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Abstract

This study empirically tests the behavior of Sharia and non-Sharia securities investors towards corporate tax avoidance. If Sharia securities investors make investment decisions considering Sharia principles, corporate tax avoidance should be viewed as a bad practice which is contradictory to Sharia principles and it is intolerable for this type of investors. Using companies from the financial industry for the period of 2007-2018, the final sample comprises 378 observations for Sharia securities and 167 observations for non-Sharia securities. This secondary data research is conducted by applying moderated regression analysis to test the hypothesis. This study finds that the market responses regarding corporate tax avoidance practices on average are lower (higher) for Sharia (non-Sharia) securities.

Keywords: Corporate tax avoidance; Sharia securities; Non-sharia securities
JEL: H26, G41, M41

[1] Currently studying here.

INTRODUCTION

This study examines the differences in behavior between Sharia and non-Sharia investors in responding to bad practices, which in this study is limited to corporate tax avoidance[2]. Previous studies have widely documented how the market reacts to bad signals and/or practices, such as negative earnings shock related to market uncertainty (Conrad et al. 2002), delay of bad news disclosure (Kothari et al. 2009), tax avoidance practices (Goh et al. 2016), restatement of fraudulent financial statements (Palmrose et al. 2004) to the practices of tax evasion, bribery, and violation of government contract (Davidson III et al. 1994). Apart from the mixed findings regarding the market response to tax avoidance (Hanlon and Heitzman 2010), previous studies in the literature also have not elucidated the difference in market response between the Sharia and non-Sharia securities investors. Previous studies that made comparisons between Sharia and non-Sharia capital markets were also limited to examining the context of securities or capital market performance rather than the behavior of investors in each capital market (e.g., Walkshäusl and Lobe 2012; El Khamlichi et al. 2014; Dharani et al. 2019).

Islamic funding, including Sharia securities and banks, is known to be operated based on Sharia principles or Islamic law (Haniffa and Hudaib 2007) so that religious investors, especially Muslims, tend to prefer Sharia securities and banks for their investment (Jamaludin and Gerrans 2015; Wan Ahmad et al. 2008). By considering that Sharia principles are related to the responsibility of the world and the hereafter (Haniffa and Hudaib 2007), Sharia ownership is expected to discourage tax avoidance practices considered as company mis-behavior, at least according to Islamic law. Analogous to the institutional ownership (Khurana and Moser 2013) and family ownership (Chen et al. 2010) in making difference, this study seeks to investigate whether Sharia securities investors will have a different response to tax avoidance than the non-Sharia securities investors. Therefore, this study is concerned with comparing the responses of Sharia investors and non-Sharia investors.

Specifically, several previous studies have indicated that investors' personal values or social norms can in-fluence investment decisions (e.g., Anand and Cowton 1993; Pasewark and Riley 2010; Borgers et al. 2015), including decisions related to the response to information disclosed by companies to the market. Religiosity as a reflection of one's level of adherence to religious values and beliefs (Worthington et al. 2003) requires that religious investors, especially Muslims, make investment decisions in accordance with Sharia principles (Walkshäusl and Lobe 2012). In Sharia principles, duties and obligations related to the management of funds entrusted to the company are interpreted as accountability to God and are a form of worship so that violations committed by the companies are deemed as sinful and result in punishment in the afterlife (Haniffa and Hudaib 2007). This way, bad practices that are judged to be incompatible with these principles are more intolerable for religious investors, including tax non-compliance (Alam et al. 2017). Therefore, assuming that Sharia securities are more demanded by religious investors, this study expects Sharia securities investors to respond less positively (more negatively) to

[2] Following Dyreng et al. (2008) and Hanlon and Heitzman (2010), this study defines tax avoidance in a broad way as all activities undertaken to reduce tax payments so as to include tax avoidance at all levels of legality and aggressiveness. However, this study argues that tax avoidance in any form and for any reason is unjustifiable, unethical, and sinful from a sharia perspective. Doing tax avoidance means that management is negligent in using the funds entrusted (Alam et al. 2017) which must be accountable to God in the hereafter (Haniffa and Hudaib 2007). It also reduces government revenue for social welfare and hurts justice for honest taxpayers (Scholz 2003).

corporate tax avoidance than non-Sharia securities investors.

This study contributes to the existing literature in two ways. First, by taking a perspective of belief-adjustment theory, our study complements the recent literature on market response to tax avoidance between Sharia and non-Sharia investors. Second, our empirical evidence offers insights and helps us to understand that the market responses regarding corporate tax avoidance practices on average are lower (higher) for Sharia (non-Sharia) securities.

Overall, this study has several important implications for the literature, companies, and government. By partitioning Sharia and non-Sharia securities, this study shed a light on the debate in the literature regarding the mixed evidence of market response to tax avoidance. Clearly, consistent with the market response to tax avoidance practices which depends on investors' perceptions, our results suggest that personal value derived from religious belief plays a role in investors' behavior in the capital market. The process of evaluating company practices based on Sharia principles to make investment decisions as indicated by this study results contributes to belief-adjustment theory. Thus, the companies should be consistent in applying Sharia principles once it is declared as Sharia securities. Potential as a control mechanism, the government's financial literacy improvement program is expected to encourage devout Muslims to enter the capital market so as to discipline bad corporate practices at least under Islamic law.

The rest of this paper is organized as follows. Section two discusses the institutional setting, previous studies related to the topic of this study, theory, and hypothesis development. Sample, data collection, variable descriptions, the model used, and methods for analysis are presented in section three. In section four, analyses and discussion of the results are presented, including the results of the robustness check. Lastly, section five provides the conclusions, limitations, and suggestions for future research.

LITERATURE REVIEW, THEORY, AND HYPOTHESIS DEVELOPMENT

Institutional Setting

The Islamic capital market is growing rapidly within the OIC (Organization of Islamic Cooperation) countries since the launch of the DJIM (Dow Jones Islamic Market) World Index in 1999 (Nurrachmi 2018). Of the OIC countries and even the world, Indonesia has the largest Muslim population, which is around 209.1 million in 2010 and 229.6 million (estimation) in 2020 (Pew Research Center 2015). This represents a great potential for the development of the Islamic capital market and other financial markets, and a huge number of Sharia investors in Indonesia. This is supported by the fact that Indonesia is included in the top ten of the most developed Islamic financial markets in the world based on the IFDI (Islamic Finance Development Indicator) version (Thomson Reuters 2018). Furthermore, the number of Sharia securities in Indonesia's capital mark*et al*so continues to increase every year with growth from 2007 to 2017 reaching 114.75% (OJK 2015, 2018).

