

## **What Determines the Choice Between Sukuk vs Bonds?**

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### ABSTRACT

Funding for investments that can be obtained from various alternative sources of financing. However, the ideal funding desired by the investment manager is the most profitable funding and in line with the company's goals. Conventional bonds have long been a popular choice of management, while Islamic bonds tend not to be well recognized by management. In that, Islamic bonds have various advantages that can provide benefits to management. This study aims to investigate factors that determine public listed corporations in 3-ASEAN nations' decisions to issue corporate bonds or sukuk. For a sample of 124 sukuk and bonds issued between 2012 and 2017, we examine the influence of free cash flow as a proxy for agency cost, growth, and leverage on the decision between bond and sukuk issuance. According to the findings of binary logistic regression, firms with high free cash flow and leverage choose sukuk over conventional bonds. Firms with stronger growth, on the other hand, choose conventional bonds over sukuk. Our findings are consistent with the agency's cost-cutting strategy for free cash flow. The research has the implication that conventional bonds are preferred by fast growing companies.

Keywords:

Financing decision, Sukuk, Bond, Free cash flow, Agency cost, bondholder.

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### **1. Introduction**

Financing decision is one of the important financial decisions for the company in funding its investment plans. The rapid development of the Islamic economy brought many changes to the economic structure, including Islamic capital market development (Tan & Mohamad Shafi, 2021). The emergence of various Islamic financial products provides an additional alternative source of financing for companies. The development of a variety of alternative sources of financing provides many options for financial managers in determining the most profitable source of financing that in line with company goals.

From an investor's perspective, the return obtained from holding the conventional bonds is equal to the coupon rate stated in bond contract. The predetermined rate of coupon makes the rate of return of the bond less fluctuate than stock (Ashraf et al., 2021). In addition, in the case of bankruptcy, bond holder will get priority over repayment before shareholders (Aghakazemjourabaf & Insley, 2021). Conventional bonds are well established financing source that widely used by companies as alternative of equity and bank debt.

Sukuk or Islamic bond is an Islamic financial certificate that comply with the Islamic law and its investment principle (Al Madani et al., 2020). The contract arrangement must be comply with the principle of a fair contract, and prohibition of transactions that are haram in Islam, such as usury, maysir, and gharar (Busari & Aminu, 2021). Currently there are various sukuk contract that develop base on the objective of the fund allocated from issuing sukuk. The Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) classifies sukuk into 14 types of sukuk. This type and amount grew widely from initially only recognizing sukuk with ijarah contract (Utami & Irawati, 2021). Various sukuk contracts have the potential to provide many preferences in choosing alternative financing. Project-specific contracts guarantee that fund raised from sukuk issuance will not allocate for activities other than those mentioned in the contract. The nature of the contract make sukuk has potential to grow faster as alternative source of financing (Khan et al., 2020). However, its development is still hampered in technical issues and lack of understanding about sukuk contract (Razak et al., 2019). Inadequate socialization and less familiar in Islamic contract of finance resulting in domination of conventional bond as the main source of financing. Hence a comprehensive understanding among the two options is needed (Grassa & Miniaoui, 2018; Wang et al., 2021).

Theoretically Jensen (1986) argues that debt, due to the nature of its claims, disciplines managers to reduce the free cash flow available for managerial self-dealing. Because conflicts of interest between managers and shareholders can occur when companies have high free cash flow. Managers have more tendency to remain in control of these funds. The excess cash flow tends to be used by managers to increase their power through overinvestment and spending that has nothing to do with the company's main activities, excessive perquisites. To overcome conflicts over cash flow control, companies can set high debt payment policies. Thus, control over free cash flow is no longer in the hands of managers and translated to bondholders (Alderson et al., 2020; Passmore & Temesvary, 2022). From the investor's perspective, guaranteed profits from the beginning of the contract make conventional bonds an interesting alternative of investment, moreover, the low level of risk will prevent manager to act out of company interest (Balli et al., 2021). On the other hand, the nature of sukuk contracts will prevent manager to utilize the fund raised from sukuk issuance outside predetermined contract. The contract mechanism reduces the potential for misuse of funds by managerial because the funds are fully allocated to specific projects according to the contract. Therefore, sukuk issuance is expected to reduce free cash flow which in turn will reduce agency problem as the problem normally arise from excess free cash.

