How Are Investors Attracted to Islamic Companies in Indonesia? Study on The Effect of Leverage, Liquidity, and Profitability on The Rating of *Sukuk*

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Abstract. *The rating of Sukuk becomes the reflection of the capital markets' activities. The better rating of Sukuk, the more investor is interested in purchasing a Sukuk. This study aimed to examine the effects of leverage, liquidity, and profitability on Sukuk's rating. The technique of data analysis employed was ordinal logistic regression. The research result revealed that the leverage and liquidity affected the Sukuk. Meanwhile, the profitability did not affect the rating of Sukuk. The test result simultaneously showed that the leverage variable and liquidity affected the Sukuk rating. Overall, this study's research result supported the previous research that discovered the impacts of leverage and liquidity variables on Sukuk's rating. The implication is that companies should improve their leverage and liquidity performance to improve the bond rating.*

Keywords: *leverage, liquidity, profitability, sukuk*

JEL Classifications: G1

Abstrak. *Rating sukuk menjadi salah satu cerminan kegiatan di pasar modal. Semakin baik rating suatu sukuk, investor akan semakin tertarik untuk membeli. Penelitian ini bertujuan untuk menguji pengaruh leverage, likuiditas, dan profitabilitas terhadap rating sukuk. Teknik analisis data yang digunakan ialah regresi logistik ordinal. Hasil penelitian menunjukkan bahwa leverage dan likuiditas berpengaruh terhadap rating obligasi syariah. Sementara itu, variabel profitabilitas tidak berpengaruh terhadap rating obligasi syariah. Semakin tinggi leverage dan likuiditas suatu perusahaan, maka semakin baik rating obligasinya. Hal ini berimplikasi pada kebijakan perusahaan untuk memperbaiki kinerja leverage dan likuiditasnya sehingga mampu meningkatkan rating obligasinya. Hasil uji simultan menunjukkan bahwa variabel leverage dan likuiditas berpengaruh terhadap rating obligasi. Secara keseluruhan, hasil penelitian ini mendukung penelitian-penelitian sebelumnya yang menunjukkan adanya pengaruh variabel leverage dan variabel likuiditas terhadap rating obligasi syariah.*

Kata Kunci: *leverage, likuiditas, profitabilitas, rating obligasi syariah*

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Introduction

One of the constraints faced by companies in Indonesia to expand the business activities was dealing with funding. The resource funding of a company consists of internal and external funding. The root of internal funding may be from the remaining operational profit. This resource is such the most accessible alternative funding at an inexpensive cost. If the internal funding were not available, the financial manager would try to seek other funding obtained from the external sources by issuing a debenture or stocks in a capital market (Raffestin, 2017; Najeeb et al., 2017). Meanwhile, deciding on using a specific funding source is one of the most important financial management (Honková, 2015; Reboredo & Naifar, 2017; Smaoui et al., 2020).

Issuing securities through the capital market makes the Indonesian stock exchange significantly grew from IDR 2.73 billion in 1977 to IDR 6,870.7 trillion in 2018. This data was also supported by investors' business activities, which reached 43 thousand investors per day (Arief, 2018). Aside from the trading volume, which was significantly increasing, the type of securities held for trading in the stock exchange is also developing. Indonesian Stock Exchange Inc. (BEI) has commenced a capital market, particularly for sharia investment, part of sharia finance. One of the sharia products that attract investors is Sukuk. Sukuk has a significant potential to evolve as innovative Islamic financial instruments that obey the sharia principles (Ahmed et al., 2014; Haji Wahab & Naim, 2020; Zakaria et al., 2012a).

The issuance of Sukuk in Indonesia had embellished the capital market, starting in 2002 and placed as the second biggest in East Asia (Pribadi & Wibowo, 2019; Wilson, 2008). The emission of Sukuk in Indonesia is always increasing from time to time. In 2011, the total emission of Sukuk was as significant as 791.5 billion. While in 2017, the total reached 18.260 billion or increased as big as 130,69% since 2011. The average increase in the total emission of Sukuk in Indonesia was as significant as 15,26%. This condition reveals the higher demand for Sukuk in Indonesia. The following is the data on the growing emission of Sukuk in the past several years.

