



International Journal of Economic Research

ISSN : 0972-9380

available at <http://www.serialsjournal.com>

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Volume 14 • Number 11 • 2017

The Dynamics of Islamic International Stock Price Movement to Jakarta Islamic Index

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ABSTRACT

The dynamics of the capital market are not isolated activities of economic activity outside the capital market. This macroeconomic condition is due to market sentiment and turmoil in the capital market. The sensitivity of the capital market to changes in macroeconomic and global conditions is an interesting theme for attention. This research is intended to explain the influence of international stock indexes represented by Dow Jones Islamic Market Europe, Dow Jones Islamic Market USA, Dow Jones Islamic Japan, Dow Jones Islamic Malaysia and Jakarta Islamic Index. The data used are secondary data which is daily data period 1 Januari 2017 until 31 March 2017. The analysis technique used is model equation structure with software Amos and multiple regression analysis with software R. The results of Dow Jones Islamic USA and Dow Jones Islamic Malaysia variables that give a significant influence on the Jakarta Islamic Index. While other variables proved not biased against the Jakarta Islamic Index. The contribution of all Dow Jones Islamic Market variables of Europe, United States, Japan and Malaysia to the Jakarta Islamic Index is 67.77%.

Keywords: Dow Jones Islamic Market Europe, Dow Jones Islamic Market USA, Dow Jones Islamic Market Japan, Dow Jones Islamic Market Malaysia, Jakarta Islamic Index.

1. INTRODUCTION

The role of syariah capital market in supporting the country's economy is very important that it can affect the growth of the real market through syariah -based investment is the investment integrates religious values embraced in doing investment by selecting (screening) in choosing the instrument of investment. Syariah capital market is a market in which the financial instruments or equity of Islamic capital are transacted and in a justified manner. The syariah capital market can be defined as a means to sell the

ownership of an enterprise as long as the object is real and embraces the principle of freedom of contract (Septian: 2012).

The Jakarta Islamic Index is an issuer whose business activities comply with the provisions of syariah law, prior to entering the JII shares through a gradual screening process, and then periodically evaluated based on the performance of exchange traded transactions and financial ratios. If not according to syariah then it will be issued and replaced other shares. As an instrument of capital market economy, JII can not be separated from the influence and changes of both economic and non-economic factors. One of the effects of the economic factor is the macroeconomic factor. Macroeconomic conditions often lead to market sentiment and turbulence in the capital market when it experiences a downward trend or slowdown, then the stock price will also decrease. Macroeconomic factors have been empirically proven to affect the condition of capital markets in some countries. These factors include inflation rate, and exchange rate. Inflation is a symptom of an increase in goods in general and continuously affect the stock price.

Apart from macroeconomic factors, the development of syariah capital market can not be separated from the influence of foreign capital market. This factor is one of the implications of globalization. Globalization occurs because of technological advances in the field of information and the opening of the world economy (Rianti, 2013). Indonesia's capital market is in a strong position vulnerable and easily influenced by capital market turmoil that occurred in the world region. Syariah stock exchange that also affects the Jakarta Islamic Index is Dow Jones. The emergence of the Dow Jones Islamic Market (DJIM) has had an impact on the development of investment in various countries both in a predominantly Muslim country such as Malaysia and non-Muslim countries such as Europe, America and Japan. With 35 Islamic indexes and nearly 1.8 billion US Dollars arranged based on syariah. Dow Jones Islamic Market has been successful in a relatively short time.

2. RESEARCH QUESTION

The issue of syariah stocks is the Jakarta Islamic Index which is influenced by various macroeconomic variable factors and international syariah stock index which need attention for investors for decision making. Problems that can be formulated are as follows:

- How the research model Dow Jones Islamic Market Europe, USA, Japan, and Malaysia to the Jakarta Islamic Index stock movement period January 1, 2017 to March 31, 2017?
- What is the effect of macroeconomic factors on the movement of shares of the Jakarta Islamic Index period 1 January 2017 to March 31, 2017?