There are many factors that may determine firms' debt level. Companies with high growth rate required more funds to finance its business expansion. Manager will attempt to find the most feasible financing source to fulfill their financing need. The source of funds may come from internal as well as external. Base on pecking order theory, first priority after internal source is debt, followed by equity financing. Debt financing can be form of conventional bond as well as Islamic bond (sukuk) as the new alternative (Liu & Lai, 2021). As the main objective of financing decision is to obtain the lowest cos of fund, companies with high growth rates will consider various funding alternatives to obtain funds at the lowest cost of capital.

Companies with high debt ratios are predicted to concentrate on interest and principal repayment and suffer higher financial risk (Ampatzoglou et al., 2020). This condition encourages companies to carefully maintain their cash flow to ensure that company has enough cash to repay interest and principal. Moreover, high leverage firm will face some difficulties to get additional external financing as investor and creditor believe that the company is risky (Deng et al., 2021). As a consequence, manager will seek alternative external source of financing other than debt. Therefore, we expect that the higher the leverage level, the more probability that company will choose sukuk.

Free cash flow and choice between sukuk and bond perspective. Firm with excessive free cash flow will drive managers to allocate the excess case in misappropriate project for their self-benefit that are not related to the main activities of the company, causing moral

hazard to abuse cash flow higher. The higher free cash flow of the firm, will potentially increase conflict between managers and shareholders. Which in turn will raise agency costs because of conflicting interests between shareholders and manager.

Firm growth and the choice between sukuk and bond perspective. Companies with high growth rate rely more on external capital rather than internal source of fund. Low-cost factors encourage companies to use more funding through debt. Rapid growth rate will bring company to face greater uncertainty. Hence, firms will try to seek more alternative source of fund that over lower risk as well as cost. The possible alternative made by the company is by combining some source of financing to gain advantage from diversification.

Leverage and the choice between sukuk and bond perspective. Firm with high debt level has the obligation to regularly pay interest as well as principal in the maturity date to creditors. As the interest is fixed expenses, firm with high debt level will suffer high financial leverage and resulted in higher financial risk. Moreover, high debt firm will experience financial constraint, difficult access to external source of financing, since creditors and shareholders will charge high cost of fund due to higher risk perception of investor to the firm. This condition encourage manager to explore other alternatives to meet their financing need. Companies tend to diversify strategies as the first alternative in dealing with financial constraints. Sukuk is possible alternative of financing for companies that experience a financial constraints (Aziz et al., 2021). By nature, sukuk has a secure contract structure and more stable cash flow can be considered as source of fund to refinance the existing debt.

This study aims to empirically examine how the level of agency problems will encourage companies to choose between sukuk and bond as financing source (Saeed et al., 2021). This research expands previous studies by using agency theory to explain the choices as well as incorporating wider region as the object, namely, Indonesia, Malaysia and Singapore which have not been explored so far. The three countries are countries with a majority Muslim population. In addition, the development of the Islamic financial industry in the region is also one of the fastest compared to other regions. This research is expected to add literature and insight on sukuk as a new alternative in financing decision. The remaining of this study consists of literature review at section two, discusses the data and model methodology at section three, presents the empirical results at section four, and conclusion and policy implications are included in section five. Further analysis, this research question can be devided as follows:

- Does Free cash flow increase probability of the firm to choose sukuk over conventional bond?
- Does Growth rate increase probability of the firm to issue sukuk over bond?
- Does leverage will increase probability of firm to issue sukuk over bond?

## **2. Methods**

The sample of this study is companies in ASEAN-3, namely, Indonesia, Malaysia, and Singapore that issue conventional bond or sukuk during the period of 2012-2017. Secondary data consists of company annual and financial reports and data needed in this study is retrieved through [www.idx.co.id](http://www.idx.co.id), [www.bursamalaysia.com](http://www.bursamalaysia.com), [www.sgx.com](http://www.sgx.com), and the company's official website. The total sample is 124 observations consist of 38 sukuk and 86 conventional bonds.

To examine how free cash flow, asset growth, leverage and other control variables, determine the choices between sukuk and conventional bond we employ logistic regression model. The logistic regression fits this research objective. Since the response variable is dichotomous, we are able to link the time-variant predictors to the probability of choice between two financing structures.

$$n\left(\frac{p}{1-p}\right)Sukuk_{i,t} = \alpha + \beta_1FCF_{i,t-1} + \beta_2Growth_{i,t-1} + \beta_3Lev_{i,t-1} + \beta_4Size_{i,t-1} + \beta_5Age_{i,t-1} + \beta_6Prof_{i,t-1} + e_{i,t}$$

Where, *sukuk* is a dummy variable take the value of 1 if the firm is issue *sukuk* and 0 if firm issue conventional bond. *FCF* is free cash flow calculated by operating income before depreciation minus interest expense, taxes, preferred dividends, and common dividends, divided by total sales, *Growth* is asset growth calculated by percentage change in total asset. *Lev* is leverage calculated based on ratio between total debt to total assets. *Size* is natural logarithm of total asset. *Age* is firm age calculated by subtracting the year of issuance and the year incorporated. *Prof* is firms' profitability which is ratio of operating income to total asset.

