



# Pengaruh *Maturity Issue Term* dan Likuiditas Sukuk terhadap *Yield Sukuk*

Laila Nur Fadhila<sup>1\*</sup>, Dwi Irawati<sup>2\*</sup>, Mahendra Galih Prasaja<sup>3\*</sup>

<sup>1</sup> Laila Nur Fadhila, Faculty of Economics, Muhammadiyah University Purworejo, Purworejo, Indonesia

\*fadhilalaila7@gmail.com

<sup>2</sup> Dr. Dwi Irawati, S.E., M.Si, Faculty of Economics, Muhammadiyah University Purworejo, Purworejo, Indonesia

<sup>3</sup> Mahendra Galih Prasaja, S.E., M.M, Faculty of Economics, Muhammadiyah University Purworejo, Purworejo, Indonesia

## Abstract

The development of corporate Sukuk in Indonesia continues to increase every year. That is because there is a market demand for halal investment, avoiding usury, gharar, and maysir, so the instruments traded must be by sharia principles. Sukuk yield is the rate of return invested in corporate Sukuk. Sukuk yield is one of the benchmarks considered by investors in evaluating and making investment decisions on Sukuk. In assessing and evaluating corporate Sukuk, several factors need to be considered, namely maturity issue term and Sukuk liquidity.

This study aims to examine the effect of the maturity issue term and Sukuk liquidity on the yield of corporate Sukuk listed on the Indonesia Stock Exchange in the 2016-2018 period.

This research is a descriptive study, research which includes collecting data to test hypotheses or answer questions about the latest status of research subjects. The sampling technique uses a purposive sampling technique with a sample of 14 corporate Sukuk. Hypothesis testing uses multiple linear regression analyses with  $\alpha$  (5%).

The results of this study indicate that the maturity issue term and Sukuk liquidity have a significant positive effect on Sukuk yield.

**Keywords:** *maturity issue term*, sukuk liquidity, sukuk yield

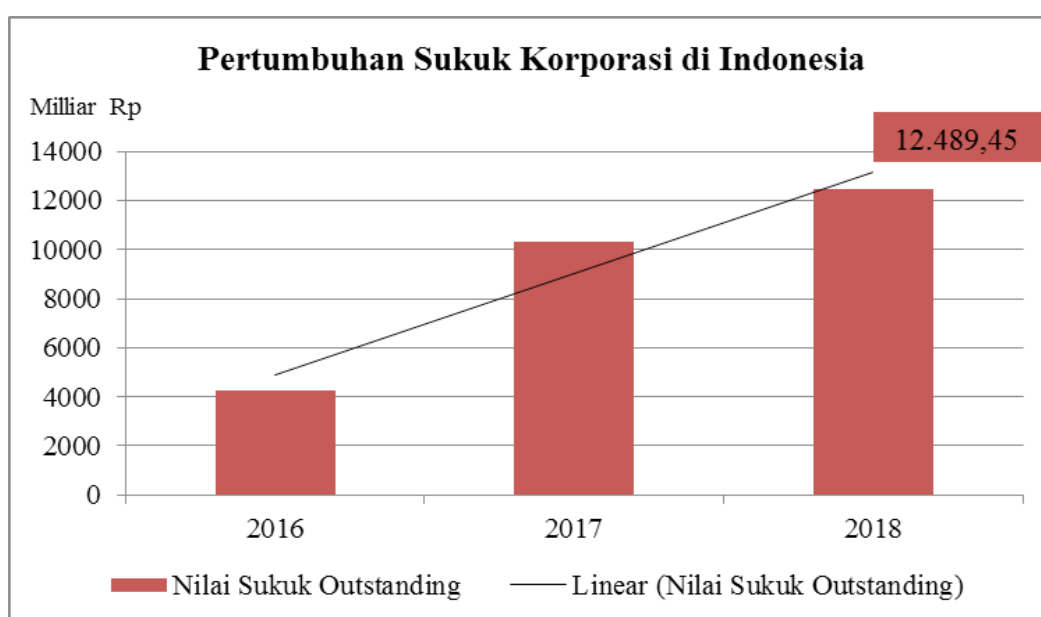
## Introduction

Investment is an investment of funds made by a company into an asset (aktiva) in the hope of earning income in the future (Harjito and Martono, 2014: 144). One form of investment that can be done is an investment in the capital market.

