An Analysis of the Relationship between Tax Avoidance and Debt Maturity with Financial Constraints as the Mediation Variable

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This study aims to examine the relationship between tax avoidance and debt maturity with financial constraints as a mediation variable. The independent variable in this study is tax avoidance, measured by Cash Effective Tax Rate (CETR). The dependent variable in this study is debt maturity. Meanwhile, the mediating variable in this study is financial constraints that are measured by the KZ Index. The researcher uses a sample of 186 observations from 135 firms in the period 2016 to 2017 from non-financial firms listed on the Indonesia Stock Exchange (IDX). The results of this study indicate that there is a direct and indirect relationship between tax avoidance and debt maturity. This study also documented the full mediation effect of financial constraint on the relationship between tax avoidance and debt maturity.

Keywords: *Debt maturity, Financial constraints, Tax avoidance*

Introduction

Taxes are not something new in the business world. Taxes are one of the primary sources of income for all levels of government (Olaoye et al., 2018). The definition of tax is a mandatory fee that is imposed upon both the individual and the body. Tax income is the primary source of state revenue, proven from the percentage of tax revenues in 2016, around 83%, while in 2017 85% of total state revenues are derived from tax revenues. Tax revenue is not separated from the taxpayer's level of compliance. Although tax revenue is relatively high, the same is also the case for tax avoidance. For firms, paying taxes is an expense because it reduces their income. This notion is what causes the firms to avoid tax. Non-compliance and tax avoidance are universally present in developed and developing countries

(Panjaitan et al., 2019). According to Suandy (2014), tax avoidance is a form of action to reduce tax payments by utilising the gaps in taxation rules. Lin et al. (2014) disclosed that the firm conducts tax planning to reduce the firm's tax obligations.

Tax avoidance is one form of a conflict of interest between the government and the taxpayer. The government strives to increase tax revenues, while taxpayers try to avoid taxes. Tax planning is one way to reduce the amount of tax expense payments, which includes one form of tax avoidance action. It was also expressed by Lin et al. (2014), who revealed that the firm is conducting tax planning to reduce payments of corporate taxes. One form of management decision is tax avoidance (Chang Youl et al., 2013). The firm with management or a CEO who is obedient to the rules will lead to lower company tax evasion (Nasih et al., 2019).

The firm's ability to conduct financial planning is closely related to tax avoidance. Financial planning is used to determine the costs associated with tax avoidance (Armstrong et al., 2015). The impact caused by management decisions to use tax avoidance is due to direct or indirect debt maturity. The firm that conducts tax evasion tends to manipulate data in its financial statements resulting in reduced creditor level of trust in the firm (Giombini et al., 2018). Manipulation of data impacts on the accuracy of the financial statements, so the value presented in the financial statements is doubtful. This doubtfulness makes the creditors limit their loan to the firm, causing the firm to experience financial constraints. Financial constraints are defined as an increase in costs due to external financing or increased difficulty in accessing external funds (Edwards et al., 2016).

The study discusses the effect of mediation of financial constraints on tax avoidance relationship to debt maturity. Financial constraints connect tax avoidance to debt maturity. The firm's debt maturity impacts the limitation of credit given by creditors. The firm that undertakes tax avoidance tends to experience financial constraints, resulting in firms increasing their cash holdings and affecting the selection of debts used. Similar opinions are also expressed by Phan (2018) and Foley-Fisher et al. (2016) when a firm is experiencing financial constraints; then, creditors tend to provide tighter debt maturity. This response is made by creditors as a form of protection, to avoid the possibility of uncollectible debts. Also, tax avoidance has a direct relationship to maturity due to debt. According to Kubick and Lockhart (2017), tax avoidance has a negative relationship with the maturity of debt. The study aims to further investigate the effect of mediation of financial constraints on the relationship between tax avoidance to debt maturity of non-financial listed firms of the period 2016-2017.

The remainder of this article is structured as follows. Section 2 reviews literature and develops the research hypotheses. Section 3 describes the sample, variables, and research

design. Section 4 specifies the empirical result. Section 5 summarises the paper and presents concluding remarks.

