

Determinants of Sukuk Issuance with Mediating Role of Effective Tax Rate

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ABSTRACT

Sukuk market has continued to grow over the past two decades, yet researches on determinants of sukuk over conventional bond issuance have produced mixed findings. Previous researches also leave a puzzle why asset tangibility is insignificant to sukuk issuance. To contribute to this debate and answer the puzzle, this study examines the roles of asset tangibility and intangibility, earning and cash volatility, and effective tax rate to investigate why firms issue Sukuk over conventional bonds. Using logistic regression and a dataset of 389 Sukuk and 125 conventional bonds issuances from 2016 to 2020 in Malaysia, the result shows that Sukuk issuers rely more on intangible assets than tangible assets, as unlike conventional bond, the instrument allows tangible and intangible assets combination. This study also finds that Sukuk can be an alternative debt financing for firms with higher cash volatility. Moreover, firms with higher effective tax rate also prefer Sukuk because they may enjoy tax savings due to tax incentive exclusively given to sukuk issuer. This study also shows that effective tax rate serves as a quasi-moderator to asset intangibility and cash volatility. It implies that tax incentives provided by regulators play important role to promote sukuk market.

Keywords: Sukuk, Intangible assets, Cash volatility, and Effective tax rate.

1. INTRODUCTION

Once a niche market, sukuk market is now available globally in more than 20 countries with an outstanding value of USD 648 billion as of 2020. Malaysia is the leader of sukuk market with a market share 45.1% globally and sukuk dominates 60% of debt market in Malaysia [1]. This remarkable growth leads to several innovative transactions in sukuk to attract global investors while still adhering to Shariah principles. Two of best practices of Securities Commission Malaysia (SCM) in promoting financial innovation are (1) tax incentive exclusively for sukuk issuers (2) the allowance of hybrid and wakalah sukuk [2].

The phenomenon of sukuk growth motivates several researches to investigate why firms issue sukuk over conventional bonds; however, these studies produce mixed findings. [3] and [4] find that larger and more profitable companies prefer sukuk to conventional bonds. Firms with higher growth rates of income also prefer sukuk [5]. This result supports the trade-off theory where firms may receive greater benefit when they issue sukuk. On the contrary, [6], [7], [8], and [9] find that companies

with lower profitability, higher probability of bankruptcy risk, lower growth rates, and weaker performance choose sukuk over conventional bonds. It concludes that sukuk is an alternative debt financing for companies that are less profitable. Moreover, [4] and [9] also leave a puzzle due to insignificant relationship between asset tangibility and sukuk issuance while SCM requires that underlying assets must back all sukuk offers.

The use of financial risk in previous studies as determinants may only reflect the partial decision on why firms prefer sukuk. In that regard, this study employs business risk, measured by earning volatility and cash volatility, to determine the sukuk issuance. Higher earnings and cash volatility lead to higher risks of company default; therefore, debt financing should be avoided. Sukuk can be an alternative debt financing for companies with weaker performances because sukuk allows risk transfer and hence the issuers may pass through the loss to the sukuk holders [6]. The next objective of this study is to examine the impact of collateral assets value on sukuk issuance since SCM requires sukuk to be backed with underlying assets. Unlike the previous research, this study employs asset intangibility and asset tangibility. One of sukuk

innovations is hybrid sukuk where it allows a combination of physical and Shariah compatible intangible assets [10]. This study also examines the role of effective tax rate since Malaysian government provides attractive tax incentive policies for sukuk issuers, such as: tax exemption on income received by Special Purpose Vehicles (SPV), tax deduction on expenses incurred in the issuance, and stamp duty exemption [2]. [9] finds non-debt tax shield has insignificant effect to sukuk issuance because the tax advantage of interest deduction only may not benefit sukuk issuers due to the availability of tax incentives.

