

**THE EFFECT OF DEBT TO EQUITY RATIO (DER), RETURN
ON ASSETS (ROA), AND ECONOMIC CONDITIONS ON THE
YIELD OF CORPORATE SUKUK IJARAH FOR THE PERIOD
2017-2020**

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ABSTRACT

This study was conducted to determine the effect of debt-equity ratio (DER), Return on Assets (ROA), and economic conditions on corporate sukuk yields for the 2017-2020 period. Economic conditions in this study are represented by inflation and interest rate variables. The data used is secondary data from the company's Financial Report website, Central Statistics Agency (BPS), Indonesia Price Bond Agency (IPBA), and Bond Book published by the Financial Services Authority (OJK) website. The analysis method used is the panel data regression analysis test, where the sample used amounts to eighteen sukuk originating from four sukuk issuing companies obtained by purposive sampling method. The study's results simultaneously showed that all variables significantly affect sukuk yields. Partially, the DER variable has a considerable positive impact on sukuk returns, the ROA and inflation variables have no significant impact, and the interest rate has a significant negative impact on sukuk returns.

Keywords: *Debt to Equity Ratio (DER), Return on Assets, Inflation, Interest Rate, Sukuk Yield.*

A. INTRODUCTION

The capital market has a role in the country's economy and the Sharia capital market. Activities in the Sharia capital market focus on the free Sharia aspect from things that are prohibited by Islamic belief, such as usury, gambling, speculation, and so on (Damalia, 2013:1). In Islamic law, trade letter valuables must be done with be careful, because Islam arranges problem This very strictly. This is seen in paragraph following This:

يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللَّهَ وَذَرُوا مَا بَقِيَ مِنَ الرِّبَا إِن كُنْتُمْ مُؤْمِنِينَ

Yes ayyuhallahazina the Almighty wow the darling ma the baqiya interest-interest ing flower believer

Meaning: " O you who believe. Be fearful to Allah and leave remainder usury (which has not been collected) if you are believers. " (Qs. 2:278, Ministry of Religion, Republic of Indonesia, 2010:47).

Islam forbids existence usury as in the word of Allah SWT in the letter Al Baqarah verse 278 above. In investing the funds based on the paragraph on that, Allah SWT seems to forbid us from doing transactions containing usury. Therefore, Lots, the company that switched, issued a letter of intent with more valuable sharia, one of which is known as the Sukuk's name. The companies that issue the sukuk are companies that have been selected based on Sharia law and have become Muslim investors who invest funds in sukuk or are not worried.

Sukuk is known as sharia bonds. According to Ryandono (2009:246), Sukuk is a letter containing a financing contract (agreement) based on Sharia principles. This sukuk is issued by an agency/institution/organization, Good private and government to investors (*sukuk holders*). Sukuk requires the issuing party to pay investors income through results, margins, or fees during the contract period. The issuer must pay a return of investment funds to investors at the time due date. Some understanding can be concluded that sukuk is the ownership of an asset in a company and published institution based on sharia principles to holders, and at the specified time, the sukuk issuer must pay income to sukuk owners.

Based on issuance, sukuk are differentiated into government sukuk and corporate sukuk. Corporate sukuk is used by companies as a financing instrument for expansion business. State sukuk, or government sukuk, is used to finance deficit budgets caused by income taxation and non-taxation that cannot close the amount of spending budgeted by the government.

Data from issuance and registration of sukuk at OJK at the moment this is corporate sukuk own several types frequent agreements used in Indonesia is *Mudharabah* sukuk (sukuk with a contract *mudharabah*) and *Ijarah* sukuk (contracted sukuk *ijarah*)—the sukuk Lots used Because convenience mechanism in transaction its trade. Investors who invest in funds expect high returns. In every type of sukuk agreement, the income or returns generated will also differ.

The focus study is on the type of *Ijarah* sukuk agreement, which returns the results that will be obtained using contract *Ijarah* or system rent, so that return the results given Are the same throughout time or still during the sukuk agreement *Lease* the applicable. Sukuk has become an alternative for the business world for long-term halal funding length (Yuliana, 2010:2). Division profit from the sukuk depends on the level of profit income generated, so the finances of the company and conditions of the economy

can influence the level of return.

