The Analysis of Company Decisions in Choosing Sukuk and Bonds Using Logit Model

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Abstract: Sukuk has become one of alternative financing for corporate. The development of Sukuk provides the flexibility choices of company's funding decisions that required their needs and capabilities. Sukuk market in Indonesia is the second largest in emerging East Asia in terms of size but the number of issued Sukuk lower than a conventional bond. This study aims to obtain empirical evidence that the characteristics of the company influence the decision of the company in issuing Sukuk and bonds using the logit model. The results of this study conclude: (1) leverage has a negative influence and significant (2) size of the firm has a positive influence and significant (3) fixed assets has a positive influence and significant to the decision of the company in issuing Sukuk.

Keywords: Sukuk; Bonds; Financing Company Decisions; Characteristic Company; Logit Model

Abstrak: Sukuk telah menjadi salah satu alternatif pembiayaan bagi perusahaan. Pengembangan Sukuk memberikan pilihan fleksibilitas dari keputusan pendanaan perusahaan yang membutuhkan kebutuhan dan kemampuan mereka. Pasar sukuk di Indonesia adalah yang terbesar kedua di Asia Timur dalam hal ukuran tetapi jumlah sukuk yang diterbitkan lebih rendah dari obligasi konvensional. Penelitian ini bertujuan untuk memperoleh bukti empiris bahwa karakteristik perusahaan mempengaruhi keputusan perusahaan dalam menerbitkan sukuk dan obligasi menggunakan model logit. Hasil penelitian ini menyimpulkan: (1) leverage memiliki pengaruh negatif dan signifikan (2) ukuran perusahaan memiliki pengaruh positif dan signifikan (3) aktiva tetap memiliki pengaruh positif dan signifikan terhadap keputusan perusahaan dalam menerbitkan Sukuk.

Kata Kunci: Sukuk; Obligasi; Keputusan Perusahaan Pembiayaan; Perusahaan Karakteristik; Model Logit

Introduction

Funding is something important to be able to develop its business for the company. There are two main models of the world financial system for corporations to obtain funding sources, bank-based systems, and market-based systems. In some developed countries, the role of the capital market is very large in supporting corporate funding needs and even the capital market has become the foundation of the country's business and economy. Many capital market instruments are known as funding sources, namely stocks and bonds.

In addition to the increase in the conventional financial industry, the global Islamic finance industry has continued to increase over the past 20 years in both Muslim-majority and non-Muslim countries. The types of products and financial instruments based on sharia principles have also been circulating. One of them is sharia-based bonds known as Sukuk. Sukuk issuance was first started in Bahrain in 2001. The issuance of Sukuk was then followed by Britain which issued Sukuk in 2014. The UK is even committed to making its country the center of the world financial system and the center of Islamic finance in the western world. In general, the principles and concepts of Sukuk issuance resemble the principles and concepts of conventional bond issuance. The difference lies in the product, the mechanism of issuance and the use of funds that must be in accordance with sharia principles.

Based on the Islamic Finance Development Report in 2017 the total assets of the Islamic finance industry amounting to USD 2,202 billion at the end of 2016 and Sukuk ranked the second largest with a value of USD 344.77 billion or 16% of the total assets of the Islamic finance industry (Thomson Reuters 2017). Indonesia contributed USD 81.839 billion or around 11.5% of the total world Islamic financial assets. With the value of these assets,

Indonesia is in the seventh position as the largest country that has a contribution to the Islamic finance industry.

The development of the capital market industry, especially the bond or bond market in Indonesia, is increasingly conducive and increasing in 2017. This increase can be seen from the value of new issuance of corporate bonds in 2017 which reached 161.36 trillion rupiah or an increase of 40.23% from 2016 of 115.06 trillion rupiah. The total value of new bonds is dominated by issuers from the financial sector with a value of 97 trillion rupiah or 60% of the total new issuance nominal.

Compared to conventional bonds, in Indonesia, Sukuk is still a new thing. Sukuk issuance is still considered less popular than the issuance of bonds. According to the Islamic Finance Development Report in 2017, in terms of issuance, Indonesian Sukuk is ranked 10th, while the first position is occupied by Malaysia. As of the end of 2017, the value of Sukuk issuance in the global market reached a value of USD 99.5 billion. Indonesia ranked 5th as the country with the largest outstanding Sukuk value or by 7.3%. The first position is occupied by Malaysia which is followed by Saudi Arabia and the UAE by becoming the country with the largest market share when viewed from the total outstanding Sukuk in the world. The first Sukuk issuer in Malaysia, namely Shell MDS Sdn. Bhd in 1990.

