

Chapter 10

What Determines *Sukuk* Issuance Type in Indonesia?

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Abstract

We empirically investigate the determinants of *sukuk* issuance type in Indonesia to issue either *ijarah sukuk* or *mudharabah sukuk*. We include *sukuk* characteristics, sharia-related factors, and firm characteristics, provide empirical evidence on the determinants of *sukuk* issuance type by incorporating *sukuk*-specific factors, firm-specific factors, and sharia compliance variables, and address the role of Sharia Supervisory Board, as the sharia representative of firm compliance for sharia products, in the issuer's choice of *sukuk* type. By studying 88 *sukuk* issuance in Indonesia from 2009 to 2017, we find that firm profitability and the sharia compliance level have a significant effect on the probability of issuing *mudharabah sukuk*. Some other factors' characteristics including *sukuk* yield, firm age, and inflation rate are also found to have a significant effect.

Keywords: Sukuk, Ijarah, Mudharabah, sharia supervisory board, profitability, yield, Indonesia

JEL Classifications: G15, G23

1. Introduction

Sharia economic activities in Indonesia have been continuing to significantly grow following the implementation of Law no. 19/2008 on State Sharia Bonds (SBSN) in 2008. Also, due to the prohibition of *riba* (usury) according to the sharia law, there has been an increase in the interest of investors seeking sharia financial instruments including *sukuk*. *Sukuk* is sharia bonds which have two main differences compared to conventional bonds. They operate based on Islamic law (sharia), pay benefits, not interest, and involve ownership of tangible assets (Smaoui, Mimouni, & Temimi, 2017).

Although the largest *sukuk* market is Malaysia, the development of Indonesia's *sukuk* market has experienced significant growth over the last few years. The macroeconomic condition is indicated to have a positive effect on the development of the global *sukuk* market (Ali Said & Rihab Grassa, 2013). However, there has been pattern change in the choice of types of *sukuk* issuance in Indonesia since it was first introduced in 2002. *Sukuk* issuance in Indonesia is limited to only two types: *ijarah sukuk* and *mudharabah sukuk* (Endri, 2009). Fatah (2011) explains that *mudharabah sukuk* was the dominant *sukuk* issuance during the period of 2002–2004, approximately 88%. However, from 2004 to 2017, *sukuk* market was dominated by *ijarah* which is around 92% of total issuance.

The present chapter examines the determinants of *sukuk* issuance in Indonesia with emphasis on the type of issuance. Generally, the issuance of *sukuk* is affected by a number of factors, which include *sukuk*-specific characteristics, sharia-related factors, and firm characteristics. *Sukuk*-specific characteristics could affect the type of *sukuk* to be issued as investors expect to receive benefits at a level of *sukuk* return or yield both for *mudharabah* and *ijarah*. On the basis of pecking order theory, Nagano (2017) finds that firm characteristics have significant effect on the issuance of *sukuk* relative to the issuance of conventional bonds. According to agency theory, Abdul Halim, How, and Verhoeven (2017) reveal that agency cost has an effect on the issuance of *sukuk* and conventional bonds. Another important factor is the sharia compliance which is reflected by the role of Sharia Supervisory Board (SSB), which in some cases may influence the issuer's choice regarding *sukuk* type. Godlewski, Turk-Ariss, and Weill (2016) document the effect of SSB on the issuance of *sukuk* by measuring the reaction of the stock market. They find that the role of the SSB increases the credibility and reliability of published accounting information in the capital markets (Godlewski et al., 2016). However, previous studies have not investigated the determinants of the type of *sukuk* issuance selected by issuers more particular in the context of Indonesia which is dominated by *ijarah sukuk* and *mudharabah sukuk*. Most studies focus on

the comparison between the issuance of *sukuk* and conventional bonds. Using a sample of 88 *sukuk* issuance during the period of 2009–2017, we question what factors mainly determine the issuer's choice in selecting the type of *sukuk* issuance, between *ijarah sukuk* and *mudharabah sukuk*.

We contribute to the existing literature in the following aspects. First, we provide empirical evidence on the determinants of *sukuk* issuance type by incorporating *sukuk*-specific factors, firm-specific factors, and sharia compliance variables. Second, we specifically address the role of SSB, as the sharia representative of firm compliance for sharia products, in the issuer's choice of *sukuk* type.