The ability of the company to return investment funds to investors needs to be noticed by the finance company. Funding from outside companies usually uses debt or bonds, so the ratio used to describe the proportion of debt in the finance activity operational company is *the debt-to-equity ratio* (DER). DER explains the risks faced by the company. The higher the DER of the company, the fewer symptoms. This is good for the company because it shows the risks faced by the company that will affect the return that investors will obtain

The company's funding decisions will also influence the condition of the capital structure. Company capital structure consists of composition debt or sukuk in sharia and equity. According to Sudana (2005,25), profitability can measure with *Return on Assets* (ROA). The composition of non-optimal debt and equity will reduce a company's profitability. It is said the more profitable it is to identify the more efficient performance A company and improve mark company that too (Copeland et al.1994). Changes in in the company's capital structure will also affect the return that investors will accept in the capital market because it is related to the occurrence of change mark company.

Apart from finance companies, the economy's condition can also influence *the returns* investors will accept. Inflation as a Factor Economy According to the Central Statistics Agency (BPS), it is a trend of the rise in the price of goods and services in general that is ongoing in a way. Keep going continuously. If inflation increases, then the price of goods and services in the country will increase. Inflation can control, for example, the government forms unit task controller inflation. Stable inflation is a prerequisite for creating a sustainable economy that will impact activities and investment, especially in corporate sukuk. The interest rate Flowers are also very influential in the rise and fall of returns that will be accepted by investors. When ethnic group flowers experience an increase, the issuer bond will offer a higher yield high, so too on the contrary, the time ethnic group flowers experience a decline, then the yield will be lower. This, of course, will influence the change in the return level of the results obtained.

Based on the description that has been exposed above, the study focused on the influence of *Debt-to-Equity Ratio* (DER), *Return on Assets* (ROA), and conditions of the economy to return corporate sukuk ijarah results period 2017-2020.

B. LITERATURE REVIEW

Sharia Capital Market

The Islamic capital market is a capital market that is run with Sharia principles. Every valuable transaction letter in the capital market is implemented by the provision of Sharia Islam (Muhammad, 2014:548). According to Metawally, an economist Muslim in Rendragraha (2012:16) states that the Sharia capital market has at least four (4) functions that are:

1. It allows the public to participate in business activities by buying shares issued by the company. Stock investors can profit through distribution dividends and capital gains and bear the risks inherent in the investment.
2. The Islamic capital market also allows holders to sell shares to obtain liquidity or funds when needed.
3. It allows the company to obtain alternative funding to develop its business. Outside funding is from sector banking or owned funds Alone.
4. Separating operation activity business from fluctuation term short on price shares, characteristics common in conventional capital markets.

Sukuk Yield

Investing funds in sukuk usually makes investors consider several matters like sukuk price, the background behind the company that will be invested, and the return on the results that will be obtained. Reward results are the profits obtained by investors in investment funds. The profits obtained in sukuk Ijarah are usually determined at the beginning moment of the Sukuk, and then investors will get a level fixed profit until the sukuk period ends.

Yield is the result investors obtain from investing in bonds (Fahmi, 2012:181). Several types of investors invest funds in sukuk, for example, by saving sukuk until it is due. Hosten (2014:283) explains level return or return the results that investors will accept when a due date is called with *Yield to Maturity* (YTM). In research this, the return sukuk yield is calculated using YTM. Sukuk calculation can be counted with the measurement of the *Last Yield Sukuk*, namely annual *yield* observation. Where is the data? Can obtained from *Indonesian Bond Pricing Agency* (IPBA).

Debt to Equity Ratio (DER)

DER is the ratio used to assess debt with equity. To find the ratio, compare all debts, including current debts, with all over equity. The Ratio is useful for knowing the amount of funds the borrower (Creditors) provides to the owner company. In other words, the ratio is used to know every capital that is used for debt guarantee (Kasmir, 2014: 112).