3. THEORETICAL BACKGROUND AND HYPOTHESIS

Jakarta Islamic Index

In the Indonesian syariah capital market there is an index called Jakarta Islamic Index launched based on syariah principles on July 3, 2000 JII is a joint venture between Indonesia Stock Exchange (IDX) and PT Danareksa Investment. This index is expected to be a benchmark for the performance of syariah-based stocks and to further develop the syariah capital market.

In accordance with the guidelines set out in determining criteria of shares of issuers that are components of the Jakarta Islamic Index are:

1. Determination of Issuer's Stock Criteria

Selection of Syariah

Issuers do not run games that are classified as gambling and prohibited trades

Not a conventional financial institution

Not producing distribute food and beverages forbidden

It is not an enterprise that produces, distributes and provides goods and services that are morally destructive and harmful

Selection of Capitalization

This process filters 60 stocks with the highest market capitalization on the JSX

This process filters 30 stocks with the highest average transaction value on the JSX

Evaluation process of emiten every 6 months once

Source: Sudarsono, 2007

The objective of the Jakarta Islamic Index involving 30 selected stocks is benchmark to measure investment performance in Syariah-based stocks and increase investor confidence to develop investment in syariah equity or to provide opportunities for investors who want to invest in accordance with the principles of syariah- Principles of syariah (Beik: 2014).

The calculation of syariah shares in JII is conducted by PT Bursa Efek Indonesia by using the calculation method index which is determined by using the calculation method of index which is determined by market capitalization weightedness. This calculation includes adjustments made by changes to the issuer of corporate action.

Dow Jones Islamic Market

Dow Jones is one of the stock market indices set up by the editor of The Wall Street Journal and Dow Jones & Company founder Charles Dow. Dow created this index as a way to measure the performance of industrial components in the US stock market. The index officially started since May 26, 1986. Dow Jones stock exchange is one of the oldest US stock market indices that are still running. The number of initial membership of the stock was only 12 companies then propagated to 20 in 1916, and eventually added to 30 companies from 1928 until now (Amin: 2012).

In more detail Dow Jones in its website makes stock criteria that should not be included in the calculation of Islamic Market Indexes (DJ Islamic Market Indexes) ie companies engaged in production such as alcohol (liquor), pig and its associated financial services conventional capitalist, entertainment industry Such as casino hotels and gambling cinemas, porn media.

Literature

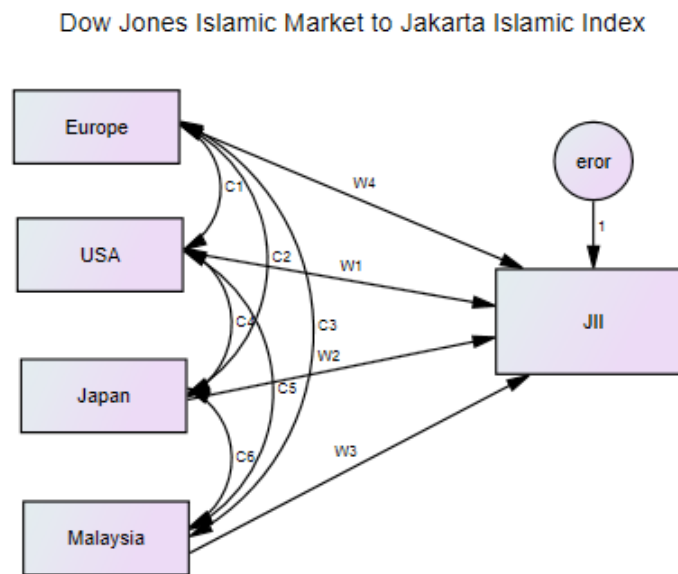
This research requires observation of previous studies as a comparison material. Some of the studies that precede and can be used as a reference are as follows:

2. Literature

No.	Name	Result
1	Khamlichi, et. al., (2014)	The results show that the Islamic index has the same level of efficiency as the conventional one, the MSCI and FTSE family indices are less efficient. In terms of cointegration analysis, the Dow Jones and S & P Islamic indices have no cointegration relationships with their respective benchmarks.
2	Medhioub and Chaffai (2016)	The results show a high level of synchronization between Islamic and Conventional stock markets to each pair of countries, except for cases in Indonesia. These results confirm that the mechanisms and products adopted in Islamic finance are similar to Conventional systems.
3	Khamlichi et. al., (2014)	The findings show positive performance for momentum strategy and support the idea that ethical investment can become less mature and therefore investors accept to pay their ethics.
4	Albaity and Ahmad (2011)	The results show no significant difference in returns, risk premiums found absent in every index of Islamic stocks. All filtered indices report the effect of leverage, suggesting that bad news is more influential on price volatility than good news.
5	Miniaoui et. al., (2015)	The results showed the financial crisis had an impact on the average rate of return Bahrain, other indices remain unaffected. However, the financial crisis affected volatility in the three GCC markets (Kuwait, Bahrain and UAE), while its impact on the remaining markets (Saudi Arabia, Oman and Qatar) and the Islamic index were insignificant.

Source: Proquest, 2017

Research Model



Source: Output Amos, 2017

Research Model

Hypothesis

- H1:** There is a significant influence between Dow Jones Islamic Market Europe and Jakarta Islamic Index
- H2:** There is a significant influence between Dow Jones Islamic Market USA and Jakarta Islamic Index

- H3:** There is a significant influence between Dow Jones Islamic Market Japan and Jakarta Islamic Index
H4: There is a significant influence between Dow Jones Islamic Market Malaysia and Jakarta Islamic Index

4. RESEARCH METHODS

Looking for model (Structure Equation Model) research between Dow Jones Islamic Market with Jakarta Islamic Index using Software amos version 22. While the data feasibility analysis with classical assumption test and analysis test consisting of correlation test, determination test and regression using software R version 3.3.2.

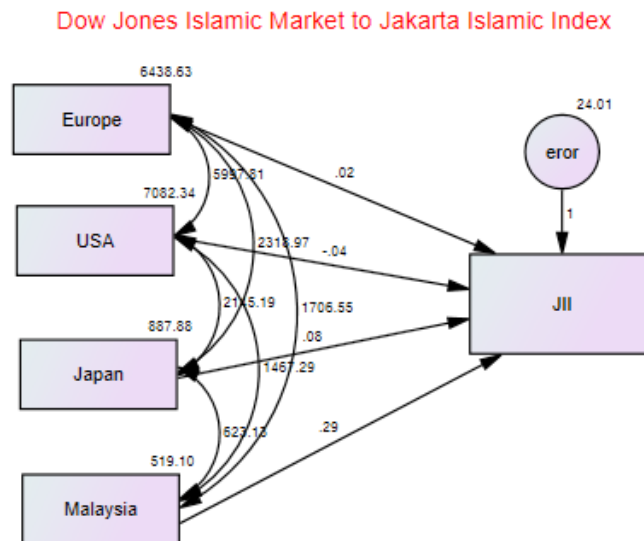
Variable

Dow Jones Islamic Market used in this research consists of five markets: Europe, USA, Japan and Malaysia. The data used is daily data using data closing price period January 1, 2017 until March 31, 2017.

Jakarta Islamic Index is an indicator showing monthly stock movement the closing stock price that has been calculated by Indonesia Stock Exchange using closing price data for period January 1, 2017 until March 31, 2017.

5. RESULT

1. Structure Equation Model



Source: Output Amos, 2017.

2. Model Research Result

Here are the results of the analysis through the Amos program with the Structure Equation Model method, there are two parts to be interpreted about the model picture that is the analysis of the variance value of each Dow Jones Islamic Market variable and the Dow Islamic Market regression analysis on the Jakarta Islamic Index.

3. Covariance Model

Covariances: (Group number 1 . Default model)

			<i>Estimate</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P</i>	<i>Label</i>
USA	< -- >	Europe	5997.805	1156.409	5.187	***	C1
Europe	< -- >	Japan	2318.970	426.467	5.438	***	C2
Europe	< -- >	Malaysia	1706.550	320.210	5.329	***	C3
USA	< -- >	Japan	2145.188	422.523	5.077	***	C4
USA	< -- >	Malaysia	1467.295	309.134	4.746	***	C5
Japan	< -- >	Malaysia	623.130	117.988	5.281	***	C6

Source: Output Amos, 2017.

