UNIVERSITAS ISLAM INDONESIA

THE RELATIONSHIP BETWEEN MACROECONOMICS VARIABLES AND ISLAMIC STOCK MARKET RETURNS LISTED IN INDONESIAN ISLAMIC STOCK INDEX

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Received : November 3, 2020

Revised : December 10, 2020

Accepted : December 12, 2020

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Abstract:

The aim of this paper is to explore the extent to which macroeconomic variables affect the Islamic stock market behavior in Indonesia between Oct 2014 until the end of 2019. The paper uses the latest estimation technique of Autoregressive Distributed Lag (ARDL) model approach to cointegration. The data used is secondary data by collecting data from the official websites of Bank Indonesia, BPS, IDX, and Indopremier. The results suggest that GDP, interbank interest rates, IHSG seem to be suitable targets for the government to focus on in short-term. As for long-term, the GDP and IHSG significantly influence the Islamic stock market return, and that's the targets for the government to focus in order to stabilize the Islamic stock market and to encourage more capital flows into the market.

Keywords: Islam, Stock Market, Macroeconomics, Indonesia

Introduction

In the digital age as now it provides a variety of conveniences for the public, one of which is the ease in investing. Investments in Kashmir and Jafar (2015) in (Pardiansyah, 2017) is the planting of capital in an activity which has a period of time is relatively long in various fields of business or projects that require funds with the purpose to obtain profit. Investment is an activity that has been recommended in Islam, as stated in QS Al- Hashr: 7, which calls for assets not to be circulated among wealthy people. This means that most of the treasure we should to allocate some instruments of investment such as time deposits, stocks, bonds, mutual funds, and other instruments. It proficiency level which makes investment into a thing that is very important as a step community of Muslims in preparing themselves in the future and could be beneficial to offspring.

Interest of investors to invest according to (Tandelilin, E., 2010) is to get a return more higher in order to be able to enjoy most of the funds have been invested. Determination of investment in the capital market need to pay attention to the performance of the company in order to get a return that is in accordance with the expected. The performance of the company may be affected by factors of macro- economics. An article which in published by the FSA stated that during the reign of president Joko Widodo which began October, 2014 until December 2019, the value of the exchange amount against the dollar United States (US) continue to weaken until touching Rp15,000/dollar which is considered as the weakening exchange rate of the deepest in several this year. Based on data from the Jakarta Interbank Spot Rate Dollar (JISDOR), the Rupiah exchange rate was at the level of Rp. 14,172 per US dollar on October 17, 2019. This value is 17.7 percent lower than the position on October 20, 2014, the day Jokowi's appointment to be the 7th president.

Source : Bank Indonesia (2019)

However, the weakening of the exchange rate that is perceived as a nightmare worse for Indonesia, in fact, could be a momentum that is good for some parties to take advantage of the momentum is to start investing in the market share. If the weakening of the exchange rate is also followed by a decrease in Indonesian Composite Index (IHSG) in the capital market, it is actually the right momentum to invest because of the price of the instrument of investment were also down. Investors can start investing by buying stocks or mutual funds when the price of these instruments drops, then selling them again when the exchange rate of Rupiah and IHSG strengthens again and the price of investment instruments is corrected.

It mentioned that made the market share of the most in demand by investors when it as able to provide a return more higher than the instrument of financial other. However, high returns are faced also with the high risk. So investors need to anticipate and know how great the influence of changes in the condition of macroeconomics. The issuance of Islamic stock is a solution for Muslim communities to become investors in the capital market. According to the fatwa DSN-MUI No.40 / DSN-MUI / X / 2003, shares of sharia is a proof of ownership on a company that meets the criteria of sharia and not including the shares that have the right to privilege. There are various kinds of indices on the stock that one of them is the Indonesian Islamic Stock Index (ISSI), which was published on the date of May 12, 2011, where in it contains Islamic Stock Composite Index the are listed on the Indonesian Stock Exchange (BEI).

In macroeconomic there are some indicators that should be considered investor in making decisions investment. According to (Tandelilin, E., 2010), factors macro that affect the return stock is the rate of GDP growth, the rate of inflation growth, interest rate and currency exchange rates. Several studies have proven the effect of variable macroeconomic to return stock. One of them is the research that is carried out by (Wijayanti & Sishadiyati, 2020) and (Kharis & Mawardi, 2019) which gives the results of the exchange rate and inflation variable affect to return stock. The research further conducted by (Nidya & Mawardi, 2018) which states that the variable of BI Rate, Inflation, GDP, and ROA affect positively not significant to Islamic stock return.