In the past 5 years, corporate Sukuk issuance in Indonesia has continued to increase. Until the end of December 2017, the Financial Services Authority (OJK) recorded a total accumulation of corporate Sukuk that had been issued in Indonesia as many as 137 Sukuk, an increase of 24.5% from the previous year. The total nominal value of accumulated Sukuk issuance during 2017 was IDR 26.39 trillion. While the number of outstanding Sukuk (outstanding) until the end of December 2017 recorded 79 corporate Sukuk from 37 issuers with a nominal value of 15.7 trillion rupiah or an increase of 32.49% (YTD).

In general, Sukuk issuance contracts used in issuing corporate Sukuk in Indonesia are Ijarah and Mudharabah contracts. Matters related to Sukuk issuance have been regulated and in accordance with the DSN-MUI fatwa No. 40/DSN-MUI/X/2003 concerning the Capital Market and General Guidelines for the Implementation of Sharia Principles in the Capital Market and three BAPEPAM-LK regulations currently the Financial Services Authority (OJK) which are related to sharia securities governing issuance, contracts, and criteria in issuing sharia securities lists (DES) which were refined in 2009 and 2012 (Dewan Syariah Nasional 2003). In Indonesia, DSN-MUI is an institution whose task is to establish, supervise and make guidelines for implementing fatwa related to securities or financial instruments and capital markets which are in accordance with Islamic sharia. According to OJK data, out of 79 corporate Sukuk currently in circulation, there are 62 corporate Sukuk (78.48%) using Ijarah contracts and 17 corporate Sukuk (21.52%) using Mudharabah contracts with a nominal value of 11.6 trillion rupiah for Ijarah and 4.14 trillion rupiah for Mudharabah.

The development of the Islamic capital market in 2018 especially in corporate Sukuk issuance is a positive thing. With the increase in the value of corporate Sukuk issuance, it is a positive trigger that will attract investors to be able to invest in the capital market profitably and lawfully. The increase in the number of corporate bonds and corporate Sukuk issuance of each country can be caused due to various factors. Factors or motives that affect the issuers in issuing corporate bonds can be in the form of internal conditions of each issuer or economic conditions in the country. Issuers also must have different and relevant motives underlying the decision to issue corporate bonds and Sukuk with various tenors, coupons, and Sukuk types as alternative sources of financing.

For companies, the development of capital market instruments for corporate and Sukuk bonds provides flexibility in the choice of funding sources that can be used in accordance with the needs and capabilities of the

company so that the objectives can be fulfilled. The company has alternative funding through the issuance of conventional bonds or Sukuk issuance as a funding source. However, the company's motivation to issue Sukuk compared to issuing conventional bonds has not been widely studied.

Empirical studies in previous studies related to company decisions about issuing Sukuk and conventional bonds show mixed results. Johnson (1997) argues that the proportion of fixed assets in the company's balance sheet is negatively related to the proportion of non-bank debt. This shows that financial institutions, especially non-banks, are riskier companies compared to other companies. Whereas, Denis and Mihov (2003) did not find a relationship between fixed assets and the possibility of loans from non-bank institutions. However, companies with investment-grade categories are more likely to like loans from banks. Carey, Post, and Sharpe (1998) provide evidence that banks serve low-risk borrowers while non-bank financial institutions better serve high-risk borrowers.

Previous research has explored many factors that influence company decisions in issuing different financial instruments. The decision of the company chosen includes the choice of the type of debt that will be issued in accordance with the characteristics of a particular company. In a study conducted by Azmat, Skully, and Brown (2014) and Mohamed, Masih, and Bacha (2015) about the choice of conventional bonds and Sukuk issuance in Malaysia, it was revealed that the choice of publishers in choosing Sukuk or conventional bonds was not the same.

