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Financial Ratios and These Effects Toward Sukuk Yield with Sukuk Risk as a Mediator Variable

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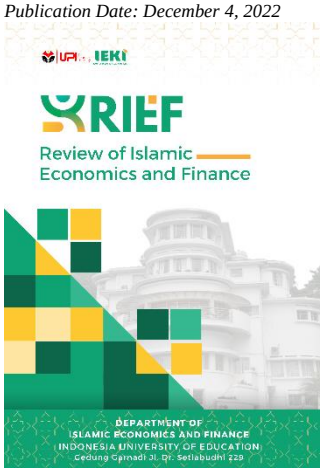

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Abstract

Purpose *- This study aims to demonstrate the impact of financial ratios on* sukuk *yield using* sukuk *risk as a mediator variable.*

Methodology *- This study focused on corporations in general and employed path analysis and the Sobel test. The secondary data used for this study spans the years 2017 through 2019, with a total of 33* sukuks *still outstanding for each year.*

Findings *- According to the study's findings, corporate liquidity has little bearing on* sukuk *yield or risk. Corporate leverage, meanwhile, has a positive impact on* sukuk *yield and a negative one on* sukuk *risk. Furthermore, whereas* sukuk *risk cannot mediate the impact of corporate liquidity on* sukuk *yield, it can mediate the impact of corporate leverage on* sukuk *yield. The research's implication is that it is not necessary to avoid taking on larger* sukuk *risk in order to raise company leverage by boosting capital structure.*

Keywords: sukuk *Yield,* sukuk *Risk, Financial Ratios, Path Analysis, Sobel Test.*

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1. INTRODUCTION

Corporate sukuk is still an instrument with a large market share in the world. In Indonesia itself, corporate sukuk becomes one of the Islamic financial industries that has increased every year. This growth has been ongoing since the issue of the fatwa DSN-MUI Number: 32/DSN-MUI/IX/2002. Until now, other companies have also issued corporate sukuk in the capital market.

Corporate sukuk in Indonesia is also a supporting instrument, which makes Indonesia the top rank in terms of leadership and its potential in global Islamic banking and finance in 2019, based on the results of the global Islamic finance report (GIFR). This is an achievement considering Indonesia ranks sixth after Qatar in 2018.

On the other hand, sukuk trading in the secondary market in Indonesia is still low compared to conventional bonds. This is based on the Sharia Capital Market Development report released by the Financial Services Authority (OJK) in 2019 that, out of a total of 748 securities issued, corporate sukuk only contributed 16.04%. This figure is still well below conventional bond issuance reaching 83.96% or 628 bonds.

The three foundations that become the investor's decision to invest are the expected return performance, the level of risk and the form of the relationship between risk and return, so that sukuk performance should be in line with the risk profile and return on the side of investors and sukuk issuers (Utami & Rohmana, 2019). Therefore, a person's decision to conduct investment activities is not far from the risk and return that he or she will receive.

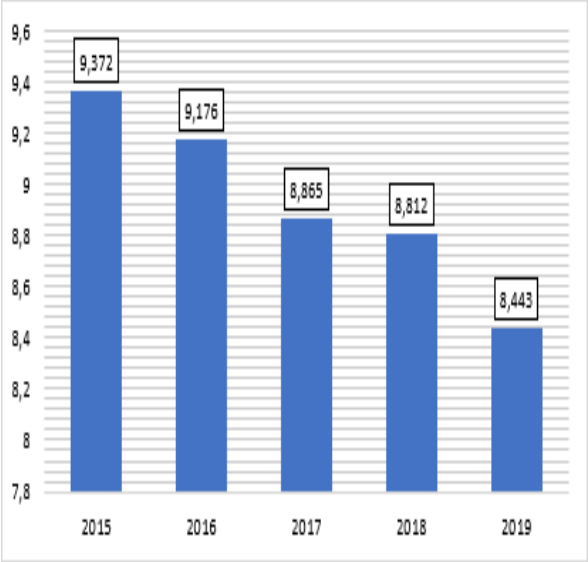

Figure 1. The Average sukuk Corporate Yield in Indonesia 2015-2019
Source: Indonesia Bond Pricing Agency (2020)

Based on figure 1 shows the data obtained from PT. Indonesian Securities Price Assessor (2020), that corporate sukuk returns in Indonesia in 2015 to 2019 decreased each year. sukuk yields decreased in 2015 and 2016 was 0.196, which was originally from 9,372 in 2015 to 9,176 in 2016. Meanwhile, in 2017, it decreased sharply by 0.311 to 8,865. The yield also fell by 0.053 in 2018 to 8,812. Then in 2019, the corporate sukuk yield fell by 0.369 to 8,443.

The data which presented above indicates that investing in corporate sukuk is not optimal, whereas since 2002 companies that publish corporate sukuk are increasingly emerging. The fact that the capital market in Indonesia (IDX) in this case sukuk corporation is less in demand for investors. Modern portfolio theory also explains, where investor's structure portfolios to maximize expected returns on a specific market risk level basis while still realizing that risk is inevitable when looking for high returns or returns.