Based on the explanation of the Islamic stock, factors macroeconomic and return of Islamic stock market at the top, so as to encourage researchers to undertake research with the use of a five variable macroeconomic namely GDP, interbank interest rate, inflation, IHSG and exchange rate so that more complex to explain the effect of the return Islamic stock market.

Theory

Stock Return

Return is the result that is obtained from the investment. Return is one of the factors that motivate investors to invest are also a reward on the courage of investors to bear risk on investments were made (Tandelilin, E., 2010). The sources of investment returns consist of two main components, namely : (Tandelilin , E., 2010)

a. Capital Gain (Loss), is the increase or decrease in the price of a mailing cost (can share and letter of debt term long), which could provide a profit or loss for the investor. In other words, Capital Gain (Loss) can also be interpreted as the change in the price of a security.

b. Yield, a component of the return that reflects the flow of cash or income that is derived by periodically from an investment. For example, if invested in stocks, the yield is indicated by the amount of dividends that we earn.

Return the stock can be calculated using the formula below : (Hanafi, 2015)

$$\text{Return} : \{[(P_t - P_{t-1}) + D_t] / P_{t-1}\} \times 100\%$$

Remarks :

Pt : The share price in period t
Pt-1 : Price share in the period before (t-1)
Dt : Dividends are paid in period t

Gross Domestic Product (GDP)

According to (Kharis & Mawardi, 2019), in measuring the well-being of the economy of a country, real GDP is better used than the Nominal GDP. It is done because the real GDP is not affected by changes in prices that prevail in the market so that real GDP is a size that is appropriate in assessing the well-being of the economy to the growth of the value of goods and services which are produced by a country in the period specified. In this study, GDP data uses the Industrial Production Index (IPI) because there is no monthly GDP data available. IPI is an economic indicator that measures the value of real production output with a certain base year so that the calculation does not include price changes.

Theories are put forward by (Tandelilin, E., 2010) states that the growth of GDP is a signal positive for investment. If the growth of the economy improved, the power purchasing public also will be improved, and there are opportunities for companies to improve sales. With the increasing sales of the profits were obtained also getting increased. Calculation of GDP is conceptually uses three kinds of approaches, namely :

1. **Approach Production (Production Approach)**

With the approach of this, income nationwide was calculated by way of summing value added of whole sectors of production during the period specified (usually within one year). Value added that is in here is the difference between the value of production (value of output) with the value of the cost between (value input), which consists on the material that is involved in the process of production, including materials of raw and material helper.

The formula for calculating national income using the production approach is as follows :

$$Y = (Q1xP1) + (Q2xP2) + \ldots + (QnxPn)$$

2. **Approach Revenue (Income Approach)**

GDP is the number of reply service that is received by factors of production are involved and in the process of production in a country in a period of time specified (usually one year). Reply services are intended are wages and salaries, rent land, the interest of capital and profits ; all before the cut in tax income and taxes directly other. In the definition of this, GDP includes also depreciation and taxes not directly net (taxes not directly reduced subsidies). The research approach formula is as follows :

$$Y = w + r + i + p$$

3. **Approach Expenditure (Expenditure Approach)**

Calculation by using the approach of spending is done by way of summing entire expenditure of various sectors of the economy, namely the house stairs, governments, companies, and communities outside the state of a country in the period specified. The types of expenditure of each economic actor consist of spending for consumption (C), investment (I), government (G), exports (X) and imports (M). The formula that is used is as follows :

$$Y = C + I + G + (X-M)$$

4. **Interbank Interest Rate**

Interbank interest rate is Interbank Market Offered Rate (Ibor) that reference the use of banks in the set rate of interest loans and / or transaction banking else, usually are used as a reference that is the average rate of interest bank specific. In international usually refers to the rate of interest of London Interbank Offered Rate (LIBOR) or the Singapore Interbank Offered Rate (SIBOR), whereas in Indonesia refers to the Jakarta Interbank Offered Rate (JIBOR).

Based on the website of Bank Indonesia, JIBOR intended role as a benchmark rate market money, which is a reflection rate of interest that occur in the market of money, which is calculated by periodically, is available and can be used by the perpetrators of the market as a reference such as the determination of rate of interest loans, fixing the price of the instrument of financial, and measuring the performance of financial instruments. JIBOR is the average of the rate of interest indicative of loans without collateral are offered and are intended to be transacted by banks contributors to banks contributors others to lend rupiah in Indonesia, for tenures up overnight.