The development of the capital market in Indonesia was accompanied by the emergence of the Islamic capital market which was inaugurated by the Minister of Finance Boediono in March 2003. In the Sharia Capital Market Roadmap issued by the Financial Services Authority (2015: 23), the Islamic capital market is a capital market activity that has special characteristics. These characteristics are formed from the fulfillment of sharia principles in creating products, making contracts in the issuance of sharia securities, conducting trade transactions, and conducting other capital market activities. Sharia principles that must be met include the avoidance of sharia capital market activities from the elements of gambling (maysir), uncertainty (gharar), the interest system (usury), and injustice.

One of the products or instruments in the Islamic capital market that investors are interested in is Sukuk. The first Sukuk in Indonesia was issued using the mudarabah agreement in 2002 ([www.idx.co.id](http://www.idx.co.id)). The mudarabah Sukuk issued by PT Indosat Tbk worth 175 billion rupiahs with a term of 5 (five) years.

The development of corporate Sukuk in Indonesia continues to increase every year. This can be seen based on the following Sukuk statistics:



Source: Financial Services Authority, data processed.

Image 1.

The Growth of Corporate Sukuk in Indonesia

Based on data from the Financial Services Authority (OJK), from 2016 to 2018 an increase in the value of outstanding Sukuk with an average increase of 38.01%. The existence of this phenomenon indicates that corporate Sukuk is in great demand and is starting to flourish in Indonesia.

For publishing companies, Sukuk is one alternative in meeting the funding needs. That is because there is a market demand for halal investment, avoiding usury, gharar, and maysir, so the instruments traded must be by following sharia principles.

Sukuk investment can be evaluated and explained through yield Sukuk. Sukuk is a reflection of the results of Sukuk that can provide information for investors in making investment returns. Sukuk yields vary depending on several attributes, Sukuk, changes in the period to maturity, Sukuk (maturity), defaults, coupon interest rates, call and put conditions (call and put conditions), tax status, and can trade (marketability) (Sharpe, Alexander, and Bailey, 2005: 356).

The maturity period needs to be considered if you want to invest your funds in Sukuk. This determines the amount and time of cash flow promised to the Sukuk holders by the issuer (Tandelilin, 2017: 357). The longer the maturity period of the Sukuk, the higher the level of risk that will be faced by investors, so that the results to be obtained will be higher. Vice versa, the shorter the Sukuk maturity will be the lower the investment risk so that the results obtained will be smaller (Melzatia, et al, 2018).

Investors must also pay attention to Sukuk liquidity (ease of marketing) which refers to the ability of investors to quickly sell assets without having to change prices substantially (Sharpe, Alexander, and Bailey, 2005: 359). According to Rahardjo (2004: 18), liquid Sukuk is Sukuk that are widely circulated among Sukuk holders and are often traded by investors in the Sukuk market. Some Sukuk is bought and sold in the dealer market, one measure of bond marketing is the bid-ask spread offered by the dealer on Sukuk. Active Sukuk traded tend to have lower bid-ask spreads than inactive Sukuk. Sukuk good liquidity causes a decreased risk so that the required yield also decreases. Therefore, active Sukuk should have lower yields and higher intrinsic value (Sharpe, Alexander, and Bailey, 2005: 359).

Based on this description, the researcher is interested in examining the related “Effect of Maturity Issue Term and Sukuk Liquidity on Sukuk Yield “.

## Methodology

This research is a descriptive study, which is research that includes collecting data to test hypotheses or answer questions about the latest status of research subjects (Kuncoro, 2013: 12). In this study, researchers examined the effect of maturity issue term, rating outlook, and Sukuk liquidity on Sukuk yields for the period of 2016-2018.

The sampling technique used in this study was the purposive sampling technique. Purposive sampling is a sampling technique with criteria established by researchers (Sekaran and Bougie, 2016: 248). The number of samples used in this study was 14 corporate Sukuk.

The criteria used, namely:

- a. Companies that publish corporate Sukuk and actively traded during 2016-2018 are listed on the Indonesia Stock Exchange.
- b. The corporate Sukuk is still circulating and has not matured in 2016-2018. It means that the data needed during the study period is available.
- c. Have a complete financial report during the observation period, namely 2016-2018.
- d. Sukuk issued by non-bank companies. This is because there are differences in the balance sheet and financial statement components of banks and non-banks.