Sukuk's use for the company is as a funding strategy for its operational activities (Noviana & Solovida, 2018; Saad, Hanif & Ali, 2020). The funds collected from sukuk are used for the business development of the company other than the company's internal funds or from bank loans (Said & Grassa, 2013). Thus, if investor interest in sukuk is less due to consideration of the level of risk and low sukuk yield, it will reduce the collection of funds for the company itself and the company is difficult to expand or expand its business because it needs to seek the collection of funds from other sectors or from its own business.

Based on the statement of the Ministry of Foreign Affairs (2015), the company needs to reconsider the level of risk and return it received before investing, including the systemics it used. Moreover, sukuk itself can be exposed to risks as well as conventional bonds especially because of the young age of sukuk in Indonesia.

Although the product is in accordance with sharia principles, it is also worth remembering that it does not mean that sharia financial products are free of risk. Like other sharia investment products, sukuk instruments are also not separated from the possibility of having various investment risks (Bachtiar, Risza & Naomi, 2018). Therefore, before investing in sukuk should investors understand what the various risks of investing in sukuk are because the risk itself comes unexpectedly, as in the word of God mentioned in the Qur'an Surah Luqman verse 34.

Capital-seeking companies that are sukuk issuers themselves need to pay attention to what factors affect sukuk yields and sukuk risk as mediator variables against sukuk yields. According to signalling theory that financial statements can give signals from the company to investors (Yesuf, 2016). Thus, the financial condition of sukuk issuing companies reflected by the financial ratio will signal to investors how the quality of the yield or risk of sukuk issued.

As for some studies that explain the effect of financial condition factors on yield. According to Ejsing, Grothe, M. & Grothe, O. (2012) and Chen, Liao & Tsai (2011), liquidity has a negative significant influence on bond yields. However, Nashikkar, Subrahmanyam & Mahanti (2011) shows a positive influence between liquidity and yield. Meanwhile, research conducted by Hamida, Zakaria & Aziz (2014), Noviana & Solovida (2018), and Merdad, Hassan & Hipler (2015) stated that there was no significant effect of liquidity on yields.

Hamida, Zakaria & Aziz (2014), Noviana & Solovida (2018), and Merdad, Hassan & Hipler (2015) explained that leverage has a negative influence on yield. As for your research Melzatia & Doktoralina (2018) and Che-Yahya, Abdul-Rahim & Mohd-Rashid (2016) show a positive relationship between leverage and yield. On the other hand, research conducted by Nasir & Farooq (2017) and Shalhoob (2018) stated the absence of leverage influence on yields.

Liquidity analysis of sukuk and bond risks has also been extensively researched. Based on He and Xiong (2012), Nashikkar, Subrahmanyam & Mahanti (2011), and Ariff, Chazi, Safari & Zarei (2017) stated that liquidity has an influence on risk. However, Braouezec and Lehalle (2010), stated that there is no influence of liquidity on risk.

Other research conducted by Wang, Zhou H. & Zhou Y. (2013) and Asness, Frazzini & Pedersen (2018) shows the influence of leverage on risk. Financial leverage is a ratio that reflects

the risk factors faced by investors. Leverage alone shows how much percentage of debt is used by companies to finance investments against existing capital. However, Braouezec and Lehalle (2010), Hamida, Zakaria & Aziz (2014) and Kamarudin, Kamaluddin, Manan & Ghani (2014) showed that leverage has no influence on risk.

Finally, risk on yields conducted explained in the research by Bachtiar, Risza, & Naomi (2018), Ejsing, Grothe, M. & Grothe, O. (2012) shows a positive effect of risk on bond yields. While according to Noviana and Solovida (2018), and Yesuf (2016) there is a negative relationship between risk and yield. However, research conducted by Shalhoob (2018) showed no effect of risk on yield.

Based on the research gaps above, the writer suggested for the title on thi research is" Financial Ratios and These Effects Toward sukuk Yield with sukuk Risk as a Mediator Variable". This research was compiled to find out how the effect of financial ratios namely corporate liquidity and corporate leverage on sukuk yields and sukuk risk. In addition, it was also analyzed whether sukuk risk mediates both financial ratios to sukuk yields.

2. LITERATURE REVIEW

2.1. Investment and Capital Market

Investment is a commitment to a number of funds or other resources made at this time with the aim of obtaining a number of greater profits in the future (Elton, Gruber, Brown & Goetzmann, 2014). One of the facilities of investing activities is with the capital market. The capital market consists of primary and secondary markets. The primary market is important for obtaining new capital and relies on the supply of funds, while the secondary market contributes significantly by facilitating the trading of existing valuable assets/shares (Godlewski, Turk-Ariss & Weill, 2013).

2.2. Investment and Sharia Capital Market

Investment in Islamic economic countries according to Metwally should not contain elements of speculation or gambling (maysir), riba, gharar, ikhtikar funds. In addition, in Islamic investment is not seen as related to the ups and downs of interest rates (Afshar, 2013). Islamic financial institutions provide investment and production funds for companies through non-riba financing agreements mudharabah and musyarakah. Mudharabah, musyarakah, and wakalah contract are the basis for sukuk in its operational mechanism (Ahmad & Radzi, 2011).

One of the means of investment is the capital market. The capital market itself is called the stock exchange, which is currently distinguished into conventional capital markets and Sharia capital markets. The basis used in sharia capital markets is the original law of muamalah which states that, "basically, all forms of muamalah can be done unless there is evidence that forbids it". Thus, Sharia capital markets currently use the concept to make development and innovation in the era, by withdrawing existing and supportive commitments, as well as restrictions on not violating the nash that forbids it.