Grassa and Miniaoui (2018) provides evidence that in relation to larger debt and a longer period of time, companies prefer to issue Sukuk rather than conventional bonds. While related to the quality of credit ratings, shows a positive correlation with the issuance of conventional bonds and a negative correlation with Sukuk issuance. Nagano (2016) findings show that in Malaysia, Sukuk publishers prefer this instrument to other external financing tools, and this choice is not related to the availability of internal funds. In

addition, Sukuk issuance is considered to contribute to the increase in the company's stock profit. This means that the choice to issue Sukuk rather than conventional bonds has a significant influence on shareholder value. Therefore, in Malaysia, Sukuk issuance is preferred because of the unique benefits that standard external financing does not have.

In line with previous research, Arena and Howe (2009) also found that companies that have better credit quality in the leverage ratio and outstanding subordinated debt, are more likely to make loans from banks than to issue debt. Shirasu and Xu (2007) found that good quality Japanese companies had left the bank and switched to the bond market, while low-quality companies turned towards bank debt. Banks in Japan tend to lend to large companies.

Lin et al. (2013) studied the relationship between the ownership structure of the borrowing company and its choice to obtain a source of debt. Their findings provide evidence that the difference between the control rights and the cash flow rights of the borrowers' largest shareholders has a significant impact and a negative correlation to the company's dependence on bank debt financing.

Based on this background, this research was conducted to find out what factors influenced the company to issue sukuk and bonds and how much accuracy the logit model was used to predict the probability of a company to issue sukuk and bonds.

Literature Review

According to Harjito and Martono (2005) there are four main types of decisions that can be taken by management in financially related companies, namely (1) investment decisions (investment decisions), (2) financing decisions (financing decisions), (3) dividend distribution decisions (dividend decision) and (4) liquidity decisions (liquidity decision). In finance, capital structure is used as one way for companies to finance their assets or projects

through several combinations of securities consisting of equity securities and debt securities. According to Hanafi and Halim (2012), there are several theories regarding capital structure including:

Traditional Approach

This approach argues that companies can change the capital structure to obtain an optimal structure. This capital structure can affect the value of the company.

Modigliani-Miller Theorem

This theory was introduced by Franco Modigliani and Merton Miller in 1958. They introduced a basic form of capital structure known today. This theorem reveals that the optimal capital structure is a capital structure that maximizes firm value. The optimal capital structure must have 99.9% debt and no equity effects.

The Trade-Off Theory

This theory reveals that there are advantages to financing using debt. The trade off theory in capital structure allows for bankruptcy costs as compensation costs in an effort to balance the benefits of using debt as a tax protector called the tax benefit of debt. This theory refers to how much equity and debt are used in financing based on costs and benefits.

Pecking Order Theory

The pecking order theory was popularized by Myers in 1984. This theory explains the hierarchy of the Company's funding sources. This theory reveals that the priority of the company's funding sources is financing originating from internal sources. When internal financing sources are no longer sufficient, the Company will issue debt securities. Financing using equity securities is used as the Company's last resort if external financing is

needed. In this theory, the selection of issuance of debt securities can be considered as a signal that the Company needs external funding.

Theory of Information Asymmetry and Signaling

Asymmetry theory argues that parties related to the company do not have the same information about the prospects and risks of the company. There are others who have better information about the company, usually company managers. Differences between investors and managers that cause information asymmetry. Signaling theory is a theory where the capital structure is a signal that managers convey to the market. Companies that increase debt can be seen as companies that have good prospects. It is hoped that investors will raise this signal as something positive.

Bonds according to Brigham and Houston (2012) are long-term contracts where the borrower agrees to pay interest and principal loans on a certain date to the bondholders. Publisher-based bonds are divided into three types, namely: (1) regional bonds (municipal bonds), (2) government bonds, (3) corporate bonds.

Based on interest rates, bonds are divided into four types, namely: (1) zero coupon bonds, which are sold at a discounted price, but at maturity investors will receive payment of their debt in full, (2) fixed rate (FR) bonds are these bonds provide the same coupon value or fixed interest rate until the maturity date of the bond. (3) variable rate (VR) bonds are bonds whose value of coupon payment changes or uses floating interest rates throughout the period of coupon payments to maturity, (4) mixed fixed rate and variable rate bonds are types of bonds that have coupon values varying throughout period of coupon payment until maturity. For example, payment of bond coupons for the first 12 months uses a fixed interest rate and the remaining coupon payments to maturity use floating interest rates.