Effective tax rate also serves as a mediating role in this study. As implied by Modigliani-Miller (MM) preposition with tax, a firm should minimize its corporate taxes by utilizing the maximum amount of debt. [11] also suggest that companies will issue debt if the tax savings can provide a zero marginal rate. The tax exemption on sukuk income can reduce the value of the actual tax paid. The value of the effective tax rate itself reflects all taxes paid by a company [12] hence it already includes tax exemption on income and tax deduction on expenses incurred of issuance.

This study delivers three main contributions to the literature. First, this study finds that sukuk issuers rely more on intangible assets than tangible assets. This result aligns with the innovation of hybrid and wakalah sukuk. Second, besides having higher financial risks, firms with higher business risk also find sukuk as an alternative debt financing. Finally, firms with higher effective tax rates also prefer sukuk because they may benefits tax savings due to tax incentive policy. Effective tax rate also serves as a quasi-moderator to asset intangibility and cash volatility.

2. LITERATURE REVIEW

2.1. Sukuk

The main difference between sukuk and conventional bonds is the contract design between the investors and the issuers of the instruments. Conventional bonds do not reflect ownership and create a relationship between lenders and borrowers; thus, a conventional bond issuer remains to own the assets and bear the risk of the assets. Meanwhile, sukuk is a certificate that shows an ownership of an asset or project granted by the sukuk issuer [6]. Sukuk contracts shall comply with Islamic jurisprudence, known as shariah principles. Sukuk is also not merely a loan because it is characterized as an assetbased instrument that requires certain underlying assets to facilitate transactions. The specific contract of exchange also determines Sukuk structure. Sukuk contracts can be created as a leasing agreement, sale and purchase of an asset with deferred payment, or a participation in joint-venture businesses [15]. Overall, the sukuk holders, regardless of their structures, becomes the owners of the assets purchased by the issuer firm. The assets purchase is financed using collected fund from sukuk issuance. The profits of sukuk underlying asset or business venture set in sukuk indenture, becomes the cash flow source for sukuk holders. This gives rise to create special purpose vehicle (SPV) on sukuk issuance [4].

2.2. Hypothesis Development

2.2.1. Collateral Assets

Most capital structure theories imply that company's asset may affect its capital structure choice. Pecking order theory suggests that firms prefer secured debt rather than equity, and therefore firms will utilize its asset as the collateral to issue debt [13]. Agency theory also states that firms with higher agency cost also choose debt because bondholders are inclined to closely monitor managers to avoid excessive consume of perquisites [14]. [4] also find that firms with higher free cashflow also prefer sukuk because it requires well-collateralized assets to prevent underinvestment. Collateralized assets facilitate the transaction and secure investors' interest in the project's cash flows in sukuk contract [15].

H₁: Firms with higher asset tangibility prefer sukuk issuance

Pecking order theory also implies that companies with higher intangible assets confront more asymmetric information problems due to complex asset valuation [13]. Intangible assets can reduce the decision to finance companies with conventional debt due to valuation risk. Further, bondholders require tangibles assets to redeploy at relatively lower transaction costs when borrowers default, due to more straightforward valuation [16]. The existence of hybrid sukuk can provide an alternative debt financing by pledging Shariah compatible intangible assets. Moreover, wakalah sukuk gives issuers flexibility in selecting underlying assets hence it can be comprised of both tangible and intangible assets [10].

H₂: Firms with higher asset intangibility prefer sukuk issuance.

2.2.2. Business Risk

A company's business risk can be expressed as earning volatility and cash flow volatility. Firms with higher earnings volatilities may have higher risks of default on debt payment [17]. Sukuk can be an alternative debt financing for companies with weaker performances and higher insolvency risks because one feature of sukuk allows risk transfer to sukuk holders [6], thus companies with lower capacity of debt repayment may choose to issue sukuk. [8] also find that companies with lower profitability performances also prefer sukuk issuance to conventional bonds. One of sukuk's characteristics is partnership based with profit-loss sharing, and therefore sukuk can be an alternative debt funding for companies with higher earnings volatilities.