On the other hand, Indonesia is ranked ninth in the world based on the level of tax avoidance practices with an estimated loss of up to $6.48 million (Cobham and Janský 2018). In this regard, the manufacturing industry contributes to a large portion of tax revenue in Indonesia. Particularly, the manufacturing industry contribution accounts for 31.8% of the total tax revenue in Indonesia for 2017 (Winanto 2018). Similarly, in 2018, the largest tax revenue came from the manufacturing industry amounting to Rp103 trillion (Anggraeni 2018). Unfortunately, the manufacturing industry is also the largest tax avoider in Indonesia. In addition, the manufacturing industry holds the largest proportion of total companies listed on the

Indonesia Stock Exchange, reaching 27.35% (BEI 2018).

While the high population of Muslims is expected to prevent tax avoidance practices, Indonesia is in fact one of the countries with the highest tax avoidance in the world. This contradiction makes Indonesia an interesting setting to investigate whether Sharia investors dampen corporate tax avoidance practices by responding negatively. As previously mentioned, Sharia investors are guided by the Sharia principles in which tax non-compliance is a sinful act that violates the obligation to manage funds, including those that must be paid to the government as taxes (Alam et al. 2017).

Tax Avoidance

Tax avoidance in this study is broadly defined as anything that reduces corporate tax relative to profit before tax. This definition follows Dyreng et al. (2008) since the clear boundaries of tax avoidance practices are not known. In this regard, Merks et al. (2007) identified that tax avoidance practices can be done in several ways, i.e., by (1) transferring tax subjects and/or tax objects to countries that provide special tax treatment or tax relief (tax haven country) for certain types of income; (2) maintaining the economic substance of transactions through formal elections that provide the lowest tax burden (formal tax planning); (3) using the Anti-Avoidance provisions for transfer pricing transactions, thin capitalisation, treaty shopping, and controlled foreign corporations (Specific Anti Avoidance Rule).

According to Hanlon and Heitzman (2010), tax avoidance is a continuum of tax planning strategies that are completely legal at one end—i.e., research and development claims, investments in assets, tax saving—and illegal on the other end—i.e., tax aggressiveness, tax evasion, tax noncompliance. In practice, tax avoidance tends to be carried out using certain methods and techniques in exploiting the "grey area" in tax regulations (Pohan 2013; Blaufus et al. 2016; DeZoort et al. 2018). Specifically, this type of tax avoidance aims to minimize the tax burden by taking advantage of the weaknesses of a country's taxation regulations (Suandy 2001; Brown 2012; Feller and Schanz 2017).

As the findings regarding the market's reaction to corporate tax avoidance are still mixed (Hanlon and Heitzman 2010), there are two views regarding this practice identified in the literature. Some opinions (e.g., Tresch 2002; Darussalam and Septriadi 2008; Xynas 2011) considered tax avoidance as a legal practice because it does not violate existing provisions. Further, McGuire et al. (2014) explained that tax avoidance is beneficial for increasing tax savings as a way to increase cash flow. In this way, tax avoidance creates value because it will increase the current period's net income and the shareholders' wealth (Akbari et al. 2018, 2019). However, this value is impaired when tax avoidance is carried out with opportunistic motives (Wang et al. 2019). Proponents of the agency view of tax avoidance include Slemrod (2004), Chen and Cu (2005), and Crocker and Slemrod (2005).

Tax Avoidance on Islamic Perspective

Tax avoidance is considered as an action that is contrary to Islamic law because it is close to bad intentions, since bad deeds to avoid taxes are harmful to the state. Emzaed et al. (2018) explained that the intention/motivation to avoid taxes is a manifestation of bad faith (instead of good faith). In this sense, Alam et al. (2017) stated that tax avoidance is a morally sinful behavior under Sharia principles. More specifically, the payment of a certain amount of tax to the government is a form of managing company funds that will be accountable to God in the hereafter (Haniffa and Hudaib 2007). Thus, failure to pay taxes, regardless of motivation, especially because of opportunistic tax avoidance, is a sinful act.

To the extent that the relationship between the taxpayer and the government can be viewed as an implicit contract (Scholz 2003), Islam emphasizes good faith as the main prerequisite to be strongly upheld by the parties involved in the 'tax contract'. If there is a breach of contract made by one of the parties, i.e., the taxpayer, it means that he has initiated bad intentions in the tax reporting system and has committed an act of injustice (Walkshäusl and Lobe 2012). Furthermore, if this behavior by chance goes undetected by the tax authorities, God will always know what we are doing, even what it is in our hearts and when bad intentions have not been executed. This is consistent with Quran Surah Hashr verse 18:

> "O believers! Be mindful of Allah and let every soul look to what deeds it has sent forth for tomorrow. And fear Allah, for certainly Allah is All-Aware of what you do."

and Surah Taghabun verse 4:

> "He knows whatever is in the heavens and the earth. And He knows whatever you conceal and whatever you reveal. For Allah knows best what is hidden in the heart."

Belief-Adjustment Theory

Belief-adjustment theory (BAT) explains how individual decision-making is strongly influenced by their beliefs on the basis of available information (Hogarth and Einhorn 1992). In this regard, Beaver (1989) stated that decision-making behavior will change when new information becomes available, thereby changing one's beliefs. Individuals will change their beliefs through the anchoring and adjustment process (Hogarth and Einhorn 1992). This theory is based on the assumption that in processing information, an individual does it gradually either because of limited memory capacity or cognitive constraints (Simon 1955). Moreover, the presence of separation of control and ownership gives management an information advantage over investors (Scott 2015), supporting the need for belief adjustment.

Applying the context of this study, BAT is used to explain how Sharia investor beliefs change about firms that claim to follow Sharia principles but engage in tax avoidance practices. In this case, the initial belief of investors is that Sharia-based firms will choose strategies, carry out operations, and engage in activities that are not against Islamic law. Therefore, when these firms are involved in tax avoidance practices, the initial belief of Sharia securities investors will be "shaken", and they will immediately revise their beliefs. In addition, the revised belief is then reflected in firms' stock prices as the information is used in decision making.

Hypothesis Development

As indicated in the literature review by Hanlon and Heitzman (2010), empirical research on tax avoidance related to market reactions shows mixed results, reflecting two conflicting views of tax avoidance. On the one hand, tax avoidance is perceived as a value-creating activity so that it is responded positively by investors (Kirchler et al. 2003). In line with this argument, Goh et al. (2016) and Lim (2011) find that tax-avoiding firms enjoy lower costs of capital. On the other hand, tax avoidance is viewed as an opportunistic behavior that exacerbates agency problems (Desai and Dharmapala 2009; Balakrishnan et al. 2019; Kim et al. 2011). Supporting this view, Blaufus et al. (2019) show that there is a negative stock market response towards tax evasion practice in Germany. In addition, both Kim et al. (2011) and Brooks et al. (2016) report the positive association between tax avoidance and stock market risks. Table 1 summarizes the findings of previous studies on the consequences of tax avoidance.

