

## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia



Herni Ali HT<sup>1</sup>, Muhammad Hartana Iswandi Putra<sup>2</sup>

<sup>1,2</sup>Islamic State University Syarif Hidayatullah Jakarta, Indonesia

**ABSTRACT:** This study aims to examine the effect of macroeconomic factors (SBIS Yield Rate, Islamic Interbank Rate, Rupiah and Ringgit Exchange Rates against Dollar), Partial Yield to Maturity, and Time to Maturity and the effect of individual conditions on the Fair Price of Corporate Sukuk for the period 2014-2018. Research data were taken from several institutions in the form of statistical data and historical transactions, namely BI, OJK, BEI, IBPA, KSEI, Securities Commission Malaysia, Bank Negara Malaysia, BPAM, Bursa Malaysia. This research using quantitative approach, where the sampling was done by purposive sampling consisting of 7 series of corporate sukuk from Indonesia and Malaysia. The analysis technique used Panel Data Regression Test. The results showed that Macroeconomic Factors (SBIS and Islamic Interbank Rate) generally have a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia; Macroeconomic factors (Rupiah exchange rate and Ringgit exchange rate against the US dollar), have a positive and significant effect on the fair price of sukuk in Indonesia and Malaysia; Yield To Maturity, has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia; Time To Maturity, has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia.

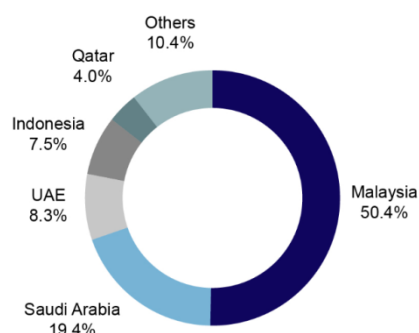
**KEYWORDS:** corporate sukuk, fair price, macroeconomics factor.

### INTRODUCTION

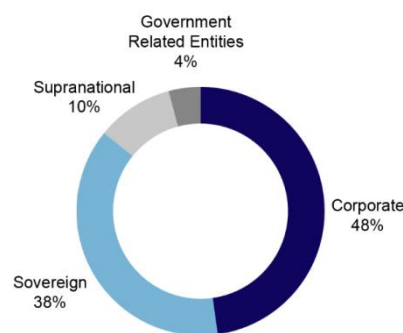
The sharia capital market is part of the Indonesian Capital Market Industry. In general, the activities of the Sharia Capital Market are not different from conventional capital markets, but it is a capital market that applies sharia principles / facilities or a meeting place for sellers and buyers of sharia financial instruments, in their transactions based on Islamic teachings, and stay away from prohibited things (El Mosaid, 2014). One of the products of the Sharia Capital Market is Sukuk / Sharia Bond which consists of sovereign sukuk and corporate sukuk.

At this time, several countries have become regular issuers of sukuk such as, Malaysia, Bahrain, Brunei Darussalam, United Arab Emirates, Qatar, Pakistan, and the State of Saxony Anhalt-Germany.

Graph 1. *Outstanding Sukuk* by country per year 2014-2018



Graph 2. *Outstanding Sukuk* by issuer per year 2014-2018



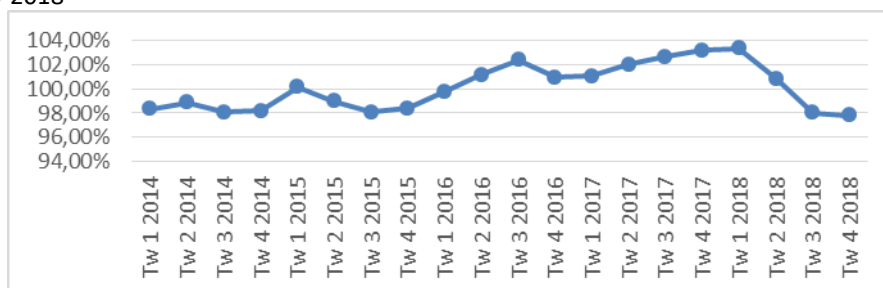
Source : *Malaysia International Islamic Financial Centre* (MIFC)

## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

Graph 1. shows the country with the largest outstanding sukuk, namely Malaysia, amounting to 50.4% of the total outstanding sukuk in the world, while Indonesia ranks fourth in the world with a value of 7.5%. From Graph 2. for the type of sukuk based on the issuer globally, the highest portion is the corporate sukuk type, which is 48% of all types of sukuk in the world.