2.3. Corporate Sukuk

Sukuk (صُكُوْك) is a plural form of sakkun (صَك), which means money recognition letter, bank cheque, sukuk means document, charter, deed (Hardini & Giharto, 2012). Sukuk invetation is a certificate of equal value representing an undivided share of the ownership of tangible assets, benefits and services rights or (in asset ownership) of a particular project or investment activity that has been carried out (Accounting and Auditing Organization for Islamic Financial Institutions, 2017).

There are two types of sukuk agreements that are more often issued by the company (Yesuf, 2016):

1. Sukuk Ijarah
   Sukuk ijarah is the issuance of sukuk where the profit is based on the rental of goods which in sharia rents an item must pay to the person who gives the rent.
2. Sukuk Mudharabah
   Sukuk mudharabah is a sukuk issued with a mudharabah agreement in which one party as shahibul maal or who provides capital and the other party as a mudharib or who manages the business by providing energy.

2.4. Corporate Sukuk Theory

1. Modern Portfolio Theory
   In modern portfolios there are four steps in forming a portfolio namely security valuation, asset allocation, portfolio optimization, and performance measurement. Performance measurement can be seen from the financial condition of the company concerned (Bhuiyan, Rahman, Saiti & Ghani, 2019). In addition, modern portfolio theory looks at how financial asset portfolio management finds the best trade-off composition between risk and yield.
2. Signaling Theory
   The expectation of Signaling Theory according to Spence is to provide information about the quality or condition of the bonds, whether the bonds are potentially defaulted or not. One of these signals is shown by the company's financial statements. Thus, the financial statements can signal the quality of a bond or sukuk to investors (Aloui, Hammoudeh & Hamida, 2015).

   As for the example of signaling theory in islamic view, sukuk issuer companies publish financial statements that correspond to the actual financial condition of the company that is not exaggerated or falsified. In the Qur'an it is explained the belief in Surah Al-Anfal (no. 8) verse 27 (Hamida, Zakaria & Aziz, 2014).

2.5. Sukuk Yield

In the investment of bonds, income or return that will be obtained by the investor from the result of the placement of his funds on the bond is called yield. As an investment instrument, the change in the yield of bonds obtained by investors as the time has passed. While on the bond return is the interest rate or coupon to be paid (Naifar & Hammoudeh, 2016).

The yield to maturity (YTM) was taken as a estimate of sukuk yield in this study because it reflects the yield of the corporate sukuk obtained if the sukuk is owned until maturity, but while paying attention to coupons and market price as well as the sales price of the sukuk itself. The calculations and YTM are as follows:

$$YTM = \frac{C + \frac{F - P}{n}}{\frac{F + P}{2}}$$

2.6. Sukuk Risk

Risk is the possibility of loss of part or all of the investment, or in other words the actual return of an investment is not as expected. Risk can be measured by the standard deviation from the actual return against the expected return of a benchmark. High deviation standards indicate a high risk Kamarudin, Kamaluddin, Manan & Ghani (2014).

The direct and linear relationship to yield is explained in fiqh of al-ghunmu (profit) bi al-ghurmi (risk) i.e., the right to profit is comparable to the risk incurred in business cooperation (Nasreen, Naqvi, Tiwari, Hammoudah & Sah, 2020).

Shape index analysis can be used to evaluate sukuk rewards in investors who have received risk per unit Yesuf (2016) The sharpe index calculation formula is as follows:

$$S(x) = \frac{r_x - R_f}{\delta_x^2}$$

2.7. Corporate Liquidity

Liquidity is a company's ability to meet its financial obligations in the short term, or at the time it is billed. Meanwhile, liquidity from bonds shows how quickly investors can sell bonds without having to sacrifice their bond prices.

According to Covitz, that current ratio can explain the yield of bonds with a short period of time Chen, Liao & Tsai (2011). Current ratio is used to know the extent to which the company's current assets are used to pay off current debts (liabilities) that will be due/paid immediately. The current ratio calculation formula as follows:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities} \times 100\%$$

2.8. Corporate Leverage

Leverage includes debt of money and borrowing the need for cash sources to pay interest and loans Chen, Liao & Tsai (2011). Leverage itself becomes one of the risk factors and risk avoidance based on expected profit (Elton, Gruber, Brown & Goetzmann, 2014).

The amount of leverage of the company itself can indirectly have an effect on a country's economic growth. Economic growth alone can occur if there is an increase in the total value of goods and services produced. Therefore, if companies in a country find it difficult to develop their business and operational activities due to the company's high leverage ratio, it will lower the total value of goods and services produced, which also impacts the country's economic growth to be less than optimal.

One measure of leverage in the company is Debt to Equity Ratio. DER describes indicators of capital structure and financial risk, which is the comparison between debt and capital. The debt-to-equity ratio is as follows (Hamida, Zakaria & Aziz, 2014):

$$DER = \frac{Total\ Debt}{Total\ Equity} \times 100\%$$

2.9. Theoretical Framework and Hypothesis

The theoretical framework and hypotheses are shown below in Figure 2.

