

# The Determinants of *Sukuk* Issuance on Indonesian Public Companies from 2007-2016

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**Abstract**—The purpose of this research is to understand the motivations of Indonesian public companies in issuing *Sukuk* and conventional bond. Indonesia are chosen because researches that determine the issuance of *Sukuk* is still scant whilst the growth of *Sukuk* is rapid. The samples are 57 public companies that issue 97 conventional bond and 22 *Sukuk* from 2007 – 2016. By using logistic regression, the result proposes that there are differences between the determinant of *Sukuk* and bond issuers. Firms with higher leverage ratio are more inclined to issue *Sukuk* than bond. Thus, this result complies with trade-off theory.

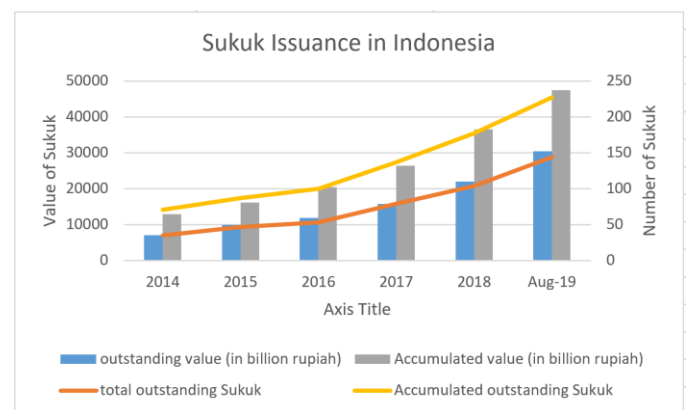
**Keywords:** *Sukuk*, bond, trade-off theory

## I. INTRODUCTION

As the largest Muslim country in the world, Indonesia should have had the largest investor pools for Islamic Financial Instrument. Thus, the growth of Islamic Financial Market in Indonesia is to be expected, notably in recent years. The most prominent growth of Islamic Financial Instrument is in Islamic Shares and Islamic Bond (*Sukuk*). AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions) describe *Sukuk* as “certificates that represent undivided shares in ownership of tangible assets, usufruct and services or the asset of particular projects or special investment activity” [1]. According to the description, the characteristics of *Sukuk* is similar to conventional bond. Both instruments have nominal value, maturity date, and provide a regular cash flow to the investors until they pay back the initial capital at the end of the maturity date. Latham and Watkins proposed that the difference of bond and *Sukuk* comes from their different view to Sharia laws [2]. *Sukuk* must follow these laws before being issued while bond do not have such restrictions.

Malaysia was the first country where the corporate *Sukuk* was first issued in 1990 with a value of MYR 125 Billion (USD 46 million) by Shell MDS. The *Sukuk* market then continues to grows and until today, Malaysia has become the center of *Sukuk* Issuance in the world. This is because Malaysia is the country with the largest issuance of *Sukuk* in terms of value and number of *Sukuk* issued [3]. Meanwhile, *Sukuk* in Indonesia was first issued by Indosat Tbk, in 2002 with Rp.175 Billion (USD 9 Million) in value. The success of that issuance draws the interest of other companies to issue *Sukuk*. Thus, the

trend of *Sukuk* issuance grow gradually over the year. The graph below shows the increase of *Sukuk* Issuance in Indonesia from 2014 to July 2019.



Source: Developed from OJK stock exchange statistics, 2019.

Fig. 1. *Sukuk* issuance in Indonesia.

Based on the graph it can be seen that *Sukuk* continue to grow gradually over the years, both from the number of *Sukuk* issuance and the number of values. Since *Sukuk* has the characteristics as conventional bond. Thus, it may affect how companies decide to either issue *Sukuk* or conventional bond.

Several theories are provided to support this research, particularly theories about capital structure. This is because the motives behind the issuance of either *Sukuk* or conventional bond will affect the capital structure of a company, especially the debt. There are mixed views about the optimal ratio of a capital structure [4]. However, some also views that capital structure of a companies will not affect the companies' value, regardless of how optimal it is [5]. Modigliani and Miller proposed 2 theory known as MM proposition I and II, which acknowledge the role of tax in companies [5]. MM Proposition I suggest that leverage has the benefit to lower tax payment. While MM proposition II suggest that the bigger the leverage of a firm, the lower the WACC. This theory even proposes that due to the tax benefit, it will give more benefit to the companies if their capital structure is more heavy on debt

rather than equity or even all of its capital structure is based on only debt.

However, it should be pointed out that these theories were based under perfect market assumption where there is no transaction cost, bankruptcy cost or borrowing cost. Thus, some views that this theory is quite outdated since most companies in certain industry has their own ratio of capital structure that they have to maintain which fit to their economy and their type of business [6].