Hanlon and Slemrod (2009) state that the magnitude of the market's reaction depends on investors' perceptions of corporate tax avoidance. This idea becomes our basis to build an argument related to a

Table 1
Summary of Previous Research on The Consequences of Tax Avoidance

Author(s)	Dependent Var.	Independent Var.	Result	Sign
Desai and Dharmapala (2009)	Firm value	Tax avoidance	Not significant	-
Hanlon and Slemrod (2009)	Stock price reaction	Tax aggressiveness	Significant	-
Kim et al. (2011)	Stock price crash risk	Tax avoidance	Significant	+
Lim (2011)	Cost of debt	Tax avoidance	Significant	-
Abdul Wahab and Holland (2012)	Firm value	Tax planning	Significant	-
Chen et al. (2014)	Firm value	Tax avoidance	Significant	-
	Agency costs	Tax avoidance	Significant	+
Brooks et al. (2016)	Firm stock return	Tax avoidance	Not significant	-
	Stock market risk	Tax avoidance	Significant	+
Goh et al. (2016)	Cost of equity	Tax avoidance	Significant	-
Brushwood et al. (2017)	Equity market values	Permanent BTD by stock-based compensation	Significant	-
Cook et al. (2017)	Cost of equity (*ex-ante*)	Tax avoidance	Significant	+
Balakrishnan et al. (2019)	Transparency of information environment	Tax aggressiveness	Significant	-
Blaufus et al. (2019)	Stock market response	Legal tax planning	Not significant	+
		Illegal tax planning	Significant	-
Tang (2019)	Firm value	Tax avoidance	Significant	+

different capital market reaction between Sharia securities investors and non-Sharia investors, supported by belief-adjustment theory. Sharia-compliant firms are expected to implement and comply with Islamic law in all their strategies, operations, and activities. Specifically, according to Islamic law, firms operated based on Sharia principles must avoid involving in unethical and completely unacceptable (*haram*) activities, stay away from all types of usury and interests (*riba*), sidestep from uncertain (*gharar*) and gambling transactions, maintain the number of its assets in a way that liquid assets do not dominate, and obedient with paying taxes (Alam et al. 2017). This is an initial belief and basis for the perception of company practices by Sharia securities investors.

As devout Muslims tend to invest in Sharia-based funds (Jamaludin and Gerrans 2015), this type of investors will evaluate new-discovered information regarding their Sharia investment portfolios based on its compliance with Islamic law (Borgers et al. 2015; Pasewark and Riley 2010; Wan Ahmad et al. 2008). When a Sharia-compliant company commits tax avoidance, which is considered a sinful act (Alam et al. 2017), Sharia investors will change down their initial belief towards that company since its behavior does not reflect the value it is supposed to uphold. This revised belief will then be used as a new basis for making investment decisions (Hogarth and Einhorn 1992). Since tax avoidance is a bad practice according to Islamic law, a negative market reaction by Sharia securities investors is expected.

Different from non-Sharia securities investors who may perceive tax avoidance as a positive behavior under certain conditions (Akbari et al. 2018, 2019), religious investors cannot tolerate tax avoidance that is inconsistent with Sharia principles (Wan Ahmad et al. 2008). As Sharia investors are expected to adhere to Sharia principles, this type of investor can be seen as controlling corporate tax avoidance practices. This disciplinary mechanism is analogous to other types of ownership. For example, Khurana and Moser (2013) show that firms held by long-

Table 2
Total Observations

Initial observations of 167 companies, 11 years (2008-2018)	1,837
Less: observations with missing data used to estimate the expected return using a market model	1,053
Less: observations with missing data used to estimate corporate tax avoidance	-
Less: observations with missing data of financial variables used for control variables	153
Less: observations trimmed for the corporate tax avoidance, debt issuance, and leverage variables	86
Final observations	545

term institutional investors engage in less tax avoidance practices. Similarly, Chen et al. (2010) find that family firms are less aggressive in avoiding tax than their counterparts. In addition, related to this study context, Boone et al. (2013) document that religiosity is negatively associated with tax avoidance aggressiveness.

The discussion leads to the expectation that the overall market may respond positively or negatively depending on the perception of whether tax avoidance will create value or not. However, the Sharia investors do not favor any kind of tax avoidance practices as it contradicts the Sharia principles, resulting in a negative response. Taken together, when the overall market perceives tax avoidance as value-creating (value-deteriorating) activity so that respond positively (negatively) to it, the Sharia investors' response is lower/ more negative in positivity (negativity). Thus, this study hypothesis can be stated as follows:

H_1: Sharia securities investors respond more negatively than non-Sharia securities investors to corporate tax avoidance regardless of how the market perceives it (positive or negative).

DATA AND RESEARCH DESIGN

Data and Sample

This study uses an observation period of 2008-2018. The sample comprises the manufacturing companies listed on the Indonesia Stock Exchange. The total initial observations amounted to 1,837 firm-year observations. The sample was then selected based on the criteria of data availability for analysis. Furthermore, observations with extreme outliers were also omitted from the sample. The final number of observations consisted of 545 firm-year observations consisting of 378 observations for Sharia securities and 167 observations for non-Sharia securities. In the final sample, the remaining number of companies was 123 companies. Table 2 depicts these procedures.

The data used in this study were obtained from several sources, i.e., Thomson Reuters database, the Decrees of the OJK (Otoritas Jasa Keuangan/Financial Services Authority) Board of Commissioners regarding Sharia Securities List for 2007-2017, and the yahoo finance page. Data on the companies' daily share price, income before and after-tax, income tax expense, financial statement announcement date, total assets, total liabilities, and market capitalization were taken from the Thomson Reuters database. The daily data on market returns (Jakarta Composite Index return) during the study period were taken from the yahoo finance page (*https://finance.yahoo.com/quote/^JKSE/*). Meanwhile, the Decrees of the OJK Board of Commissioners regarding the Sharia Securities List for the period of 2007-2017 were used to identify the securities type.