The rest of the chapter consists of several sections. Section 2 describes the theoretical framework and the hypothesis development. Section 3 explains the data, sample, and method. Empirical results, data analysis, and discussion are presented in Section 4. Section 5 presents the conclusion.

2. Theoretical Framework and Hypothesis Development

According to the Accounting and Auditing Organization of Islamic Financial Institution (AAOIFI), the classification of *sukuk* consists of 14 types which are based on the types of financing of financial assets in accordance with sharia law. These 14 types of *sukuk* could essentially be divided into three broad groups. First, *Ijarah-based sukuk*, also referred to SARA bonds, includes *sukuk* for ownership of tangible assets, *sukuk* for beneficial ownership, and *sukuk* for ownership for services. Second, partnership-based *sukuk*, usually referred to Islamic joint venture (IJV) bonds, includes *mudharabah sukuk*, *musyarakah sukuk*, *wakalah sukuk*, *muzaraah sukuk*, *musaqah sukuk*, and *mukharabah sukuk*. Third, debt-based *sukuk* includes *murabahah sukuk*, *salam sukuk*, and *istishna sukuk*. Based on the contracts of these financial assets in the secondary market, types of *sukuk* could be divided into two categories: tradable *sukuk* (*mudharabah sukuk*, *musyarakah sukuk*, and *ijarah sukuk*) and non-tradable *sukuk* (*istishna sukuk*, *murabahah sukuk*, and *salam sukuk*) (Tariq, 2004).

2.1. Mudharabah Sukuk

Mudharabah sukuk is a partnership with a profit-sharing scheme for earnings or benefits. This type of *sukuk* offers an expected return due to its floating and because it is dependent on the performance of the profit-shared earnings. In Indonesia, the issuance of sharia *sukuk* with *mudharabah* structure is based on Fatwa No. 33/DSN-MUI /IX/2002. This fatwa mentions that *mudharabah sukuk* is a type of *sukuk* that is based

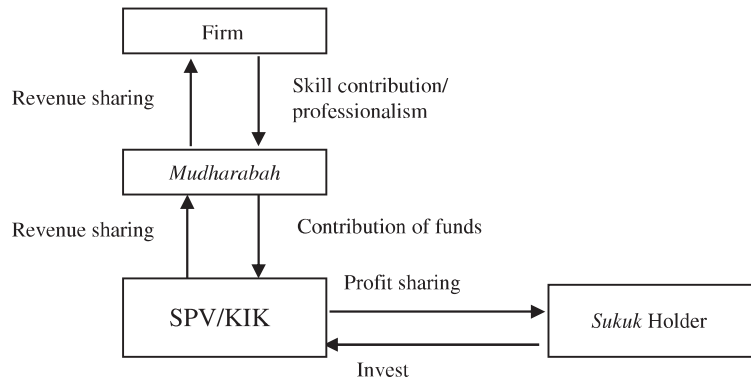


Figure 1: Structure of *mudharabah sukuk*.

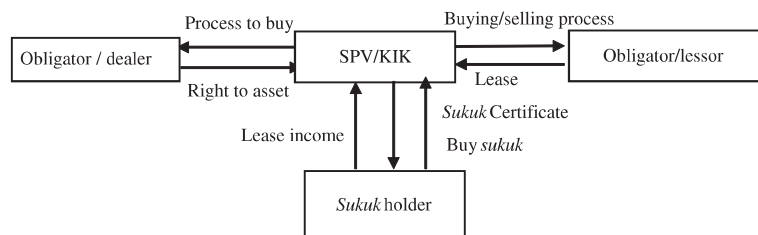


Figure 2: Structure of *ijarah sukuk*.

on a *mudharabah* contract. The structure of *mudharabah sukuk* is presented in Figure 1.

2.2. Ijarah Sukuk

Ijarah sukuk is a financial certificate with a financial contract based on the principle of sharia which is issued by a firm, government, or other institution. It requires the sukuk issuer to pay earnings to the *sukuk* holder in the form of a fee incurred by the leasing of assets and also to pay the principal amount at the time of maturity of the *sukuk*. In Indonesia, the issuance of *ijarah sukuk* must be based on certain stipulations laid out by the National Sharia Council-MUI in Fatwa No. 41/DSN-MUI/III/2004 about *ijarah sharia sukuk*. This fatwa mentions that *ijarah sharia sukuk* is based on an *ijarah* contract referring to the National Sharia Council-MUI Fatwa No. 09/DSN-MUI/IV/2000 about *ijarah* financing. The structure of *ijarah sukuk* is exhibited in Figure 2.