5. **Inflation**

According to Antonio (2001) in (Rachman & Mawardi, 2015), inflation in general is often understood as the rising price of goods as a whole. By thus, occurred decrease power purchase money (decreasing purchasing power of money). Because it is, according to adherents understand this, take interest money is very logical as compensation for a decrease in power purchase money during lent. The arguments are indeed very appropriate if the world economy which occurred just inflation alone without deflation or stable. Inflation can be defined as the process of decline in the value of currency money is kept constant. The increase in the price of one or two items alone not be called inflation unless the increase was widespread (or the resulting rise in the price) on goods other. An increase in inflation will cause the prices of goods and services to increase, thereby reducing company profits. As a result, lowers the results of which will be on the share to investors, so investment in considered as things that are not interesting because it is not able to provide the advantage that in the expected (Nandari, 2017).

Indonesian Composite Index (IHSG)

Indonesian Composite Index (IHSG) became one of the factors that reflect the performance of the capital market is currently experiencing an increase (bullish) or were experiencing a decline (barrish). If the economic conditions of a country are good, the IHSG will certainly show an increasing trend. However, if the condition of the economy of a country in a state down, it will affect also to the IHSG (Mie & Agustina, 2014). According to (Widodo, 2018), with function mutilation movement of stock price of all securities on the Indonesian Stock Exchange (BEI), IHSG into the spotlight important for investors. The movement that will influence the decisions of all investors are going to sell, hold or buy shares. Besides that, the IHSG change into a size and perception on the outside of the increase and decrease in the value of the foreign exchange to rupiah.

The formula that is used to calculate the IHSG:

$$\mathbf{CSPI} = \frac{\sum \text{Market Capitalization}}{\sum \text{Standard Value}}$$

Exchange Rates

Exchange rate can describe the level of prices on the exchange of one currency to another currency, where the value that can be used in the activity of the economy such as, investing internationally and transactions trade internationally (Nidya & Mawardi, 2018). Exchange rate is a macroeconomic variable that also affects the volatility of stock prices. Depreciation of the domestic currency will increase the volume of exports. When demand market internationally is quite elastic case this will improve the cash flow of companies domestic, which then increases the price of the stock, which is reflected in IHSG. Conversely, if the issuer to buy products in the country, and have the debt in the form of dollars the price of the shares will go down. The depreciation of exchange rate will raise the stock price which reflected in the IHSG in economy that experiencing inflation (Kewal, 2012).

Previous Research

Research that is done by (Kharis & Mawardi, 2019) showed that in the short term only variable GDP has influence negatively and significantly to the return Islamic stock. Meanwhile, in the long term, GDP and SBIS have a negative and significant impact. Inflation and exchange rate valiable impact positively and significantly to returns sharia stock in agriculture sector are registered in ISSI in the period 2011-2018. Further research conducted by (Maqdiyah, Rahayu, & Topowijono, 2014), states that the Simultaneous Test Results (F Test), show that all variables (deposit interest rate, inflation rate, GDP and exchange rate) simultaneously have a significant effect on the stock price index of JII which will also affect to stock return. Whereas in the partial test results, the deposit interest rate and the inflation rate do not have a significant effect on stock returns. Instead of variables GDP and Rupiah exchange rate impact significantly on the stock return.

(Nidya & Mawardi, 2018) conducted research on the influence of macroeconomic factors on Islamic stock return at PT. Panin Dubai Syariah Bank. In the find results that inflation, GDP, BI rate, and ROA gives influence positively not significant to the Islamic stock return. Only factor exchange rate that gives the effect of negative significantly to the Islamic stock return. Research (Majid & Yusof, 2009) were performed in Malaysia provide results that all variable macroeconomic, ie the exchange rate, the money supply, interest rate in the country / Treasury Bill Rate (TBR) and the rate of interest of international / Federal Funds Rate (FFR) effect to the Islamic stock return. Meanwhile, GDP which also uses the IPI projection has no effect on Islamic stock returns.