Measurement of Variables

CAR refers to 7 days (-3, 0, +3) cumulative abnormal return and represents the dependent variable used to test the

hypothesis. A market model introduced by Brown and Warner (1980, 1985) is used to estimate the expected return component for the main proxy of CAR. This model has been widely used in previous studies (e.g., Al-Thaqeb 2018; Armstrong et al. 2010; Ikenberry et al. 1995). In substance, the procedures to be followed for computing CAR are (1) calculating actual return, (2) estimating expected return, (3) calculating abnormal return, and (4) calculating cumulative abnormal return.

In this study, the event date (day 0) is the financial statement announcement date. If the company reports after March 31 of the following year for a financial statement at a particular year, the event date used is the maximum date for reporting the financial statements (March 31). The estimation period used is 200 days, that is 203 to 4 days before the event date.

Tax_avoid represents the corporate tax avoidance that is proxied by STR - ETR in this study. STR denotes the Indonesian statutory tax rate, which is 25%. ETR is an *effective tax rate* and is calculated as a percentage of tax expense over its reported income before tax. The lower ETR means the more corporate tax avoidance engaged by the company. For ease of interpretation, this study deducted the ETR (in percentage) from STR so that the larger value of *Tax_avoid* represents more corporate tax avoidance. This proxy has been widely used by previous studies in the taxation literature, especially those investigating tax avoidance on equity matters. Some of them are Rego (2003), Dyreng et al. (2008), Abdul Wahab and Hollad (2012), Chen et al. (2014), Brushwood et al. (2017), and Tang (2019).

For example, Company A has a tax expense of Rp500,000 and income before tax of Rp2,500,000. The level of tax avoidance (Tax_avoid) engaged by Company A can be calculated as STR – ETR with an ETR equal to tax expense/income before tax. That way, the value of *Tax_avoid* for Company A in certain year is 5% or 0.05 (25% - {Rp500,000/Rp2,500,000}).

Sharia is an identifier variable that is used to differentiate between the Sharia and non-Sharia securities. *Sharia* is expressed in the form of a dummy variable with non-Sharia securities as the base. Therefore, this variable has a value of 1 for Sharia securities and 0 for otherwise. The classification for Sharia and non-Sharia securities is based on the Sharia Securities List issued by OJK (Otoritas Jasa Keuangan).

Several *control* variables that may affect the company's stock price other than the tax avoidance are included in the model. Those are *leverage* (Abdul Wahab and Holland 2012; Cook et al. 2017; Tang 2019), *firm size* (Rego 2003; Chen et al. 2014; Cook et al. 2017; Tang 2019), *growth* (Kim et al. 2011; Goh et al. 2016; Thaker et al. 2020; Brushwood et al. 2017), *debt issuance* (M'ng et al. 2019), and *market capitalisation* (Kim et al. 2011; Goh et al. 2016; Brushwood et al. 2017). The description and measurement of the variables used in this study are summarized in Table 3.

Model Specification

The model used in the multiple regression analysis to evaluate the effect magnitude of the independent variables can be stated as follows:

$$CAR_{i,t,7} = \alpha + \beta_1 Tax\_avoid_{i,t} + \beta_2 Sharia_{i,t} + \beta_3 Tax\_avoid_{i,t} * Sharia_{i,t} + \beta_4 Size_{i,t} + \beta_5 Growth_{i,t} + \beta_6 Debt\_issue_{i,t} + \beta_7 Leverage_{i,t} + \beta_8 Market\_cap_{i,t} + Year\text{-}Fixed\ Effect + \varepsilon_{i,t} \quad (1)$$

where $CAR_{i,t,7}$ is 7-days cumulative abnormal return of firm *i* in year *t*; $Tax\_avoid_{i,t}$ is the level of corporate tax avoidance engaged by firm *i* in year *t*; $Sharia_{i,t}$ is a dummy variable that indicates the securities type of firm *i* in year *t*; $Tax\_avoid_{i,t} * Sharia_{i,t}$ is an interaction between the level of corporate tax avoidance and securities type of firm *i* in year *t*; $Size_{i,t}$ is the size of firm *i* in year *t*; $Growth_{i,t}$ represents the growth of firm *i* in

Table 3
Variables Description and Measurement

Variable	Description	Measurement
CAR	Cumulative abnormal return	Cumulative abnormal return is estimated using the following procedures. 1. Calculating actual return $R_{i,t} = [(P_{i,t} - P_{i,t-1})/ P_{i,t-1}]$ (2) 2. Estimating expected return using market model by Brown and Warner (1980,1985) $E[R_{i,t}] = [\hat{\alpha}_i + \hat{\beta}_i R_{M,t}]$ (3) 3. Calculating abnormal return $AR_{i,t} = R_{i,t} - E[R_{i,t}]$ (4) 4. Calculating cumulative abnormal return $CAR_i = \sum_{t=-3}^{t=+3} AR_{i,t}$ (5) where R_i is an actual return of a firm, P is the stock price, E[R] is the expected return, R_M is the market return (Jakarta Composite Index return), AR is the abnormal return, and CAR is the cumulative abnormal return.
Tax_avoid	Corporate tax avoidance	This variable is proxied by (STR - ETR), in which ETR (Effective Tax Rate) is calculated as follows. ETR = (Tax Provision/ Income Before Tax) x 100
Sharia	Securities type	An indicator variable that is equal to 1 if the share of a firm identified as Sharia securities, and 0 otherwise.
Size	Firm size	The natural logarithm of the total assets of a firm.
Growth	Firm growth	The market-to-book ratio of common equity of a firm.
Debt_issue	Debt issuance	The percentage change in total liabilities of a firm.
Leverage	Leverage	Debt to equity ratio of a firm.
Market_cap	Market capitalisation	The natural logarithm of the market capitalisation of a firm.

year *t*; $Debt\_issue_{i,t}$ indicates the business risk of firm *i* in year *t*; $Market\_cap_{i,t}$ shows the market capitalization of the firm *i* in year *t*; *Year-Fixed Effect* is used to capture factors outside the model that vary between years that might affect the cumulative abnormal return; dan Ɛ denotes the error terms.

Prior to the analyses, we performed a trimming procedure to three variables in the model. The three variables are *Tax_avoid*, *Debt_issue*, and *Leverage*, since they are indicated to contain observations with extreme outlier data. The trimming procedure was performed on observations with defined limits at the 1st and 99th percentiles. Specifically, this means discarding observations that lie outside the defined limits which in this study are less than data on the 1st percentile or more than data on the 99th percentile. Because the ETR contains a high number of outliers, the trimming procedure for *Tax_Avoid* variable was done with the 5th and 95th percentiles limits.