H₃: Firms with higher earnings volatility prefer sukuk issuance

Earnings volatility differs from cash volatility because earnings volatility has an accrual component. The availability of cash is important to pay interest and principal. A higher cash volatility leads to a higher company's cost of debt and firms may have speculative credit ratings due to their high default risk [18]. [5] also find that sukuk issuers tend have lower credit ratings. The characteristics of sukuk structure allows risk transfer from asset owners to sukuk owners. Further, partnershipbased sukuk also allows profit-loss sharing where the return on investment is based on the income of the underlying asset [6]. Hence, sukuk can be an alternative financing for companies with higher cash volatility and higher debt costs

H₄: Firms with higher cash flow volatility prefer sukuk issuance.

2.2.3. Effective Tax Rate

According to [19], companies should aim for overall debt financing because of the tax reduction associated with paying debt interest. Non-debt tax shield is insignificant to sukuk issuance because debt tax advantage itself may not benefit sukuk issuers, since tax incentives are exclusively given for sukuk issuers [9]. Countries that offer tax incentive policies will encourage companies to issue sukuk to recover the additional issuance cost [6]. Several tax incentives are available in Malaysia to promote Islamic financial market. The value of the effective tax rate reflects the combined effects of all tax system components [12], thus it already includes the tax shield of debt interest and tax incentives offered by government. The existence of these tax incentives will encourage companies to issue sukuk to lower their effective tax rates in the following year.

H₅: Firms with higher effective tax rates prefer sukuk issuance.

Sukuk issuance is aligned with trade-off theory where companies may take advantage of tax savings by utilizing the asset as debt collateral. Firms enjoy tax saving by amortization deduction, interest deduction, and the various tax incentives on the sukuk issuance. The existence of non-taxable income in income from SPV will reduce the actual value of corporate tax, which is calculated by the effective tax rate [20]. Thus, companies with higher effective tax rates will prefer sukuk. [21] also suggest that the value of the leveraged company is equal to the value of the company without debt, added with cost of bankruptcy and income tax savings. Sukuk is an alternative funding with a lower risk of bankruptcy because of the profit-loss sharing structure and risk transfer contract. Also, it offers tax savings due to tax incentives policies. The existence of tax exemption incentives on income received by the SPV in issuing sukuk can lead to zero taxable income which can reduce the company's marginal tax [11].

H₆. Effective tax rate moderates the relationship between asset intangibility to sukuk issuance.

H₇. Effective tax rate moderates the relationship between cash volatility to sukuk issuance.

3. DATA AND METHODOLOGY

3.1. Data

This study is using cross-section data and a nonprobability purposive sampling judgment method. The data is obtained from Thomson Reuters database to construct the sample for this study. Careful sample selection is performed to ensure a robust result. The sample is sukuk and conventional bonds issuances between 2016 until 2020 by publicly listed companies in Malaysia. Instruments issued by financial industries are removed from the sample due to different accounting treatment. Instruments issued by firms with negative book value are also excluded from the sample. Following [12], only issuers with effective tax rates between 0 and 1 are included in the sample. Conventional bonds issued by firms whose primary business are not Shariahcompliant also excluded. All sukuk types are included as per [8] sample selection. The issuers must have available financial statements. The final sample consists of 514 issuances from 54 issuers. Sukuk represents 70% of the sample in number of issues. It aligns with the fact that sukuk dominates Malaysia debt market.

3.2. Variable Measurements

The dependent variable in this study is the probability of sukuk issuance. This probability is measured by dummy variable where the value equals to 1 if Sukuk issuance and 0 if the issuance is conventional bonds. The measurement of this variable follows [8], who use dummy variables to determine the decision to issue sukuk. The explanatory variables for this study are tangible assets, intangible assets, earning volatility, cash volatility, and effective tax rate. Effective tax rate is also set as moderating variable. This study also identifies several firm's characteristics as control variables based on literature. Following the study of [3], the control variables for this study are profitability, firm size, leverage, sales growth, firm credit quality, and additional control variable of free cash flow.