Bond rating (bond rating) is a character symbol given by a bond rating agent to indicate the default risk of a bond issued. Bond ratings according to PT PEFINDO can be seen as table 1:

Table 1. Bond Ratings

Ratings	Interpretation
$_{id}$AAA	*Superior*
$_{id}$AA	*Very Strong*
$_{id}$A	*Strong*
$_{id}$BBB	*Adequate*
$_{id}$BB	*Somewhat weak*
$_{id}$B	*Weak*
$_{id}$CCC	*Vulnerable*
$_{id}$D/$_{id}$SD	*Default/Selective Default*

Source: PT PEFINDO (2018)

Based on the Accounting and Auditing Organization for Islamic Financial Institutions/(AAOIFI 2003), Sukuk is a security with the same denomination value that represents individual ownership in a portfolio of assets that meet current or future requirements (Vinnicombe 2010). According to DSN-MUI in the DSN-MUI Fatwa Number 32/DSN-MUI/IX/2002, Islamic bonds (Sukuk) as a long-term security issued by issuers based on sharia principles that require issuers to pay income in the form of profit sharing/margin/fee to Sukuk holders and promises to repay the principal at maturity.

Some types of Sukuk based on the Accounting and Auditing Organization for Islamic Financial Institutions/AAOIFI include: (1) Sukuk Mudharabah, which is Sukuk based on Mudharabah contracts, namely cooperation agreements between two or more parties, namely between

investors or capital owners with owners services, (2) Sukuk Ijarah, namely Sukuk which is based on the Ijarah contract, namely leasing agreement on an asset, (3) Sukuk Musyarakah, which is Sukuk based on cooperation contract in combining capital and profit and loss together according to the initial contract, (4) Sukuk Istisna, which is a Sukuk based on the financing contract of a project in which the way the period of delivery of goods and the price of goods are agreed upon by the parties.

While the characteristics of Sukuk are generally owned as follows: (1) Sukuk is a certificate or proof of ownership of an tangible asset or beneficial title, (2) Has income that is profit or profit sharing, adjusted to the type of contract, (3) Activities that financed by Sukuk and all matters related to Sukuk issuance must be in accordance with sharia principles and free from elements of usury, gharar and maysir, (4) Issuance of Sukuk through Special purpose vehicle (SPV). SPV as a third party that functions as a Sukuk issuer, trustee represents investors and as a government counterpart in asset transfer transactions, (5) Sukuk must have an underlying asset.

The difference between Sukuk and conventional bonds based on the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) can be shown in the table 2:

Table 2. The Comparison Between Sukuk and Bond

Parameters	Sukuk	Bond
Issuer	Government or corporate	Government or corporate
Characters	Ownership certificate for an asset	Debt statement
Revenue	Profit sharing and capital gain (if traded in secondary market)	Coupon and capital gain (if traded in secondary market)
Tenor	Starting from the short to medium term	Starting from short to long term
Underlying	Require underlying asset	Does not require underlying

Parameters	Sukuk	Bond
asset		assets
Related parties	Obligor (issuer), Special Purpose Vehicle (SPV), and investor	Issuer, trustee, underwriter, and investor.
Price	Market price	Market price
Payment par value	Bullet or amortization	Bullet or amortization
Utilization of fund	In accordance with sharia principles	free

Source: (AAOIFI 2015)

Methods

Sources and Research Methods

This study uses descriptive analysis research design that is by explaining the results obtained from data collected and processed and tested and analyzing the relationships that occur between the variables studied. This research is a quantitative method where the data obtained is secondary data in the form of Sukuk and bond data from 2013 to 2017 which are still outstanding and other secondary data such as financial statements from each company.

The research uses Sukuk and corporate bonds data that are published and still circulating from 2013 to 2017 obtained from the Indonesia Bond Pricing Agency (IBPA). Furthermore, the researcher uses audited financial statements from each company to obtain the required data in accordance with the research variables. After data collection and processing is carried out, 68 data of Sukuk and 415 bonds are obtained, so that the data is adjusted to the research variables. This study aims to look at variables that affect companies in issuing Sukuk and bonds.

Model Logit

The analysis used in this study is logistic binary regression using the logit model. The logit model is a non-linear probability econometric regression method, where the dependent variable is a dummy variable that follows the logistic distribution function. The logit model is used to be able to test the probability of the dependent variable with the independent variable. This study uses this model because it has 2 (two) categories in the dependent variable. The dependent variable in this study is the probability of the company to decide on the use of funding from Sukuk or bonds. The researcher uses a dummy value to determine if the company uses Sukuk and if the company uses bonds. Dummy Sukuk or bond variable as follows:

P = 0 ; If company choose bonds; and

P = 1 ; If company choose sukuk.