The analysis technique in this study uses multiple linear regression techniques. The several steps that must be taken in the technique of multiple linear regression analysis before the regression model equation is formed are to test the classical assumptions including The analysis technique in this study uses multiple linear regression techniques. The several steps that must be taken in the technique of multiple linear regression analysis before the regression model equation is formed are to test the classical assumptions including:

1. Normality Test

The normality test aims to test whether, in the regression model, confounding or residual variables have a normal distribution. The way to detect whether residuals are normally distributed or not is by the Jarque-Bera (JB) test. If the probability value is greater than 0.05, then the residuals are normally distributed. Whereas if the probability value is smaller 0.05 then the residuals are not normally distributed (Ghozali and Ratmono, 2017: 145).

## 2. Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the residual error in the  $t$  period and the intruder error in the  $t-1$  period (before). To detect the existence of autocorrelation can use the Durbin-Watson test (DW Test). If the probability value is equal to 0 then there is no autocorrelation. Whereas if the probability value is not equal to 0 then there is autocorrelation (Ghozali and Ratmono, 2017: 121).

## 3. Multicollinearity Test

Multicollinearity Test aims to test whether the regression model found a high or perfect correlation between independent variables. Multicollinearity can be seen from the value of tolerance and variance inflation factor (VIF). Tolerance measures the variability of selected independent variables that are not explained by other independent variables. The cutoff value commonly used to indicate multicollinearity is a tolerance value  $< 0.10$  or equal to a VIF value  $> 10$  (Ghozali and Ratmono, 2017: 73).

## 4. Heteroscedasticity Test

The heteroscedasticity test aims at whether in the regression model there is an unequal variance from the residuals of one observation to another. The method used to detect the presence or absence of heteroscedasticity in this study is to use the Glejser Test. If the variable probability value is greater than 0.05 then heteroscedasticity does not occur. But if the variable probability value is smaller than 0.05 then heteroscedasticity occurs (Ghozali and Ratmono, 2017: 91).

Analysis of the data used in this study was processed using EVIEWS software version 10. The formulas in multiple linear regression testing are as follows:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Information:

Y	= Sukuk Yield
a	= constant
$b_1, b_2, b_3$	= Regression coefficient
$X_1$	= Maturity issue term
$X_2$	= Sukuk Liquidity
e	= Error

## Result and Discussion

### 1. Descriptive Statistics

After processing the data with the Eviews version 10 program, descriptive statistics of the variables of the research objects obtained are presented in Table 1 below.

Table 1  
Descriptive Statistics Results

Variable	N	Minimum	Maximum	Mean	Std. Dev
<i>Maturity Issue Term</i>	140	5	12	7,64	2,26
Sukuk Liquidity	140	0	41	3,81	6,39
Sukuk Yield	140	7,09	10,84	8,75	0,85

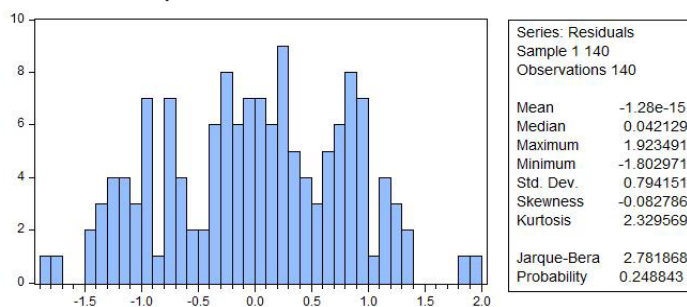
Source: Output Eviews 10, 2020 (data processed)

Table 1 shows the minimum value, maximum value, mean value, and Standard Deviation (SD) value of each variable and the amount of data (N) used in this study. Standard deviation indicates how far the value obtained may deviate from the expected value. The greater the standard deviation, the greater the possibility that the real value deviates from expectations.

Descriptive statistical test results in Table 1 show that the amount of data used in this study was 140 data with maturity issue terms and Sukuk liquidity as independent variables and Sukuk yields as dependent variables. The variables in this study have a small distribution level or the absence of a large enough gap from the lowest and highest level (homogeneous). This is indicated from the standard deviation value of the variable is lower than the average value (mean). However, the Sukuk liquidity variable has a standard deviation value that is higher than the mean value. This shows that the data used in the Sukuk liquidity variable has a large (heterogeneous) distribution.