Covariance is used to measure the magnitude of the relationship between two variables. Based on the value of covariance on SEM model P value shows *** which means all models have significant relation at level 0.001, that is:

- Covariance between USA and Europe produces the number 5997.805 means the relationship between the two is a positive relationship that changes with the same magnitude and in the same direction.
- Covariance between Europe and Japan produces the number 2318.970 means the relationship between the two is a positive relationship that changes with the same magnitude and in the same direction.
- Covariance between Europe and Malaysia produces 1706,550 meaning that the relationship between the two is a positive relationship that changes with the same magnitude and in the same direction.
- Covariance between USA and Japan produces the number 2145.188 means the relationship between the two is a positive relationship that changes with the same magnitude and in the same direction.
- Covariance between the USA with Malaysia yielded 1467.295 means the relationship between the two is a positive relationship that changes with the same magnitude and in the same direction.
- Covariance between Malaysia and Japan produces the number 623,130 means that the relationship between the two is a positive relationship that changes with the same magnitude and in the same direction

4. Model Regression

Regression Weights: (Group number 1 . Default model)

			<i>Estimate</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P</i>	<i>Label</i>
JII	< -- >	USA	-.044	.018	-2.505	.012	W1
JII	< -- >	Japan	.082	.087	.938	.348	W2
JII	< -- >	Malaysia	.293	.084	3.488	***	W3
JII	< -- >	Europe	.016	.044	.357	.721	W4

Source: Output Amos, 2017.

From the model results obtained regression values between Dow Jones Islamic Market variables on the Jakarta Islamic Index, with the interpretation as follows:

- (a) Regression between Dow Jones Islamic Market USA to Jakarta Islamic Index of -0.044 means if Dow Jones Islamic Market USA increases one unit then JII will experience decline of 0.044 .
- (b) Regression between Dow Jones Islamic Market Japan to Jakarta Islamic Index of 0.082 means if Dow Jones Islamic Market Japan increases one unit then JII will increase by 0.082 .
- (c) Regression between Dow Jones Islamic Market Malaysia to Jakarta Islamic Index of 0.293 means if Dow Jones Islamic Market Japan increased one unit then JII will increase by 0.293 .
- (d) Regression between Dow Jones Islamic Market Europe to Jakarta Islamic Index of 0.016 means that if Dow Jones Islamic Market Europe increases one unit then JII will increase by 0.016 .

Classic Assumptions

Normality

```
Shapiro-Wilk normality test
data: Europe
W = 0.94475, p-value = 0.007516

Shapiro-Wilk normality test
data: USA
W = 0.86345, p-value = 5.783e-06

Shapiro-Wilk normality test
data: Japan
W = 0.97294, p-value = 0.1866

Shapiro-Wilk normality test
data: Malaysia
W = 0.95918, p-value = 0.0377

Shapiro-Wilk normality test
data: JII
W = 0.88687, p-value = 3.456e-05
```

Source: Output R, 2017.

The calculation results show that the value of shapiro wilk (w) is greater than 0.05 then the data is normally distributed and suitable for research.

