

Does financial performance and company age affect the rating Islamic bond?

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Abstract

Purpose - This study aims to determine the effect of solvency ratios, liquidity ratios, profitability ratios, and company age on the rating of Islamic bonds (Sukuk) in companies issuing Sukuk listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. The independent variables used in this study are solvency ratio (DER), liquidity ratio (CR), profitability ratio (ROE), and company age. The dependent variable is the rating of Sukuk.

Method - This study uses quantitative research methodology by purposive sampling. The gathered data on this study were processed using STATA v.14.

Result - The results showed that the solvency ratio had no negative effect on the rating of Sukuk, the liquidity ratio had a positive effect on the rating of Sukuk, the profitability ratio has a negative effect on the rating of Sukuk, company age has a positive effect on the rating of Sukuk.

Implication - Future research can expand the object of research in several other districts and can add research variables.

Originality - The sluggish global economic condition that has resulted in a decline in the performance of sukuk issuing companies is an interesting topic to study. In addition, the analysis tool uses several panel data models as a new thing in this study.

Keywords: DER; CR; ROE; company age; rating of sharia bond



Introduction

Sharia economic activity in Indonesia continues to grow significantly in line with the enactment of Law No. 19/2008 concerning State Islamic Bonds (SBSN) in 2008 (Rangkuti, 2020). Also, because of the awareness of applying sharia principles to transaction activities and being free from forbidden things, such as speculation, gambling, usury, and others (Malia, 2015). This has impacted the increasing interest of investors seeking Islamic financial instruments, including Sukuk. Sukuk is Islamic bonds with two main differences compared to conventional bonds (Smaoui et al., 2017).

The capital market is an activity related to securities trading and public offerings, public companies related to securities issuance, and professions and institutions about securities. On July 3, 2000, IDX collaborated with PT Danareksa Investment Management to release the Jakarta Islamic Index, which aims to facilitate individuals who want to invest in sharia. Subsequently, in September 2002, PT Indosat Tbk became the first company in Indonesia to issue Sukuk using a mudharabah contract. Then, in 2004, the first Sukuk was published using an ijarah contract. Sukuk, as a product similar to bonds, in general, are used to mobilize excess funds from individuals to then be used by companies to fund their operations (Ramadhani, 2013).

Before being offered, Sukuk need to be rated by a rating agency which provides rating information on how secure a bond is for parties who want to invest. Islamic bond rating agencies have two categories, namely investment grade in bonds with the highest ratings that are low in default risk (Tamara, 2013). After the investment grade, there is also a non-investment grade in bonds with the lowest ratings that are high in default risk. The rating agencies recognized by the OJK (Financial Services Authority) in Indonesia are PT Pefindo (Indonesian Securities Rating) and PT Fitch Rating Indonesia (Fitriani et al., 2020).

An example of a case related to bond ratings is PT Berlian Laju Tenker Tbk (BLTA) which is included in a company listed on the IDX (Indonesian Stock Exchange). BLTA in February 2012, declared the failure to pay interest

on six of their debt securities. Based on Detik Finance (2012), this payment should have been made on February 9, 2012, and is due in 2015. As a result of the default statement, Pefindo decided to lower the rating of BLTA bonds from idCCC to idD, which was initially worth 1 to 0. Pefindo lowered its rating Bonds III/2007, and Sharia Ijarah Bonds I/2007 became D from CCC. After that, the IDX decided to temporarily stop trading securities from BLTA on all markets. However, after the temporary closure, IDX finally re-opened BLTA securities trading on Friday, March 29, 2019. Due to this, the company was able to record a profit of US\$5.42 million in 2018, from a loss of US\$ 8.77 million in 2017. Then, the IDX also reminded all interested parties to continue to observe the openness of information conveyed by BLTA (Tari, 2019).

The originality of this study can be seen from the findings of previous studies, which are inconsistent with each other. By doing this research, it is hoped that research findings that are more consistent than the previous ones can be produced. The sluggish global economic condition that has resulted in a decline in the performance of sukuk issuing companies is an exciting topic to study. In addition, the analysis tool uses several panel data models in this study as a new thing in this study.

Literature Review

Signalling Theory

Symmetrical theory assumes that everyone, both investors and managers, has the same information about the prospects of a company. However, in reality this information does not correspond to real life. Managers are often better informed than outside investors. This is then referred to as asymmetric information which also has an important influence on the optimal capital structure. Signalling theory shows the existence of asymmetric information between the company's management and various interested parties, related to the information issued. Asymmetric information can occur between two extreme conditions, namely a small difference in information that does not affect management, or a very significant difference

so that it can affect management and stock prices (Brigham & Houston, 2014).