Literature Review and Hypotheses Development

Agency Theory

Jensen and Meckling (1976) state that the relationship of agency arose with a contract between the owner and the management in charge of running the firm. However, they also mentioned that the agency's involvement does not only occur among the shareholders with the management but instead emphasises the relationship that arises between two or more contracting parties (Arifuddin & Usman, 2017). This relationship poses various impacts, including agency costs and agency issues (Elmanizar et al., 2019).

The occurrence of differences of interest among the parties who are contracting, or the emergence of asymmetric information can encourage the existence of agency problems (Wardhana et al., 2017). However, agency costs and agency issues can be reduced by increasing the ownership of management (Iskandar et al., 2012). In the case of this research, there are differences in interests among governments, corporations, and creditors. Each party seeks to increase revenues by suppressing the risks that may occur. Agency theory also explains that ownership structures (managerial holdings, institutional holdings, etc.), debt policy, and dividend policies are the primary mechanisms in controlling the manager's actions (Mahadwartha & Ismiyanti, 2008).

Concerning this research, there is a problem of agency among creditors, tax collectors, and firms. Firms (agent) want to increase the earnings after tax by conducting tax avoidance. For tax collectors (principal), according to them, the country requires high income to finance the government, so it is necessary to increase tax payments. Another problem occurs when firms seek to get more funding through debt. But on the other hand, in the context of selecting which firm to fund, creditors will consider the firm's performance. Performance is the result of overall organisational operation and strategy (Irawati et al. 2019). When the firm has a decent performance, then the user's financial statements like creditors will see it as a positive event (Muda et al., 2019). Creditors will be inclined to reduce credit to the firm because the firm's financial statement does not present its wealth for the sake of tax avoidance.

Tax Avoidance and Financial Constraints

The difference in interest between the tax and the government raises agency issues, as has been expressed by Lin et al. (2014) that the firm conducts tax planning to reduce the firm's tax obligations. Tax avoidance by the firm is one strategy management uses to reduce taxable

income. When a firm strives to commit tax avoidance, the firm will manipulate the data on the firm's financial statements. Because of this, creditors will reduce the credit given to the firm, as the credit risk is increasingly higher (Giombini et al., 2018). Therefore, the firm experiences limitations in obtaining external funding sources. The reduced external funding sources resulted in the firm experiencing financial constraints. Previous research conducted by Giombini et al. (2018), Bayar et al. (2018), Desai and Dharmapala (2018), Law and Mills (2015), and Edwards et al. (2016) mentions the relationship between tax avoidance and financial constraints.

H1: Tax avoidance has relationship to financial constraints

Financial Constraints and Debt Maturity

Financial constraints are one of the impacts of agency issues that occur between firms and creditors. Kaplan and Zingales (1997) mentioned that the firm could be said to have financial constraints if it has a higher debt than its equity. The difference in information between the firm and creditor resulted in a difference in conception among these two. This difference resulted in the firm facing difficulty in obtaining debt from creditors and impacting the maturity level of the firm's debt. Debt maturity is a period given to the firm to pay off the debts granted by the creditor. The creditor attempted to protect the receivables given to the firm by reducing the maturity rate of the debt given. Therefore, financial constraints have a close relationship with debt maturity. However, on the other hand, the firm strives to increase its cash when subjected to financial constraints. For this reason, the firm tends to like debt with a more extended period to avoid the risk of liquidation. Brick and Liao (2017) mention that firms experiencing financial constraints tend to choose to use debts with a particular maturity.

H2: Financial constraints has relationship to debt maturity

Tax Avoidance and Debt Maturity

One of the characteristics of a firm that conducts tax avoidance is trying to suppress the tax payment figure in order to suppress outward cash flow. When the firm performs tax avoidance, the firm chooses to use the debt following the prescribed strategy. If the firm wants to be in an aggressive tax avoidance position, then the firm tends to use the debt with a more limited period, and vice versa. Tax avoidance affects the firm's financial condition in the future and reduces the transparency of the firm's financial statements. Tax avoidance conducted by the firm has several objectives, including to increase cash through the firm's internal funding (Edwards et al., 2016). Also, tax avoidance carried out by firms can encourage the use of debts by certain maturity. According to Husnaini et al. (2016), the firm

chooses to use mortgages with a lower interest rate or instalment to increase their cash so that it can be concluded that the tax avoidance can affect the debt maturity.