Return on Assets (ROA)

ROA is the ratio that shows the ability of a company to use all assets owned to produce profit. The more big ROA, that's it It means the more efficient use assets company or in other words with the same amount Can produced more profit large, and vice versa (Sudana , 2009:26).

Inflation

According to Boediono (1995:155), inflation is a tendency to increase aggregate prices continuously. The inflation rate in a country can vary at different times, depending on the indicator inflation and the year-by-year basis used. Magnitude inflation is stated in level inflation annually, representing the average price increase from Year to year.

Interest Rate Level

According to Sudana (2011:83), the level of ethnic group flower is a component in the determination of return results of every letter valuable, without notice time maturity, referring to developments level ethnic group interest issued by BI.

HYPOTHESIS

H₁: Whether *Debt to Equity Ratio* (DER) affects Corporate Sukuk Ijarah Yields in Indonesia.

H₂: Whether *Return on Assets* (ROA) affects Corporate Sukuk Ijarah Yields in Indonesia.

H₃: Whether Inflation Influential to Corporate Sukuk Ijarah Yields in Indonesia.

H₄: Does the Interest Rate Level matter to Corporate Sukuk Ijarah Yields in Indonesia.

H₅: Do DER, ROA, Inflation, and Interest Rates have an effect? in a way simultaneous to Corporate Sukuk Ijarah Yields in Indonesia.

C. RESEARCH METHOD

Methods used in the study This quantitative method tests a theory with test variables. The study uses numbers and analyzes data with procedure statistics in accordance with the research conducted (Sugiyono, 2015: 13) with the help of the STATA 13 application.

Definition Operational Variables

1. DER is the ratio used to assess debt with equity. This ratio aims to know every capital used for debt guarantee (Kasmir, 2014: 112).

$$DER = \frac{\text{Total Utang (Debt)}}{\text{Total Ekuitas (Equity)}}$$

2. ROA is the ratio that shows the ability of a company to use all assets owned to produce profit. The ROA, that's it, It means the more efficient use of assets company or, in other

words, with the same amount Can produce more profit, and vice versa (Sudana, 2009, p. 26). ROA is calculated with the formula following (Rahardjo, 2009, p. 141).

$$ROA = \frac{Laba\ Bersih\ Setelah\ Pajak}{Total\ Aktiva}$$

3. Inflation is a trend of the occurrence of an improvement in the price of a product overall (Tandelilin, 2010). The inflation rate used in the study is the use of the Consumer Price Index (CPI) with level YoY (*Year on Year*) inflation, meaning level inflation stated in annual. CPI in the central statistics agency can counted with the following formula:

$$Inflasi = \frac{IHK_t - IHK_{t-1}}{IHK_{t-1}} \times 100\%$$

4. Rate level flower is ethnic group flower policies that reflect attitude or policy monetary determined by Bank Indonesia and announced to the public (Bank Indonesia, 2015). Interest rate level flower stated in %. Interest rate flowers can count with the formula:

$$I\ Rate = Tingkat\ Suku\ Bunga\ SBI$$

5. The reward sukuk yield in study is *yield to maturity* (YTM), the level of return that investors will obtain up to Yield to maturity can be counted using the following formula (Rahardjo, 2003).

$$YTM = C + \frac{\frac{F - P\ bond}{n}}{\frac{F + P\ bond}{2}} \times 100\%$$

Data Types and Sources

Types of data used in the study This is secondary data. Secondary data was obtained from four (4) companies' sukuk ijarah issuers registered with the Financial Services Authority (OJK) and sourced from each company's website. The lease value is obtained from the Bond Book (*Indonesia Bond Market Directory*) and the *Indonesia Bond Pricing Agency* (IPBA). Inflation rates and interest rates are ethnic group flowers that come from the official website of the Central Statistics Agency. Study This uses panel data, namely data merging between *time series* and *cross-sections* (Rosadi, 2012, p. 271).

Population and Sample

Population study this is a company in Indonesia that issued sukuk for the 2017-2020 period. The technique of taking samples with purposive sampling. The criteria used are in the sample study This is as follows:

1. Registered and active corporate sukuk ijarah traded on the Indonesia Stock Exchange and the Financial Services Authority period 2017-2020.
2. Corporate sukuk ijarah, which is not its failure pay (default).
3. Corporate sukuk issuing companies with report finance complete during period research (2017-2020).