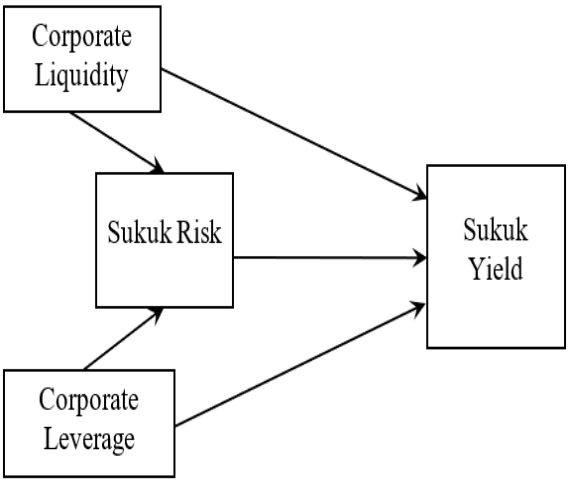

Figure 2. Theoretical Framework

2.10. Corporate Liquidity on Sukuk Yield

There is a negative relationship between the corporate liquidity to the sukuk yield the source of liquidity in the form of liquid assets is generally an asset that provides a lower yield than the cost of the funds incurred. This is because the secondary market plays an important role in ensuring liquidity and reasonable pricing in that market and provides important signals with regard to those securities. The liquidity and yield level of an asset is reflected in the value of the asset as measured by the market asset price.

Bond liquidity is reflected in the number of trading frequencies. Bonds that are often traded by investors and widely circulated in the bond market are bonds that have high liquidity. The higher liquidity causes the bond price to increase, causing risk and yield to decrease. Therefore, it can be formulated hypothesized in this study:

H1: Corporate liquidity has a negative effect on sukuk yield.

2.11. Corporate Leverage on Sukuk Yield

The negative relationship between leverage and yield was stated in the study of Hamida, Zakaria & Aziz (2014) i.e., the greater the leverage, the yield will decrease. It is shown that, the amount of debt that the company has will increase the risk of default.

The decrease in leverage from a company is likely due to the issuer's concerns about the high rate of inflation in the year which could lead to a rise in yields. Therefore, it can be formulated hypothesized in this study:

H2: Corporate leverage has a negative effect on sukuk yield.

2.12. Sukuk Risk on Sukuk Yield

According on the research of Bachtiar, Risza, & Naomi (2018) explain the positive correlation between risk and sukuk yields. This is because the risk must be manifestly inherent and inseparable from the securities product.

As for risk can increase yield and the absence of positive factors in it (Ejsing, Grothe, M. & Grothe, O, 2012). Therefore, if the risk of a sukuk is high, it will have an impact on high sukuk yields as well. Similarly, if the risk of a sukuk is low, then the yield is low. Therefore, it can be formulated hypothesized in this study:

H3: Sukuk risk has a positive effect toward sukuk yield.

2.13. Corporate Liquidity on Sukuk Risk

The liquidity of the company against sukuk risk has a negative relationship where, a company with good liquidity will potentially have a low default risk compared to a company with low liquidity because the high liquidity of a company demonstrates the ability of the company to generate sufficient funds reserves to meet all its obligations.

The negative effect of liquidity on risk is that a decrease in liquidity can lead to increased risk in bonds. This is because declining liquidity causes companies to suffer loss and have to spin off maturing debt. The capital holder must also bear the loss, when the maturing debt holder has been paid in full (He and Xiong, 2012). Therefore, it can be formulated hypothesized in this study:

H4: Corporate liquidity has a negative effect on sukuk risk.

2.14. Corporate Leverage on Sukuk Risk

The positive relationship between leverage and risk is explained by Noviana & Solovida (2018) Noviana that is, the higher the company's debt then the higher the risk that must be borne, because it will be related to the company's ability to pay off its debts.

If investors face constraints on leverage, then the portfolio market does not have the highest risk or sharpe ratio according to the expected profit prediction (He and Xiong, 2012). Therefore, it can be formulated hypothesized in this study:

H5: Corporate leverage has a positive effect on sukuk yield.

2.15. Sukuk Risk Mediates Corporate Liquidity on Sukuk Yield

Markowitz's theory states that investors structure their portfolios to maximize expected profits while remaining fully aware that risk is inevitable. Risk itself is inseparable from returns where in the management of a portfolio of financial assets find the best composition of trade-offs between

risk and yield. While the consideration of looking at the trend of risk and yield is derived from the observation and assessment of performance, namely financial performance.

The financial model is generally a consideration of a fixed position of risk avoidance to explain the uncertainty of the results (Elton, Gruber, Brown & Goetzmann, 2014). Therefore, it can be formulated hypothesized in this study:

H6: Sukuk risk mediates corporate liquidity on sukuk yield.

2.16. Sukuk Risk Mediates Corporate Leverage on Sukuk Yield

In classical financial models it is often considered a consistent position in avoiding risk. A number of studies conducted before Harry Markowitz released his theory that risk-taking models depend on how investors respond to risk (Elton, Gruber, Brown & Goetzmann, 2014). The investor themselves conducts a risk analysis that he obtains based on the results of data from financial statements published by the company.