H3: Tax Avoidance has a relationship to debt maturity

Mediating Effect of Financial Constraints on Relationship between Tax Avoidance to Debt Maturity

Tax avoidance is one of the strategies firms use to increase income by reducing the tax obligations paid. A firm will benefit tax if using an adequate capital structure (Clemente-Almendros & Sogorb-Mira, 2018; Devereux, 2018; Fan et al., 2012). According to Bayar et al. (2018), tax avoidance made by the firm triggered the occurrence of financial constraints. Meanwhile, Phan (2018) stated that financial constraints have a relationship with the firm's debt maturity. Firms that conduct tax avoidance tend to suffer a decline in creditor confidence. This consequence resulted in creditors will reduce their credit to the firm, as the credit risk is given is increasingly higher (Giombini et al., 2018). Firms that conduct tax avoidance resulted in financial constraints (Edwards et al., 2016), which resulted in the firm having to conserve the cash resources owned to avoid the risk of liquidation and prefer to use long-term debt (Husnaini et al., 2016).

H4: Tax avoidance has a relationship to debt maturity through financial constraints as mediation variable.

Research Methodology

Sample and Data Sources

This research uses secondary data and employs a quantitative approach. The data is sourced from financial statements and annual reports of non-financial firms listed on the Indonesia Stock Exchange in the period 2016-2017. Data was accessed through the website of each firm and website of the Indonesia Stock Exchange. Research samples are determined using the purposive sampling method. Researchers set the criteria used in the sample selection, including: (1) The firm being researched is a corporation that has been listed on IDX as a public firm and has published its financial statements and has been audited with unqualified opinion during the period from 2016-2017; (2) The financial statements of the firm that have been published include the necessary data in the research; (3) The currency used in the financial statement is in Rupiah unit; (4) The firm does not suffer any negative equity or losses during the period 2016-2017 and or has compensation in the previous year; (5) The financial statements presented by the firm closing date is 31 December; and (6) the firm

which owns the Cash Effective Tax Rate (CETR) ≤ 25%. Based on the Purposive sampling method, a total of 186 firm-year observations from 135 firms were eligible in this study.

Operational Definition and Variable Measurement

Dependent Variable

The dependent variables used in this study were due to debt maturity. Debt maturity is a period of debt repayment. Overdue debt is generally used as a monitoring device in both public and private debt contracts (Platikanova, 2015). In this research, long-term debt is defined as a debt that has maturities of more than a year, while short-term debt has a debt maturity of less than a year. Debt maturity is measured by comparing the percentage of long-term debt use to total corporate debt.

Independent Variable

The independent variables used in this study were tax avoidance. The definition of tax avoidance according to Suandy (2014), refers to a legally deductible effort to exploit the weaknesses of taxation provisions to obtain smaller taxes. The calculation of tax avoidance uses the negative value of CETR, which was first proposed by Dyreng et al. (2008) and used in Edwards et al. (2016).

Mediating Variable

The mediation or intervening variable used in this study is financial constraints. Financial constraints are a condition of the firm that is experiencing increased costs in obtaining external financing or increased difficulty in accessing external funds (Edwards et al., 2016). The financial constraints use a KZ index proxy, which was first triggered by Kaplan and Zingales (1997). KZ index is used because it is considered in accordance with the financial report of the firm in Indonesia and is deemed able to explain the level of financial constraints experienced by the firm. The KZ index is also used as a measurement of financial constraints in the research of Cheng et al. (2017). According to Edwards et al. (2016), the higher KZ index in a firm reflects that the financial constraints experienced by the firm are getting higher. KZ index is formulated as follows:

$$KZ\ Index = -1{,}002\ Cashflow_t + 0{,}283\ TobinQ_t + 3{,}139\ Lev_t - 39{,}367\ Div_t - 1{,}315\ CashHolding_t$$
(1)

Description: A cash flow operation divided total assets (CashFlow); Stock market price times the number of shares outstanding divided total assets (TobinQ); Total debt divided by total assets (Lev); Dividend paid divided by total asset (Div); Cash and the cash equivalents are divided by total assets (Casholding).