Several statistical analyses were conducted in this study. While descriptive statistics portray data patterns, the correlation matrix indicated whether there was a multicollinearity problem that would bias the results. Mean and median difference tests using t-test and Chi-square test were aimed to discover the presence of the significant differences between the two types of securities. ANOVA was used to determine whether the difference in market response to tax avoidance between Sharia and non-Sharia investors was statistically

Table 4
Model Selection

	H_o	H_1	Statistics[a]	p-value	Conclusion
Chow test	PLS/Common effect	Fixed effect	0.97	0.5802	PLS/Common effect
LM test	PLS/Common effect	Random effect	0.00	1.000	PLS/Common effect
Hausman test	Random effect	Fixed effect	22.62	0.0039	Fixed effect

[a] Statistics for each test can be specified as follows: F-statistics for Chow test, $\underline{\chi}^2$ for LM test, χ^2 for Hausman test.

meaningful. To test the hypothesis in a detailed sense, i.e., the market response of Sharia investors is less positive (more negative) to corporate tax avoidance than non-Sharia securities investors, multiple regression analysis was employed. To corroborate the results, a partition regression analysis was performed and the coefficients of the tax avoidance variable were compared using the Chi-square test.

Multiple regression analysis was carried out using the pooled-least square method which was selected based on the results of the panel data model selection test (for a detailed discussion, see Gujarati and Porter 2009). Specifically, the rejection of the null hypothesis in the Chow, LM, and Hausman tests means the use of fixed-effect instead of common effect, random effect instead of common effect, and fixed effect instead of random effect, respectively (Gujarati and Porter 2009; Wooldridge 2016). The inability to reject the null hypothesis suggests otherwise. As shown in Table 4, the null hypothesis of the Chow test and LM test cannot be rejected. This implies that the most efficient estimation was achieved using the common effect, or known also as the pooled-least square, method. This method is also consistent with the consideration to increase the sample size (Wooldridge 2016).

The Shapiro-Wilk test was used to indicate the normality of the residual, while the Breusch-Pagan test was operated to detect the heteroskedasticity in the residual (Wooldridge 2016). Because there was evidence that the residual of the model suffered from non-normality ($z = 7.862$, *p-value* < 0.01) and heteroscedasticity ($\chi^2 = 31.07$, *p-value* < 0.01), a robust standard error was applied in all regression analyses (Gujarati and Porter 2009). To control for confounding effects, regression with propensity score matching was applied in all analyses unless otherwise indicated. The propensity score matching originally came from the experimental study to balance the characteristics in the treated group and untreated group in order to control for unobserved factors, thereby reducing bias due to confounding variables (Rosenbaum and Rubin 1983; Austin 2011). Later, the archival data study used it to address endogeneity problems that may arise from omitted variables (e.g. Koester et al. 2017), and self-selection bias due to sample partitioning (e.g. Wang et al. 2017; Gul et al. 2018).

This study conducted a series of robustness tests by replacing the expected return estimation model from the market model to the mean-adjusted model and the market-adjusted model, using ETR and reverse ETR as a proxy for corporate tax avoidance, and estimating the model using a fixed-effect method. The series of tests were carried out to ensure that the results were consistent across the proxies to measure variables and data estimation methods used.

Descriptive Statistics

Panel A of Table 5 reports descriptive statistics that summarize and show the data patterns of all variables so that they are more meaningful (Keller 2018; Lind et al. 2017). While the mean and median values represent the central location of the data, the standard deviation, 25th percentile, and

Table 5
Descriptive Statistics

Panel A: Descriptive Statistics for the Full Sample								
	n	**Mean**	**Std. Dev.**	**Skewness**	**Kurtosis**	**25%**	**Median**	**75%**
CAR	784	0.7374	6.9711	0.6951	6.1005	-2.2981	0.0005	3.7572
Tax_avoid	1,440	2.3417	14.5153	0.7862	5.3497	-3.4882	-0.0413	6.1299
Sharia[a]	1,603	0.6089	0.4882	-0.4461	1.1990	0	1	1
Size	1,582	26.1589	3.7501	-1.0212	2.9871	25.6635	27.2515	28.4129
Growth	1,370	2.7635	6.5321	4.3742	24.1492	0.4597	0.7532	1.8019
Debt_issue	1,519	0.1189	0.3376	1.9473	11.5539	-0.0509	0.0665	0.2222
Leverage	1,568	1.2598	6.9046	-18.6353	451.1507	0.4443	1.0329	1.8114
Market_cap	1,235	27.5811	2.1607	0.5390	3.0084	26.0419	27.2473	28.9314

Panel B: Descriptive Statistics of All Variables by Securities Type						
	Sharia		**Non-Sharia**		**Diff. Mean**	**Diff. Median**
	Mean	**Median**	**Mean**	**Median**		
CAR	0.5121	-0.3749	1.0801	0.7571	-	***
Tax_avoid	0.4624	-0.1797	5.3918	0.1769	***	**
Size	26.4017	27.3028	25.7722	27.1353	***	-
Growth	2.7152	0.7284	2.8735	0.8292	-	-
Debt_issue	0.1351	0.0789	0.0914	0.0456	***	**
Leverage	0.9869	0.7685	1.7047	1.6941	**	***
Market_cap	27.6987	27.3813	27.3529	26.9402	***	***

[a] Due to a dummy variable, the mean value indicates the proportion of Sharia securities in the sample.
*, **, and *** denotes a difference in the mean (median) under a t-test (Chi-square test) with a two-tailed p-value of less than 0.1, 0.05, and 0.01

75th percentile indicate how dispersed the data is relative to its mean (Keller 2018; Lind et al. 2017). All variables except *CAR*, *Tax_avoid*, *Growth*, and *Leverage* have relatively small standard deviations, and close mean and median values, which suggest the variables are symmetrically distributed. However, the non-normal variables due to a quietly large standard deviation can still be used in the further analysis as long as the study sample is large enough to follow the central limit theorem (Hair et al. 2019).

The dependent variable, *CAR*, has a mean of 0.7374 and a standard deviation of 6.9711. About 69.36% of the securities in this study are classified as Sharia, while the level of corporate tax avoidance as the difference between STR and ETR has a mean of 2.3417. Since the smaller the difference between STR and ETR means lower tax avoidance, this serves as a good sign that the expectation about Sharia investors playing a role in disciplining misbehavior may be supported.