### 2. Classical Assumption Test

#### a. Normality test



Source: Output Eviews  
10, 2020  
Figure 2  
Normality Chart

Based on Figure 3, it shows that the Jarque-Bera value is 2.78 with a probability of 0.25. Probability is greater than 0.05, so the data is normally distributed.

b. Multicollinearity Test

Table 2  
Multicollinearity Test Results

Variable	VIF	Conclusion
<i>Maturity Issue Term</i> ( $X_1$ )	1,038	No Multicollinearity occurs
Sukuk Liquidity ( $X_2$ )	1,038	No Multicollinearity occurs

Source: Output Eviews 10, 2020 (data processed)

Based on Table 6 shows that there is no correlation between independent variables because both variables have a VIF value of 1.038 that is smaller than 10 so it can be concluded that there is no multicollinearity in the two independent variables.

c. Autocorrelation Test

Table 3  
Autocorrelation Test Results

Adjust R-Squared	Std. Error of regression	Durbin Watson	Conclusion
0,119	0,79	0,761	No autocorrelation occurred

Source: Output Eviews 10, 2020 (data processed)

The Durbin Watson value of 0.761 was then compared with the Durbin Watson table value using 5% significance, the number of samples (N) was 140, and the number of independent variables (k) was 2, resulting in values of  $dL = 1.6974$  and  $dU = 1.7544$ . It means that the Durbin Watson value is greater than 0 and smaller than 1.6974 ( $dL$ ), so it can be concluded that the regression equation model does not contain a positive autocorrelation problem.

d. Heteroscedasticity Test

Table 4  
Glejser Test Results

Variable	<i>Probability</i>	Decision
<i>Maturity Issue Term</i> (X <sub>1</sub> )	0,609	There is no heteroscedasticity problem
Sukuk Liquidity (X2)	0,518	There is no heteroscedasticity problem

Source: Output Eviews 10, 2020 (data processed)

Based on Table 4, the glacier test results show that all variables have a probability > 0.05. So it can be concluded that the model does not experience heteroscedasticity problems.

## Hypothesis test

### 1. Multiple Linear Regression Analysis

The results of the coefficient test on the maturity issue term and liquidity of Sukuk to Sukuk yield are shown in Table 10 below:

Table 5  
Multiple Linear Regression Test Results

Model	<i>Coefficients</i>	<i>Probability</i>
(Constant)	8,003	0,000
<i>Maturity Issue Term</i> (X <sub>1</sub> )	0,082	0,0085
Sukuk Liquidity (X2)	0,034	0,0022

Source: Output Eviews 10, 2020 (data processed)

Based on Table 10 can be obtained the following regression equation:

$$\text{Sukuk Yield} = 8.003 + 0.082 X_1 + 0.034 X_2 + e$$

From the multiple linear regression equation, then:



- a. The constant value (a) is 8.003. The constant magnitude shows that if the independent variables (maturity issue term and Sukuk liquidity) are constant, then the dependent variable (Sukuk yield) is 8,003
- b. The maturity issue term regression coefficient value shows positive (0.082) which means that if the maturity issue term increases by one percent, the Sukuk yield will increase by 0.082% assuming other variables are constant.
- c. Sukuk liquidity regression coefficient value shows positive (0.034) which means that if the Sukuk liquidity increases by one percent, the Sukuk yield will increase by 0.034% assuming other variables are constant.

## Discussion

The following discussion of the results of hypothesis testing. The results of the significance test can be seen in Table 5.

### a. Effect of Maturity Issue Term on Sukuk Yield in Corporate Sukuk in 2016-2018

H1: Maturity issue term has a significant positive effect on Sukuk yield.

Table 5 shows the maturity issue term regression coefficient value is positive (0.081) with a probability of 0.0085 ( $<0.05$ ), which means that it is significantly positive. This means that the maturity issue term during the study period has an effect on Sukuk yield, or it can be interpreted that the longer the maturity period of the Sukuk can be a benchmark in obtaining high yields.

Maturity issue term is the period of Sukuk from issuance to maturity. Investors who have Sukuk with longer maturity bear higher transaction costs, so maturity will affect the yield received by investors. The positive relationship between maturity issue term and Sukuk yield is caused by the longer the Sukuk period, the uncertainty risk will be higher, so the expected interest rate will also be higher (Tandelilin, 2017: 292). Maturity issue term will determine the amount and time of cash flow promised to Sukuk holders by the issuer (Sharpe, Alexander, and Bailey, 2005: 357).