Regarding information asymmetry, creditors and investors will find it difficult to distinguish between high-quality and low-quality companies. This information asymmetry arises because a party holds more information, for example, managers who understand better information from a project than investors. Signalling theory explains how companies should send signals to interested parties about company developments or use financial statements (Connelly et al., 2011; Mamik, 2015). This information is in the form of bond ratings expected to signal the company's financial position and reflect opportunities that arise due to debt (Sari & Raharja, 2008).

It was explained that the rating of Islamic bonds could affect information asymmetry. This asymmetry occurs when investors obtain unequal information regarding the value of a company. Investors are required to be able to analyze and estimate investments in Islamic bonds. The rating information issued can support investors in determining which bond securities are suitable. In addition, Islamic bonds have an interest for investors because they have advantages related to safety compared to stocks. A good rating is not limited to showing the company's capacity related to payment of obligations but can also show how efficient and effective the company's performance is because it can manage debt for the progress of a company that is being run (Sari & Raharja, 2008).

Solvency Ratio

The solvency ratio describes the ability of a company to carry out its obligations, ranging from short or long term when the related company is liquidated. Manurung in Malia (2015) states that if the solvency ratio is large, this reflects high debt, which results in the company having the opportunity to find financial difficulties and causing an increased risk of bankruptcy. It can be said that a lower solvency ratio indicates a better rating for Islamic Sukuk.

There are three essential impacts on the solvency ratio, namely (1) the solvency ratio can carry out fundraising with debt and shareholders can

control the company through limited total equity investment, (2) creditors can see the funds or equity provided by the owner as security. That is, the higher the capital that shareholders provide, the risk that creditors face is more insignificant, (3) if the results obtained through the company's assets are more significant than the interest rate paid, it means that the use of debt will increase the return on equity (Brigham & Houston, 2014).

Liquidity Ratio

Fred Weston, as quoted by Kasmir (2012), claims that the liquidity ratio can reflect the company's capability to carry out its short-term obligations. In other words, if the company gets a bill, it must be able to pay its debts, especially those that are due. Liquidity is an essential ratio in a company because it converts assets into cash.

The company's liquidity ratio is shown through the high and low current assets, while these assets are assets that can be easily converted into receivables, cash, securities, and inventories. The greater liquidity shows the company's capability to pay the short-term debt better. Ample liquidity indicates the strength of a company in a financial condition that is financially capable of influencing the Sukuk rating.

Profitability Ratio

A profitability ratio measures the company's capability to generate profits through sales, profits from its capital, and certain total assets. Profitability ratios describe how effective the company is in making a profit. High profitability indicates the company is making more effective profits, which makes its capability to pay its obligations or debts better, and the rating of Sukuk will be high. The higher the rating of Sukuk will signal that the chances of failing to fulfil the company's obligations will be smaller (Widowati, 2013).

Age of Company

The company's age is the length of time the company was formed and operated. Usually, a company that has been formed for a long time will have a

high Sukuk rating, so it is called an established company. The age of the company is expected to affect the Sukuk rating. So it can be said that the longer the company age, the higher the rating of its Sukuk because the company has a better ability to meet its obligations or debts (Widiastuty, 2017).

Hypothesis Development

The solvency ratio measures a company's ability to finance debt (Kasmir, 2010). The lower the value of the solvency ratio indicates that the rating of the Sukuk given to the company will be better. The high solvency ratio will cause the company to experience default or bad rating problems. That is because most assets use debt as funds. The greater the solvency, the greater the risk of failure experienced by the company, and the rating of Sukuk will deteriorate. However, if the value of the company's solvency ratio is low, the rating obtained by the company will improve and have the opportunity to enter into investment grade (Alfiani, 2013). In contrast, Muhammad & Biyantoro (2019) research tested 15 companies with multiple regression models as an analytical tool that gave positive results and significantly affected the Sukuk ratings. This research is in line with the research conducted by Darmawan et al. (2020) and Nurfa'izah et al. (2020). Based on previous research, the first hypothesis can be formulated as follows:

H₁: The solvency ratio has a significant negative effect on the rating of Sukuk

The liquidity ratio can show the company's capability to carry out its short-term obligations. Ample liquidity will signal the company to carry out short-term obligations. The company's strong financial position shows better repayment opportunities from term debt, which can have an impact on the Sukuk rating (Febriani, 2017). The results of the research by Cahyati & Nurnasrina (2019) using regression panel data for five years with seven companies showed that the liquidity ratio influences the Sukuk rating; this is also supported by the research of Melinda & Wardani (2018), which shows that the liquidity ratio has a positive and negative effect to the Sukuk rating.