Table 1: Operationalisation Definitions

Variables	Symbol	Proxy
Dependent variable		
Debt maturity	DM	Percentage of long-term debt to total debt
Independent variable		
Tax avoidance	CETR	Tax paid divided by earnings before tax
Mediating Variable		
Financial constraints	KZ INDEX	KZ index proxy

Research Design

The data analysis techniques to be used in this study are the analysis of ordinary least square regression and path analysis using the support of SPSS 22.0 software. Other data analysis techniques to be used in this study are descriptive statistical analyses and hypotheses testing consisting of the coefficient of determination and t-test.

Result and Discussion

Descriptive Statistic

Table 2: Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
CETR	186	0,003	0,250	0,158	0,071
INDEKS KZ	186	-13,341	8,652	0,479	2,369
DM	186	0,003	0,999	0,393	0,251
Valid N (listwise)	186				

The tax avoidance through the CETR proxy has a substantial distance with a minimum value of 0.003 and a maximum value of 0.250. The smaller the CETR value indicates the firm is committing tax avoidance. Besides, the average stated from 186 firms is only 15.81%. In other words, the rate of tax avoidance in Indonesia is relatively low for non-financial firms listed on IDX in 2016-2017. The standard deviation in this variable amounted to 0.071. The degree of variation belonging to this variable is 45.03% (< 100%). It shows that the data used is homogeneous, which means that the CETR value of the firm being sampled is relatively similar.

Financial constraints with KZ index proxies show the lowest value of -13.341 and the highest value of 8.652. The higher KZ index shows a higher level of financial constraints the firm has experienced. The average value of the KZ index is 0.479. The standard deviation in this variable amounted to 2.369, with a variation rate of 494.47% (> 100%). This value indicates that the data used in this research is heterogeneous, meaning that the level of financial constraints experienced by the sample firms is not the same.

The distance of debt maturity (DM) variables tend to be lower than the independent variable. A minimum value of 0.003, while a maximum value of 0.999. The average rate of debt maturity in 186 samples of the firm in this study amounted to 0.393. This result means that 60.60% of firms prefer short-term financing compared to long-term funding. The standard deviation on the debt due is 0.251, with a variation rate of 63.75% (< 100%). This value suggests that the data used in this research is homogeneous, which means that the selection of maturity of the selected debt in the sample firm has the same level.

Determinant Coefficient

Table 3: Model Summary

Model	R	R *Square*	*Adjusted* R *Square*
1	0,290[a]	0,084	0,074

A coefficient of determination (R2) test is used to ascertain the explaining power from an independent variable to a dependent variable. The high value of R2 means an independent variable has more considerable explaining power as well as vice versa. This study used adjusted R2 to reduce the bias of results. According to table 3, the value of the determinant coefficient (R2) of this study is 0.074, which defined the independent variables of tax avoidance, and financial constraints can explain the dependent variable, which is debt maturity of 7.4%. The rest (92.6%) is defined by other variables that were excluded in this study.

Regression Analysis

The research model was tested using ordinary least regression, which is a statistical analysis tool which utilises relationships between two or more variables.

Table 4: Test Result of Regression Analysis

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	1.548	0.416		10.401	0.000
	Tax avoidance to financial constraints (Regression 1)	-6.760	2.400	-0.203	-1.853	0.005**
2	(Constant)	0.380	0.018		20.928	0.000
	Financial constraints to debt maturity (Regression 2)	0.028	0.008	0.261	3.667	0.000**
3	(Constant)	0.492	0.044		11.116	0.000
	Tax avoidance to debt maturity (Regression 3)	-0.624	0.255	-0.177	-2.445	0.015**

*** p < 0.01 ** p < 0.05 * p < 0.10

Test results obtained from Table 4, obtained the following equation model:
KZ Index = 1.548 + 6.760 CETR + e

$$H_1(2)$$

p-*value* CETR 0.005 < α = 0.05 (significant)

DM = 0.380 + 0.028 KZ Index + e

$$H_2(3)$$

p-*value* KZ Index 0.000 < α = 0.05 (significant)

DM = 0.492 - 0.624 CETR + e

$$H_3(4)$$

p-*value* CETR 0.015 < α = 0.05 (significant)

Based on equation 2, tax avoidance measured through CETR proxies has a statistically significant relationship to financial constraints with a significance rate of 0.005. While the beta value is -6.760 indicates that every single CETR increase will lower financial constraints of -6.760 units assuming other variables remain.