Figure 1. The Growth of Emission of Sukuk in Indonesia
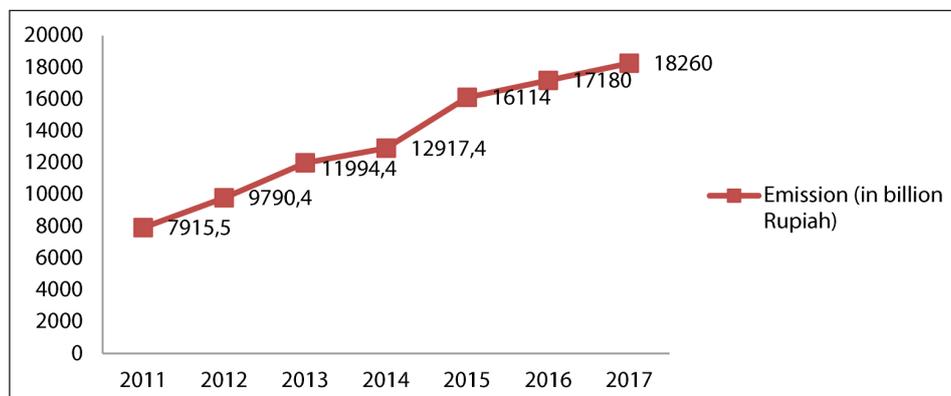
Source: Data managed by the researcher (2020)

One of the guidelines in making an investment decision is on Sukuk's rating, which can categorize into investment and non-investment ranking (Melzatia et al., 2019; Zakaria et al.,

2012a). Information related to Sukuk's ranking becomes essential as it provides informative statements and signals the probabilities of default risk. The better the ranking of Sukuk, the higher the rating's publisher's capability in paying their debts off (IBPA, 2010).

Although the ranking can use as the investors' reference to choose the Sukuk, it was not absolute. There is a doubt in Sukuk's ranking if a company label with grade investment faces a default risk as happened to PT Mobile-8 Telecom Tbk. That issued Bond I Year 2007. This company experienced a default risk two times for the coupon of 15 March 2009 and 15 June 2009 with a significant rating of Rp 675 billion, which was due in March 2012 (Baswir, 2010). Per June 2008 and 2009, the ranking of PT Mobile-8 Telecom Tbk's rating in Indonesia Bond Market Directory was idBBB+. Per June 2010, the ranking downgrade to idD.

Several methods measure the company performance in the Sukuk ranking lenses, such as leverage, liquidity, and profitability (Nagano, 2016)(Lai et al., 2017). Leverage shows a warranty given to a self-fund upon the debt received by a company, and it can read as the comparison of funding between the foreign parties and the company's, which include in the company (Renaldi et al., 2020). The leverage ratio measures the capability of a company to fulfilling the long-term obligation. The higher the ratio, the bigger the risks faced by the investors. Thus they expected high return.

Liquidity demonstrates a company's competence in accomplishing the short-term financial obligation on time (Pebruary, 2016). Companies with small liquidity levels consider not-liquid to reduce the company's value and impacts the investors' lack of interest to invest in that company as the immense obligation of debt (Rely & Arsjah, 2018). The higher the liquidity ratio, the Sukuk rating will be better. A company with high current assets shows its better capability in paying the debts off (Hanafi, 2004).

Profitability measures how big a company's capability in earning profits, whether in the extent to trading, assets, and profit for self-funding (Barakat, 2014). The profitability ratio measured by return-on-assets positively influences the increase of profit as this ratio measures the capability of a company to earn the net profit according to a particular asset's level (Sejati, 2011). When the profit of a company is high, the rank of the Sukuk will remain respectively high.