Other researchers have similar results; the liquidity ratio affects Sukuk ratings, namely Nurfa'izah et al. (2020), while different results where this ratio does not affect Sukuk ratings have been produced Rukmana & Laila (2020). Based on previous research, the second hypothesis can be formulated as follows:

H₂: The liquidity ratio has a significant positive the rating of Sukuk

A profitability ratio measures the company's capability to generate profits through sales, profits from its capital, and certain total assets. Profitability ratios describe how effective the company is in making a profit. High profitability indicates the company is making more effective profits, which makes its capability to pay its obligations or debts better, and the rating of Sukuk will be high. The higher the rating of Sukuk will signal that the chances of failing to fulfil the company's obligation will be smaller (Widowati, 2013). In line with Nurfa'izah et al. (2020), who examined the profitability of companies published by PT PEFINDO using a regression analysis tool for five years, it showed significant and positive results on the Sukuk rating. Fitriani et al. (2020) also show that profitability shows a positive and significant relationship with Sukuk ratings. In contrast, the research that has the opposite result is Laila's (2020). Based on the various literature above, this study formulated the third hypothesis:

H₃: Profitability ratio has a significant positive the rating of Sukuk

Kusbandiyah & Wahyuni (2014) explained that companies formed for a long time would have high Sukuk ratings, so they are called established companies. The age of the company is expected to affect the Sukuk rating. So it can be said that a longer company age will make the rating of its Sukuk higher because the company has a better ability to fulfil its obligations or debts. This is different from the research of Widiastuty (2017) that the age of the company does not have a positive influence on the Sukuk rating. Based on the various literature above, this study formulated the fourth hypothesis:

H₄: The company's age has a significant positive the rating of Sukuk

Research Methods

This research is a quantitative study that uses a population. The population that the researcher chose was the issuing company of Sukuk which were listed on the IDX from 2016-to 2020. The sample was selected by using purposive sampling, which is a technique in determining the sample through considerations such as: Issuing Sukuk companies listed on the IDX in 2016-2020; Companies that get a rating from PT. PEFINDO in the research period, namely 2016-2020; Companies that have financial report data for 2016-2020. Panel data analysis is used as a data analysis technique to determine how much influence the independent variable has on the dependent variable in the sukuk rating. Where the regression model formed is as follows(Agustina et al., 2021):

$$Y = a + b_1\text{DER} + b_2\text{CR} + b_3\text{ROE} + b_4\text{CA} + e$$

Y : The rating of sukuk

A : Constant, namely the value of the rating of sukuk if the independent variable is 0

b₁-b₄ : Regression coefficient for independent variables

DER : Solvency ratio

CR : Liquidity

ROE : Profitability

CA : Company Age

Table 1. Research Sample

No	Code	Company	IPO
1.	ADMF	PT Adira Dinamika Multi Finance Tbk	31 Maret 2004
2.	BNGA	PT Bank Cimb Niaga Tbk	29 November 1989
3.	MYOR	PT Mayora Indah Tbk	4 Juli 1990
4.	TINS	PT Timah Tbk	19 Oktober 1995
5.	ADHI	PT Adhi Karya Tbk	18 Maret 2004
6.	MEDC	PT Medco Energi Internasional Tbk	12 Oktober 1994
7.	TLKM	PT Telkom Indonesia Tbk	14 November 1995
8.	ISAT	PT Indosat Ooredoo Tbk	19 Oktober 1994
9.	BEXI	PT Eximbank Indonesia Tbk	9 Juli 2003
10.	EXCL	PT XL Axiata Tbk	29 September 2005

Results and Discussion

Chow-Test/ F-test

The F-test was used to choose between the pooled most miniature square model or the fixed-effect method. The following are the results of the F-test.