According to equation 3, it can be concluded that the financial constraints measured through the KZ index proxy have a statistically significant relationship on the debt maturity with a significance rate of 0.000. The beta value of the test results was 0.028, indicating that any increase in financial constraints was able to raise 0.028 units of debt maturity, assuming other variables remained.

Based on equation 4, it can be concluded that tax avoidance through CETR proxies has a statistically significant relationship to the maturity of the debt with a significance value of 0.015. CETR negatively affected the debt maturity to a beta value of -0.624. In this case, indirectly, the lower CETR will result in increased tax avoidance of the firm. It can be concluded that any increase in the tax avoidance unit will result in an increase in the debt maturity of 0.624 units assuming other variables remain.

Path Analysis

Path analysis is used to determine whether there is a causal relationship between one variable and another or not. Tax avoidance has a direct and indirect relationship to debt maturity. A path coefficient is a value that can be used to determine the result of a path analysis.

Table 5: Result of Path Analysis Test

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.454	0.045		10.135	0.000
	CETR	-0.456	0.254	-0.130	-1.795	0.074
	KZ INDEX	0.025	0.008	0.235	3.247	0.001

a. Dependent Variable: DM

Based on the results of the regression in Table 5, the path analysis is generated in the diagram below. A path analysis diagram is used to describe causal relationships between variables.

Figure 1. Path Analysis Diagram
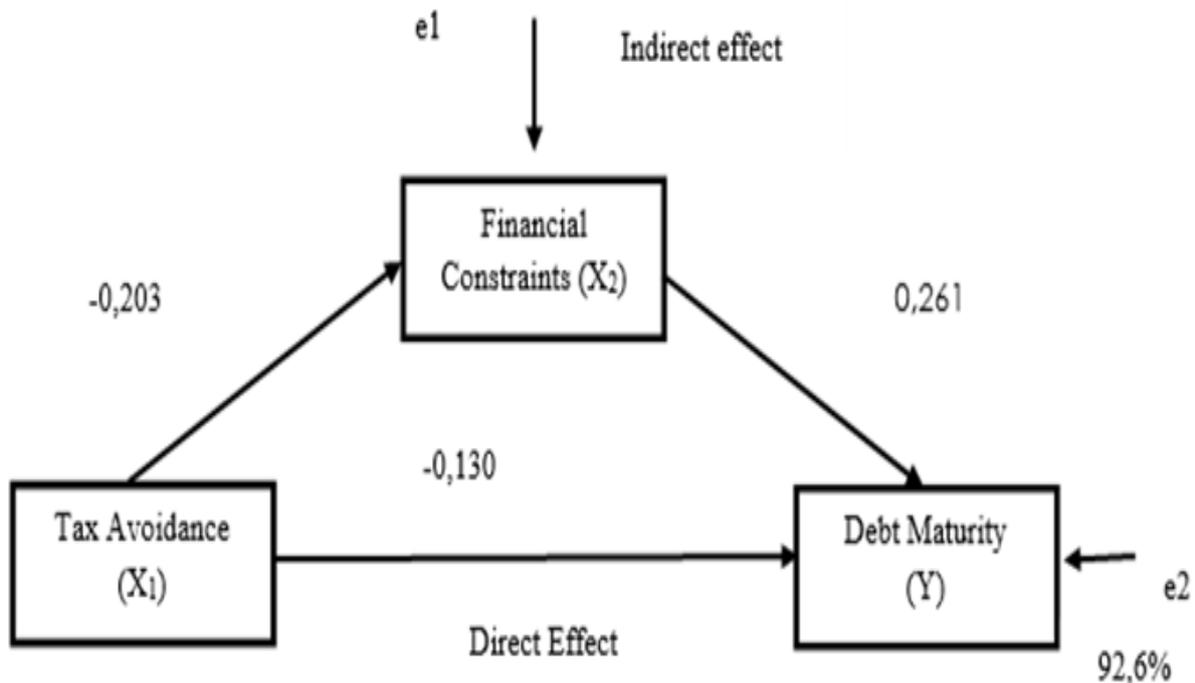
Based on the path analysis diagram described in Figure 1, it can be concluded that the magnitude of the path value resulting from the relationship of tax avoidance to the financial constraints is -0.203 and the extent of path value resulting from the relationship of financial constraints to maturity debt is 0.261.