Researchers had carried out research related to financial performance factors and their influence on bond rating in Indonesia. Meanwhile, research that focuses on the rating of Sukuk is still limited. Pebruary (2016) found that the ratio of profitability, liquidity, and leverage had a significant effect on Sukuk's rating. Arisanti et al. (2014) find that liquidity had a significant effect on Sukuk's rating. Meanwhile, Pranoto et al. (2015) find that profitability did not significantly influence Sukuk's rating.

Other studies related to the Sukuk do not focus on the rating of Sukuk. Bhuiyan et al. (2018) compare the Sukuk with conventional bonds from an advantage perspective. The study finds that the Sukuk market offers sufficient portfolio diversification opportunities for fixed income investors of the mentioned sample countries. In his writing on the Sukuk, Saad et al. (2016) explained that monitoring role and voting rights decisions by owning broad ownership of shareholding in the company has a relationship with Sukuk issuances default risks for conventional bonds. Likewise, Ahmed et al. (2014), in his research-highlighted Sukuk in terms

of its advantages compared to bonds, the advantage of Sukuk is that they are compliant with shariah principles. Sukuk is, therefore, attractive investment instruments for Islamic financial institutions, shariah managed funds, and takaful Islamic insurance companies that cannot invest in conventional securities that involve payment of interest or riba (Ahmed et al., 2014).

Melzatia et al. (2019) looked at the rating of Sukuk from the agency theory. The result indicates that the audit committee has a significant positive effect on Sukuk ratings, while the board of commissioners, institutional ownership, income smoothing, profitability, and asset growth has no significant effect on Sukuk ratings. In Malaysia's research, financial leverage negatively relates to financial measures and Sukuk's rating (Elhaj et al., 2015). Zakaria et al. (2012b) highlight from the perspective of the importance of the Sukuk rating. A Sukuk may promote default risk as a Sukuk also needs to undergo a credit rating assessment of its future payment prospects. Even though Sukuk issuance comes together with asset security, any negative migration of the credit rating assessment would indicate default risk.

The research above notes that few studies on the rating of Sukuk and the financial performance factors and any study found a different result for each other. Therefore, this paper wants to complement and re-examine within Indonesia's scope, with a period of 2015 - 2019, and with a broader sample, namely, 150 companies, taken thirty companies for one year, both in the corporate and financial sectors. This paper directs his study on leverage, liquidity, and profitability on the Sukuk rating in Indonesia.

Methods

This research is quantitative research with an associative approach that combined two or more variables such as independent variables comprising leverage (X1), liquidity (X2), and profitability (X3) and a dependent variable that is a rating of Sukuk (Y). This study's analysis technique consisted of two, as explained in the following: first, descriptive statistical analysis, calculating mean, minimum, and maximum standard deviations from each independent variable. Second, the hypotheses testing by using an ordinal logistic regression test. Ordinal logistic regression is one of regression analysis used to analyze the relationship between response and predictor variables, in which the response variable is polychotomous within ordinal scale. In this research, the logistic regression test conducts to determine each independent variable's effects on dependent variables. This logistic regression does as the dependent variable is of ordinal scale, while the independent variable uses a ratio scale. The ordinal regression model used in this study is a model by Ghozali, as stated in the following (Ghozali, 2013).

Logit $(p_1 + p_2 + \dots p_5) = \log = \alpha_1 + \beta'X$

Logit $(p_1 + p_2 + \dots + p_4) = \alpha_1 + \beta_1 LE + \beta_2 CACL + \beta_3 NPATA$

Explanation:

P: the probability ranking of sukuk AAA=1, AA=2, A=3, BBB=4, BB=5

LE: Liability/equity

CACL: Current asset/current liabilities

NPATA: Net profit after tax/Asset

Steps of ordinal logistic regression analysis in this research comprise several parts: first, conducting an independency test between predictor and response variables with hypotheses as follows:

H_0: the relationship of variable Y and X toward-i is independent (free to each other)

H_1: the relationship of variable Y and X toward-i is dependent (not-free to each other).

Second, an ordinal logistic regression test conducts partially by engaging all predictor variables. Third, conducting an ordinal logistic regression test simultaneously by engaging predictor variables influential in the partial test stage. Fourth, conducting a model-fit test. Fifth, conducting a model-propriety test.