Another theory about capital structure is trade off theory which suggest that in order to balance the cost and benefits of debt and equity, companies should also estimate their capital structure ratio [7]. In addition, trade off theory have its own benefit for specific type of industries and companies [6]. Tax shield in debt is one of them. They become crucial for companies' financial strategies since the payment of debt could lower tax interest. However, it should be noted that this condition will be partially offset when companies' debt increases due to financial distress of bankruptcy cost. This will result in how companies should consider and maintain their ratio of debt and equity for financing.

Agency theory is also included as the theory that will support this research. The theory explains that there is a contract between 2 parties among agent and principal [8]. Agency cost will emerge as the principal pay the agent for their services. However, conflict of interest may arise since there is an unequal information distribution that will lead to information asymmetry [9]. Thus, in a company, managers act as agent that should be monitored by shareholders who act as the principal in order to reduce the agency cost.

Based on the description above and several theories about capital structure, researchers are motivated to understand the reason behind the issuance of *Sukuk* compared to conventional bond.

**II. METHOD**

This study uses public *Sukuk* and conventional bond which is obtained from Thomas Reuter DataStream and Indonesia Official Stock Exchange Website ([www.idx.com](http://www.idx.com)). The total sample consist of 97 issued conventional bond and 22 issued *Sukuk* from 57 public companies from 2007 – 2016. Using logistic regression, this research will test several hypotheses regarding the motivation and factors why companies decide to issue *Sukuk* and conventional bond.

The first hypothesis will test companies' free cash flow. Halim et al found the evidence that free cash flow is one of the factor that could affect the issuance of *Sukuk* in Malaysia [10]. They explained that *Sukuk* is used to mitigate agency cost of free cash flow since funding by *Sukuk* is separate from the companies' other capital. Thus, it is used to prevent managers in expropriating the companies' cash flow for private benefit. In addition, *Sukuk* securitization is regarded as stricter than bonds. This is due to the characteristics of *Sukuk* contract which provide the information about the assets that is being used or what kind of project it is going to be executed. Hence, the first hypothesis is companies with more cash flow or high

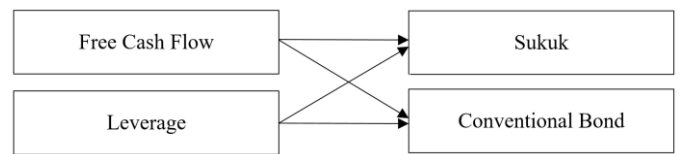
profitability are more likely to issue *Sukuk* in order to reduce the agency cost of cash flow.

H1: Companies with more free cash flow are more likely to issue *Sukuk*.

The second hypothesis is based on the tradeoff theory, as companies' leverage influence the funding decision due to the benefit of tax shields. Azmat et al research in Malaysia found that firms with higher long-term debt are more prone to issue *Sukuk*, specifically the *Ijarah Sukuk* than conventional debt [11]. Another research with different samples from GCC countries, found that leverage ratio both long and short term have a positive influence for companies to issue *Sukuk*. Thus, based on the previous research, the 2<sup>nd</sup> hypothesis for this research is companies with higher leverage are more prone to issues *Sukuk* than conventional bond

H2: Firms with high debt ratio (leverage) prefer to issue *Sukuk* than conventional bond.

The research framework is shown in the figure 2. Based on the framework, this research will test the influence of Free cash flow and Leverage to both *Sukuk* and conventional bond.



Source: Developed from Grassa and Miniaoui, 2017.

Fig. 2. Research framework.

Thus, the model for this research is

$$Sukuk_{i,t} = \beta_0 + \beta_1FCF + \beta_2Leverage + \beta_3LNAge + \beta_4ShariaIndex + (IND2-IND8, Y2008-Y2016) + \epsilon_{i,t}$$

the measurement of the variable of this research, the dependent, independent and control variable is explained in the table below

TABLE I. VARIABLE DESCRIPTION AND MEASUREMENT

Variables	Description	Measurement
<i>Sukuk</i>	<i>Sukuk</i>	Using dummy variable
Conventional bond	Conventional bond	Using dummy variable
FCF	Free Cash Flow	EBIT + Depreciation & Amortization – change in working capital – capital expenditure
Leverage	Leverage Ratio	(Long term debt + Current liabilities) divided by total assets
LNAge	Age	Natural Logarithm of companies' age
ShariaIndex	Sharia Index	Takes value of one if the firms is included in the Indonesia Islamic Index

**III. RESULTS AND DISCUSSION**

Table 2 shows the result of bond and *Sukuk* issuance from 2007 – 2016. Based on this result, the total value of issued bond is seven times bigger than the issuance of *Sukuk*. This might be due to the stricter requirements for companies to issue

*Sukuk* and *Sukuk* is considered as new concept for these companies. On the other hand, among the type of *Sukuk* issued in Indonesia, the most popular *Sukuk* type is *Ijarah Sukuk*. This is due to the structure of *Ijarah Sukuk* that is similar with leasing structure. In addition, *Ijarah Sukuk* is undisputedly one of the *Sukuk* that comply the Sharia rules, among others. In contrast, there are no companies that issue *Musharaka Sukuk*.