On the other hand, companies with high leverage are more at risk due to the burden of large interest rates. The more debt injected into the capital structure, the greater the interest obligation and the higher the risk, while leverage itself becomes one of the factor risk and risk avoidance based on the expected profit Che-Yahya, Abdul-Rahim & Mohd-Rashid (2016). Therefore, it can be formulated hypothesized in this study:

H7: sukuk risk mediates corporate leverage on sukuk yield.

3. METHODOLOGY

The objects in this study consist of 4 variables namely sukuk yield as endogenous variable, sukuk risk as mediator variable, corporate liquidity and corporate leverage on corporate sukuk issuer as exogenous variable. Then, the subject in this study is a general corporate sukuk issuing company listed on the Indonesia Stock Exchange. The data in this study was taken from 2017 to 2019.

The method used in this study is quantitative research. While the type of data in this study is panel data or a combination of time series and cross section data which in this study took the data from several companies with a certain time.

In this study, using purposive sampling techniques where the population in this study is corporate sukuk with outstanding ijarah and mudharabah agreement in 2017 to 2019, while the sample in this study is sukuk that has been supported by data from PT. Indonesian Bond Pricing Agency and financial report of each sukuk issuing company. So, the final number of research samples is as many as 99 sukuk.

The analysis techniques used in this study are path analysis, which is to test the mediation hypothesis, and perform a procedure developed by Sobel (1982) known as the Sobel Test.

4. RESULTS AND DISCUSSION

4.1. Classic Assumption Test

Hypothesis testing in this study will use multiple linear regression analysis on both models. Nevertheless, it was first tested on whether there were deviations to the classic assumptions necessary to obtain a good regression model.

4.2. Normality Test

The normality test aims to test whether in regression models, disruptor variables or residuals have a normal distribution. There are 2 regression models analyzed in this study.

1. Regression Model-1
   Based on the normality test results Kolmogorov-Smirnov, the value of significance greater than probability value 0,05 or 0,056 > 0,05 then it can be concluded that the residual value in the regression model-1 is distributed normally.
2. Regression Model-2
   Based on the normality test results Kolmogorov-Smirnov, the value of significance greater than probability value 0,05 or 0,200 > 0,05 then it can be concluded that the residual value in the regression model-2 is distributed normally.

4.3. Multicolinierity Test

Multicoliniearity means the perfect linear relationship between free variables in the regression model. The term doublelinearity indicates the absence of more than one perfect linear relationship.

1. Regression Model-1
   Based on the observation of vif values, all independent variables in the regression model 1 are smaller than 10, while at the tolerance value shows the result of the value of each variable greater than 0,01. So, this model is stated not to occur multicolinearity.
2. Regression Model-2
   Based on the observation of vif values, all independent variables in the regression-2 model are smaller than 10, while at the tolerance value shows the result of the value of each variable greater than 0,01. So, this model is stated not to occur multicolinearity.

4.4. Heterocedasticity Test

Heterocedasticity test is used to see if there is variance uncertainty from one observation's residual to another. A regression model that meets the requirements is where there are variance similarities from residual one observation to another fixed observation or so-called heterocedasticity.

1. Regression Model-1
   The significance value of each independent variable in the regression model-1 indicates a greater yield compared to the probability value of 0,05. So, the regression model-1 has no heterocedasticity or model is stated homoskedasticity.
2. Regression Model-2

The significance value of each independent variable in the regression model-2 indicates a greater yield compared to the probability value of 0,05. So, the regression model-2 has no heterocedasticity or model is stated homoskedasticity.

4.4. Coefficient of Determination (R2)

The coefficient of determination analysist (R2) measures how far the model is able to explain variations in dependent variables. Determination coefficient values (R2) range from 0 – 1.

1. Regression Model-1
   The coefficient of determination on the regression model-1 shows 0,506 or 50,6%. It can be concluded that independent variables are able to explain their effect on sukuk yields of 50,6% and by 49,4% influenced by other variables. While the error value on the regression model-1 or e1 is 0,692 with the calculation of.
2. Regression Model-2
   The coefficient of determination on the regression model-2 shows 0,078 or 7,8%. It can then be concluded that independent variables are able to explain their effect on sukuk returns of 7,8% and by 92,2% influenced by other variables, or in other words the ability of independent variables in explaining dependent variables is very limited. While the error value in the regression model-2 or e2 is 0,96 with the calculation of $\varepsilon 1 = \sqrt{(1 - 0{,}521)}$.

4.5. Path Analysis

The data analysis results using path analysis are used to find data testing in the form of simultaneous path coefficients, individual path coefficients, direct and indirect influence on variables namely corporate liquidity, corporate leverage on sukuk returns through sukuk risk. Here's the results of the data path analysis using the SPSS 22 application.

4.6. Simultaneous Path Coefficient

1. Regression Model-1
   Based on the output result of SPSS 22, the sig value is 0,000. Because of sig value. smaller than the probability value of 0,05 or 0,000 > 0,05, then in accordance with the basis of decision-making in the F test it can be concluded that the corporate liquidity variables, corporate leverage, and sukuk risk simultaneously affect sukuk yield.

