and empirical proxies for corporate tax avoidance. J*ournal of Applied Business and Economics, 17*(3), 21–34.

Lee, S. (2010). Effects of capital intensity on firm performance: The U.S. restaurant industry. *Journal of Hospitality Financial Management*, *18*(1), 1–13.

Leip, T. A. (2017). *Do institutional shareholders impact corporate tax avoidance?* Master's Thesis Annika Leipälä Spring 2017 Accounting Annika Leipälä Spring 2017. Pages 64

Lim, Y. (2011). Tax avoidance, cost of debt and shareholder activism: Evidence from Korea. *Journal of Banking and Finance, 35*(2), 456–70..

Lisowsky, P., Robinson, L., & Schmidt., A. (2013). Do publicly disclosed tax reserves tell us about privately disclosed tax shelter activity?. *Journal of Accounting Research, 51*(3), 583–629.

Miller, M. H. (1977). Debt and taxes. *The Journal of Finance*, *XXXII*(2), 637–57.

Nengzih. N. (2018). Determinants of corporate tax avoidance : Survey on Indonesia's public listed company. I*nternational Journal of Economics, Business and Management Research, 2*(02), 133–45.

Noor, R. M., Mastuki, N. A. & Bardai, B. (2008). Corporate effective tax rates: A study on Malaysian public listed companies. *Malaysian Accounting Review*, *7*, 1-20.

Noor, R. M., Fadzillah, S. M., & Mastuki, N. A. (2010). Corporate tax planning: A study on corporate effective tax rates of Malaysian listed companies. *International Journal of Trade, Economic and Finance*, *1*(2), 189-193.

Rohaya, M. N., Fadzillah, N. S. M. & Mastuki, N. A. (2010). Corporate tax planning: A study on corporate effective tax rates of Malaysian listed companies. *International Journal of Trade, Economics and Finance*, *1*(2), 189–93.

Oktaviyani, R., & Munandar, A. (2017). Effect of solvency, sales growth, and institutional ownership on tax avoidance with profitability as moderating variables in Indonesian property and real estate companies. *Binus Business Review, 8*(3), 183.

Otieno, B. A. (2014). *The relationship between capital structure and agency costs of firms listed at the Nairobi securities exchange* (Master's thesis, University Of Nairobi).

Palanca, T. J. R., & Zamudio, I. G. C. (2013). An analysis of the agency perspective on tax avoidance and firm value under different corporate governance structures: The case of firms in the Philippine stock exchange (Unpublished undergraduate thesis). *De La Salle University: Manila, Philippines*.

Pasternak, M, and C., Rico. (2008). Tax interpretation, planning, and avoidance: some linguistic analysis. *Akron Tax Journal*, 23, 33–79.

Pratama, A. (2017). Company characteristics, corporate governance and aggressive tax avoidance practice: A study of Indonesian companies. *Review of Integrative Business and Economics Research*, *6*(4), 70.

Putra, I. G. L. N. D. C. & Merkusiwati., N. K. L. A. (2016). Pengaruh komisaris independen, leverage, size dan capital intensity ratio pada tax avoidance. *E-Jurnal Akuntansi Universitas Udayana, 17*(1), 690–714.

Putra, P. D., Syah, D. H., & Sriwedari, T. (2017). Tax avoidance practices as a proof of agency theory and tax planning in Indonesia stock exchange.

Rani, S., Susetyo, D. & Fuadah. L. L. (2018). The effects of the corporate's characteristics on tax avoidance moderated by earnings management (Indonesian evidence). *Journal of Accounting, Finance and Auditing Studies, 4*(3), 149–69.

Rohaya M. N, Mastuki, N. A., & Bardai, B. (2008). Corporate effective tax rates: A study on Malaysian public listed companies. *Malaysian Accounting Review, 7*(1), 1–20.

Saputra, M. (2017). The influence of ownership structures, financial distress, and tax loss carry forward on tax avoidance. *Journal of Resources Development and Management, 31*(2011), 21–31.

Thai, H., T. N., & Quyen, P. G. (2017). The relationship between state ownership and tax avoidance level: Empirical evidence from Vietnamese firms. *Journal of Asian Business Strategy, 7*(1), 1–12.

Utomo, S., Palil, M. R., Jaafar, R. & Ramli, R. (2012). Relationship between shareholders motives and corporate tax avoidance: A literature study. *International Journal of Business, Economics and Law,* 1, 10–15.

Yuniarwati, I C. A., Dewi, S. F., & Lin, C. (2017). Factors that influence tax avoidance in Indonesia stock exchange. *Chinese Business Review, 16*(10), 510–17.