The independent variables examined in this study were 12 independent variables. The free variables are as table 3:

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Table 3. The Independent Variables

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Variables	Description	Measurement
Size	Issuance Size	Log of total amount issued
Tenor	Issuance Tenor	Number of years
Rating	Credit Rating	Issuance rating based on PEFINDO
Leverage	Leverage	Debt Equity Ratio (DER)
Age	Age	Issuer age
Leverage Ratio	Leverage Ratio	Long term debt/total assets
Firm Size	Firm Size	Log of total assets
Earning Growth	Earning Growth	$EG = \dfrac{EBIT_t - EBIT_{t-1}}{EBIT_{t-1}} \times 100$
Sales Growth	Sales Growth	$SG = \dfrac{Sales_t - Sales_{t-1}}{Sales_{t-1}} \times 100$

Variables	Description	Measurement
Return on Assets (ROA)	ROA	$ROA = \dfrac{Net\ Income}{Total\ Aset}\ x\ 100$
Fixed Assets	Fixed Assets	Based On Company's Financial Statements
Cash Flow	Cash Flow	Based On Company's Financial Statements

The independent variables in this study will be used in the logit model, namely : (i) Size ; (ii) Tenor ; (iii) Rating ; (iv) Leverage ; (v) Umur Perusahaan ; (vi) Leverage Ratio; (vii) Ukuran Perusahaan; (viii) Earning Growth; (ix) Sales Growth ; (x) Return on Assets; (xi) Fixed Assets; dan (xii) Cash Flow.

The model in this study is to determine the probability (tendency) of free variables that can influence the company's decision to issue Sukuk and bonds. Based on the number of variables examined, the logit model that will be used in this study is as follows:

$$\text{Ln}\ (p/1\text{-}p)\ = α + β_1 SIZE + β_2\ TENOR + β_3\ RATING + β_4\ LEV + β_5\ AGE + β_6\ LTDA + β_7\ LA + β_8\ EG + β_9\ SG + β_{10}\ ROA + β_{11}\ FA + β_1 + ε$$

The probability value in the logit model can be explained as follows:

$$Li = \ln\left(\frac{pi}{1-pi}\right) =\ β1$$

Research Samples

Not all Sukuk and bonds recorded in the 2013 to 2017 period meet the requirements to be sampled because companies that issue Sukuk or bonds do not have complete financial report data. And based on predetermined

criteria obtained 68 Sukuk and 415 bonds to be sampled. The sample selection process is shown in table 4:

Table 4. Samples Selection

Criteria	N
Registered and outstanding sukuk and bond on The Indonesia Stock Exchange from 2013 to 2017	527
Sukuk or bond that does not have financial report data.	(44)
Total	**483**

Source: Indonesian Bond Pricing Agency (2017)

Descriptive Statistics

Based on the results of data processing using SPSS 25, descriptive results were obtained which illustrated simply the independent variables tested in this study. Descriptive analysis of the independent variables studied can be seen in Table 5.

Table 5. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Size (in trillion rupiah)	483	22.5638	29.1250	26.714080	1.1362924
Tenor	483	1	30	4.88	2.653
Rating	483	1	7	6.17	1.040
LEV	483	.0091	.9365	.679777	.1945440
AGE	483	3	159	43.84	30.706
LTDA	483	.0010	1.1212	.290200	.2377237
LA	483	27.6679	34.8277	31.409670	1.7211508
EG	483	-39.0153	2.1586	-.480485	4.7025019
SG	483	-.9738	1.3126	.088048	.2221677
ROA	483	-.0496	9.0361	.475400	1.2539524

	N	Minimum	Maximum	Mean	Std. Deviation
FA (in trillion rupiah)	483	.0069	1204.5684	45.950987	194.4849467
CF (in trillion rupiah)	483	.0000	42.2920	4.391655	8.9824725
Valid N (listwise)	483				

Sumber : Data penelitian yang diolah

Research Hypothesis

This study will test the Goodness of Fit by using the Hosmer and Lemeshow Test H_0 p with the H_0 acceptability criteria if the significance value (p-value) is obtained > from the specified level (significant level) (α). In addition, this study also assessed the model and the accuracy of the use of the logit model. In addition, this study will also test the hypothesis to explain the significance of parameters in the model using the Wald test with the following hypothesis:

H_1 : Size significantly predicts a company to issue Sukuk or bonds.