Panel B Table 5 shows the mean and median comparison test using t-test and Chi-square test to determine whether there is a significant difference between the two groups of security types. Based on the Chi-square test on differences in median values, this study found Sharia securities had higher returns than non-Sharia securities. This is consistent with the findings of Al-Khazali et al. (2014) that the Islamic stock index outperformed its peers during and after crisis periods around the world and over time in Europe. We also documented that the level of corporate tax avoidance practices was lower for Sharia securities than non-Sharia securities. As suggested by Haniffa and Hudaib (2017), bad use of funds entrusted to the company may also be punished in the hereafter. Therefore, companies declaring as Sharia securities will refrain from tax avoidance practices that are sinful under morality and Islamic law (Alam et al. 2017). In addition, the results show that the larger size, higher amount of debt issuance, lower leverage, and higher market capitalisation characterized Sharia securities.

Table 6
Analysis of Variance (ANOVA)

	df	Mean Square	F-statistic	p-value
Model	3	107.7692	2.16	0.0920*
Main Effects				
Tax_avoid	1	1.0828	0.02	0.8830
Sharia	1	34.0278	0.68	0.4097
Two-way Interaction				
Tax_avoid x Sharia (H1)	1	236.1008	4.72	0.0301**
Residual	695	49.9971		

*, **, and *** represent significance at level 0.10, 0.05, and 0.01

Table 7
Correlation Matrix

	V1	V2	V3	V4
V1: *Tax_avoid*	1.0000			
V2: *Sharia*	-0.1650***	1.0000		
V3: *Size*	-0.1062***	0.0817***	1.0000	
V4: *Growth*	-0.0013	-0.0112	-0.0013	1.0000
V5: *Debt_issue*	-0.0743***	0.0626**	0.1034***	-0.0204
V6: *Leverage*	-0.0856***	-0.0505**	0.0314	0.0248
V7: *Market_cap*	-0.0381	0.0758***	0.3671***	0.3020***
	V5	**V6**	**V7**	
V5: *Debt_issue*	1.0000			
V6: *Leverage*	0.0144	1.0000		
V7: *Market_cap*	0.0487*	0.0177	1.0000	

*, **, and *** represent significance at level 0.10, 0.05, and 0.01

EMPIRICAL RESULTS AND DISCUSSION

Analysis of Variance (ANOVA)

Prior to testing the hypothesis in more detail, we conducted a two-way ANOVA with interaction as a preliminary analysis to get knowledge of whether there is a statistically meaningful difference in market response to corporate tax avoidance between Sharia and non-Sharia securities investors (Keller 2018). Table 6 reports the result of ANOVA analysis which indicates that the coefficient of interaction between *Tax_avoid* and *Sharia* is statistically significant (F = 4.72, *p-value* < 0.05). The result implies that the market response to corporate tax avoidance differs between Sharia and non-Sharia securities. Since devout Muslim investors opt for Sharia instruments or funds to invest in (Jamaludin and Gerrans 2015; Wan Ahmad et al. 2008), it can be said that Sharia investors respond to tax avoidance practices differently than their counterparts. In this case, religious values and beliefs determine the way a person views certain firm behavior (Boone et al. 2013) and thus his investment decision (Walkshäusl and Lobe 2012).

Correlation Matrix

Table 7 presents the correlations of all the independent variables included in the model. The correlations were used to assess if there is a serious multicollinearity issue stemming from high correlations between the independent variables in the regression model. Specifically, a multicollinearity problem arises if the pairwise or zero-order correlation coefficient among the independent variables is more than 0.80 and statistically significant (Gujarati and Porter 2009). As indicated in Table 7, in this study, the highest correlation was between *Size* and *Market_cap* (0.3671, *p-value* < 0.01) which was still below the maximum allowed correlation of 0.80. Thus, there is

Table 8
Full Sample Regression Results[a]

	(1) Pooled Least Square[b]			(2) Propensity Matching Score[c]		
Variable	**Coef. Est.**	**t-stat.**	**VIF**	**Coef. Est.**	**t-stat.**	**VIF**
Intercept	2.6039	0.68	-	-7.8428	-2.41***	-
Tax_avoid	0.0492	1.30*	2.41	0.0843	4.02***	1.70
Sharia	0.1515	0.21	1.24	1.8662	3.46***	1.10
Tax_avoid x Sharia	-0.0949	-2.05**	2.31	-0.1199	-3.47***	1.58
Size	0.0784	0.88	1.21	0.3687	4.59***	1.30
Growth	-0.0313	-1.11	1.16	-0.0272	-0.92	1.19
Debt_issue	0.5218	0.63	1.05	-0.0138	-0.02	1.06
Leverage	-0.0604	-0.52	1.08	0.2279	2.98***	1.11
Market_cap	-0.0873	-0.59	1.38	-0.0490	-0.37	1.50
			1.62			1.71
Year-fixed effect	Yes			Yes		
n	545			726		
Adj. R^2	0.0719			0.1408		
F-value	4.14***			9.18***		

[a] Robust standard error is used due to the non-normality and heteroscedasticity of residuals.
[b] Panel regression using the common effect method.
[c] To control for confounding effects, the propensity matching score is used throughout the analyses in this study (Rosenbaum and Rubin 1983; Austin 2011).
*, **, and *** represent significance at level 0.10, 0.05, and 0.01

no severe multicollinearity problem detected based on the correlation analysis.

In addition, an interesting result from Table 7 is that there is a statistically significant negative correlation between *Sharia* and *Tax_avoid* (-0.1650, *p-value* < 0.01). This supports the previous finding that Sharia-compliant companies are engaged in lower tax avoidance. In this regard, these companies internalize the principles they hold so that these are reflected in their strategies, operations, and activities. Moreover, to the extent that tax avoidance involves exploiting "grey areas" in the country's taxation system (Pohan 2013; Blaufus et al. 2016; DeZoort et al. 2018), companies adhering to Sharia principles tend to sidestep to tax avoidance as it is a dubious activity. Related to this matter, Prophet Muhammad SAW said:

> "Leave that which makes you doubt for that which does not make you doubt." (Reported by at-Tirmidhi and an-Nasa'i. Sahih Tirmidhi)

Regression Analysis

In addition to the correlation analysis to detect multicollinearity, the VIF for both the individual variables and the model (see Table 8 and Table 9) also shows favourable values. The VIF for the model used in this study ranged from 1.62 to 5.95, which is still below the rule of thumb of 10. There is also evidence that the presence of the interaction term does not inflate the VIF of the model. Overall, this study model does not suffer from the multicollinearity problem. Hence, it is expected that the results reported in this study are not driven by bias due to a multicollinearity problem.