The decline of *Musharaka Sukuk* Issuance comes after a statement from the paper of AAOIFI Sharia Council President, Muhammad Taqi Usmani, which published in 2007 [13]. In his paper, he explained that there are 3 reasons as to why *Musharaka Sukuk* that has widely issued at that moment is not compliant with Sharia principle. The first reason is that the condition for profit sharing should not include any circumstances that will lead to the disruption of the initial profit-sharing agreement. The second reason is that it is not allowed for either party to guarantee the periodic return and the return of capital to the other party. This is on the assumption that in the event of loss, then according to the Sharia principle, the loss should be shared too, thus either party should not guarantee any return. The third reason is that the underlying assets should be bought at an agreed price or market value, buying the assets at face value is not considered as Sharia compliant.

TABLE II. BONDS AND *SUKUK* ISSUANCE FROM 2007- 2016 (IN TRILLION IDR)

	Bond	Ijarah	Mudharaba	Musharaka
2007	9,975	400	125	0
2008	2,860	1090	0	0
2009	6,158	1082	0	0
2010	5,540	200	0	0
2011	7,150	0	0	0
2012	17,125	1300	375	0
2013	11,268	150	0	0
2014	8,160	490	0	0
2015	13,450	0	0	0
2016	10,270	1200	0	0
Total	91,956	5,912	625	0

Table 3 shows the empirical result on the logistic regression for *Sukuk* and conventional bond. Based on the result, free cash flow is statistically insignificant towards the issuance of both *Sukuk* and bond. However, it should be noted that the coefficient of the free cash flow is negative, which mean that the larger the cash flow that a company has, the smaller the probability of it to issue *Sukuk*. This argument could be explained for bonds issuance as well since the coefficient in bond is also negative. This result contradicts the result by Halim et al which find that free cash flow is a significant factor to explain the issuance of *Sukuk* [10].

Leverage on the other hand, present a different result. It is statistically significant for *Sukuk* while it is insignificant for bond. It also has a positive coefficient which means that the higher the leverage ratio that a firm has, the more prone the firms to issue *Sukuk* than bond. This finding support hypothesis 2 in which firms with high leverage ratio prefer to issue *Sukuk* due to the benefit it gets in maintaining their debt target ratio in accordance with trade off theory. This result is in line with the findings that one of the factors that influence the choice of

issuance in Malaysian and GCC countries companies is high debt ratio [11,12].

The control variable also provides results. The first control variable, which is age does not influence the companies to issues *Sukuk*, whether the companies is considered experienced or new. On the other hand, companies that is included in the Sharia Index are indifferent in either issuing both bond and *Sukuk*. This might be due to the similarities of characteristics of both bond and *Sukuk*. Thus, companies listed in the Sharia Index have more flexibility to either choose *Sukuk*, since they already fulfilled half of the requirement in Sharia Law, or conventional bond since both *Sukuk* and conventional bond are similar.

The pseudo R2 shows that those variables could only provide 22,61% influence for companies to issue *Sukuk* and 12,2% for companies to issue bond. Thus, it can be summarized that more variables could be added into the next research in order to understand fully what factors or determinants that influence companies to issue *Sukuk* or Bond.

TABLE III. LOGISTIC REGRESSION RESULT FOR *SUKUK* AND BOND

Independent Variables	Dependent Variables		
	<i>Sukuk</i>		Bonds
Free Cash Flow	(0.113)		(0.105)
	-0.000		-0.000
Leverage	(0.04)	**	(0.938)
	1.234		0.031
Control Variable			
LN Age	(0.087)		(0.668)
	1.196		0.099
Sharia Index	(0.010)	**	(0.003)
	1.670		0.948
Industry Dummies	Yes		Yes
Year Dummies	Yes		Yes
Pseudo R <sup>2</sup>	22.61%		12.2%
LR Chi <sup>2</sup>	38.16		63.43
Prob > Chi <sup>2</sup>	0.0085		0.0000

Notes: The \*\* shows 5% significance level. Bracketed numbers are p-value

#### IV. CONCLUSION

High leverage ratio can be assumed as one of the determinants for companies to issue *Sukuk*. this result support hypothesis 2 with the theory that firms that have high leverage are more reluctant to get funding from debt (as in conventional bond) as leveraged companies have more risk than less leveraged companies. In addition, companies usually have its own capital structure ratio to maintain, so the companies can manage the benefit and risk of tax treatment. Based on this theory, highly leveraged companies are prone to get funding that will not increase their leverage ratio. *Sukuk*, which is similar to conventional bond but with more complex and strict structure, become the alternative for companies that want to get funding but not willing to dilute their capital, particularly for shareholders.

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