The results of this study reinforce previous research conducted by Melzattia, et al (2018), Purwanti and Purwidiyanti (2017), Purnamawati (2013) who stated that the term maturity issue has an influence on Sukuk yield.

## **b. Effect of Sukuk Liquidity on Sukuk Yield on Corporate Sukuk in 2016-2018**

H2: Sukuk Liquidity has a significant negative effect on Sukuk yield.

Table 5 shows the Sukuk liquidity regression coefficient value is positive (0.034) with a probability of 0.0022 ( $< 0.05$ ), which means that it is significantly positive. Means, Sukuk liquidity during the study period affects the Sukuk yield, or it can be interpreted that the more liquid Sukuk the higher the yield obtained.

Sukuk Liquidity illustrates Sukuk trading activities. In general, greater Sukuk trading activities indicate greater liquidity. Active Sukuk traded have lower bid-ask spreads than active Sukuk. Good liquidity will lead to decreased risk so that the resulting yield will also decrease (Sharpe, Alexander, and Bailey, 2005: 359).

This study shows that Sukuk that has high liquidity produces high yields. Referring to the study of Friewald et al (2012), the effect of trade volume on yields that have a significant positive relationship can be caused by the Sukuk market conditions under study that has smaller trades. Even though the trading volume indicates good liquidity, it is still volatile so that it does not reduce yield and has a negative relationship. If the Sukuk purchased has high liquidity, the price of the Sukuk tends to be stable and increase. But if the Sukuk liquidity is low, Sukuk prices tend to weaken. Therefore, when buying Sukuk you should choose a liquid Sukuk that is always traded on the Sukuk market and is always in demand by investors.

The results of this study reinforce previous research conducted by Susanti and Permana (2017), and Indarsih (2013) which states that Sukuk liquidity influences Sukuk yield.

## **Conclusion**

Based on the results of research and discussion by examining the effect of term maturity issues and Sukuk liquidity on Sukuk yields, it can be concluded that:

1. Maturity issue term has a significant positive effect on Sukuk yield.
2. Sukuk liquidity has a significant positive effect on Sukuk yield.

## **Implication**

1. Practical Implications

The results of this study are expected to be used as an empirical basis for investment decision making, especially about corporate Sukuk investments.

## 2. Theoretical Implications

The results of this study are in line with previous studies and are expected to be an additional research reference in the field of financial management, especially about factors affecting Sukuk yields such as maturity, Sukuk liquidity, Sukuk ratings, coupon interest rates, and tax status.

## REFERENCE

- Bodie, Zvl, Alex Kane, dan Alan J. Marcus. 2006. *Investments Buku Dua Edisi Enam*. Jakarta: Salemba Empat.
- Bodie, Zvl, Alex Kane, dan Alan J. Marcus. 2019. *Dasar-dasar Investasi Edisi Sembilan*. Jakarta: Salemba Empat.
- Direktorat Pasar Modal Syariah Otoritas Jasa Keuangan. 2019. *Roadmap Pasar Modal Syariah 2015-2019*. Diunduh dari [www.ojk.go.id](http://www.ojk.go.id) pada tanggal 2 Oktober 2019.
- Fabozzi, Frank J. 2000. *Manajemen Investasi Buku Dua*. Jakarta: Salemba Empat.
- Friewald, Nils, Rainer Jankowitsch, dan Marti G Subrahmanyam. 2012. *Illiquidity or credit deterioration: A study of liquidity in the US Corporate Bond Market During Financial Crises*. *Journal of Financial Economic* 105: 18-35.
- Ghozali, Imam dan Dwi Ratmono, 2017. *Analisis Multavariat dan Eonometrika*. Semarang: Badan Penerbit Universitas Diponegoro.
- Harjito, Agus dan Martono. 2014. *Manajemen Keuangan Edisi Dua*. Yogyakarta: Ekonisia.
- Indarsih, Nanik. 2013. Pengaruh Tingkat Suku Bunga SBI, Rating, Likuiditas, dan Maturitas terhadap Yield to Maturity Obligasi. *Jurnal Ilmu Manajemen Universitas Negeri Surabaya* 1(1): 125-136.
- Kasmir. 2016. *Bank dan Lembaga Keuangan Lainnya*. Jakarta: PT Rajagrafundo Persada.
- Kuncoro, Mudrajat. 2013. *Metode Riset untuk Bisnis dan Ekonomi*. Jakarta: Erlangga.
- Melzatia, Shinta, Caturida Meiwanto Doktoralina, dan Mahroji. 2018. *Yield Sukuk: Maturity, Rating and Value of Emission*. *IISTE: Research Journal of Finance and Accounting* 9(12): 106-112.