Completing the ANOVA analysis, multiple regression with interaction was carried out to determine the direction and magnitude of differences in market responses as the hypothesis tested was in a one-tail form. The conclusion regarding the hypothesis is indicated by the sign and significance of the interaction term coefficient, which is expected to be negative. Since *Sharia* is a dichotomous variable, the interaction term reflects the prediction that the market responses to corporate tax avoidance practices should be

Table 9
Sub-Sample Analysis[a]

Panel A: Regression results						
	(1) Sharia securities			**(2) Non-Sharia securities**		
Variable	**Coef. Est.**	**t-stat.**	**VIF**	**Coef. Est.**	**t-stat.**	**VIF**
Intercept	4.1702	0.93	-	-13.5529	-3.15***	-
Tax_avoid	-0.0453	-1.69**	1.03	0.0888	3.93***	1.18
Size	0.1700	1.65**	1.18	0.5213	4.32***	1.54
Growth	-0.0169	-0.58	1.15	-0.0057	-0.09	1.33
Debt_issue	0.0059	0.01	1.03	0.3996	0.29	1.19
Leverage	-0.0457	-0.14	1.07	0.1595	1.84**	1.28
Market_cap	-0.2541	-1.42*	1.32	0.0488	0.26	1.86
			1.66			1.90
Year-fixed effect	Yes			Yes		
n	378			348		
Adj. R^2	0.0412			0.2717		
F-value	2.35***			14.36***		
Panel B: Pairwise comparison[b]						
Comparison	**chi-square stat.**			**p-value**		
Sharia vs non-Sharia	15.15			0.0001***		

[a] Robust standard error is used due to the non-normality and heteroscedasticity of residuals.
[b] Chi-square test of the *Tax_avoid* coefficient across securities type on the regression panel A. The significant statistic indicates that there is a difference in market responses between Sharia and non-Sharia investors regarding tax avoidance.
*, **, and *** represent significance at level 0.10, 0.05, and 0.01

different among securities types (Hayes 2018). In other words, the interaction term specifies the average market responses of Sharia investors to tax avoidance relative to the average market responses of non-Sharia investors in the same direction as the coefficient sign.

As shown in Table 8, the coefficient of the interaction term is negative and statistically significant in both regressions with (-0.1199, *p-value* < 0.01) and without the propensity score matching procedure applied (-0.0949, *p-value* < 0.05). By deriving equation (1) by tax avoidance, we are able to obtain the marginal effect of tax avoidance based on the securities type, and better interpret the coefficient of the interaction term to test the hypothesis (Burks et al. 2018). As an example, the marginal effect of tax avoidance on market responses is 0.0843 - 0.1199**Sharia* in the propensity score matching regression. This means that for a certain level of tax avoidance, the market response of Sharia securities investors differs on average by -0.1199 compared to the market response of non-Sharia investors, ceteris paribus. The same way of analysis and interpretation applies to the regression without propensity score matching. Thus, the hypothesis that Sharia investors respond lower to corporate tax avoidance practices than non-Sharia investors is supported.

This finding is in line with belief-adjustment theory. Once a Sharia-compliant company violates principles underlying it, for example by doing tax avoidance, the initial belief of Sharia investors will be disrupted and thus revised (Hogarth and Einhorn 1992). This adjusted initial belief is then reflected in the market response that is more negative than the market response by non-Sharia investors.

To obtain more convincing evidence in supporting this study hypothesis, we perform sub-sample analyses consisting of partition regression analysis and pairwise comparison. The results, as reported in Panel A Table 9, show that Sharia securities investors respond negatively (-0.0453, *p-value* < 0.05), while non-Sharia securities investors respond positively (0.0888, *p-*

Table 10
Robustness Check[a]

Panel A: Alternative proxy for the dependent variable						
	(1)			**(2)**		
	Mean-adjusted model[b]			**Market-adjusted model[c]**		
Variable	**Coef. Est.**	**t-stat.**	**VIF**	**Coef. Est.**	**t-stat.**	**VIF**
Intercept	-2.4436	-0.60	-	-17.6611	-4.28***	-
Tax_avoid	0.0338	1.60*	1.90	0.1013	4.40***	1.93
Sharia	1.0247	1.91**	1.17	1.4739	2.56***	1.21
Tax_avoid x Sharia	-0.0529	-1.55*	1.69	-0.1207	-3.41***	1.69
Size	0.1678	2.43***	1.24	0.0107	0.16	1.17
Growth	0.0139	0.41	1.16	-0.0588	-2.42***	1.18
Debt_issue	0.1506	0.15	1.08	-0.3959	-0.42	1.09
Leverage	0.0085	0.18	1.13	0.0950	1.57*	1.11
Market_cap	-0.0463	-0.35	1.37	0.3709	2.68***	1.33
			2.00			1.91
Year-fixed effect	Yes			Yes		
n	1,225			1,225		
Adj. R^2	0.1616			0.2192		
F-value	13.99***			25.93***		
Panel B: Alternative proxy for the independent variable						
	(1)			**(2)**		
	Effective tax rate[d]			**Reverse effective tax rate[e]**		
Variable	**Coef. Est.**	**t-stat.**	**VIF**	**Coef. Est.**	**t-stat.**	**VIF**
Intercept	-5.7355	-1.75**	-	-12.0337	-3.19***	-
Tax_avoid	-0.0843	-4.02***	1.70	0.0557	2.19**	1.91
Sharia	-1.1302	-1.25	3.14	8.8027	2.95***	29.09
Tax_avoid x Sharia	0.1199	3.47***	4.15	-0.0913	-2.42***	28.47
Size	0.3687	4.59***	1.30	0.3241	3.94***	1.35
Growth	-0.0272	-0.92	1.19	-0.0296	-1.01	1.19
Debt_issue	-0.0138	-0.02	1.06	-0.3309	-0.43	1.06
Leverage	0.2279	2.98***	1.11	0.3821	4.22***	1.23
Market_cap	-0.0490	-0.37	1.50	-0.0155	-0.12	1.50
			2.06			5.95
Year-fixed effect	Yes			Yes		
n	726			717		
Adj. R^2	0.1408			0.1467		
F-value	9.18***			10.42***		

[a] Robust standard error is used due to the non-normality and heteroscedasticity of residuals.
[b] Instead of using a market model to estimate the expected return, the mean of the actual return of securities during the estimation period is used.
[c] Instead of using a market model to estimate the expected return, the market return at the corresponding date in the event period is used.
[d] Instead of using a difference between STR and ETR to proxy tax avoidance, the original ETR is used.
[e] Instead of using a difference between STR and ETR to proxy tax avoidance, the reverse value of ETR (100-ETR) is used.
*, **, and *** represent significance at level 0.10, 0.05, and 0.01

value < 0.01) to tax avoidance. To find out whether these responses can be said to be different, we conducted a Chi-square test on the *Tax_avoid* coefficients in columns (1) and (2) Panel A of Table 9. We found a significant Chi-square statistic (15.15, *p-value* < 0.01) which means the market response to corporate tax avoidance between Sharia and non-Sharia investors is different.