2.3. Determinants of *Sukuk* Issuance Type

2.3.1. *Sukuk-specific Characteristics*

Sukuk-specific characteristics could further be reflected in the return and risk, usually measured by *sukuk* yield and rating. *Sukuk* yield is a measure of return that will be received by the *sukuk* holder and should not contain any element of *riba* (usury), *gharar* (risk), *haram*, or anything else that goes against the rules of sharia and tends to be irregular, and accordance with the promise of a fee and profit-sharing stipulated in the initial contract.

Sukuk risk may occur with the failure of the issuer to pay interest or to repay the principal bond at the time of maturity (default risk) (Ketz & Maher, 1990). The bond rating is the scale of the risk of a traded bond representing the level of security of this bond. This reflects the ability of the firm (as the issuer of the bond) to pay interest and repay the principal bond at the time of maturity and to avoid the default risk or the risk of the interest and principal debt not being paid (Ketz & Maher, 1990). Therefore, the *sukuk* yield (return), risk (*sukuk* rating), and maturity are expected to affect the choice of the issuing firm in selecting the type of bond or *sukuk*.

2.3.2. *The Role of Sharia Supervisory Board*

An SSB is a religious and juridical expert with high authority, entrusted to issue an opinion (Fatwa) on the legality of products and Islamic financial instruments (Nainggolan & Trinugroho, 2018). The role of such an advisory body is to minimize non-compliance to sharia law, which may result in the illegal transfer of assets (Archer & Karim, 2009). These sharia experts play an essential role in the issuance of *sukuk*. A new financial instrument issued should be examined for sharia compliance and may only be sold to market participants if guaranteed by ulama or experts in sharia law. The presence of sharia experts or an SSB in a firm to advise on the matters of sharia conformity in sharia financial investment is crucial in giving a positive signal to the market (Godlewski et al., 2016). Therefore, the reputation and the presence of a sharia expert to enforce sharia compliance could affect the choice of *sukuk* issuance.

2.3.3. *Firm-specific Characteristics*

According to Azmat, Skully, and Brown (2014), an issuer's choice of financing type refers to capital structure theories such as the Modigliani and Miller theory and the pecking order theory. Accordingly, *mudharabah sukuk* is in some cases comparable to equity or stock, and *ijarah sukuk* is comparable to debt (Azmat, Skully, & Brown, 2017). Previous studies reveal that an issuer's leverage level has a significant effect on *sukuk* issuance (Arundina, Azmi Omar, & Kartiwi, 2015; Elhaj, Muhamed, & Ramli, 2015; Grassa, 2017). Some other firm characteristics such as firm size, earnings growth, fixed assets, and cash

flow are found to have a significant effect on *sukuk* issuance (Grassa, 2017; Mohamed, Masih, & Bacha, 2015; Najeeb, 2013).

2.3.4. Market Value

The pecking order theory postulates that due to the higher costs of issuing equity, firms prefer funding from debt to equity, and they will issue equity only when they experience financial constraints (Dong, Loncarski, Horst, & Veld, 2012). Klein, Weill, and Godlewski (2018) find that the performance of in the stock market is negatively associated with the issuance of *sukuk*. In this research, we use earnings per share to reflect the market value (Nagano, 2016). This ratio indicates how much money is generated by a firm for its shareholders, including the issuance of new shares. Investors usually invest their fund in a firm if the earnings per share ratio show consistent growth.

2.3.5. Macroeconomic Condition

Some previous studies have found that macroeconomic condition has a significant effect on the growth of the *sukuk* market (Ali Said & Rihab Grassa, 2013). Therefore, we control for some macroeconomic variables in this study which are inflation rate and BI rate (interest rate).