Relationship between Variables and Hypotheses

GDP Relationship to Islamic Stock Market Return

Gross Domestic Product (GDP) is the value of the market of all goods and services end that is produced in the economy during the period of time specified (Mankiw, 2003). It was meant that the increase in GDP can increase the power purchasing public against products companies thus increasing the profitability of the company are reflected in the increase in the price of stock and can generate returns are high. From this description, it can be formulated :

H1: GDP has a significantly positive effect on Islamic stock market returns

Relations Interbank Interest Rate to Islamic Stock Market Return

Interest rate intebank is the benchmark that used the bank to set a interest rate of credit and / or transaction banking more. The level of interest and stock price has a relationship that is reversed. When interest rates go up, then the market will respond to these events and make returns in the stock market decrease. Research that is done by (Majid & Yusof, 2009), the Islamic stock market in Malaysia, stated that when the interest rate in the country (TBR) or interest rate in internationally (FFR) rises, then the Muslim investors will buy more many Islamic stock that will increase the stock price and Islamic stock returns. From this description, it can be formulated :

H2: Interbank interest rate effect significantly positive to Islamic stock market return

Inflation Relationship to Islamic Stock Market Return

The level of inflation that high is usually associated with the condition of the economy that is too hot (overheated). Where the conditions of the economy experienced a demand on products which exceed the capacity of deals for its products, so the prices tends to experience the rise. If inflation is too high will cause a decrease in power purchase money and can reduce the level of income of the real which earned investors of investment. More further, inflation will increase the revenue and cost of the company. If the increase in production costs is higher than the price increase that can be enjoyed by the company, then the company's profitability will decrease. So inflation are high causing declining profits the company, so that the effect of equity became less competitive (Tandelilin, E., 2001). If the terms of the above happens, of course profit is obtained the company will be getting smaller, then that cause investors reluctant to infuse their capital in that companies, so stock price down which ultimately also affect to the stock return that gained investor (Tandelilin , E., 2010). From this description, it can be formulated:

H3 : Inflation has a significantly positive effect on Islamic stock market returns

Relationship of the Indonesian Composite Index (IHSG) to the Islamic Stock Market Return

The movement of the index value will show changes in the market situation that have occurred. The market is being positively or going on a transaction that is active, indicated by the index price of the stock that is experiencing the rise. State stable is indicated by the index price of shares that remain, while the lethargy shown by the index price of shares that experienced a decrease. The condition is usually not favored investors due to the decline in the index price of the stock will decrease the profit (return) of their (Tesa 2012). Investors will find no safe when infuse capital in the Islamic stock market when IHSG experienced a decline, so that the condition of IHSG indeed become a benchmark for investors are going to infuse capital in Islamic stock or in place of other. From this description, it can be formulated :

H4: IHSG has a significantly positive effect on the Islamic stock market return

Relationship Exchange Rate to Islamic Stock Market Return

According to Hanafi (2016) in (Wijayanti & Sishadiyati, 2020), approaches traditionally said that the relationship between the currency exchange rate and stock return is positive. Changes in the Rupiah exchange rate affect revenues and costs operating companies which subsequently will lead to a change in the stock return, while the approach to portfolio balance assumes that there is a relationship which is negative between the stock return and currency exchange rate. Depreciation of the domestic currency will increase the volume of exports. If demand market internationally is quite elastic then the cash flow of companies domestic will go up, otherwise if the issuer to buy the product outside the country and have the debt in the form of dollars the price of the stock and stock return will fall. From this description, it can be formulated :

H4: The exchange rate has a significantly positive effect on the Islamic stock market return

Research Methods

Research Approach

his research is using the kind of approach of quantitative descriptive to analyze the influence of macroeconomic namely the growth of GDP, interest rate, inflation, IHSG and exchange rate to Islamic stock market return. The method of analysis that is used is the Autoregressive Distributed Lag (ARDL) which was introduced by Pesaran and Shin in the year 1997 with the approach of cointegration. ARDL methods is a method that can estimate the model linear regression in analyzing the relationship run length which involves the testing of cointegration between the time series variables.