3.3. Model Specification

The study aims to investigate the probability of a company to issue sukuk over conventional bonds. This

study uses binomial logit regression with issuance type as the dependent variable. Following [8], this study takes the explanatory variables from the year preceding the issuance. There are two reasons for this choice. First, the issuance occurs during the year, hence the determinants of the choice are based on the firm's circumstances at the end of the previous year. Second, it averts an endogenous problem because the issuance cannot impact the variable of preceding issuance. This study performs logit regression twice to investigate the effect of quasi effective moderating from tax rate. The operationalizations of variables used in the model are summarized in table 1, and the empirical model can be written as:

 $Ln (p/1-p) = \alpha + \beta_{1}TANG_{i} + \beta_{2}INTANG_{i} + \beta_{3}OI_{i} + \beta_{4}CF_{i} + \beta_{5}TAX_{i} + \beta_{6}ROA_{i} + \beta_{7}SIZE_{i} + \beta_{8}LEV_{i} + \beta_{9}SG_{i} + \beta_{10}CQ_{i} + \beta_{11}FCF_{i} + \varepsilon_{i}$ (1)

where,

Ln (p/1-p) = probability of issuing sukuk, TANG = tangibility, INTANG = intangibility, OI = earnings volatility, CF = cash flow volatility, TAX = effective tax rate, ROA = profitability, SIZE = firm size, LEV = leverage, CQ = credit quality, FCF = free cash flow

Table 1. Variable list

| Variable Name | Formula |
|--------------------|---|
| Sukuk Bond | 1 for sukuk issuance, 0 for |
| - | conventional bonds issuance |
| Tangible assets | Net property, plant, and equipment |
| 0 | divided by total assets |
| Intangible assets | Net intangible assets by total assets |
| Earning volatility | Standard deviation of change in |
| с , | operating income for the last five years |
| Cash volatility | Standard deviation of cash to total |
| | assets for the last three years |
| Effective tax rate | Income tax divided by income before |
| | tax |
| Profitability | EBITDA divided by total assets |
| Firm size | Ln of total assets |
| Leverage | Debt to total assets |
| Sales growth | Percentage change in sales |
| Credit quality | 1 if the issuer's credit rating BBB and |
| 1 2 | above, 0 if the issuer's credit rating BB |
| | and below |
| Free cashflow | Operating income before depreciation |
| | minus interest expense, taxes, |
| | preferred dividends, and common |
| | dividends, divided by total sales |
| | |

4. RESULT AND DISCUSSION

4.1. Statistic Descriptive

Table 2 presents the statistic descriptive of each variable. It shows sukuk issuance dominates the sample because the mean of issuance is 0.70. It aligns with the fact that sukuk dominates debt market in Malaysia. The value of intangible assets, earning volatility, sales growth, and credit quality are volatile due to higher standard deviation. The difference between maximum

 Table 2. Statistic Descriptive

| Variable | Obs | Mean | Median | Std. | Max | Min |
|-----------------|-----|-------|--------|-------|-------|-------|
| Name | | | | Dev | | |
| Sukuk Bond | 514 | 0.698 | 1 | 0.429 | 1 | 0 |
| Tangible assets | 514 | 0.473 | 0.439 | 0.215 | 0.891 | 0.028 |
| Intangible | 514 | 0.051 | 0.016 | 0.031 | 0.621 | 0 |
| assets | | | | | | |
| Earning | 514 | 0.545 | 0.368 | 0.475 | 2.461 | 0.054 |
| volatility | | | | | | |
| Cash volatility | 514 | 0.024 | 0.014 | 0.024 | 0.141 | 0.001 |
| Effective tax | 514 | 0.259 | 0.240 | 0.176 | 0.988 | 0.003 |
| rate | | | | | | |
| Profitability | 514 | 0.087 | 0.069 | 0.062 | 0.384 | 0.005 |
| Firm size | 514 | 22.25 | 22.57 | 1.587 | 24.60 | 24.60 |
| Leverage | 514 | 0.546 | 0.555 | 0.182 | 0.837 | 0.043 |
| Sales growth | 514 | 0.040 | 0.042 | 0.241 | 0.909 | 0.087 |
| Credit quality | 514 | 0.531 | 1 | 0.499 | 1 | 0 |
| Free cashflow | 514 | 0.054 | 0.049 | 0.041 | 0.366 | 0.001 |

and minimum value of effective tax rate and profitability is very high. The values of mean and median are not the same for all variables.