Table 2. Chow-Test

Source	Sum of Square	df	Mean Square
Model	64.8245075	4	16.2061269
Residual	151.595493	45	3.36878872
Total	216.42	49	4.41673469

Number of obs = 50
 F(4,45) = 4.81
 Prob>F = 0.0026
 R-squared = 0.2995
 Adj R-squared = 0.2373
 Root MSE = 1.8354

From the output results, it can be seen that the probability value of 0.000 means that the F-test gives significant results. Because the probability is smaller than (0.05), H0: PLS is rejected, and H1: FE is accepted, which means that the Fixed Effect Model regression results are better used.

Hausmann test

The Hausmann test was conducted to determine the best model between the Random Effect Model (REM) and the Fixed Effect Model(FEM).

Table 3. Hausmann test

	Coefficient		(b-B) Difference	Sqrt (diag(V_b- V_B)) S.E.
	(b) fe	(B) re		
X1	.0724911	.0723617	.0001294	-
X2	.0088762	.009851	-.0009748	.002059
X3	-.0004536	-.0006018	.0001482	-
X4	.0341051	.0296051	.0045	.003388

Test :
 Ho: difference in coefficients not systematic
 Chi2(4) = 2.15
 Prob>chi2 = 0.7081

It can be seen that the resulting probability value is 0.7081, which means it is greater than 5% ($0.7081 > 0.05$). So, it can be concluded that H_0 : Random Effect is accepted and H_1 : Fixed Effect is rejected, which means that the data held by the Random Effect Model is more suitable for use in this study.

Langrange Multiplier Test

The Langrange Multiplier (LM) test determines the best estimate, whether to use a random effect or not. This test is used to determine which model will be used; the basis for this test is the inconsistent results of the Chow model and Hausmann test. So, it takes the LM test to decide the best model (Ghozali, 2013).

H_0 : Common effect model, if p-value > significant level (α 5%)

H_1 : Random effect model, if p-value < significant level (α 5%)

Table 4. Langrange Multiplier Test

	Var	sd = sqrt(Var)
Y	4.416735	2.101603
E	.0184081	.01356765
U	5.03508	2.243898

Test :
 Var(u) = 0
 Chibar2(01) = 79.97
 Prob>chibar2 = 0.0000

Based on the results of the LM test that the significance or probability value of 0.0000 is more petite than Alpha 0.05 percent (<0.05), which means that it indicates that the best model or method to use is the random effect; therefore, based on the results of the LM test, this study uses the Random Effect Model.

Panel Data Analysis Results

Table 5. Results of Regression Random Effect Model

Y	Coef.	Std. Error	z	P> z	[95% Conf.Interval]	
X1	.0723617	.0153207	4.72	0.000	.0423336	.1023897
X2	.009851	.0119061	0.83	0.408	-.0134845	.0331865
X3	-.0006018	.0039301	-0.15	0.878	-.0083047	.0071011
X4	.0296051	.0140006	2.11	0.034	.0021645	.0570457
_cons	13.96189	.9506665	14.69	0.000	12.09862	15.82516
sigma_u	2.2438983					
sigma_e	.1356765					
rho	.99635735	(fraction of variance due to u_i)				
max	= 5					
Wald	= 27.90					
chi2(4)						
Prob>chi	= 0.0000					
2						

Based on the results of the random effect estimation above, in this method, the chi-square probability value of 0.0000 means that the independent variables have a significant effect on the dependent variable.

The results of regression equation above can be interpreted as follows: (a) Solvency ratio to Sukuk rating. The result of $\{p>|z|\}$ inflation is 0.000, meaning that $\{p>|z|\}$ is smaller than the value of 0.05. In addition, the t-test value is 4.72, while the t-test value for one-way testing is at a significance of 5% and df_{45} ($n-k$ is $50-5$) is 1.67943, then the t-test is greater than the t-table. The solvency ratio significantly affects the rating of Sukuk, or $H_{01}: \beta_1 = 0$ is accepted, and $H_{a1}: \beta_1 \neq 0$ is rejected. (b) The ratio of liquidity to the rating of Sukuk. The result of $\{p>|z|\}$ liquidity is 0.408, meaning that $\{p>|z|\}$ is greater than the value of 0.05. In addition, the t-test value is 0.83, so the t-test is smaller than the t-table. So that the liquidity ratio does not significantly affect the rating of Sukuk or $H_{02}: \beta_2 = 0$ is accepted, and $H_{a2}: \beta_2 \neq 0$ is rejected. (c) The ratio of profitability to Sukuk ratings. The result of $\{p>|z|\}$ profitability is 0.878, meaning that $\{p>|z|\}$ is greater than the value of 0.05. In addition, the t-