   Simultaneous testing of influence between exogenous variables against endogenous variables can also be seen through the F count, where in F the table in this model is 2,70. In the output SPSS found F count of 34,413 which means F count is greater than F table or 34,413 ≥ 2,70. Thus, it can be concluded that the corporate liquidity, corporate leverage, and sukuk risk simultaneously affect sukuk yield.
2. Regression Model-2
   Based on the output result of SPSS 22, the sig value is known. is 0,000. Because of sig value. smaller than the probability value of 0,05 or 0,020 > 0,05, then in accordance with the basis of decision-making in the F test it can be concluded that the corporate liquidity variables and the corporate leverage simultaneously affect sukuk risk.

   Simultaneous testing of influence between exogenous variables on endogenous variables can also be seen through F count, where in F the table in this model is 3,10. In SPSS

output found F count of 4,060 which means F count is greater than F table or 4,060 ≥ 3,10. Thus, it can be concluded that the corporate liquidity variables and the corporate leverage simultaneously affect the risk of sukuk.

4.7. Individual Path Coefficient

1. Regression Model-1

Table 1. Path Coefficient Independent Variables Regression Model-1

Independent Variables	Sig. Value	Path Coefficient
sukuk Risk	0,000	0,749
Corporate Liquidity	0,560	-0,042
Corporate Leverage	0,001	0,256

Based on table 1 above, the Sig. value can be seen at sukuk risk variable is 0,000 and the corporate leverage variable is 0,001, both of which are smaller than the probability value of 0,05. This means that both variables partially affect sukuk yields. Meanwhile, corporate liquidity has the value of Sig. 0,560 is greater than the probability value of 0,05 or 0,560 > 0,05 which means corporate liquidity variable has no significant effect on sukuk yields. The coefficient of the path on sukuk risk is 0,749 and has a significant influence on yield. It can then be concluded that sukuk risk has a positive and significant effect on sukuk yields.

Corporate liquidity has a path coefficient of -0,042 and has an insignificant influence on sukuk yields. Therefore, it can be concluded, corporate liquidity is negatively insignificant to sukuk yields. Finally, corporate leverage represents a line coefficient of 0,256 and has a significant gain in sukuk yields. Thus, it can be concluded that the corporate leverage variable has a significant positive effect on sukuk returns.

2. Regression Model-2

Table 2. Path Coefficient Independent Variables Regression Model-2

Independent Variables	Sig. Value	Path Coefficient
Corporate Liquidity	0,741	0,033
Corporate Leverage	0,006	-0,275

Based on table 2 above, the Sig value can be seen. on the corporate liquidity variable is 0,741, which means greater than the probability value of 0,05 or 0,741 > 0,05. While the corporate leverage has sig value. 0,006 is smaller than the probability value of 0,05 or 0,006 > 0,05. It can be concluded that the corporate liquidity does not have a significant influence on sukuk risk, but the corporate leverage has a significant influence on sukuk risk.

Then in the path coefficient of the corporate liquidity variable shows a value of 0,033, so the corporate liquidity variable has an insignificant positive effect on sukuk risk. While the corporate leverage variable shows a value of -0.275, the corporate leverage variable has a significant negative effect on sukuk risk.

4.8. Direct and Indirect Effect

Direct and indirect effect is the purpose of using the path analysis model by looking at a set of exogenous variables against endogenous variables. Table 3 below is an explanation of the direct and indirect influence.

Table 3. Decomposition Causalities Effect Between Variables

Inter-Variabel Effect	Inter-Causal Effect		Total
	Direct	Indirect through Z_1	
X_1 to Y_1	-0.042	0.0247	0.0677
X_2 to Y_1	0.256	-0.2060	0.4619
Z_1 to Y_1	0.749	-	0.749
X_1 to Z_1	0.033	-	0.033
X_2 to Z_1	-0.275	-	0.275

4.9. Sobel Test

The Sobel or Sobel Test is conducted to see the significance of indirect influence between independent variables against dependent variables through mediator variables. Before starting the sobel test calculation, first formulated regression coefficient and error standard of independent variables as follows:

Table 4. Regression Coefficient and Standard Error Between Variables

Variable's Effect	Regression Coefficient	Standard Error
X1 to Z1	0,001	0,004
X2 to Z1	-0,003	0,001
Z1 to Y1	0,457	0,045

Then, on the calculation of the sobel test, obtained Z-calculate and p-value variable corporate liquidity and the corporate leverage against sukuk yield through sukuk risk formulated in the table as follows:

Table 5. Result of Sobel Test

Variables Independent's Effect through sukuk Risk	Z-count	*P-Value*
Corporate Liquidity	0,249	0,801
Corporate Leverage	-2,877	0,004

Based on Table 5, it can be seen that the Z-count of corporate liquidity is smaller than Z-table 1,96 which is 0,249 or 0,249 > 1,96, where the p-value is greater than the probability value of 0,05 or 0,803 > 0,05, so the variable risk sukuk cannot mediate the corporate liquidity against sukuk yield.

While in corporate leverage has a z-count value greater than the Z-table value of 1,96 which is -2,877 or -2,877 > 1,96, and a p-value that is less than the probability value of 0,05 or 0,004 < 0,005. So that sukuk risk variables can mediate the corporate leverage on sukuk yields.