According to Rosadi (2011), the formation of a bond price is determined by various factors, namely Coupon Rate, Issuer Rating, Bond Value, Maturity Period, Bond Liquidity, Bond Type and issuer external factors such as inflation, interest rates, IHSG and exchange rates. These factors can be determinants that affect a sukuk price. This study will analyze the characteristic factors of sukuk as well as external factors which are interpreted in the form of macroeconomic variables in the form of exchange rates of Rp to USD \$, exchange rates of RM against USD \$, yields on SBIS (Bank Indonesia Syariah Certificates), Islamic Interbank Rates BNM, capital structure of sukuk issuers for corporations, the yield of sukuk is in the form of yield to maturity, and the maturity is in the form of time to maturity. So that it can produce a more comprehensive study that can compare between Indonesia and Malaysia whether the factors mentioned above affect the fair price of corporate sukuk. Fair market price information can be obtained from IBPA for the Indonesian capital market and BPAM for Malaysia which is also known as the Fair Price. Fair Price Sukuk is used as a reference in assessing fair market prices / mark to market and the presentation of Financial Statements for Financial Institutions as stated in the respective regulations.

Graph 3. Average Fair Market Price of Indonesian Corporate Sukuk per Quarter from 2014-2018



Source: Data processed from [www.ibpa.co.id](http://www.ibpa.co.id)

It can be seen in Graph 3. which shows the increase and decrease in fair market price of Corporate Sukuk. To support government regulation in terms of provisions for the use of fair market prices, this study will discuss the factors that influence the fair price of corporate sukuk originating from internal factors in the form of characteristics of corporate sukuk and external factors interpreted in the form of macroeconomic variables.

Islam in Islamic Economics is a big concept as a comprehensive and *kaffah* system. *Kaffah* Thinking is holistic thinking with Islamic methods in the form of a root word from Islam, namely *sinlamim* (Aziz, 2012; Siskawati, 2010; Sidarwati, 2010). Namely consisting of three main parts, namely God, Nature and Worship or a complete sub-system (Aziz, 2016) must consist of three (3) things, namely: God, humans and Worship which produces Theory H which is the translation of the basic words Islam it self (Aziz, 2016) which is a theory about how important an economic activity is by including elements of worship in it.

According to Azizah (2015) SBI interest rates have a significant and negative effect on bond prices. While the SBIS Yield, the calculation refers to the discount rate of SBI auction results with the same maturity issued simultaneously with the issuance of the SBIS. Irawan (2015) partially obtained the regression coefficient of the dollar exchange rate shows a negative sign, this indicates that an increase in the dollar exchange rate will encourage a decrease in bond prices. Banks participating in the interbank Islamic money market that are experiencing a lack of funds can ask other banks with excess funds to invest their funds in the bank that lacks funds in the form of Islamic Banking *Mudharabah* Deposit. Research of Sumarna (2016);Azizah (2015) states that coupons have a significant and positive effect on bond prices. Fitriana (2013) from the negative coefficient value indicates that bond yields have a significant effect on bond prices in the opposite direction. Sumarna (2016) states that the maturity period has a negative and significant effect on changes in corporate bond prices.

Based on these descriptions, This study aims to examine the effect of macroeconomic factors (SBIS Yield Rate, Islamic Interbank Rate, Rupiah and Ringgit Exchange Rates against Dollar), Partial Yield to Maturity, and Time to Maturity and the effect of individual conditions on the Fair Price of Corporate Sukuk, with the title of "Assessment of Macroeconomic Factors, Yield to Maturity, and Time to Maturity of Fair Price of Corporate Sukuk in Indonesia and Malaysia for the 2014-2018 Period".

# Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

## RESEARCH METHOD

Research uses nonprobability sampling, which is a sampling technique that does not provide equal opportunities for each element or member of the population to be selected as samples (Ghozali, 2012). The sample technique used was purposive sampling where the determination of the sample with certain considerations (Ghozali, 2012; Sriyana, 2014). Through the population of the issuing companies, a sample was taken consisting of corporate sukuk which are still active in the Indonesian Islamic Capital Market.

The results of the determination of the data sample are in accordance with the characteristics of the data sample, namely there are 7 series of corporate sukuk in Indonesia and Malaysia. Secondary data for Indonesia were obtained from Bank Indonesia (BI), the Financial Services Authority (OJK), PT Bursa Efek Indonesia (BEI), PT Kustodian Sentral Indonesia (KSEI), PT Penilai Harga Efek Indonesia / IBPA, and PT Pemeringkat Efek Indonesia (PEFINDO). Meanwhile for Malaysia, it was obtained from the Malaysian Securities Commission (<https://www.sc.com.my/>), Bank Negara Malaysia (<http://www.bnm.gov.my/>), Bond Pricing Agency Malaysia (BPAM) (<https://www.sc.com.my/>). : <http://www.bpam.com.my/>), Bursa Malaysia: <http://www.bursamalaysia.com>.

## Panel Regression Model Analysis

Panel data or pooled data is a combination of times series and cross section data, so it consists of several objects and several periods. According to Widarjono (2010) regression is a study of how one variable, namely the dependent variable, is influenced by one or more other variables, namely the independent variable with the aim of estimating or predicting the average value of the dependent variable. There are 4 models of research models for corporate sukuk in Indonesia and Malaysia, namely as follows:

### Model 1:

$$\text{FAIRPRC}_{it} = \beta_0 + \beta_1 \text{SBIS}_{it} + \epsilon_{it}$$

Where:

$\beta_0$	= Intercept/constant
FAIRPRC <sub>it</sub>	= Fair Price of Corporate Sukuk in Indonesia and Malaysia (i) in period t (2014-2018)
$\beta_1 \text{SBIS}_{it}$	= SBIS yield rate in Indonesia and Islamic Interbank Rate Bank in Malaysia in period t (2014-2018)
$\epsilon_{it}$	= error term model at the i-th observation unit and time t

### Model 2:

$$\text{FAIRPRC}_{it} = \beta_0 + \beta_1 \text{KUR}_{it} + \epsilon_{it}$$

Where:

$\beta_0$	= Intercept/constant
FAIRPRC <sub>it</sub>	= Fair Price of Corporate Sukuk in Indonesia and Malaysia (i) in period t (2014-2018)
$\beta_1 \text{KUR}_{it}$	= Rupiah and Malaysian ringgit exchange rate against dollar in period t (2014-2018)
$\epsilon_{it}$	= error term model at the i-th observation unit and time t

### Model 3:

$$\text{FAIRPRC}_{it} = \beta_0 + \beta_1 \text{YTM}_{it} + \epsilon_{it}$$

Where:

$\beta_0$	= Intercept/constant
FAIRPRC <sub>it</sub>	= Fair Price of Corporate Sukuk in Indonesia and Malaysia (i) in period t (2014-2018)
$\beta_1 \text{YTM}_{it}$	= Yield to maturity of Corporate Sukuk in Indonesia and Malaysia at period t (2014-2018)
$\epsilon_{it}$	= error term model at the i-th observation unit and time t

### Model 4:

$$\text{FAIRPRC}_{it} = \beta_0 + \beta_1 \text{TMT}_{it} + \epsilon_{it}$$

Where:

$\beta_0$	= Intercept/constant
FAIRPRC <sub>it</sub>	= Fair Price of Corporate Sukuk in Indonesia and Malaysia (i) in period t (2014-2018)
$\beta_1 \text{TMT}_{it}$	= Time to maturity of Corporate Sukuk in Indonesia and Malaysia on period t (2014-2018)
$\epsilon_{it}$	= error term model at the i-th observation unit and time t

## B. Operational Definition of Variables

This study uses two research variables, namely the dependent variable (dependent variable) and the independent variable (independent variable).