3. Research Methods

We study the *sukuk* issuance, both *ijarah sukuk* and *mudharabah sukuk*, in Indonesia over the period 2009–2017. Finally, we end up with 88 observations. A probit regression model is employed to estimate the empirical model. We include a number of determinant factors that are supposed to affect the decision to choose *mudharabah sukuk* or *ijarah sukuk* including *sukuk* characteristics, sharia compliance, firm characteristics, market values, and macroeconomic variables. The following equation is then derived (Table 1).

$$\begin{aligned}
 yi^* = & \alpha + \beta_1 \text{Lev} + \beta_2 \text{Profit} + \beta_3 \text{EG} + \beta_4 \text{Age} \\
 & + \beta_5 \text{EPS} + \beta_6 \text{Yield} + \beta_7 \text{Rating} + \beta_8 \text{Maturity} \\
 & + \beta_9 \text{SSB} + \beta_{10} \text{Inflation} + \beta_{11} \text{BI Rate} + \varepsilon
 \end{aligned}$$

4. Empirical Results and Discussion

4.1. Descriptive Statistics of Research Variables

As presented in Table 2, the number of *sukuk* issued is 88, of which 67 issuances are *ijarah sukuk* and 21 are *mudharabah sukuk*. *Ijarah sukuk* has

Table 1: Variable Definitions and Measurement

Variable		Measurement/proxy
Dependent variable		
<i>Sukuk</i> type	<i>Sukuk</i> type	Dummy: – 1: if issuer chooses <i>mudharabah sukuk</i> – 0: if issuer chooses <i>ijarah sukuk</i>
Explanatory variable		
Firm characteristics	Leverage level	$\frac{\text{total debt}}{\text{total asset}}$
	Profitability level	Net profit margin
	Age	Company age
	Earnings growth	$\frac{\text{current net earning} - \text{prior period net earning}}{\text{prior period net earning}} \times 100\%$
Market valuation	Earnings per share	$\frac{\text{EAT} - \text{dividend}}{\text{number of shares in circulation}}$
<i>Sukuk</i> characteristics	Return	Level of profit-sharing earnings for <i>mudharabah sukuk</i> Reward for <i>ijarah sukuk</i>
	Risk (default)	<i>Sukuk</i> rating
	Maturity	<i>Sukuk</i> maturity level
Sharia-compliance	Sharia committee	Dummy number of SSBs: – 1: Disclosure of presence of SSB in company sharia committee – 0: No disclosure of the presence of SSB in company sharia committee
Macroeconomic condition	Inflation level	% Inflation level
	BI rate	
	Interest rate	% BI interest rate

higher mean compared to *mudharabah sukuk* in some variables including yield level, risk level, maturity level, leverage level, and firm age. However, profitability, earnings growth, and earnings per share are higher for *mudharabah sukuk* than *ijarah sukuk*. For the disclosure of SSB, firms issuing *mudharabah sukuk* have a higher score than companies issuing *ijarah sukuk*.

4.2. Regression Results and Discussion

As presented in Table 3, some firm-specific characteristics which profitability and firm age are have a significant effect on the choice of sukuk issuance type. However, leverage and earnings growth are found to have an insignificant effect. Profitability has a significant and positive coefficient. This means that the more profitable the firms, they tend to issue *mudharabah sukuk* rather than *ijarah sukuk*. As mentioned by Borhan and Ahmad

Table 2: Descriptive Statistics

Variable		Total	<i>Ijarah sukuk</i>	<i>Mudharabah sukuk</i>
Leverage	Observation	88	67	21
	Mean	0.840	0.887	0.69
Profitability	Observation	88	67	21
	Mean	6.208	4.836	10.586
Earnings growth	Observation	88	67	21
	Mean	16.362	13.43	25.705
EPS	Observation	88	67	21
	Mean	169.704	80.07	455.678
Firm age	Observation	88	67	21
	Mean	42	45	30
Yield	Observation	88	67	21
	Mean	8.740	9.13	7.484
Maturity	Observation	88	67	21
	Mean	6.761	8	3.7

(2018) and Elhaj et al. (2015), profitability is highly correlated with the bond (*sukuk*) ratings which reflect the risk of the *sukuk*. It could be argued that profitable firms are not financially constraint, so that they are more confident to issue *mudharabah sukuk* which is an equity-based financing. It is supported by the significant and positive coefficient of earnings per share which also indicates that firms having higher EPS prefer to choose equity-based *sukuk* rather than *ijarah sukuk*. It is in line with the study of Nagano (2017) showing that EPS is an indicator of market timing in issuing *sukuk*. Firms could issue *mudharabah sukuk*, which have a higher risk than *ijarah sukuk*, if they have higher EPS to attract prospective investors.