H_2 : Tenor is significant for predicting a company to issue Sukuk or bonds.

H_3 : Significant rating to predict a company to issue Sukuk or bonds.

H_4 : Significant leverage to predict a company to issue Sukuk or bonds.

H_5 : The age of the company is significant to predict a company to issue Sukuk or bonds.

H_6 : Leverage Ratio is significant to predict a company to issue Sukuk or bonds.

H_7 : Company size is significant for predicting a company to issue Sukuk or bonds.

H_8 : Earning Growth The company is significant to predict a company to issue Sukuk or bonds.

H_{10} : Sales Growth The company is significant to predict a company to issue Sukuk or bonds.

H_{11} : Return on Assets The company is significant to predict a company to issue Sukuk or bonds.

H_{12} : Company Fixed Assets are significant to predict a company to issue Sukuk or bonds.

H_{13} : Cash Flow The company is significant to predict a company to issue Sukuk or bonds.

Result and Discussion

The Analyst of Model Logit

The assessment of a model can be seen from the log likelihood value in block 0 (beginning block) and block 1 (method). A model is said to be good if the log likelihood value in block 0 > log likelihood value in block 1. The log likelihood analysis results can be seen in Table 6.

Table 6. Log Likelihood Block 0 (Beginning Block)

Iteration History[a,b,c]		-2 Log likelihood	Coefficients
			Constant
Step 0	1	401.396	-1.437
	2	392.674	-1.767
	3	392.572	-1.808
	4	392.572	-1.809

a. Constant is included in the model.

b. Initial -2 Log Likelihood: 392.572

c. Estimation terminated at iteration number 4 because parameter estimates changed by less than.001.

Table 7. Log Likelihood Block 1 (Method)

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	268.180[a]	.227	.408

From the results of the SPSS as shown in table 7, the log likelihood value in block 0 was 392,572 > log likelihood in block 1 of 268,180. So that it can be said that the logit model is good model. Based on Table 7, it can be seen that the value of Nagelkerke R^2 which describes the relationship between the dependent variables can be explained by the independent variable. The interpretation of this value is equal to R^2 in multiple regression, which means that the variability of the independent variable in this model is 40.8% and 59.2% is the other independent variables outside the model.

After the result of logit model is good, then the Hosmer and Lemeshow Test are carried out to test the Goodness of Fit and determine whether the formed logit model is correct or not. The value of the Goodness of Fit from the data can be seen from the Hosmer and Lemeshow Test as in Table 8.

Table 8. Hosmer anda Lemeshow Test

Step	Chi-square	Df	Sig.
1	4.984	8	.759

The model made also needs to be tested for its performance by calculating the accuracy of the predictions and errors produced. The logit model in this study was formed based on the cut-off value of 0.5. The cut off value is a limiter in the dependent variable. In this study, it can be interpreted that the cut-off value is a barrier between companies that choose Sukuk and companies that choose bonds. The results of the logit model statistics with a cut off value of 0.5 can be seen in the following table 9:

Table 9. Classification Table

Observed		Predicted		
		Types		Percentage Correct
		Obligasi	Sukuk	
Types	Obligasi	399	16	96.1
	Sukuk	44	24	35.3
Overall Percentage				87.6

a. The cut value is.500

After analyzing using the logit model by using a cut off value of 0.5, it is obtained a prediction data in the company's decision to issue Sukuk or bonds. It can be seen that from a total sample of 483, the model is able to predict the company's decision to issue bonds as much as 399 bonds with an accuracy percentage value of 96.1%. Whereas from a total of 483 samples, the model was able to predict the company's decision to issue Sukuk as many as 24 Sukuk with an accuracy percentage value of 35.3%. So that when compared to the company's decision to issue bonds or Sukuk, the exact percentage of the model is 87.6%.