### 1. Dependent Variable

The dependent variable used in this study is the Fair Price of Corporate Sukuk in Indonesia and Malaysia with the proxy for the average value of corporations that have issued sukuk from 2014 to 2018, in Indonesia and Malaysia.

# Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

## 2. Independent Variable

The independent variables used in this study include :

- Yields on SBIS (Bank Indonesia Sharia Certificates) and Islamic Interbank Rates for Bank Negara Malaysia
- Rupiah Exchange Rate against Dollar USD and Malaysian Ringgit Exchange Rate against Dollar USD
- Yield to maturity of Corporate Sukuk in Indonesia and Malaysia
- Time to maturity of Corporate Sukuk in Indonesia and Malaysia

## RESULTS

Research Result Model 1 (SBIS in Indonesia and Islamic Interbank Rate in Malaysia)

**Table 1.** Common Effect Model (CEM) GLS Method

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.615747	0.010280	449.0240	0.0000
LOG(SBIS?)	-0.001609	0.008260	-0.194778	0.8466
Weighted Statistics				
R-squared	0.000997			
Adjusted R-squared	-0.025292			

Source : Processed Eviews Result,2020.

**Table 2.** Fixed Effect Model (FEM) GLS Method

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.908782	0.040280	121.8650	0.0000
LOG(SBIS?)	-0.197049	0.026968	-7.306837	0.0000
Fixed Effects (Cross)				
_IND--C	0.072642			
_MLY--C	-0.072642			
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.592842			
Adjusted R-squared	0.570833			

Source: Processed Eviews Result, 2020.

**Table 3.** Chow Test

Redundant Fixed Effects Tests

Pool: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	53.331935	(1,37)	0.0000

Source: Processed Eviews Result, 2020.

From the Chow test it is known that the value of the Cross-section Probability F is 0.0000; this is less than the value of  $\alpha = 5\%$  or 0.05; meaning that the best model is FEM (Fixed Effect Model). From the FEM method in model 1, it is known that the t statistical probability value of the independent variable is 0,000 and the coefficient value of the independent variable is -0.197. Because the statistical probability t value is smaller than  $\alpha = 5\%$  or 0.05, and because the coefficient value of the independent

## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

variable is negative, it means that the SBIS or Islamic Interbank Rate generally has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia. If the SBIS or Islamic Interbank Rate increases by 1%, the Fair Price of sukuk in Indonesia and Malaysia will decrease by 0.197%.

From the FEM method data processing in model 1, it is also known that the difference in the amount of the Sukuk Fair Price in Indonesia and Malaysia, when the change in the SBIS or Islamic Interbank Rate is 0 or constant. Here, of course, the assumption of ceteris paribus (the value of change in variables outside the constant model) remains valid. In this condition, it turns out that the Sukuk Fair Price value in Indonesia is 4,982 units, while the Sukuk Fair Price value in Malaysia is 4,836 units. This means that if the only thing affecting the Fair Price of sukuk in Indonesia and Malaysia is the SBIS or Islamic Interbank Rate which is in constant condition and also the ceteris paribus assumption applies, then the value of the Fair Price of sukuk in Indonesia is higher than in Malaysia.