The population in this study comprises the companies that issued Sukuk on the Indonesian Stock Exchange (BEI), which were ranked by PEFINDO Inc. as big as 150 companies. The research sample was collected using non-probability sampling. Cook explained that non-probability sampling is a sampling technique without giving any probability or opportunity for each of the population to be chosen as the sample (Cook & DeMets, 2007).

Result and Discussion

The result of descriptive statistics reveals that the score of Sukuk's rating, leverage, liquidity, and profitability shows in Table 1. Table 1 shows that the minimum score was 0.150000; the maximum score was 25.00000, with an average of leverage as significant as 3.057586 and a standard deviation as big as 4.061928. Based on this data, the significant difference is between the lowest and highest leverage scored between 0.150000 and 25.00000. These scores showed that leverage increase.

Table 1. The Result of Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Leverage (X1)	150	0.150000	25.00000	3.057586	4.061928
Liquidity (X2)	150	0.010000	2.390000	1.143793	0.617911
Profitability (X3)	150	-0.130000	11.14000	1.707076	2.596001
Rating of sukuk (Y)	150	1.000000	4.000000	1.937931	0.883653
Valid N (listwise)	150				

Source: Data managed by the researcher (2020)

The minimum score of liquidity was as big as 0.010000, while the maximum score was 2.390000, with average score (mean) liquidity as significant as 1.143793 and a standard deviation 0.617911. According to this data, the significant difference lied between the lowest and highest liquidity ranging from 0.010000 to 2.390000. This result shows that the score of standard deviation was below the average of liquidity. This result means that the data variation or data deviations are considered little. The minimum score of profitability is -0.130000, and a maximum score is 11.14000, with an average profitability of as significant is 1.707076 and a standard deviation of 2.596001. It shows a significant difference between the lowest and

highest profitability level ranging from -0.130000 to 11.14000. This score implies an increase in profitability.

The minimum score of Sukuk's rating was 1, while the maximum score was 4, with the average score of Sukuk's rating as big as 1.937931 and a standard deviation of 0.883653. According to this data, the significant difference between the lowest and highest Sukuk ratings, ranging from 1 to 4. This score implies the increase of Sukuk's rating and generally shows the growing interest of investors towards the capital market. According to the data, the standard deviation was still under the mean score of Sukuk's rating. The data revealed that the data variation or data deviation is considered small.

The result of the independency test between predictor and response variables shows in Table 2. The followings are the result of the independence test between predictor and response variables shown in Table 2. The independency test result showed that the p-value from the three variables was 0,000, which is less than the significant level of 5%. Therefore, it states that the three-predictor variables are related to the predictor variables. Meanwhile, if comparing each X2 count in each variable with X2 (0,05, df=252) = 290,0285, it can be concluded that the three predictors have a connection (not free to each other) towards the response variable.

Table 2. Independency test of predictor and response variables

Variables	Chi-square test statistics	P-Value	Decision	Explanation
Leverage	379.75	0.000	H_0 is rejected	Dependent
Liquidity	366.18	0.000	H_0 is rejected	Dependent
Profitability	299.64	0.000	H_0 is rejected	Dependent

Source: Data managed by the researcher (2020)

The following stage was conducting the ordinal logistic regression partially by engaging all predictor variables with the result that show in Table 3. Referring to Table 3, it can reveal that some variables are significantly affecting the predictor variables, which is leverage (X1) with p-value 0.001 and liquidity (X2) with p-value 0.00. On the other hand, the profitability variable gains a p-value as significant as 0.127. This number is bigger compared to the level of significance, which is 5%. Therefore, it can conclude that the profitability variable (X3) did not affect the Sukuk variable (Y). According to the result of the partial test above, it decides that the variables that are worth the next simultaneous ordinal regression test are leverage (X1) and liquidity (X2) variables towards the rating of Sukuk (Y).