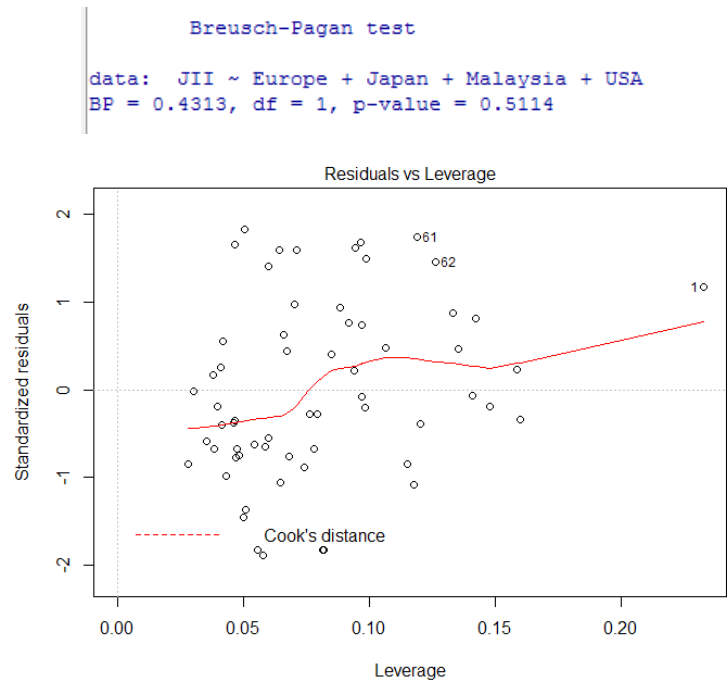
Multicollinearity

```
> vif(JIIRegModel)
Europe      Japan  Malaysia      USA
1.204404    7.211503  9.310679  5.573258
```

Source: Output R, 2017.

VIF value shows each variable has a VIF value of no more than 10, which means that between the independent variables are not found any correlation

Heterocedastisity



Source: Output R, 2017.

3. Scatter Plot

P-value value shows greater than 0.05 which means no heterocedastisity between variables and feasible to use. The heterocedastisity test can be explained also by scatter plot graphs that are dispersed and do not form a pattern.

Autocorrelation

```
Durbin-Watson test
data: JII ~ Europe + Japan + Malaysia + USA
DW = 0.94912, p-value = 3.635e-07
alternative hypothesis: true autocorrelation is greater than 0
```

Source: Output R, 2017.

From the table Durbin Watson obtained value $dL = 1.283$ and $dU = 1.559$. DW value of the calculation of 0.94912 where the DW is located in the area there is no autocorrelation.

Correlation Test

```
Pearson's product-moment correlation
data: Europe and JII
t = 8.3864, df = 60, p-value = 1.077e-11
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.5937748 0.8317560
sample estimates:
cor
0.7345977

Pearson's product-moment correlation
data: JII and USA
t = 4.658, df = 60, p-value = 1.819e-05
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.3048051 0.6778575
sample estimates:
cor
0.5153401

Pearson's product-moment correlation
data: Japan and JII
t = 8.5359, df = 60, p-value = 6.004e-12
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.6021513 0.8357311
sample estimates:
cor
0.7405431

Pearson's product-moment correlation
data: JII and Malaysia
t = 10.772, df = 60, p-value = 1.186e-15
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.7051111 0.8826693
sample estimates:
cor
0.8118933
```

Source: Output R, 2017.

Dow Jones Islamic Market Europe shows a strong correlation strength of 0.734, Dow Jones Islamic Market USA shows a considerable correlation strength of 0.515, Dow Jones Islamic Market Japan shows a strong correlation strength of 0.740, and Dow Jones Islamic Market Malaysia shows a very strong correlation strength of 0.811.

Determination Test

```
Residual standard error: 5.11 on 57 degrees of freedom
Multiple R-squared: 0.6987, Adjusted R-squared: 0.6775
F-statistic: 33.04 on 4 and 57 DF, p-value: 2.973e-14
```

Source: Output R, 2017.

The adjusted R-squared value shows a value of 0.6775 which means that the Dow Jones Islamic Market Europe, USA, Japan and Malaysia variables contributed to the Jakarta Islamic Index of 67.77% and the remaining 32.23% influenced by other variables.