The magnitude of the value of the path resulting from the tax avoidance relationship to the debt maturity is -0.130, while the magnitude of indirect relationship resulting from tax avoidance relations and debt maturity is -0.053 (-0.203 X 0.261). Therefore, the total relationship generated amounted to -0.130 + (-0.053) = -0.183. It is interpreted that each increase in one of the tax avoidances (decline in CETR) results in raising the debt maturity by 0.183

Tax Avoidance and Financial Constraints

The first hypothesis that has been developed previously mentions that tax avoidance has a relationship to financial constraints. Based on the results of the test, tax avoidance has a statistically significant relationship to the financial constraints with a significance value of 0.005 (< 0.05). Therefore, it can be concluded that the results of this research support the first hypothesis. For each tax avoidance increase (the lower CETR), it results in increases in financial constraints experienced by the firm. Financial constraints that continue to occur will result in the firm experiencing financial difficulties (Bassetto and Kalatzis, 2011) and affect

the performance of the firm (Opler and Sumarman, 1994). From the creditor side, this will undoubtedly increase the firm's credit risk; thus, the firm has difficulty obtaining external funding.

According to agency theory, each party has a different interest that poses a conflict of interest between the government, the creditor, and the firm. The government wants to increase its income with tax revenues, while for firms, paying taxes is an expense that may be avoided. Tax avoidance is one of the management strategies for making minimal tax payments by manipulating financial statements (Giombini et al., 2018). For creditors, manipulated financial statements can reduce creditors' confidence so that creditors try to limit credit to protect their money. In order to strive to increase funding for its survival, the firm engages in tax avoidance to increase internal financing of the firm by reducing the tax expense paid.

The results of this study successfully supported the hypotheses that have been formulated and supported earlier research by Edwards et al. (2016). Although the study supports the research of Giombini et al. (2016) and Bayar et al. (2018), which explains the existence of tax avoidance has a relationship to financial constraints, the relationship direction documented is the opposite.

Financial Constraint and Debt Maturity

The second hypothesis developed earlier mentioned that financial constraints have a relationship to debt maturity. Based on the test results, the financial constraints have a relationship to the debt maturity with a significance value of 0.000 (< 0.05). This relationship suggests that the study supports the second hypothesis. The higher the level of financial constraints experienced by the firm, the longer the debt repayment period.

Based on the theory in this study, giving credit to the firm poses a conflict of interest. The creditors' side prefers a shorter period of debt when the firm is experiencing financial constraints, as it is considered risky. Meanwhile, the firm strives to obtain debt with a more extended period to maintain the stability of its liquidity. Although the interest paid is higher than short-term debt, the size of the instalments paid is smaller, so it does not exacerbate the firm's financial condition.

Brick and Liao (2017) revealed that firms prefer the use of long-term debt financing to increase their cash amount. Short-term debt triggers an increase in liquidity risk when firms experience financial constraints. Financial constraints are also related to the ability of the firm to manage the circulation of cash in financing its operations, which results in firms trying to avoid financing that tends to increase their liquidity risk.

According to Foley-Fisher et al. (2016), long-term use of debt can reduce the cost of issuing debt compared to short-term debt and stock issuance. The results obtained from this study successfully supported the previously developed hypotheses and supported the previous research by Brick and Liao (2017) and Foley-Fisher et al. (2016).

Mediation Effect of Financial Constraints on Relationship between Tax Avoidance to Debt Maturity

The third hypothesis developed earlier stated that tax avoidance has a relationship to debt maturity. In contrast, the fourth hypothesis states that tax avoidance has a relationship to debt maturity through financial constraints as a mediation variable. Based on the test results, tax avoidance has a relationship directly to the debt maturity to the significance value of 0.015, while the value of significance after the existence of the mediation variable changes to 0.074. When the value of significance after the inclusion of the mediation variable becomes higher than before the existence of mediation variables, it can be concluded that the financial constraints can mediate the relationship between tax avoidance to the debt maturity. The cause increases the significance value because between the mediation variables, and the independent variables correlate. According to Baron and Kenny (1986), the mediation variables can be said to succeed when independent variables can cause dependent variables. The test results have been successfully supported by the third hypothesis and the fourth hypotheses that have been developed.