- Muhammad. 2014. *Manajemen Keuangan Syariah Analisis Fiqh dan Keuangan*. Yogyakarta: UPP STIM YKPN.
- Noviana, Linda dan Grace Tianna Solovida. 2018. Pengaruh Likuiditas, Leverage, *Rating* Obligasi Syariah, Risiko Obligasi Syariah terhadap *Yield* Obligasi Syariah (Sukuk). *Stability: Jurnal of Management and Business* 1(2): 171-188.
- Oktavian, Oky, Harietti, dan Sjahrudin. 2015. Pengaruh Tingkat Inflasi, *Debt to Equity Ratio*, Likuiditas Obligasi, dan *Rating* Obligasi terhadap *Yield* Obligasi Korporasi yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2009-2012. *JOM FEKON Universitas Pekanbaru Indonesia* 2(1): 1-20.
- PT Bursa Efek Indonesia. 2017. *Indonesia Bond Market Directory 2017-2018*. Diunduh dari [www.idx.co.id](http://www.idx.co.id) pada tanggal 4 Oktober 2019.
- PT Bursa Efek Indonesia. 2018. *Indonesia Bond Market Directory 2018-2019*. Diunduh dari [www.idx.co.id](http://www.idx.co.id) pada tanggal 4 Oktober 2019.
- Purnamawati, I Gusti Ayu. 2013. Pengaruh Peringkat Obligasi, Tingkat Suku Bunga Sertifikat Bank Indonesia, Rasio Leverage, Ukuran Perusahaan, dan Umur Obligasi pada Imbal Hasil Obligasi Korporasi di Bursa Efek Indonesia. *Vokasi Jurnal Riset Akuntansi Undiksha* 2(1): 28-45.
- Purwanti, Puput dan Wida Purwidianti. 2017. Pengaruh Peringkat Obligasi, Tingkat Suku Bunga Sertifikat Bank Indonesia, Rasio Leverage, Ukuran Perusahaan, Umur Obligasi, dan Tingkat Inflasi pada Imbal Hasil Obligasi. *Jurnal Manajemen dan Bisnis Media Ekonomi Universitas Muhammadiyah Purwokerto* 17(1): 14-24.
- Rahardjo, Sapto. 2004. *Panduan Investasi Obligasi*. Jakarta: PT. Gramedia Pustaka Utama.
- Sari, Kadek Ary Asta Pramita dan Henny Rahyuda. 2019. Pengaruh Kupon, Maturitas, Likuiditas, dan Suku Bunga terhadap *Yield* Obligasi Korporasi. *E-Jurnal Manajemen Universitas Udayana* 8(10): 5966-5983.
- Sari, Ni Wayan Linda Naluritha dan Nyoman Abudanti. 2015. Variabel-variabel yang Mempengaruhi *Yield* Obligasi pada Perusahaan yang Terdaftar di Bursa Efek Indonesia. *E-Jurnal Manajemen Universitas Udayana* 4(11): 3796-3824.
- Sekaran, Uma dan Roger Bougie. 2016. *Research Method for Business A Skill Building Approach Seventh Edition*. United Kingdon: John Wiley & Sons.

- Sharpe, F. William, Gordon J. Alexander, dan Jeffery V. Bailey. 2015. *Investasi Edisi Keenam Jilid Satu*. Jakarta:PT Intermedia.
- Soemitra, Andi. 2014. *Bank dan Lembaga Keuangan Syariah*. Jakarta: Kencana Prenadamedia Group.
- Susanti, Neneng dan Muhamad Ruri Permana. 2017. Pengaruh Peringkat, Likuiditas, Kupon, dan Maturitas terhadap *Yield* Obligasi pada Bursa Efek Indonesia (BEI) Periode 2013-2014. *Jurnal Muara Ilmu Ekonomi dan Bisnis Universitas Widyatama Bandung* 1(1): 1-10.
- Tandelilin, Eduardus. 2017. *Pasar Modal Manajemen Portofolio dan Investasi*. Yogyakarta: PT.Karnisius.
- Zubir, Zalmi. 2012. *Potofolio Obligasi*. Jakarta: Salemba Empat.