4.2. Analysis of Correlation Coefficient

Table 3 displays the correlations among independent variables. The correlation coefficient for each variable is between 0.8 and -0.8; therefore, multicollinearity does not exist in this model. This study notes highest correlation between profitability and leverage, indicating profitable firms prefer debt financing. A lower credit rating quality is not only associated with higher earnings and cash volatility, but also lower profitability and lower sales growth. Firms with higher effective tax rate is correlated with higher profitability and sales growth.

4.3. Regression Result

The logit regression result is reported in tables 4 and 5 below. After controlling for profitability, firm size, leverage, sales growth, firm credit quality, and free cash flow, the result shows that asset intangibility, cash volatility, and effective tax rate partially influence sukuk issuance decision. While for the moderating effect, effective tax rate gives quasi moderation effect to asset intangibility and cash volatility for sukuk preference. The variables simultaneously influence the sukuk decision and based on the overall model fit test, the model fits with the data.

Table 4 reports that asset tangibility has insignificant effect on sukuk issuance. The result is consistent with [8] and [9] who argue that sukuk issuers rely more on intangible assets, although regulators' requirements on tangible as asset back-up in sukuk issuance. However, a higher intangible asset increases the probability of sukuk issuance. This finding is consistent with [16] where intangible assets can reduce the debt financing decision due to valuation risk. The sukuk structure that allows intangible assets as collateral can be an alternative debt financing for companies to utilize its intangible asset. The

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|----------------------|--------|--------|--------|--------|--------|-------|--------|--------|-------|------|----|
| 1 Tangible assets | 1 | | | | | | | | | | |
| 2 Intangible assets | -0.368 | 1 | | | | | | | | | |
| 3 Earning volatility | -0.114 | -0.153 | 1 | | | | | | | | |
| 4 Cash volatility | 0.226 | 0.018 | 0.154 | 1 | | | | | | | |
| 5 Effective tax rate | 0.334 | 0.010 | -0.114 | 0.214 | 1 | | | | | | |
| 6 Profitability | 0.364 | 0.078 | -0.467 | 0.200 | 0.200 | 1 | | | | | |
| 7 Firm size | 0.213 | 0.278 | -0.408 | 0.060 | 0.204 | 0.001 | 1 | | | | |
| 8 Leverage | 0.100 | 0.123 | -0.255 | 0.141 | 0.229 | 0.015 | 0.662 | 1 | | | |
| 9 Sales growth | -0.058 | 0.251 | -0.234 | -0.061 | 0.164 | 0.253 | 0.204 | 0.190 | 1 | | |
| 10 Credit Quality | -0.368 | 0.199 | 0.017 | 0.331 | -0.391 | 0.063 | -0.219 | -0.495 | 0.134 | 1 | |
| 11 Free cashflow | 0.298 | 0.183 | -0.344 | 0.088 | 0.099 | 0.750 | -0.066 | 0.047 | 0.147 | 0.47 | 1 |

Table 3. Coefficient correlation of variables

Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) also clearly states that sukuk must reflect sharia-based assets, both in the form of tangible and intangible assets. Nowadays, the newly innovated hybrid sukuk allows companies to combine tangible and intangible asset as collateral [10]. Therefore, the value of intangible assets may add up the asset backup value if the value of tangible assets only is not sufficient. Wakalah sukuk is also a type of sukuk consisting of tangible and intangible assets, which provides flexibility to issuers in choosing the collateral assets [22]. The use of intangible assets in the sukuk structure can also be an alternative for companies whose primary assets do not comply with sharia provisions [23]. The preference for sukuk issuance with intangible assets as collateral is also driven by investors who begin to accept the structure [24].