Our result shows that the coefficient of firm age has a negative and significant effect on the probability of a firm to choose *mudharabah sukuk*. This means that relatively old firms prefer to issue *ijarah sukuk* rather than *mudharabah sukuk*. *Ijarah sukuk* could be considered to be less risky than *mudharabah sukuk*. The matter of firm age in the determination of *sukuk* is also highlighted by Abdul Halim et al. (2017).

Turn to *sukuk*-specific characteristics, we only find a significant result for *sukuk* yield which means that the higher the *sukuk* yield, firms tend to prefer issuing *ijarah sukuk* rather than *mudharabah sukuk*. *Mudharabah sukuk* return is determined based on the earnings generated, while *ijarah sukuk* return is determined beforehand, and as such, the risk of *ijarah sukuk* is lower than that of *mudharabah sukuk*. However, we do not find a significant coefficient either for *sukuk* rating or for maturity.

Interestingly, we find robust evidence that SSB has a positive and significant coefficient. It means that the higher the disclosure on SSB which indicates the higher level of sharia compliance is positively associated with the

Table 3: Probit Regression Estimation Results

Variable	Coefficient
Lev	-0.54 (0.473)
Profit	0.17* (0.091)
Earnings growth	0.616 (0.549)
Age	-0.084* (0.046)
EPS	0.59* (0.32)
Yield	-0.713** (0.324)
Rating	1.379 (1.133)
Maturity	0.016 (0.161)
SSB	3.537** (1.787)
Inflation	-3.054* (1.69)
BI rate	0.135 (0.501)

Note: Number of observations is 88 *sukuk* issuance, the values in parentheses are the standard error.

*Significant at 10%.

** Significant at 5%.

*** Significant at 1%.

issuance of *mudharabah sukuk*. The presence of some sharia experts or an SSB in a firm gives a strong positive signal to the market. Also, the structure of *sukuk* chosen by the issuer should pass through a strict process of screening by sharia experts in order to ensure the sharia compliance. These instruments should be free from undesired elements such as *riba* (usury), *gharar* (uncertainty), *maysir* (gambling), and other prohibited activities (e.g., investment in pigs, pornography, entertainment, drugs). More importantly, *sukuk* certification is vital for investors to determine that the securities they are buying are sharia compliant. Datuk (2014) mentions that *mudharabah* and *ijarah sukuk* contracts are shown to have different mechanisms and are based on a sharia concept that suits the contract and mechanism of each type. These differences may include earnings for *sukuk* holders in the form of revenue sharing and payment of the principal debt at the time of maturity, and the issuance must be based on the form of profit sharing already agreed upon. The reasonably complex mechanism for *mudharabah sukuk* means that the risks of

mudharabah sukuk are higher than *ijarah sukuk*. The presence and the reputation of sharia experts involved in the certification process play a leading role in the issuance and marketing of *sukuk*.

Finally, we also control for two macroeconomic variables, inflation and the BI rate (reference interest rate). First, we find a negative and significant coefficient for inflation rate which means that when the inflation is relatively high, firms tend to choose *ijarah sukuk* which is less risky rather than *mudharabah sukuk*. Inflation is considered to have an impact on *sukuk* issuance as exhibited in some previous studies (Ahmad & Muda, 2013; Ali Said & Rihab Grassa, 2013; Ariff & Safari, 2012). However, we do not find any evidence for the interest rate.

5. Conclusion

There have been some previous studies on *sukuk* (Islamic bonds); however, taking a different perspective, we look at the determining factors in *sukuk* issuance type, more particularly in selecting between *mudharabah sukuk* and *ijarah sukuk*. Our empirical results show that firm profitability, earnings per share, and the presence of SSB have a positive effect on the probability of firms of issuing *mudharabah sukuk* which is riskier than *ijarah sukuk*. The younger firm is also found to have higher profitability to issue *mudharabah sukuk*.

Moreover, *sukuk* yield is negatively associated with the issuance of *mudharabah sukuk*. Macroeconomic condition reflected by inflation rate is also negatively correlated with the issuance of *mudharabah sukuk*. However, several caveats are in order. First, our study is limited to 88 *sukuk* issuance. Second, this research is only focused on *sukuk* issued by Indonesian firms.

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