The direct relationship between tax avoidance and debt maturity depends on the strategy chosen by the firm. The more aggressively that tax avoidance is applied by the firm limits the debt, without considering the existence of the mediation variables. The indirect relationship of tax avoidance to debt maturity indicates the role of other variables because the relationship given is not too substantial. Financial constraints become a liaison between tax avoidance and debt maturity. Tax avoidance tends to encourage the manipulation of data in financial statements showing a higher profit to obtain debt in financing its operations. Financial constraints can intervene in the relationship of tax avoidance to debt maturity and the ability to support the existence of agency theory. According to Jensen and Meckling (1976), the theory of agency connects firms with creditors and the government. Also, in theory, it is assumed that there is a conflict of interest among the parties with the relationship. Tax avoidance by the firm can trigger a lack of creditors' trust resulting in the difficulty of obtaining external funding (Giombini et al., 2018). As the level of tax avoidance conducted by the firm grows, the financial constraints of the firm increase so that the debt maturity given by the creditors is decreasing. The same thing is also expressed by Foley-Fisher et al. (2016), that higher financial constraints can reduce the maturity of the debt given by the creditor.

However, the results of Foley-Fisher et al. (2016) expressed the emergence of agency issues because firms tend to seek debt with a more extended period. Husnaini et al. (2016) also reveal that long-term debt issuance costs are lower than those of short-term debt issuance. When the firm is experiencing financial constraints, it is limited by the position of vulnerability to liquidation risk. Therefore, the firm would prefer to use debt with an extended period to protect the use of cash and to avoid any possible liquidation risks. This opinion is also supported by research conducted by Husnaini et al. (2016), which reveals that firms experiencing financial constraints are trying to reduce the risk of liquidation that may occur.

Tax avoidance by a firm can influence the view of the other parties, because it is one of the acts that violate the law, to reduce the trust of the investor and government. Firms with substantial expenditures have the possibility of committing tax avoidance and potentially experiencing higher financial constraints. This opinion is also in line with the views expressed by Bayar et al. (2018). The results of this study supported previous research conducted by Husnaini et al. (2016), Foley-Fisher et al. (2016), as well as Brick and Liao (2017). Although the study supported Platikanova (2015), Kubick and Lockhart (2017), and Bayar et al. (2018), this study's documented direction of the relationship was different.

Conclusion

This research was conducted to test the effect of the mediation of financial constraints on the relationship between tax avoidance to debt maturity of non-financial firms listed on the Indonesia Stock Exchange in the period 2016-2017. From the results of the analysis using several tests and discussions that have been explained, it can be concluded that tax avoidance has a positive relationship on financial constraints. The increase in tax avoidance depicted with the lower value of CETR has a relationship on the higher level of financial constraints experienced by the firm. Secondly, financial constraints have a positive relationship to debt maturity. The higher the level of financial constraints experienced by the firm, the more likely the firm is to like using long-term debt, to avoid the risk of liquidation that may occur. Thirdly, tax avoidance has a relationship to debt maturity without the effect of mediation. The higher the tax avoidance described by the lower the CETR, increasing the period of debt that the firm will use. Fourth, financial constraints as mediation variables affect the relationship between tax avoidance to debt maturity. The mediation effect given to financial constraints reinforces the relationship of tax avoidance to debt maturity. Firms that conduct tax avoidance tend to be subjected to financial constraints so that the maturity of the chosen debt is longer to avoid the risk of liquidation.

This research is expected to be a reference for subsequent research related to tax avoidance and debt maturity. It also expected to assist in terms of financial planning for the firm and as

a consideration in taking action related to tax management. However, this research has limitations whereby KZ index proxies used in this study are only one way to illustrate the financial constraints experienced by the firm as the data available in the financial statements. According to Law & Mills (2015), financial constraints cannot be detected accurately. Accurately identifying financial constraints requires information that measures the cost of external funds and the demand for firm funds. On the other hand, the firm seeks to cover up information that acts as evidence of the occurrence of financial constraints to produce high quality-looking financial statements. For further research, it is expected to use other measurements such as the WW Score or SA index, which allegedly can more accurately detect the occurrence of financial constraints.

Acknowledgement

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