Table 3. The Result of Partial Test

Variables	Estimation	Wald	P-value
Leverage	0.131	10.201	0.001
Liquidity	1.414	23.352	0.000
Profitability	0.097	2.325	0.127

Source: Data managed by the researcher (2020)

Table 4 shows the result of the simultaneous ordinal logistic regression test on predictor variable that consists of leverage (X1) and liquidity (X2) towards the response variable that is the rating of Sukuk (Y). The simultaneous test results that engaged leverage and liquidity show that both variables have p-value 0.002 and 0.00. This number is lower than the significant level, which decides that it is 5%. This result means that leverage (X1) and liquidity (X2) variables have significant impacts on the variable of the rating of Sukuk (Y). The simultaneous test also reveals whether the model has been significant according to the response variables' influential factors.

Table 4. The result of the simultaneous test

Variable	Estimation	Wald	P-value
Y=1	1.621	13.794	0.000
Y=2	3.04	38.82	0.000
Y=3	6.124	71.382	0.000
Leverage	0.131	10.201	0.002
Liquidity	1.414	23.352	0.000

Source: Data managed by the researcher (2020)

According to Table 5, it can reveal that the result of the simultaneous test showed a significant value as big as 6.88051E-07. This value is bigger than the significant level decided that is 5%. Therefore, it could decide that H0 rejects, which means that the coefficient β is significant towards the ordinal logistic regression model.

Table 5. Ratio Likelihood Test

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	355.5840769			
Final	327.2052701	28.3788	2	6.88051E-07

Source: Data managed by the researcher (2020)

The following Table 6 reveals the result of the model-fit test. The model-fit test result can state that the analysis result is suitable for the empirical data and is proper to use. The result in Table 6 shows the model-propriety test with Pseudo R-square. The value of the McFadden determination coefficient showed value as significant as 1. Meanwhile, Cox and Snell's determination coefficient value showed a value of 0.907, and the Nagelkerke determination coefficient as significant as 1. The value of the Nagelkerke determination coefficient, which reached 1 or 100%, implies that leverage (X1) and liquidity (X2) 100% affected Sukuk's rating.

Table 6. The Result of Model-fit Test

D	Chi-Square	df	Sig.
Pearson	494.061	280	0.000
Deviance	327.205	280	0.027

Source: Data managed by the researcher, 2020.

Table 4 shows that leverage (X1) and liquidity (X2) variables impact Sukuk's rating, with each p-value as significant as 0.001 and 0.00. Meanwhile, the profitability variable did not affect Sukuk's rating with a p-value as big as 0.127. Leverage affecting the rating of Sukuk. This result is in line with a theory proposed by Jiang et al. (2012) and Elhaj et al. (2015), which stated that ratio leverage (debt-equity ratio) measures a company in completing its long-term obligation as the ratio is getting higher. Therefore, it will make the risks faced by the investors became higher than before. As a result, they expected a high profit.

Moreover, it will have an impact on the rating of Sukuk. The higher the risk, it will make the rating of Sukuk became lower than before. High ratio leverage implies the extensive use of debt in a company, which at the same time, will elevate profitability. On the other hand, a high debt would likely raise the riks. If a company gained profit in an adequate level of sales, assets, and capital, the profitability ratio would be high. This result shows that a better efficiency and effectiveness of managing assets would be good for Sukuk's rating.

This research is in line with the previous research which was conducted by Godlewski et al. (2013), Alam et al. (2013), and Ahmad et al. (2012), which states that the performance of a company shows through its debt ratio (debt to equity ratio), the bigger the ratio, the bigger the dependency of a company towards the debt. This condition was unfavorable if a company is relying on debt. Leverage significantly affects Sukuk's rating as it is one of the financial ratios that consider as an accountancy factor that influenced the rating of Sukuk. Besides, a company's debt is lower than equity, so a company tends to have a high capability to fulfill its obligations. A company with high leverage tends to have a current ratio and acid test ratio lower than companies with low leverage (Kaya, 2014).