4.9. Corporate Liquidity and Sukuk Yield

Based on the results of individual path coefficients, that corporate liquidity has a Sig value. 0,560 is greater than the probability value of 0,05 or 0,560 > 0,05 which means liquidity variables have no significant effect on sukuk yields. While the coefficient of the path is -0,042, it can be concluded, bringing corporate liquidity negatively affects the yield of sukuk. So, it can be found that the first hypothesis is not accepted.

The result of this study is consistent with the study from Hamida (2017), Noviana and Solovida (2018), and Putri (2013) that stated there is no effect of liquidity on returns. The absence of significant influence from liquidity on sukuk yields makes it clear that sukuk returns are not based on the financial condition of global companies which each year are weakening to negatively impact the country's capital markets.

As for the greater threat and uncertainty of the global economic recession that causes companies to tend to cautiously raise funds from capital markets (Sidik, 2019). Therefore, high levels of low corporate sukuk yields can also be caused by external factors such as economic growth, interest rate era, and others.

Liquidity itself is a measure of how quickly liquid funds show yields that have no effect on sukuk yields. This is because the variation in liquidity ratio measured using current ratio has different percentage rates where sukuk issuing companies are dominated by sukuk with a ijarah agreement of as many as five companies. These companies are not very concerned about how much liquidity the company had at the time, as is the case with financial institutions. However, the financial sector companies sampled in this study tend to be fewer, so the absence of influence on corporate liquidity may occur.

4.10. Corporate Leverage and Sukuk Yield

Based on the results of individual path coefficients, that corporate leverage has a Sig value. 0,001 is smaller than the probability value of 0,05 or 0,001 < 0,05 which means variable leverage has a significant effect on sukuk yields. While the path coefficient is 0,256, it can be concluded, bringing corporate leverage has a significant positive effect on sukuk yields. So, it can be obtained that the second hypothesis is not accepted.

The positive influence between the corporate leverage on corporate sukuk returns is consistent with research conducted by Che-Yahya, Abdul-Rahim & Mohd-Rashid (2016). High leverage reflects risky sukuk due to higher ratio charges or fees. The more debt injected into the company's capital structure, the larger the company's operational activities are carried out, resulting in higher corporate sukuk returns.

As for the results of the research proves that signalling theory can explain the effect of leverage on sukuk yields, namely, leverage is an overview of the company's financial information contributing to inaccurate information on sukuk or bond yield predictions.

4.11. Sukuk Risk and Sukuk Yield

In the results of the research that has been done shows the value of Sig. at sukuk risk variable is 0,000 which means it is smaller than the probability value of 0,05 or 0,000 < 0,05. Then the coefficient of the path on sukuk risk is 0,749, which can then be concluded that sukuk risk has a

positive and significant effect on sukuk yields. So, it can be obtained that a third hypothesis is accepted.

The positive influence between sukuk risk on sukuk yield is consistent with the results of research conducted by Bachtiar, Risza & Naomi (2018) and Ejsing, Grothe, M. & Grothe, O. (2012). Investors who dare to choose sukuk with high sukuk risk will get high returns as well. Similarly, if investors choose sukuk with a low sukuk risk will get a low sukuk yield as well.

In theory, the return on an investment must be a risk that follows. The statement is in accordance with the fiqh rule of al-ghunmu bil al-ghurmi, where al-ghunmu is profitable and al-ghurmi is a risk. So that the profit gained from the investment is balanced with the energy expended and the risks it faces. Investors will also maximise the yield per unit of risk with their own risk tolerance.

4.12. Corporate Liquidity and Sukuk Risk

In the results of the research that has been done shows the value of Sig. on the corporate liquidity variable is 0,741, which means greater than the probability value of 0,05 or 0,741 > 0,05. Then in the coefficient of the liquidity variable path showing a yield of 0,033, then the corporate liquidity variable has an insignificant positive effect on sukuk risk. So, it can be obtained that the fourth hypothesis is not accepted.

The absence of influence between the corporate liquidity variables on sukuk risk is consistent with the results of research by Braouezec and Lehalle (2010) which stated that there is no influence of liquidity on risk. The insignificance of the corporate liquidity to sukuk risk is due to research conducted on various companies that show different levels of market capitalization where in sukuk corporate issuing companies with mudharabah agreements tend to be higher than corporate sukuk issuing companies with ijarah agreements.

Braouezec and Lehalle (2010) in their journal stipulate that a company may have bad liquidity but still survive, while in other companies that have sufficient liquidity can experience bankruptcy at any time. This is due to the probability of the company generating low cash flow but the liquidity value of its assets is high, and vice versa.

As for the greater threat and uncertainty of the global economic recession that causes companies to tend to carefully raise funds from capital markets. Therefore, high levels of corporate sukuk risk can also be caused by external factors such as economic growth, interest rate era, and others.

4.13. Corporate Leverage and Sukuk Risk

Based on the research that has been done, that the corporate leverage has sig value. 0,006 is smaller than the probability value of 0,05 or 0,006 > 0,05. While the path coefficient on leverage variables shows a yield of -0,275, the corporate leverage variable has a significant negative effect on sukuk risk. So, it can be concluded that the fifth hypothesis is not accepted.

The results of the corporate leverage research has a significant influence on sukuk risk supported by the research by Wang, Zhou H. & Zhou Y. (2013), and Asness, Frazzini & Pedersen (2018). As for the negative effect of corporate leverage on sukuk risk, if investors face constraints on leverage or leverage that tends to be high, then the portfolio market does not have the highest risk or sharpe ratio in accordance with the expected profit prediction.