*Research Result Model 2 (Exchange Rate of Rupiah, Ringgit against US Dollar)*

**Table 4.** Common Effect Model (CEM) GLS Method

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.612720	0.002615	1763.841	0.0000
LOG(KURS?)	0.000453	0.000765	0.591690	0.5576
Weighted Statistics				
R-squared	0.009129			
Adjusted R-squared	-0.016947			

**Source :** Processed Eviews Result, 2020.

**Table 5.** Fixed Effect Model (FEM) Metode GLS

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.173404	0.058195	71.71412	0.0000
LOG(EXCHANGE RATE?)	0.081334	0.010722	7.585902	0.0000
Fixed Effects (Cross)				
_IND--C	-0.329026			
_MLY--C	0.329026			
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.609766			
Adjusted R-squared	0.588672			

**Source :** Processed Eviews Result, 2020.

### C. Table 6. Chow Test

Redundant Fixed Effects Tests

Pool: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	56.877713	(1,37)	0.0000

**Source :** Processed Eviews Result, 2020.

## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

From the Chow test it is known that the value of the Cross-section Probability F is 0.0000; this is less than the value of  $\alpha = 5\%$  or 0.05; meaning that the best model is FEM (Fixed Effect Model). From the FEM method in model 2, it is known that the probability value of the independent variable t statistic is 0,000 and the coefficient value of the independent variable is 0.081. Because the probability value of t statistic is smaller than  $\alpha = 5\%$  or 0.05, and because the coefficient value of the independent variable is positive, it means that the Rupiah exchange rate or the Ringgit exchange rate against the United States dollar generally has a positive and significant effect on the fair price of sukuk in Indonesia and Malaysia. . If the Rupiah Exchange Rate or the Ringgit Exchange Rate against the United States Dollar increases by 1%, then the Sukuk Fair Price in Indonesia and Malaysia will increase by 0.081%.

From the FEM method data processing in model 2, it is also known that the difference in the amount of Sukuk Fair Price in Indonesia and Malaysia, when the change in the Rupiah Exchange Rate or the Ringgit Exchange Rate against the United States Dollar is worth 0 or constant. Here, of course, the assumption of ceteris paribus (the value of change in variables outside the constant model) remains valid. In this condition, it turns out that the Sukuk Fair Price value in Indonesia is 3,844 units, while the Sukuk Fair Price value in Malaysia is 4,502 units. This means that if the only thing affecting the Fair Price of sukuk in Indonesia and Malaysia is the Rupiah Exchange or the Ringgit Exchange Rate against the United States Dollar which is in constant condition and the ceteris paribus assumption applies, then the value of the Sukuk Fair Price in Indonesia is lower than in Malaysia.

*Research Result Model 3 (Yield To Maturity)*  
**Table 7. Common Effect Model (CEM) GLS Method**

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.625587	0.014565	317.5755	0.0000
LOG(YIELD?)	-0.007188	0.008801	-0.816697	0.4192
Weighted Statistics				
R-squared	0.017250			
Adjusted R-squared	-0.008612			

Source : Processed Eviews Result,2020.

**Table 8. Fixed Effect Model (FEM) GLS Method**

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.074041	0.025813	196.5678	0.0000
LOG(YIELD?)	-0.244095	0.013716	-17.79684	0.0000
Fixed Effects (Cross)				
_IND--C	0.082207			
_MLY--C	-0.082207			
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.895916			
Adjusted R-squared	0.890289			

Source : Processed Eviews Result,2020.

**Table 9. Chow Test**

Redundant Fixed Effects Tests

Pool: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	311.796199	(1,37)	0.0000

Source : Processed Eviews Result, 2020.

## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

From the Chow test it is known that the value of the Cross-section Probability F is 0.0000; this is less than the value of  $\alpha = 5\%$  or 0.05; meaning that the best model is FEM (Fixed Effect Model). From the FEM method in model 3, it is known that the t statistical probability value of the independent variable is 0,000 and the coefficient value of the independent variable is -0.244. Because the value of the probability t statistic is smaller than  $\alpha = 5\%$  or 0.05, and because the coefficient value of the independent variable is negative, it means that, Yield to Maturity, generally has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia. If Yield To Maturity increases by 1%, then the Fair Price of sukuk in Indonesia and Malaysia will decrease by 0.244%.