The liquidity variable gives impacts on the rating of Sukuk. According to Hanafi (2004) and Halim et al. (2019), liquidity measures whether a company has a capability in returning the debt in the short-term (the due is less than a year / < 1 year) by using current assets. Hence, the lower the ratio shows low short-term liquidity, and vice versa, the higher the ratio, the more the current assets are (high liquidity and low risk). Low risk means a strong influence on the rating of Sukuk. This study is relevant to the mentioned theory. If the liquidity of a company is high, respectively, the rating of Sukuk is high. This condition is because a company can fulfill its short-term obligation appropriately, which would likely impact a better accomplishment on its long-term obligation (Azmat et al., 2014).

Companies that have high liquidity means that the current assets are more significant than the current debts. Therefore, if someday there is an alteration of economic or financial conditions, the current assets can be used to fulfill the obligation of a company related to the due date's obligations. The liquidity level directly affects the rating of Sukuk at that time. Low liquidity depicts that a company cannot fulfill its current obligations appropriately when a due date impacts the poor financial condition of a company. Liquidity ratio is most of the time used to evaluate the risks as the liquidity ratio demonstrates a company's ability to pay off its short-term obligations (Hamdan et al., 2020). Hence, knowing the liquidity ratio can be decided on how big a company may face risk. Sukuk is a debenture which uses sharia

contract. Therefore, if an investor purchases a Sukuk of a company that issued the Sukuk, the investor will see a company's capability to return their obligation. A company must maintain its current ration to be within acceptable boundaries, particularly by the investor. That is why liquidity significantly affects the ranking of Sukuk in Indonesia (Pebruary, 2016).

The profitability variable in this research did not show insignificant results in the rating of Sukuk. The profitability ratio measured by return on assets has no implications on the growth of profits as this ratio measures a company's ability to earn a net profit based on a certain level of an asset. According to Azmat, profitability ratio measured by return on the asset would generate a view on the management in controlling the expenditure effectively to gain high profit maximally (Azmat et al., 2014). As this ratio measures a company's capability to earn a net profit according to a certain level of an asset, the higher the profitability o a company, the lower the risk of a dishonor. Thus, the ranking of Sukuk may get higher.

Profitability is information on the profit level achieved by a company. The information gives an insight into the external parties in terms of the operational effectiveness of a company. The financial report arranged by control and strict supervision would minimize the distortion and depict a company's real condition (Elhaj et al., 2015; Widani & Bernawati, 2020). This condition can be a concern for a company. Information on profitability consisted of the financial report can be legitimately useful for the investors and the Sukuk ranking agency to decide to invest and awards Sukuk's ranking.

Conclusion

The partial test result showed that the leverage and liquidity variables affected the rating of Sukuk issued by the Indonesian Stock Exchange. However, the partial test did not prove that the profitability variable impacted the rating of Sukuk. After undergoing the simultaneous test, it reveals that leverage and liquidity are concurrently affecting Sukuk's rating. This research showed that the increase in leverage and liquidity would escalate the rating of Sukuk. Leverage and liquidity affected the rating of bonds. This condition creates an implication to the companies that are maintaining their leverage and liquidity performance. The leverage ration that is leveling up would impact the increase of the rating of bonds. This result implied a company that suggests choosing to fund derived from debts rather than equity. Besides, this study implies that the company should increase its liquidity ratio so that Sukuk's rating is getting better. It means that a company is better at increasing its current assets and pushing on its fixed asset to maintain liquidity growth. The higher the current asset, it will make a company's capability to pay its obligation of Sukuk bigger than before, both in the form of interest and the number of Sukuk. This result is responded by the higher of the rating of Sukuk received by a company.

The result gives implication to the parties. This result is essential for investors to consider when investing. They are not only known about financial ratios and accounting factors, such as leverage and liquidity. They are also required to pay attention to non-accounting factors, business risks, and others. This study indicates that profitability did not affect the company is the rating of Sukuk. Besides, the results provide an evaluation

note for issuers that Sukuk's rating is essential as a reflection of the quality of the company's financial performance. Therefore, they are required to pay attention to the condition of a company's internal and external factors. With the better, the companies' ratings of Sukuk will increasingly provide the right image for strengthening the Islamic securities market's development in Indonesia.

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