Multiple Linear Regression Test

```

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept) 300.84208   73.75968   4.079 0.000142 ***
Europe       0.01560    0.04518   0.345 0.731093
Japan        0.08193    0.09036   0.907 0.368384
Malaysia     0.29301    0.08692   3.371 0.001349 .
USA          -0.04408    0.01821  -2.421 0.018679 .
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Source: Output R, 2017.

From the results of coefficient calculations obtained the form of linear equations of multiple regression are: $JII = 300.84 + 0.01560 \text{ Europe} - 0.04408 \text{ USA} + 0.0819 \text{ Japan} + 0.29301 \text{ Malaysia}$. The multiple regression equation that is formed, can be interpreted as follows:

- Constant $\alpha = 300.84$ gives the meaning that JII will have a value of 300.84 if Dow Jones Islamic Market Europe, USA, Japan, and Malaysia are ignored.
- The coefficient value of Europe (β_1) = 0.01560, meaning that if Dow Jones Islamic Market Europe increases one unit then JII will increase with the assumption of Dow Jones Islamic Market of USA, Japan, and Malaysia constant.
- The coefficient value of Europe (β_1) = 0.01560, meaning that if Dow Jones Islamic Market Europe increases one unit then JII will increase with the assumption of Dow Jones Islamic Market of USA, Japan, and Malaysia constant.
- The coefficient value of USA (β_2) = -0, 04408, means that if Dow Jones Islamic Market USA increases one unit then JII will experience decline with assumption Dow Jones Islamic Market Europe, Japan and Malaysia constant.
- The coefficient value of Japan (β_3) = 0.135 means that if Dow Jones Islamic Market Japan increases one unit then JII will increase with the assumption of Dow Jones Islamic Market Europe, USA and Malaysia constant.
- The coefficient value of Malaysia (β_4) = 0, 29301 means that if Dow Jones Islamic Market Malaysia increases one unit then JII will increase with the assumption of Dow Jones Islamic Market Europe, USA and Japan constant.

6. CONCLUSION

The analysis in this study tried to examine the matter so that after going through the hypothesis test, got the following conclusion: (1) The Dow Jones Islamic Europe Index has no significant effect on the Jakarta Islamic Index; (2) Based on the results of the research note that the Dow Jones Index of USA has a negative and significant impact on the Jakarta Islamic Index; (3) Based on the results of the research note that Japan Dow Jones Index has no significant effect on Jakarta Islamic Index; (4) Based on the research

results, it can be seen that the Dow Jones Islamic Index of Malaysia has a positive and significant impact on the Jakarta Islamic Index.

References

- Albaity, Mohamed, Rubi Ahmad. 2011. "Return performance and leverage effect in Islamic and socially responsible stock indices evidence from Dow Jones (DJ) and Financial Times Stock Exchange (FTSE)". *African Journal of Business Management* Vol. 5(16), pp. 6927-6939.
- Antonio, MS. 2013. *The Islamic Capital Market Volatility: A comparative Between in Indonesia and Malaysia*. Buletin Ekonomi Moneter dan Perbankan April, Jakarta.
- Beik, IS. 2014. "Pengaruh Indeks Harga Saham Syariah Internasional dan Variabel Makro Ekonomi Terhadap Jakarta Islamic Index". *Jurnal Ilmu Ekonomi Syariah Al Iqtishad* Vol 8 -1
- Hismendi. 2013. "Analisis Pengaruh Nilai Tukar, SBI dan Inflasi dan Pertumbuhan GDP Terhadap Pergerakan Indeks Harga Saham Gabungan Di Bursa Efek Indonesia". *Jurnal Ilmu Ekonomi Universitas Syiah Kuala* Volume I No. 2.