### 3. Results

The *sukuk* funds that have been allocated according to the contract will not increase the company's free cash flow next year, hence *sukuk* will effectively prevent the misuse of free cash flow. Free cash flow has a significant effect on the issuance of *sukuk*, the higher the free cash flow the higher the probability of firm to choose *sukuk* over conventional bond, it can be seen in Table 1.

**Table 1. The choice between *sukuk* and conventional bonds**

<b>Variables</b>	<b>Coefficient</b>	<b>Sig.</b>
Constant	-18.629	0.002***
FCF	7.793	0.005***
Growth	-2.833	0.036**
Leverage	3.433	0.040**
Age	0.521	0.009***
Size	0.142	0.751
Profitability	-12.129	0.042**
Pseudo R square	0.378	

Notes: The dependent variable takes a value of 1 for debt-like *sukuk*, and 0 for conventional bonds. \*\*\*, \*\*, \* denote significance at the 1, 5, and 10% level respectively

Asset growth has a negative effect on the choice of *sukuk* issuance over conventional bond, its mean that company with higher growth rate prefer bonds over *sukuk*. Companies with high prospects to grow need large funds to finance its business expansion. On the other hand, the ASEAN *sukuk* market is still relatively small, as during the 2012-2017 period there are only 38 issuances.

### 4. Discussion

Companies with high free cash flow have the potential to have agency problems. Agency problems occur because high free cash flow tend to lead managers to act opportunistically or not in line with shareholders' interest in managing free cash flow. As consequences, companies with high free cash flow tend to choose *sukuk* as a source of funding as the nature of *sukuk* contract will guarantee that the funds obtained can only be used to finance specific projects mentioned in the *sukuk* contract. Thus, *sukuk* contracts are expected to prevent misuse of funds by managers for other purposes. There are no clauses in conventional bonds that limit the use of funds obtained from creditors, so the possibility of misuse of funds by managers is higher. Empirical studies documented that the separation of project cash flows from existing assets, combined with extensive

contracts, making cash flow verifiable to parties in the contract, increasing their monitoring, and thus preventing managerial cash takeovers.

The small number of sukuk in the market make sukuk market less attractive for investors, hence sukuk market become illiquid, in turn less fund will available in the sukuk market. The small number of sukuk issuance limit the firms' choice to full fill its investment need. Conventional bond market is not the case, the large number of issuance shows that the availability of funds by conventional bonds is very large, so that conventional bonds become a suitable alternative for companies that are in the stage of developing their businesses, high growth rate. This shows that the higher the growth, the probability of issuing sukuk decreases or companies tend to issue conventional bonds.

Leverage has a positive effect on sukuk issuance. The greater the proportion of debt owned by the company, the company's obligation to pay a fixed payment to creditors is also higher, hence the company face high level of financial risk. As the debt level is turn higher, company will face financial constraint. In such conditions, companies experience limitations to access external source of fund.

Empirical studies conducted by McMillen (2000) show that companies with high leverage will issue sukuk with contracts that are adjusted to the company's financial condition, one of which is related to capital structure, for example sukuk with musharaka or mudharabah contracts which have the flexibility for companies to pay for results in accordance with the profit (revenue) received by the company. Thus, the higher the level of leverage, companies tend to issue sukuk rather than bonds as a step for companies to diversify their debts due to the limitations they face.

## **5. Conclusion**

Investments fund that can be obtained from various alternative sources of financing. However, the best source of financing is the one that most profitable funding and in line with the company's goals. Conventional bonds have long been a popular choice of management, while Islamic bonds tend not to be well recognized by management. This research examines the factors that influence the decision of public listed firms in 3-ASEAN countries to issue corporate bonds or sukuk. For a sample of 124 sukuk and bonds issued between 2012 and 2017, we examine the influence of free cash flow as a proxy for agency cost, growth, and leverage on the decision between bond and sukuk issuance. According to the findings of binary logistic regression, firms with high free cash flow and leverage choose sukuk over conventional bonds. Firms with stronger growth, on the other hand, choose conventional bonds over sukuk. Our findings are consistent with the agency's cost-cutting strategy for free cash flow. This research has contributed in terms of empirically analyzing the predictor relationship of time variants with probabilities between bond financing structures and sukuk financing.

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