Earning volatility has an insignificant impact on sukuk issuance. This result is consistent with the finding of [25]. Cash flow volatility is positively significant to sukuk issuance. Companies may focus on cash availability more than earning to ensure they can pay interest. This finding supports [6] where sukuk issuers are weak performing companies with lower credit ratings. Partnership sukuk allows profit-loss sharing therefore there is no obligation for payment of fixed interest. Further, the issuers may pass through the losses to the sukuk holders. The trade-off theory can also explain this result where companies may enjoy greater external benefits when they choose sukuk because they are still able to obtain debt funding without an increase in the risk of bankruptcy due to profit-sharing structure of sukuk. This result is also consistent with [18] and [5] where a higher cash volatility is associated with a low credit rating and sukuk issuers are firms with lower credit rating.

A higher effective tax rate also increases the probability to issue sukuk. This result supports Modigliani Miller (MM) proposition with tax, trade-off theory, and the findings of [6] and [15]. [6] and [15] states that tax incentives provided by government can promote sukuk market since they induce firms to issue sukuk. As implied by [19], companies may benefit from the use of debt on corporate income taxes, therefore the decision of

corporate financing must lead to corporate tax savings. However, it does not mean that companies take on as much debt as possible to avoid the risk of bankruptcy. The sukuk structure that offers risk transfer and profitloss sharing may benefit companies to reduce corporate tax and the risk of bankruptcy. It is also consistent with

Table 4 Regression result

| Variable | Sukuk |
|----------------------------|----------|
| Tangible assets | -0.407 |
| - | (-0.311) |
| Intangible assets | 1.511* |
| | (1.33) |
| Earning volatility | -0.145 |
| | (-0.30) |
| Cash volatility | 0.756** |
| | (1.97) |
| Effective tax rate | 1.212*** |
| | (5.63) |
| Profitability | 0.551** |
| | (2.51) |
| Firm size | 0.567** |
| | (3.44) |
| Leverage | -1.525 |
| | (-1.71) |
| Sales growth | 0.573 |
| | (0.81) |
| Credit quality | 0.321 |
| | (0.78) |
| Free cashflow | 1.946 |
| | (0.16) |
| No. of observation | 514 |
| Prob. Hosmer Lemeshow test | 0.402 |
| Mc-Fadden R ² | 0.555 |
| Prob LR Statistic | 0.000 |

The dependent variable is a dummy variable equal to one if the instrument is sukuk and zero if the instrument is a bond. The table reports coefficients with t values in parenthesis. Asterisks*, ** and *** denote the significance levels of 10%,

trade off theory [21] where companies must balance the cost of debt while managing the marginal benefit of tax saving and marginal cost of bankruptcy risk.

Table 5 displays the result of effective tax rate as moderating effect. The effective tax rate shows quasimoderating effect to intangible asset with a negative sign to sukuk issuance. There are two reasons to explain this result. First, a higher effective tax rate will weaken the influence of intangible assets in sukuk issuance because the firm may receive more benefits from tax incentives. It indicates that the benefit of tax savings due to higher effective tax rate, outweighs the benefit of utilizing intangible assets as sukuk back-up. Thus, the firm's decision to issue sukuk relies more on the impact of higher effective tax rate than higher asset intangibility. This result is consistent with [11] where a company facing tax exhaustion due to higher tax shield will be less likely to issue debt in order to get tax benefits; therefore, the availability of tax incentives give stronger influence on sukuk issuances. In conclusion, there is a substitution effect of utilising the intangible assets to saving higher effective tax rate. Second, the company may try to signal that the company is still able to pay its debts despite bearing a higher effective tax rate because the companies must keep the projects related to intangible assets, such as technological developments, software, and marketingrelated [16]. It also supports signalling theory where the companies can signal to the public by using capital structure decisions [26]. Sukuk issuance leads to a negative cumulative abnormal return on the announcement date even though the company is profitable, thus sukuk issuance is giving a negative signal [7].