High debt ratios tend to be less attractive to investors. Thus, investors tend to depress the price of stocks or bonds if leverage rises, and also result in the risk of such investments decreasing and the risk of avoidable bankruptcy. The secondary market itself plays an important role in reasonable pricing in that market and provides important signals with respect to such securities.

4.14. Sukuk Risk Mediates Corporate Liquidity on Sukuk Yield

The results of the calculation of direct and indirect influence on this study show that the influence of corporate liquidity on corporate sukuk yields cannot be mediated by sukuk risk. This is due to the coefficient of the direct influence path between the corporate liquidity to the higher corporate sukuk yield of -0,042 than the indirect influence line coefficient of 0,0247.

In addition, in the results of the analysis of sobel test or sobel test indicates that the Z-calculate corporate liquidity is smaller than Z-table 1,96 which is 0,249 and at p-value shows insignificant results where, the p-value of the corporate liquidity shows a greater value of 0,803 > 0,05. Then it can be concluded that the sixth hypothesis is not accepted.

The theory that explains the relationship of liquidity to sukuk yields and sukuk risk has similarities where, the hypothesis that has been formulated in this study is rejected based on the results of measurement and processing of data using path analysis techniques. As in the first hypothesis and the fourth hypothesis is rejected because liquidity has no effect on sukuk yields or sukuk risk. Risk in sukuk investment proxed by sukuk rating as a mediator variable in Hamida, Zakaria & Aziz (2014) research can't mediate liquidity and leverage on yield.

The corporate liquidity cannot be mediated by sukuk risk also explained that it could be that corporate liquidity is high, but it turns out that the cash flow of the company is low. So, there are other factors that can cause the risk of sukuk to drop such as solvency ratio Braouezec and Lehalle (2010). This is also the case that companies with high liquidity are found to have a large sukuk risk, as well as the opposite is that low corporate liquidity does not necessarily reflect high sukuk risk because there are other factors that are more influential to the risk.

4.15. Sukuk Risk Mediates Corporate Leverage on Sukuk Yield

The results of the calculation of direct and indirect influence on this study show that the influence of corporate leverage on corporate sukuk yields can be mediated by sukuk risk. This is because the results of the sobel or sobel test analysis suggest that the Z-count value of the corporate leverage is greater than the Z-table of 1.96 which is -2,877. While the p-value of the corporate leverage is 0,004 < 0,05 or less than the probability of 0,05 with an indirect influence of -0,2060. Then it can be concluded that the seventh hypothesis is accepted.

The theory that explains the relationship of coporate leverage to sukuk yields and risks has similarities to hypotheses that have been tested based on the results of measurement and processing of data using path analysis techniques. As in the second hypothesis, there is a positive influence of the corporate leverage on sukuk yields and the fifth hypothesis is that corporate leverage negatively affects sukuk risk. Then mediation through sukuk risk will occur.

In addition, performance measurements of the company can affect the formation of the portfolio itself. Financial assets may explain the composition of risk and yield trade-offs of an investment. So sukuk risk can be a mediation for the corporate leverage on sukuk yields due to the need for consideration of financial performance, one of which is the leverage of the company to formulate sukuk risk and sukuk risk itself affects sukuk yield.

The risk avoidance models describe investors who perform risk analysis they obtain based on financial statements published by the company (Elton, Gruber, Brown & Goetzmann, 2014). From here too, investors can weigh how much sukuk returns are obtained where, low corporate leverage will lead to high risk and will then be captured by investors, that the sukuk yield received will be high anyway.

5. CONCLUSION

There is a theoretical implication of this research that Markowitz's modern portfolio theory is able to explain the linear and uni-directional relationship between sukuk risk and corporate sukuk returns. While signalling theory may explain that there is an influence between corporate leverage with sukuk yields and corporate sukuk risk in this case, the corporate leverage has a positive influence on yield and the negative influence on sukuk risk, as well as the mediation of sukuk risk between the corporate leverage to the sukuk yield.

In addition, there are managerial implications that can be filed that is, the company is expected not to avoid high risk in the issuance of corporate sukuk because the high risk reflects high returns as well. Corporate sukuk issuers can increase their sukuk risk and sukuk returns by increasing the corporate leverage ratio by adding a capital structure with financial risks that follow. The company may increase its total liabilities in financial statements in both the long and short term. While the obligation or total debt is used as an operational and business development of each company. So that investors can obtain high sukuk returns with risks that follow them low.

Investors and issuers of corporate sukuk issuing companies can see the risks that will be gained when choosing sukuk investments, where there is a linear and positive relationship of risk to yield. So, investors should not avoid high-risk corporate sukuk, because high risk indicates high returns as well. However, it is good for investors to invest in primary capital markets to avoid speculation (maysir) and obscurity (gharar).

Suggestions for future research, can use other variables both externally and internally. External variables to choose from are economic growth rate or Gross Domestic Product (GDP) and currency exchange rate. Meanwhile, internal variables that can be used in subsequent research are the frequency of company sales or some type of risk that exists in corporate sukuk. The mediator variable that can be considered is the fair value of sukuk in sharia capital market in Indonesia.

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