test value is -0.15, so the t-test is smaller than the t-table. So that the profitability ratio does not significantly affect the rating of Sukuk or $H03: \beta_3 = 0$ is accepted, and $Ha3: \beta_3 \neq 0$ is rejected. (d) Age of the company to the rating of Sukuk. The result of $\{p>|z|\}$ company age is 0.034, meaning that $\{p>|z|\}$ is smaller than the value of 0.05. In addition, the t-test value is 2.11, so the t-test is greater than the t-table. So that the company's age significantly affects the rating of Sukuk, or $H04: \beta_4 = 0$ is rejected, and $Ha4: \beta_4 \neq 0$ is accepted.

The Effect of Solvency Ratios on Sharia Bond Ratings

This study states that the solvency ratio proxied by the Debt to Equity Ratio (DER) has a positive and significant effect on the rating of Sukuk. The solvency ratio can be concluded that this ratio is measured by the obligations or debts of a company in fulfilling each of its long-term debt obligations or the company's ability to fulfil corporate responsibilities. For measurement, the Debt to Equity Ratio (DER) is used; in other words, this ratio is used to find out each rupiah of own capital used as collateral for debt which will affect the financing of Sukuk, whether using *ijarah*, *mudharabah*, *murabahah*, *salam*, *musyarakah*, and *istisnha* contracts. So, it is said that the larger the assets funded by debt, the higher the solvency ratio will impact the magnitude of the risk obtained. The results of this study support previous research conducted by Malia (2015), which states that the ratio with the DER proxy has a positive influence on bond ratings.

The Effect of Liquidity Ratio on Sukuk Ratings

The test results on the second hypothesis show that the independent variable (liquidity ratio), which is proxied by the Current Ratio (CR), states that the liquidity ratio has a positive but not significant effect on the rating of Sukuk. Adams et al. (1998) stated that a high level of liquidity would indicate the company's strong financial condition so that financially it will affect the prediction of Sukuk ratings. This research is in line with the research conducted by Astuti (2017), which states that the liquidity ratio proxied by the Current Ratio (CR) has a positive effect on the rating of Sukuk.

The Effect of Profitability Ratios on Sharia Bond Ratings

The test results on the third hypothesis show that the independent variable (profitability ratio) proxied by Return on Equity (ROE) affects the Sukuk rating. The profitability ratio measures how much profit the company gets from operating activities implemented. The greater the company's profit, the company's ability to pay its short-term and long-term obligations, so that later it can affect the Sukuk rating that will be given. This study is in line with research conducted by Pranoto (2015) which states that the profitability ratio proxied by Return on Equity (ROE) has a significant adverse effect on the rating of Sukuk.

The Effect of Company Age on Sharia Bond Rating

The test results on the fourth hypothesis (H4) show that the independent variable (company age) has a positive and significant effect on the rating of Sukuk. Widiastuty (2017) says that the length of the company's life will not guarantee a high rating of Sukuk. Therefore, companies must continue to pay attention to asset management so that all debts owed can be paid off. It can be concluded that the old age of the company does not necessarily get the highest rating, and vice versa. Therefore, companies that are not old enough can still get a high Sukuk rating because the company can manage its assets well. That is different from the research conducted by Kusbandiyah and Wahyuni (2017), which states that firm age has no significant effect. Significant to the rating of Sukuk.

Conclusion

From the results of the tests carried out, several conclusions can be drawn as follows: (1) The results of the solvency ratio research carried out using the DER measuring instrument on the rating of Sukuk show that the solvency ratio has no adverse effect on the rating of Sukuk. So, it can be concluded that the first hypothesis (H1) is rejected. (2) The results of research on liquidity ratios that have been carried out using the Current Ratio (CR) measuring instrument on the rating of Sukuk show that the liquidity

ratio has a positive but not significant effect on the rating of Sukuk. So, it can be concluded that the second hypothesis (H2) is rejected. (3) The results of the profitability ratio research that have been carried out using the Return on Equity (ROE) measuring instrument on the rating of Sukuk indicate that the profitability ratio has a negative effect on the rating of Sukuk. So, it can be concluded that the third hypothesis (H3) is rejected. (4) The research results on the age of the company that have been carried out on the rating of Sukuk show that the age of the company has a positive effect on the rating of Sukuk. So, it can be concluded that the fourth hypothesis (H4) is accepted.

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