Variables and Data Sources

Type of data used in this study is time series data are obtained via the website of Bank Indonesia, BPS, IDX, and Indopremier . The time period is during the period of president Joko Widodo in October, 2014 - December 2019. Selection of the period are to reduce interference of different policy leaders of the country and see whether the conditions of the economic leaders of the country when it conform to expectations. The data obtained are :

1. Indonesian Sharia Stock Index (ISSI) closing price data

which is then used to find market returns (an endogenous variable with RPS notation)

2. GDP data monthly that is projected by the Index of Production Industry (IPI) for representing the real sector which is variable exogenous (X1)
3. Interbank interest rate (SBB) data were selected for more represent the condition of real finance, a variable exogenous (X2)
4. Inflation data for measure resilience of a country that is a variable exogenous (X3)
5. IHSG data which indicate the condition of Indonesia stock market in general, a variable exogenous (X4)
6. Exchange rate data of USD / IDR monthly, a variable exogenous (X5)

Estimation Model

This study uses cointegration techniques to examine the relationship between macroeconomic growth and the Islamic stock market. This method was chosen because of the tendency for the unit root in most of the economic and financial time series data to result in spurious regression. This study have adopted the approach bound testing for cointegration based framework model of Autoregressive Distributed Lag (ARDL) such as that presented by Pesaran, Shin and Smith (2001). In contrast to the approach of another, ARDL models do not impose the assumption that limiting that all variables must be stationary at the level of the same. Because it, ARDL can be applied regardless of whether the all variables I (0), I (1), or usually coordinated (Pesaran, Shin, & Smith, 2001).

After that, determine the structure of the lag, then estimate the model, then the residue is calculated for the autocorrelation test. Finally, cointegration will be tested with bound testing. Following the model estimates were used in the research is :

$$\begin{aligned}\Delta \ln(RPS)_t = {} & \alpha_0 + \lambda_1 ln(GDP)_{t-1} + \lambda_2(SBB)_{t-1} + \lambda_3(INF)_{t-1} + \lambda_4 ln(IHSG)_{t-1} + \lambda_5 ln(EXR)_{t-1} \\ & + \sum_{i=1}^{p} \beta_1 \Delta\, ln(GDP)_{t-1} + \sum_{i=1}^{p} \beta_2 \Delta\,(SBB)_{t-1} + \sum_{i=1}^{p} \beta_3 \Delta\, ln(INF)_{t-1} \\ & + \sum_{i=1}^{p} \beta_4 \Delta\, ln(IHSG)_{t-1} + \sum_{i=1}^{p} \beta_5 \Delta\, ln(EXR)_{t-1} + \sum_{i=1}^{p} \beta_6 \Delta\, ln(RPS)_{t-1} + \mu_t\end{aligned}$$

Where RPS is the return on the Islamic stock market, SBB is the interbank interest rate, INF is the inflation rate, and EXR is the exchange rate, μ_t disturbance. All variables are in the form of natural logarithms, except for SBB and INF, which are already in percentage form. The F-test is conducted to detect whether the variables are cointegrated, that is if they have a long term relationship. In accordance with what the do Pesaran (2001), F-Statistical that is calculated is evaluated using the critical values. If the F- statistic that is calculated is smaller than the value of the limit lower, then H0 not be denied, it is not no relationship run long between variables. On the other hand, when the calculated F-statistic is greater than the upper bound value, then H0 is rejected and there is a long term relationship between the variables under consideration.

RESULTS AND DISCUSSION

Result

This section will be described in five steps : first, the variable stationarity test is checked via the unit root test; second, determine the lag structure ; third, model estimation ; fourth, autocorrelation test ; fifth, test for cointegration and long - term relationships.

Variable Stationarity Test

Table 1

Unit Root Test Result (ADF)

Variable	Level	First Difference	Stasionarity Status
RPS	0.0000	0.0000	I(0)
GDP	0.0000	0.0001	I(0)
SBB	0.1745	0.0000	I(1)
INF	0.0000	0.0000	I(0)
IHSG	0.0000	0.0000	I(0)
EXR	0.0000	0.0000	I(0)

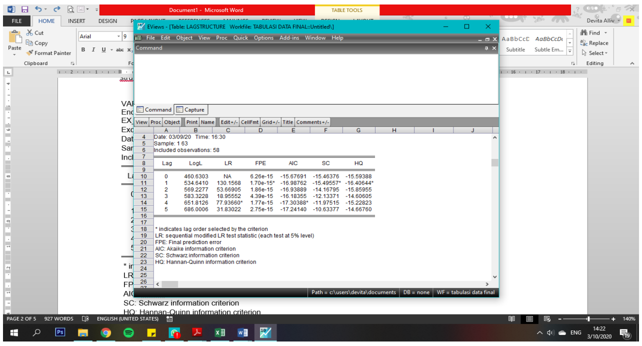
Source : Eviews 10 test result (data processed)

The results of the unit root test of Table 1 reveals that the return of market share, In GDP, inflation, In IHSG and In exchange rate does not have a unit root at the level they are. This means that the variables are stationary, hence integrated in the order of zero, I (0). On the side of the other, rate of interest between banks have unit root which means the variables is not stationary in levels. However, after taking the first difference, it turns out rate interest among banks do not have unit roots implies that they are I (1). Mix variables I (0) and I (1) have been validating the selection of ARDL methods for cointegration.