A quasi-moderating effect of effective tax rate is also shown on cash volatility with a positive sign on sukuk issuance. This result is consistent with the trade-off theory by [21]. Sukuk is an alternative debt funding by

| Tabl | le 5 | Regression | result wi | ith mod | lerating | effect |
|------|------|------------|-----------|---------|----------|--------|
|------|------|------------|-----------|---------|----------|--------|

| Variable | Sukuk |
|--|---------------|
| | Moderating |
| Intangible assets | 3.133** |
| 0 | (2.68) |
| Intangible assets x Effective tax rate | -0.531*** |
| 0 | (-2.35) |
| Cash volatility | 0.647** |
| - | (1.74) |
| Cash volatility x Effective tax rate | 0.789** |
| - | (2.40) |
| Effective tax rate | 1.939*** |
| | (2.12) |
| Profitability | 0.441** |
| | (2.25) |
| Firm size | 0.678^{***} |
| | (4.82) |
| Leverage | -2.567 |
| | (-1.96) |
| Sales growth | 0.376 |
| | (0.53) |
| Credit quality | 0.174 |
| | (0.42) |
| Free cashflow | 8.906 |
| | (0.96) |
| No. of observation | 514 |
| Prob. Hosmer Lemeshow test | 0.867 |
| Mc-Fadden R ² | 0.568 |
| Prob LR Statistic | 0.000 |

The dependent variable is a dummy variable equal to one if the instrument is sukuk and zero if the instrument is a bond. The table reports coefficients with t values in parenthesis. Asterisks*, ** and *** denote the significance levels of 10%, 5% or 1%, respectively. providing a lower risk of bankruptcy because of the risk transfer and profit-loss structure. It also offers additional tax savings due to tax incentive policy. The existence of tax exemption is exclusively given to sukuk issuer thus reducing the company's marginal tax [11]. Therefore, sukuk is an alternative debt financing for companies with a higher cash volatility with an advantage of cash savings for tax payments.

For control variables, the result is consistent with [3] and [4], where larger and more profitable companies prefer sukuk to conventional bonds. This result supports the trade-off theory where firms may receive greater benefit when they issue sukuk. The remaining variables are not significant to sukuk issuance.

5. CONCLUSION

The growth of sukuk market motivates this study to investigate why firms issue sukuk over conventional bonds. Previous researches give mixed findings and leave a puzzle why asset tangibility is insignificant to sukuk issuance. This study contributes to the literature by finding that sukuk issuers rely more on intangible asset than tangible assets. Unlike conventional bonds, the existence of sukuk structure that allows combination of tangible and shariah-compatible intangible assets as asset collateral, can be used as source of debt financing. This offers an opportunity for companies to utilize its intangible assets for debt funding. Previous studies are also limited to financial risk determinants thus it may only reflect the partial decision of sukuk issuance. This study finds that a firm with higher business risk, measured by a higher cash volatility, also prefers sukuk issuance. The design of sukuk contract which allows risktransfer and profit sharing is attractive for companies to obtain debt financing without increasing the risk of bankruptcy. Firms with higher effective tax rates also choose sukuk because they may benefit from tax saving due to the tax inventive policy exclusively given to sukuk issuers. Effective tax rate also serves as a quasimoderator to intangible where it substitutes the influence of intangibility of sukuk issuance. Lastly, effective tax rate strengthens the decision of firms with higher cash volatilities to issue sukuk over conventional bonds.

This study gives three important practical implications. First, sukuk allows companies to utilize their intangible assets to access debt market. Second, sukuk market may support firms with higher business risk to overcome the debt market barriers by using Islamic debt rather than conventional debts. Lastly, tax incentives provided by regulators play an important role to promote sukuk market as it offers tax savings for companies. Governments may improve the regulators framework to facilitate the sukuk market growth.



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