From the FEM method data processing in model 3, it is also known that the difference in the amount of Sukuk Fair Price in Indonesia and Malaysia, when the change in Yield to Maturity is 0 or constant. Here, of course, the assumption of ceteris paribus (the value of change in variables outside the constant model) remains valid. In this condition, it turns out that the Sukuk Fair Price value in Indonesia is 5,156 units, while the Sukuk Fair Price value in Malaysia is 4,992 units. This means that if the only thing affecting the Fair Price of sukuk in Indonesia and Malaysia is the Yield To Maturity which is in constant condition and also the ceteris paribus assumption applies, then the value of the Fair Price of sukuk in Indonesia is higher than in Malaysia.

### Research Result Model 4 (Time To Maturity)

**Table 10.** Common Effect Model (CEM) GLS Method

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.649334	0.010652	436.4920	0.0000
LOG(TTM?)	-0.017724	0.005241	-3.382053	0.0017
Weighted Statistics				
R-squared	0.231365			
Adjusted R-squared	0.211138			

Source : Processed Eviews Result, 2020.

**Table 11.** Fixed Effect Model (FEM) GLS Method

Dependent Variable: LOG(PRICE?)

Method: Pooled EGLS (Cross-section weights)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.684450	0.012300	380.8493	0.0000
LOG(TTM?)	-0.040133	0.007034	-5.705624	0.0000
Fixed Effects (Cross)				
_IND--C	-0.014151			
_MLY--C	0.014151			
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.470783			
Adjusted R-squared	0.442177			

**Table 12.** Chow Test

Redundant Fixed Effects Tests

Pool: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	16.174544	(1,37)	0.0003

## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

From Chow's test it is known that the Cross-section Probability value  $F$  is 0.0003; this is less than the value of  $\alpha = 5\%$  or 0.05; meaning that the best model is FEM (Fixed Effect Model). From the FEM method in model 4, it is known that the statistical probability value of the independent variable is 0,000 and the coefficient value of the independent variable is -0.04. Because the probability value of  $t$  statistic is smaller than  $\alpha = 5\%$  or 0.05, and because the coefficient value of the independent variable is negative, it means that, Time to Maturity, generally has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia. If Time To Maturity increases by 1%, then the Fair Price of sukuk in Indonesia and Malaysia will decrease by 0.04%. From the FEM method data processing in model 4, it is also known that the difference in the fair price of sukuk in Indonesia and Malaysia, when the change in Time to Maturity is 0 or constant. Here, of course, the assumption of *ceteris paribus* (the value of change in variables outside the constant model) remains valid. In this condition, it turns out that the Sukuk Fair Price value in Indonesia is 3,844 units, while the Sukuk Fair Price value in Malaysia is 4,502 units. This means that if the only thing affecting the Fair Price of sukuk in Indonesia and Malaysia is the Time To Maturity which is in constant condition and the *ceteris paribus* assumption applies, then the value of the Fair Price of sukuk in Indonesia is lower than in Malaysia.

From models 1, 2, 3 and 4, It can be seen that the independent variable that has the greatest partial influence on the value of Fair Price Sukuk in Indonesia and Malaysia is Yield To Maturity, because the coefficient of change is the largest at 0.244%. From models 1, 2, 3 and 4; It can also be seen that the value of Fair Price Sukuk in Indonesia and Malaysia is balanced, Indonesia is 2 times having bigger value, but Malaysia is also 2 times having bigger value.

### Economic Analysis

The economic interpretation of the research on Corporate Sukuk in Indonesia and Malaysia is as follows:

1. The analysis shows that the Macroeconomic Factors (SBIS or Islamic Interbank Rate) generally have a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia. If the SBIS or Islamic Interbank Rate increases by 1%, the Fair Price of sukuk in Indonesia and Malaysia will decrease by 0.197%. The results of this study are consistent with research by [Azizah \(2015\)](#), namely that the SBI interest rate has a negative and significant effect on bond prices.
2. The results of this study, Macroeconomic Factors (Rupiah Exchange Rate and Ringgit Exchange Rate against the US Dollar), have a positive and significant effect on the fair price of sukuk in Indonesia and Malaysia. If the Rupiah Exchange Rate or the Ringgit Exchange Rate against the United States Dollar increases by 1%, then the Sukuk Fair Price in Indonesia and Malaysia will increase by 0.081%. according to research by [Sukanto \(2015\)](#); [Subagia \(2015\)](#); [Purnomo\(2017\)](#); [Sukanto \(2019\)](#) the rupiah exchange rate against the United States dollar partially has a positive and significant effect on the price of government bonds.
3. Yield To Maturity, has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia. If Yield To Maturity increases by 1%, then the Fair Price of sukuk in Indonesia and Malaysia will decrease by 0.244%. The results of this study are in line with [Fitriana \(2013\)](#) research results that bond yields have a negative and significant effect. In accordance with the theory which states that if the yield decreases, the price will increase with a smaller marginal increase. Conversely, if the yield increases, the bond price will decrease with a smaller marginal decline ([Tandelilin, 2010](#)).
4. In this study, Time To Maturity has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia. If Time To Maturity increases by 1%, then the Fair Price of sukuk in Indonesia and Malaysia will decrease by 0.04%. The results of this study are in accordance with [Sumarna \(2016\)](#); [Yanti \(2017\)](#) where the maturity period or Time To Maturity has a negative and significant effect on changes in corporate bond prices.

### CONCLUSIONS

Based on the results of panel data analysis and with the assumption of *ceteris paribus*, the following is the conclusion of this study:

1. Macroeconomic factors (SBIS and Islamic Interbank Rate), generally have a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia;
2. Macroeconomic factors (Rupiah exchange rate and Ringgit exchange rate against the US dollar), have a positive and significant effect on the fair price of sukuk in Indonesia and Malaysia;
3. Yield To Maturity, has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia.
4. Time To Maturity, has a negative and significant effect on the fair price of sukuk in Indonesia and Malaysia;
5. From the analysis of individual securities it is known:
  - a) If the only thing affecting the Sukuk Fair Price in Indonesia and Malaysia is the SBIS or Islamic Interbank Rate, which changes are in a constant condition or is zero, the value of the Sukuk Fair Price in Indonesia is higher than in Malaysia.
  - b) If the only thing affecting the fair price of sukuk in Indonesia and Malaysia is the Rupiah exchange rate or the ringgit exchange rate against the United States dollar, which changes are in constant condition or zero value, then the value of the fair price of sukuk in Indonesia is lower than in Malaysia.



## Assessment of Macroeconomic Factors, Yield to Maturity and Time to Maturity towards Fair Price of Corporate Sukuk in Indonesia and Malaysia

- c) When the only condition that affects the fair price of sukuk in Indonesia and Malaysia, is only Yield to Maturity, whose changes are in constant condition or zero value, then the value of the fair price of sukuk in Indonesia is higher than in Malaysia.
- d) When the only condition affecting the Fair Price of sukuk in Indonesia and Malaysia is Time to Maturity, the changes are in constant condition or zero value, then the value of the Fair Price of sukuk in Indonesia is lower than in Malaysia.