Research sample This is four (4) companies' corporate sukuk issuer ijarah, with eight twelve (18) ijarah sukuk registered with the Financial Services Authority. Population in study This is a company insurance Sharia Soul in Indonesia registered with the Financial Services Authority from 2017-2020. The sample used *purposive sampling*. The selected companies, that is, those who have reported finance annual published 2017-2020 period

Results of Analysis and Hypothesis Testing

Study This uses two approaches that are *Fixed Effect Model* (FEM) and *Random Effect Model* (REM). Based on the Hausman test that has been done, the right model used in the study is the *random effects model* with Prob>chi value = 0.6287, which means the mark is bigger than the mark significance 0.05.

Regression Model Analysis

Panel data regression model analysis and testing hypothesis with YTM as endogenous variable return corporate sukuk ijarah results 2017-2020 and variable exogenous consisting of DER, ROA, inflation, and level ethnic group flower.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_i \quad \beta_1, \beta_2 > 0$$

Where:

i = 1,2N (symbol for cross-section)

t = 1,2N (symbol for time series)

Y_{it} = Yield of Corporate Sukuk

β_i = Constant Coefficient

X_1 = Debt to Equity Ratio

X_2 = Return on Assets

X_3 = Inflation

X_4 = Interest Rate

a = *Constantine*

e = Error Variable

The results of the regression above written in equality as following:

$$\text{YTM} = 0.1113692\text{DER} - 0.0345371\text{ROA} - 0.1663915\text{INFLATION} - 0.1908236\text{BIRATE} + e$$

Based on the results, the following show:

1. If all over variable, independent No There is a change or constant, ytm is = 2.255998.
2. If the DER variable increased by one unit, whereas the independent variables remained constant, YTM improved by 0.1113692 units.
3. If the ROA variable experienced an increase of as much as one unit, whereas the independent variable remained unchanged or constant, YTM experienced a decline of -0.0345317 units.
4. If variable inflation experiences an increase as big as One unit whereas variable independent other is considered still or constant, then YTM experiences a decline of -0.1663915 units.
5. If the level of ethnic group flower experience increases by as much as one unit, whereas the variable independent other is considered still or constant, then YTM experiences a decline of -0.1908236 units.

Testing Hypothesis

1. F Test (Simultaneous)

F test is used to know influence variable independent to variable dependent in a way together or simultaneous. Hypothesis as following:

H₀: DER, ROA, inflation, and level ethnic group flower influential significant simultaneously to return corporate sukuk ijarah results period 2017-2020.

H₁: DER, ROA, inflation, and ethnic group flower are not influential in a way simultaneous to returning corporate sukuk ijarah results for the period 2017-2020.

Based on the results, panel data regression using the Stata 13 application shows F-statistic test results at 0.0000, where smaller from $\alpha = 0.10$ means H₀ is accepted and H₁ is rejected.

2. T Test (Partial)

Based on the results of the t-test in Table 4.6, the interpretation of the result:

1. DER, with t- a statistic value of 2.59 and a level significance of 0.010, which means smaller than $\alpha = 0.10$, has a positive and influential significance to return corporate sukuk ijarah results period 2017-2020.

2. ROA has a statistical value of -1.40 and a level significance of 0.162, which means that it is more important than $\alpha = 0.10$, has a negative connection time, and has no influential significance to return corporate sukuk ijarah results period 2017-2020.
 3. Inflation with t- a t-statistic value of -1.18 and a level significance of 0.239, which means more from $\alpha = 0.10$, has a connection with negative and no influential significance to return corporate sukuk ijarah results period 2017-2020.
 4. The rate level flower has a t statistic value of -4.79 and a level significance of 0.000, which means that a smaller value from $\alpha = 0.10$ has a negative and influential significance to return corporate sukuk ijarah results period 2017-2020.
3. Coefficient Determination (R^2)

Coefficient value determination or R-square in research This is 0.4596 or 45.96%. It can be concluded that a variable independent of DER, ROA, inflation, and rate ethnic group flower can explain the influence on return corporate sukuk ijarah results 2017-2020 period of 45.96%.