- Huda, N ME Nasution. 2008. *Investasi pada Pasar Modal Syariah*. Jakarta: Kencana Prenada Media Group.
- Imdadullah, Muhammad, Muhammad Aslam, Saima Altaf. 2016. "An R Package for Detection of Collinearity among Regressors". *The R Journal* Volume 8:2, pages 495-505.
- Indarto, BS. 2012. "Analisis Faktor-Faktor yang Mempengaruhi IHSG di Bursa Efek Indonesia Periode Tahun 2007-2011". *Jurnal Ilmiah USM: Semarang*.
- Isnurhadi, 2014. "Analisis Model CAPM Dalam Memprediksi Tingkat Return Saham Syariah dan Konvensional". *Jurnal Ilmiah Manajemen Bisnis Dan Terapan* Tahun XI No 1.
- Khamlichi, Abdelbari El, Kabir Sarkar, Mohamed Arouri, Frédéric Teulon. 2014 "Are Islamic Equity Indices More Efficient Than Their Conventional Counterparts? Evidence From Major Global Index Families". *The Journal of Applied Business Research*, Volume 30, Number 4. PP. 1137-1150.
- Khamlichi, Abdelbari, Mohamed Arouri, Frédéric Teulon, 2014. "Persistence Of Performance Using The Four-Factor Pricing Model: Evidence From Dow Jones Islamic Index". *The Journal of Applied Business Research*, Volume 30, Number 3. PP. 917-928.
- Kristanti, TF. 2013. "Pengujian Variabel Makro Ekonomi Terhadap Jakarta Islamic Index". *Jurnal Keuangan dan Perbankan* Vol 17 No 1 Januari, Hal 220-229.
- Kristiyawati, Widjajanti Kesi, 2012. "Analisis Pengaruh Tingkat Suku SBI, Kurs, Jumlah Uang Beredar, dan Indeks Dow Jones terhadap IHSG di Bursa Efek Indonesia". *Jurnal Ilmiah USM*.
- Kuwomu, JKM. 2011. "Macroeconomic Variables and Stock Market Returns: Full Information Maximum Likelihood Estimation". *Journal of Finance and Accounting*, Vol 2 No 4.
- Medhioub, Imed, Mustapha Chaffai, 2016. "Islamic versus conventional stock market Indices synchronization". *African Journal of Business Management*, Vol. 10(11), PP. 270-278.
- Miniaoui, Hela, Hameedah Sayani, Anissa Chaibi. 2015. "The Impact Of Financial Crisis On Islamic And Conventional Indices Of The GCC Countries". *The Journal of Applied Business Research*, Volume 31, Number 2. PP. 357-368
- Muchlas, Zainul. 2015. "Faktor-Faktor Yang Mempengaruhi Kurs Rupiah Terhadap Dollar Amerika Pasca Krisis (2000-2010)". *Jurnal JIBEKA* Vol I No 9.

- Mulyani, Neny. 2014. "Pengaruh Inflasi, Suku Bunga, Nilai Tukar Rupiah dan Produk Domestik Bruto Terhadap Jakarta Islamic Index". *Jurnal Bisnis dan Manajemen Eksekutif* Vol. 1 No. 1.
- Nicita, Alessandro. 2013. "Exchange Rate International Trade and Trade Policies". United Nations New York and Geneva.
- Pasaribu, RB. 2012. "Analisis Pengaruh Variabel Makroekonomi Terhadap Indeks Saham Syariah Indonesia". *Jurnal Ekonomi & Bisnis* Vol. 7 No. 2.
- Pebesma, Edzer, Thomas Mailund, James Hiebert. 2016. "Measurement Units in R". *The R Journal* Volume 8:2, pages 486-494.
- Rahamis, Yulein. 2014. "Analisis Komparasi Kinerja Pasar Modal Indonesia, Hongkong, China, Inggris dan Amerika". *Jurnal Bisnis dan Manajemen* Vol. 2 No. 3.
- Rashid, Mamunur. 2014. "Macroeconomics Investor Sentiment and Islamic Stock Price Index in Malaysia". *Jurnal of Economic Cooperation and Development*, 35. PP. 221-236.
- Riantani, Suskim. 2013. "Analisis Pengaruh Variabel Makroekonomi dan Indeks Global Terhadap Return Saham". Seminar Nasional Teknologi dan Informasi Terapan.
- Said, Salmah. 2012. "Pemikiran Ekonomi Muslim Terhadap Pasar Modal Syariah". *Jurnal Ilmiah Al Fikr* Vol 16 No 2.
- Sugiyono. 2010. *Metode Penelitian Bisnis*. Cetakan ke-15 Bandung: Alfabeta.
- Widhiarso, Wahyu. 2011. "Contoh Analisis Melalui Amos – Ketika Mediator & Moderator dalam satu Model". *Jurnal Fakultas Psikolog, UGM*. Hal 1-5.