According to Hanlon and Slemrod (2009), investors' perceptions of tax avoidance affect their responses to it. As investors' perceptions are shaped by their personal values (Anand and Cowton 1993; Pasewark and Riley 2010; and Borgers et al. 2015), the negative response of Sharia investors to tax avoidance reflects the application of values and beliefs they hold, i.e., the Sharia principles or Islamic law, in

Table 11
Fixed Effect Estimation[a]

Variable	Coef. Est.	Std. Error[b]	t-statistics	VIF
Intercept	5.1557	42.6588	0.12	-
Tax_avoid	0.0863	0.0536	1.61*	2.41
Sharia	-1.4099	1.3109	-1.08	1.24
Tax_avoid x Sharia	-0.1004	0.0654	-1.54*	2.31
Size	-0.1873	1.5613	-0.12	1.21
Growth	0.0445	0.1257	0.35	1.16
Debt_issue	-0.3418	0.9979	-0.34	1.05
Leverage	-0.1015	0.2672	-0.38	1.08
Market_cap	0.0933	0.5822	0.16	1.38
				1.62
Year-fixed effect	Yes			
n	545			
Adj. R^2	0.0986			
F-value	4.32***			

[a] Panel regression using fixed effect method.
[b] Robust standard error is used due to non-normality and heteroscedasticity of residuals.
*, **, and *** represent significance at level 0.10, 0.05, and 0.01

interpreting and responding to corporate practices. In this regard, tax avoidance is intolerable to Sharia investors (Wan Ahmad et al. 2008), since it is considered a morally sinful practice under Sharia principles (Alam et al. 2017). In addition, the positive market reactions by non-Sharia investors are probably due to they perceive tax avoidance as an activity that creates value through increased cash flow, net income, and shareholder wealth (McGuire et al. 2014; Akbari et al. 2018; 2019).

Robustness Check

To ensure that the results of this study do not depend on the proxy used to measure the variables and the estimation method applied, a series of robustness tests were performed. Panel A Table 10 presents the regression results after replacing a market model with a mean-adjusted model and a market-adjusted model to estimate the expected return for calculating CAR (e.g., Brushwood et al. 2017; Blaufus et al. 2019). The regression results with the alternative proxies of tax avoidance, i.e., effective tax rate (e.g., Brooks et al. 2016) and reverse effective tax rate (e.g., Goh et al. 2016), are reported in Panel B Table 10. This study also re-estimates model (1) by changing the estimation method used from the common effect method to the fixed-effect method. The reasons are (1) the fixed-effect method is typically used to address the effect of omitted variables on the relationship between variables in the model (Wooldridge 2016); and (2) the Hausman test shows that the fixed-effect method fits the data better in this study (Table 4).

The interaction term coefficient in the regression across the alternative proxies for both the *CAR* and *Tax_avoid* variables are consistent with that of the main analysis. Particularly, we found a negative and statistically significant coefficient of the interaction term for the mean-adjusted model (-0.0529, *p-value* < 0.10), market-adjusted model (-0.1207, *p-value* < 0.01), and reverse effective tax rate (-0.0913, *p-value* < 0.01) regressions. Because the lower ETR indicates higher tax avoidance, we document evidence of a positive and statistically significant coefficient of the interaction term for the effective tax rate regression (0.1199, *p-value* < 0.01). Accordingly, the finding in the main analysis is robust towards the selection of proxies to measure variables in confirming the hypothesis. In addition to the results to support the hypothesis, the regression

analyses employed in this study also show weak evidence that larger size, lower growth, higher leverage, and larger market capitalization are associated with higher return.

Finally, we conducted a regression analysis with a fixed effect estimation method. As presented in Table 11, the interaction term is still statistically significant in the expected direction (-0.1004, *p-value* < 0.10). Thus, our main result is robust in supporting the hypothesis and is not determined by the model estimation method used. Therefore, it can be concluded that Sharia investors respond negatively to corporate tax avoidance compared to non-Sharia investors. In other words, the personal values held by investors affect their investment decisions (Anand and Cowton 1993; Pasewark and Riley 2010; Borgers et al. 2015). Moreover, Sharia ownership is a potential mechanism for controlling corporate tax avoidance as a deviant behavior similar to institutional ownership (Khurana and Moser 2013) and family ownership (Chen et al. 2010).

CONCLUSIONS

The purpose of this study is to investigate whether investors' personal value determines their investment decisions. In particular, the role of Sharia ownership in disciplining corporate tax avoidance as a bad practice under Islamic law is examined. Using comprehensive analyses, the results show that the market response associated with corporate tax avoidance practices is on average lower for the Sharia securities. Another finding is that firm characteristics also explain the market responses, i.e., there is a higher market response for firms with a larger size, larger market capitalization, lower growth, or higher leverage.

However, this study has limitations in several ways. First is the complex nature of determining the event date because the company does not officially announce its tax avoidance practice. Second, Indonesia has not distinguished between the capital market that trades Sharia securities and non-Sharia securities. Third, this study is limited to only the manufacturing industry for certain reasons. Retesting using another setting of industry or country may be worthwhile.

Forth, the assumption held by this study in testing the hypothesis is that Sharia securities are more demanded by religious (devout Muslim) investors. This assumption is not to say that non-Sharia investors are not religious, non-Muslim investors are disobedient, or non-Muslim investors do not invest in Sharia securities. Rather, this is due to the inability of this study to control for religion and religiosity of the individual investors because of the absence of such measures or proxies in the database. Thus, future research might validate this study result by investigating the same issue, but using other research methods, such as experiment and survey, which do not face these limitations.

Altogether, the results of this study provide initial empirical evidence regarding the role of investors' religious values in influencing investment decisions as reflected in market response differences to tax avoidance practices in Muslim majority country, Indonesia. Therefore, this study results may be applied as a matter of consideration in the other countries that have a similar environment to Indonesia.

Given the continuously increasing number of Sharia securities in Indonesia's capital market and the evidence of Sharia securities lead to higher returns, further research can be also carried out to answer these questions: "Why are the companies willing to move to Sharia securities from the non-Sharia ones?;" "Are the Sharia securities more attractive to investors than the non-Sharia securities?;" and "Does the company get a competitive advantage by becoming a Sharia security?"

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