Table 1. Descriptive Analysis Table

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. xtsum ytm der roa inflasi birate
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Variable		Mean	Std. Dev.	Min	Max	Observations
ytm	overall	.7148611	.37151	.29	2.17	N = 72
	between		.251271	.38	1.2125	n = 18
	within		.2784786	.1723611	1.672361	T = 4
der	overall	1.525833	.9813482	.3	3.37	N = 72
	between		.7828051	.3775	2.12	n = 18
	within		.6133129	.7658334	2.775833	T = 4
roa	overall	1.250833	1.797887	-2.1	5.67	N = 72
	between		.7234095	.48	3.4925	n = 18
	within		1.652631	-2.306667	3.428333	T = 4
inflasi	overall	3.2775	.2273469	3.02	3.61	N = 72
	between		0	3.2775	3.2775	n = 18
	within		.2273469	3.02	3.61	T = 4
birate	overall	5.8825	1.036944	4.95	7.52	N = 72
	between		0	5.8825	5.8825	n = 18
	within		1.036944	4.95	7.52	T = 4

Sources: Data Processing Results Stata 13, 2024

Table 2. Results of Panel Data Regression *Random Effect Model (REM)*

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. xtreg ytm der roa inflasi birate
Random-effects GLS regression
Group variable: id
Number of obs   =          72
Number of groups =          18
Obs per group:  min =           4
                  avg  =          4.0
                  max  =           4

R-sq:  within = 0.4596
       between = 0.0004
       overall = 0.2142

corr(u_i, X) = 0 (assumed)
Wald chi2(4) =          40.84
Prob > chi2  =          0.0000
    