Significance Parameters Test

Testing the significance of parameters in the model was carried out by Wald Test. By using SPSS 25, the test results can be seen in table 10:

Table 10. Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1[a]	Size	-.931	.148	39.722	1	.000	.394
	Tenor	-.010	.072	.021	1	.885	.990
	Rating	-.126	.211	.352	1	.553	.882
	LEV	-3.611	.965	13.986	1	.000	.027
	AGE	-.003	.008	.173	1	.677	.997

LTDA	.011	1.045	.000	1	.991	1.011
LA	.676	.191	12.498	1	.000	1.966
EG	-.060	.034	3.088	1	.079	.941
SG	-.335	.900	.139	1	.710	.715
ROA	-.608	.368	2.726	1	.099	.544
FA	.004	.004	1.376	1	.241	1.004
CF	-.165	.107	2.386	1	.122	.848
Constant	5.094	6.263	.662	1	.416	163.024

a. Variable(s) entered on step 1: Size, Tenor, Rating, LEV, AGE, LTDA, LA, EG, SG, ROA, FA, CF.

Based on the data above, the logit model equation in this study can be written as follows:

$$L(x) = ln\left(\frac{p}{1-p}\right)$$
$$= 5.094 - 0.931\ Size - 0.010\ Tenor - 0.126\ Rating$$
$$- 3.611\ Leverage - 0.003\ Umur\ Perusahaan$$
$$+ 0.011\ Leverage\ Ratio + 0.676\ Size\ Perusahaan$$
$$- 0.060\ Earning\ Growth - 0.335\ Sales\ Growth$$
$$- 0.608\ ROA + 0.004\ Fixed\ Assets - 0.165\ Cash\ FLow$$

The established logit model can be used to predict the company's decision whether to issue Sukuk or bonds. Using data from one Sukuk sample, the simulation will be carried out as follows:

$$\left(\frac{p}{1-p}\right) = e^{-1.8541}$$

$$p = \left(\frac{e^{-1.8541}}{1-e^{-1.8541}}\right) = 0.1857 = 18.57\%$$

Based on the calculation above the probability value of the company choosing Sukuk compared to the bonds using the model is 18.57%.

Proof Hypothesis

After all the stages in the research are carried out, then the next step is to prove the hypothesis through hypothesis testing with a significance value at α = 5% (see table 11).

Table 11. Hypothesis Testing Results.

Hypothesis	Variable	Measurement	Result
1	Size	Log of total amount issued	H_0 rejected
2	Tenor	Number of years	H_0 accepted
3	Rating	Issuance rating based on PEFINDO	H_0 accepted
4	Leverage	Debt Equity Ratio (DER)	H_0 rejected
5	Age	Issuer age	H_0 accepted
6	Leverage Ratio	Long term debt/total assets	H_0 accepted
7	Firm Size	Log of total assets	H_0 rejected
8	Earning Growth	EG = (EBIT(t)-EBIT(t-1))/ EBIT(t-1) x 100	H_0 accepted
9	Sales Growth	SG = (Sales_(t)-Sales(t-1))/ Sales_(t-1) x 100	H_0 accepted
10	Return on Assets	ROA= (Net Income)/(Total Aset) x 100	H_0 accepted
11	Fixed Assets	Based On Company's Financial Statements	H_0 accepted
12	Cashflow	Based On Company's Financial Statements	H_0 accepted

Conclusion

The variables in the study have a diverse influence on the decisions of companies in issuing Sukuk. Variable size, tenor, rating, leverage, company age, earnings growth, sales growth, return on assets, and cash flow have a negative influence on the company's decision to issue Sukuk. While the variable leverage ratio, company size, and fixed assets have a positive effect on the tendency of companies to issue Sukuk.

Of the various variables studied only 3 (three) variables that significantly influence the company's decision to issue Sukuk. These variables are the amount of nominal financing value (size) needed by the company, the

value of the company's assets (company size) and the value of the company's Debt to Equity Ratio (DER).

In this study, the logit model proved to be the right model and was sufficient to explain the research data. The logit model can be accepted as a good estimator and can be used to predict the tendency of companies to issue Sukuk or bonds by considering the conditions and characteristics of the company. The logit model that was formed resulted in an estimated accuracy value of 87.6%.

The research range is only limited to 2013 until 2017 and only Sukuk and bonds circulate in the Indonesian Capital Market. The number of samples can be added by adding a sample of years of research and research countries. For further research it is necessary to conduct in-depth studies related to non-significant variables in this study and can be added with other independent variables that can influence the company's decision to issue Sukuk or bonds. In addition, further research can also be done by comparing or using other models so that the results of the research obtained are more comprehensive.

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