Determine the Optimum Lag

Table 2

Length Lag Criteria Test Result


Date: 03/09/20 Time: 16:30
Sample: 1 63
Included observations: 58

Lag	LogL	LR	FPE	AIC	SC	HQ
0	460.6303	NA	6.26e-15	-15.67691	-15.46376	-15.59388
1	534.6410	130.1568	1.70e-15*	-16.98762	-15.49557*	-16.40644*
2	569.2277	53.66905	1.86e-15	-16.93889	-14.16795	-15.85955
3	583.3228	18.95552	4.39e-15	-16.18355	-12.13371	-14.60605
4	651.8126	77.93660*	1.77e-15	-17.30388*	-11.97515	-15.22823
5	686.0006	31.83022	2.75e-15	-17.24140	-10.63377	-14.66760

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

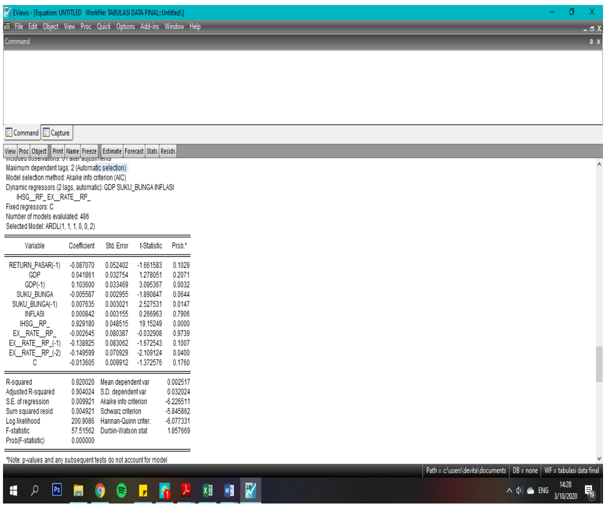
Source : Eviews 10 Test Results

Determination of the optimum lag in the model is done to determine the lag combination in the ARDL model (p, q). Optimum lag is a way to choose how large the number of LAG which we use in research that before doing the next test. The optimum lag is chosen based on the base value of Akaike Information Criterion (AIC), Schwarz Bayesian Criterion (SC), and Hanna Quinn Criterion (HQ). From the table 2, it is known that lag 1 meets the SC and HQ criteria, so in this study it can be determined that the optimum lag is lag 1.

Estimation Model Relations Term Short

Table 3

Short Run ARDL Model Estimation


Maximum dependent lags: 2 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): GDP SUKU_BUNGA INFLASI IHSG__RP_ EX__RATE__RP_
Fixed regressors: C
Number of models evalulated: 486
Selected Model: ARDL(1, 1, 1, 0, 0, 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
RETURN_PASAR(-1)	-0.087070	0.052402	-1.661583	0.1029
GDP	0.041861	0.032754	1.278051	0.2071
GDP(-1)	0.103600	0.033469	3.095367	0.0032
SUKU_BUNGA	-0.005587	0.002955	-1.890847	0.0644
SUKU_BUNGA(-1)	0.007635	0.003021	2.527531	0.0147
INFLASI	0.000842	0.003155	0.266963	0.7906
IHSG__RP_	0.929180	0.048515	19.15249	0.0000
EX__RATE__RP_	-0.002645	0.080387	-0.032908	0.9739
EX__RATE__RP_(-1)	-0.138925	0.083062	-1.672543	0.1007
EX__RATE__RP_(-2)	-0.149599	0.070929	-2.109124	0.0400
C	-0.013605	0.009912	-1.372576	0.1760

R-squared	0.920020	Mean dependent var	0.002517
Adjusted R-squared	0.904024	S.D. dependent var	0.032024
S.E. of regression	0.009921	Akaike info criterion	-6.226511
Sum squared resid	0.004921	Schwarz criterion	-5.845862
Log likelihood	200.9086	Hannan-Quinn criter.	-6.077331
F-statistic	57.51562	Durbin-Watson stat	1.857669
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model