### REFERENCES

- 1) Aziz, Roikhan Mochamad. (2013). *The Simulation of Islamic Economic Instrument as Sukuk*. Jurnal Nalar Fiqh Vol. 8 No. 2.
- 2) Aziz, Roikhan Mochamad. (2016). *Teori H dalam Islam Sebagai Wahyu dan Turats*. Jurnal Ushuluddin, UIN Riau. Volume 24 Nomor 1. ISSN: 1412-0909/E-ISSN: 2407-8247. <http://ejournal.uin-suska.ac.id/index.php/ushuludin>
- 3) Azizah, Yosi (2015), *Analisis Faktor Spesifik Yang Mempengaruhi Harga Obligasi Negara Di Bursa Efek Indonesia*, Jurnal Fakultas Ekonomi UII Tahun 2015
- 4) El Mosaid, Fadma & Rachid Boutti. (2014). *Sukuk and Bond Performance in Malaysia*. International Journal of Economics and Finance; Vol 6 No 2:2014, Published by Canadian Center of Science and Education
- 5) Fitriana, Eka Sari, Suci Rohayati (2013). *Pengaruh Suku Bunga Terhadap Harga Obligasi Melalui Yield Obligasi*, Jurnal Ilmu Manajemen Volume 1 Nomor 3 Mei 2013
- 6) Ghozali, Imam. (2012). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Yogyakarta: Universitas Diponegoro
- 7) Irawan Dan Cahyo Pramono (2015), *Determinan Faktor-Faktor Harga Obligasi Perusahaan Keuangan Di Bursa Efek Indonesia*, Seminar Nasional dan The 4th Call for Syariah Paper ISSN 2460-0784 Tahun 2015
- 8) Purnomo, Endri, Novi Puspitasari. (2017), *Pengaruh Likuiditas, Kupon, Jangka Waktu Jatuh Tempo Dan Suku Bunga Pasar Terhadap Harga Pasar Obligasi Berperingkat Rendah Dan Harga Pasar Obligasi Berperingkat Tinggi*. Jurnal Relasi Stie Mandala Jember Vol 13, No 1 (2017).
- 9) Rosadi, Dedi (2011). *Ekonometrika & Analisis Runtun Waktu Terapan Dengan Eviews*. Yogyakarta: Andi
- 10) Siskawati, Eka. (2010). *Perkembangan Obligasi Syariah di Indonesia : Suatu Tinjauan* Jurnal Akuntansi & Manajemen Vol .5 No.2 Desember 2010 ISSN 1858-3687 hal 1-9.
- 11) Sudarwati. (2010). *Pasar Modal*. Jakarta: Penerbit Erlangga.
- 12) Sriyana, Jaka. (2014). *Metode Regresi Data Panel*. Yogyakarta : Ekonisia
- 13) Subagia, I Ketut, Ida Bagus Panji Sedana. (2015), *Analisis Pengaruh Likuiditas, Waktu Jatuh Tempo Dan Kupon Obligasi Terhadap Perubahan Harga Obligasi Korporasi Di Bursa Efek Indonesia*, E-Jurnal Manajemen Unud, Vol. 4, No. 5, 2015 : 1451-1465 ISSN: 2302-8912
- 14) Sukanto, Eman. Widaryanti. (2015). *Pengaruh Rate Bunga Deposito, Nilai Tukar Rupiah Dan Besaran Inflasi Terhadap Harga Obligasi Pemerintah Republik Indonesia (Periode 2009-2013)*. Jurnal Dinamika Ekonomi & Bisnis. Unisnu Jepara
- 15) Sukanto, Eman. Widaryanti. (2019). *Pengaruh Suku Bunga Deposito, Kurs Rupiah-USD, Tingkat Inflasi, IHSI Dan Volume Transaksi Terhadap Harga Obligasi Pemerintah RI (SUN)*. Jurnal Fokus Ekonomi, Vol. 4 No. 2 Desember 2009 : 9 - 23
- 16) Sumarna, I Wayan, Ida Bagus Badjra (2016), *Pengaruh Rating, Maturitas, Tingkat Suku Bunga Dan Kupon Terhadap Perubahan Harga Obligasi Korporasi Di Bursa Efek Indonesia*, E-Jurnal Manajemen Unud, Vol. 5, No. 12, 2016: 7724-7751 Issn : 2302-8912
- 17) Tandililin, Eduardus. (2010). *Portofolio dan Investasi. Edisi Pertama*. Yogyakarta: Kanisius.
- 18) Yanti, Tri. (2016). *Analisis Pengaruh Peringkat, Maturitas, Dan Kupon Obligasi Terhadap Harga Obligasi Di Bursa Efek Indonesia*, Jurnal Ekonomi dan Bisnis Universitas Tanjungpura Tahun 2016.