```

ym	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
der	.1113692	.0430408	2.59	0.010	-.0270108 .1957276	
roa	-.0345371	.0246804	-1.40	0.162	-.0829097 .0138356	
inflasi	-.1663915	.1414204	-1.18	0.239	-.4435703 .1107874	
birate	-.1908236	.0398031	-4.79	0.000	-.2688362 -.112811	
_cons	2.255998	.6183399	3.65	0.000	1.044074 3.467922	
sigma_u	.23537066					
sigma_e	.24300582					
rho	.4840435	(fraction of variance due to u_i)				

Sources: Data Processing Results Stata 13, 2024

Table 3. Random Effect Model t- statistic results

Tabel 4.6
Hasil t-statistik *Random Effect Model*

Variabel	t-statistik	Probabilitas
DER	2.59	0.010
ROA	-1.40	0.162
INFLASI	-1.18	0.239
BIRATE	-4.79	0.000

Sources: Data Processing Results Stata 13, 2024

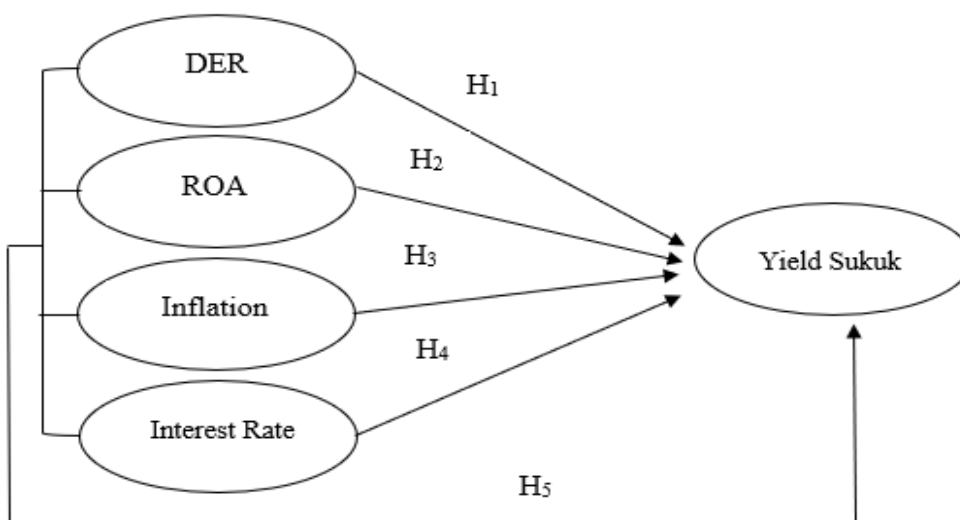


Figure 1. Model Empiris

Sources: Previous research is processed, 2024

D. RESULTS AND DISCUSSION

Debt to Equity Ratio (DER)

Study This process that DER has a significant positive effect on sukuk yield. According to Sartono (2001), the higher the DER, the greater the risk that will be faced, and investors will request higher r profits. That included the higher the DER, the higher the height risk company would be in the future, so that would impact the height return results of the bond company. Research results This is by research by Ziebart and Reiter (1992), Sengupta (1998), Bhojraj and Sengupta (2003), and Khurana and Raman (2003) where results in his research are DER influential positive and significant to *yield* or return results bonds. The following research was conducted by Setyapurnama (2005), which resulted in a study that found that DER is not influential or significant to bond *yield*.

Return On Assets (ROA)

Study This proves that ROA is not influential and significant to return sukuk yield. This is in line with research conducted by (Sari et al.: 2015) and Abudanti (2015), which stated that profitability a matter. This is ROA, with no influential significance to the bond *yield*. Elsi (2015) also conducted a study on sukuk ijarah, and the results showed that ROA is not influential and significant in return sukuk yield. According to Ratih (2014), the taller level profitability company, the cash flow for paying principal and interest bonds becomes, and the risk of failure to pay becomes. This is a live signal that the hat complies with good condition and indicates that risk investments are low and security investments are more guaranteed. The more investors feel comfortable with the cap, the higher they tend to expect return results and higher bonds.

Inflation

Partial test results prove that Inflation has No influential significance on return sukuk results. This is a see from the data processing results that shows the level probability bigger than α , which is 0.239 with a mark coefficient of -1.18. Low inflation has influenced the country's economy, including level-risk and high-risk companies Because conditions and a good economy have supported good performance. This signifies that existing investments' own level of relative risk is small while sukuk has a greater risk and gives return small results anyway, so fluctuating inflation with category low can impact returns sukuk yield (Hana, 2018). This is possible Because inflation is a symptom of monetary while sukuk ijarah is a symptom real sector. Real sector and real sector monetary walk individually. It's the same with

research conducted by Okky et al. (2015) that level inflation does not affect the return results of bonds but its own positive direction.

Interest Rate Level

Interest rate flowers are influential and damaging in determining the return of sukuk yield. This shows that if the level of the ethnic group flower increases, the return sukuk yield will decrease. This can happen because the period study is based on conditions that occur at the time. Also, for Muslim investors, the ups and downs No ethnic group flower No become problem for investing in sukuk, because flower including usury. Interest rate flower is a Power pull for investors to plant their investment as a deposit or SBI so that the investment share will be unrivaled (Mansur, 2009). Research This No support results research by Kadir (2007) and Ibrahim (2008) which shows results that there is a connection positive significance between level ethnic group flower to return results bonds because study This produces negative and significant relationship, then Thompson and Vaz (1990) on 426 bonds company industry with period time between 1977-1983 shows results that level ethnic group flower No influential significant on bond yields. Furthermore, Tandelilin's (2017) book states that the level of ethnic group interest will generate the returns that investors desire from an investment.

E.CONCLUSION

The conclusion from testing conducted in the study This proves that the fourth independent variables, namely DER, ROA, inflation, and level ethnic group, flower in a way simultaneous influential significant to return corporate sukuk ijarah results period 2017-2020. The values obtained for the F- statistic test show the number 0.0000, which is more minor from $\alpha = 0.10$ with a mark coefficient (R-square) of 0.4626 or 46.26%, which means that DER, ROA, inflation, and rate variables ethnic group flower influential significant in a way simultaneous and can explain return measured results using YTM with good. In a way, partial (t-test) obtained results that show that DER variables and levels of ethnic group flower are influential in the return results. However, ROA and inflation variables had no influential significance in the return sukuk yield.

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