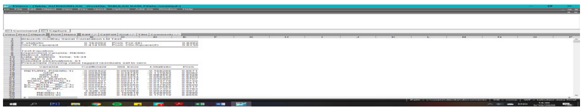
Source : Eviews 10 Test Results

From table 3, it can be seen that the short term macroeconomic effect on the Islamic stock market return in Indonesia. The table shows that the growth of GDP the period before, interest rate between banks periods before, and IHSG in now period affects the Islamic stock market return is significantly positive at the level of 5%, while the value of the exchange 2 periods prior to the effect of significantly negative to the Islamic stock market return. R-squared value on research this has a number 0920 which means that the variable GDP, interbank interest rate, Inflation, IHSG, and Exchange Rate USD / IDR could explain the effect of Islamic stock market return in Indonesia amounted to 92%.

Autocorrelation Test

Table 4

Autocorrelation Test Results



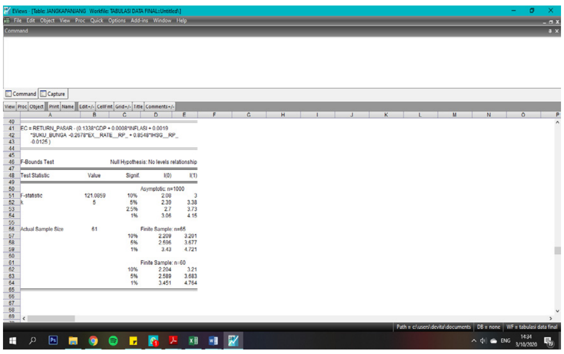
Source : Eviews 10 Test Results

From table 4, found to be the result of the test autocorrelation using test Breusch-Godfrey Serial Correlation LM Test. Judging by the Chi-Square number of 0.8130 where 0.8130> 0.05 so that H0 is accepted or it means that there is no problem with serial autocorrelation.

Coinstergration Test and Long- Term Relationships

Table 5

Cointegration Test Results



EC = RETURN_PASAR - (0.1338*GDP + 0.0008*INFLASI + 0.0019 *SUKU_BUNGA -0.2678*EX__RATE__RP_ + 0.8548*IHSG__RP_ -0.0125)

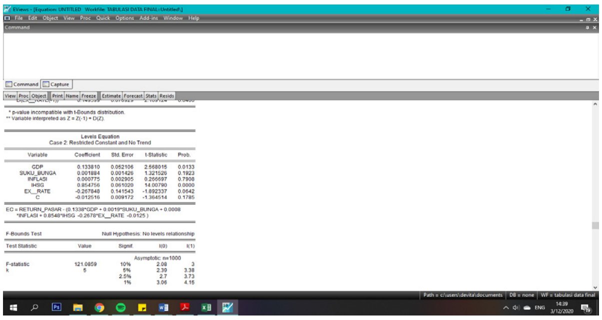
F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	121.0859	10%	2.08	3
k	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15
Actual Sample Size	61	Finite Sample: n=65		
		10%	2.209	3.201
		5%	2.596	3.677
		1%	3.43	4.721
		Finite Sample: n=60		
		10%	2.204	3.21
		5%	2.589	3.683
		1%	3.451	4.764

Source : Eviews 10 Test Results

As the stated previously, the approach test limit for cointegration adopted and the results are presented in table 5 at the top. It reveals that for both models, the F- statistic that is calculated is higher than the limit critically on the level of significance of 1% (121.05> 4764). Thus, there is strong statistical evidence of the existence of a long term relationship between the variables in this study. These results indicate that macroeconomic factors have a long run equilibrium relationship with the Islamic stock market return in Indonesia.

Table 6

Long Run ARDL Model Estimation



EViews - [Equation: UNTITLED Workfile: TABULASI DATA FINAL::Untitled\]

* p-value incompatible with t-Bounds distribution.
** Variable interpreted as Z = Z(-1) + D(Z).

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	0.133810	0.052106	2.568015	0.0133
SUKU_BUNGA	0.001884	0.001426	1.321526	0.1923
INFLASI	0.000775	0.002905	0.266697	0.7908
IHSG	0.854756	0.061020	14.00790	0.0000
EX__RATE	-0.267848	0.141543	-1.892337	0.0642
C	-0.012516	0.009172	-1.364514	0.1785

EC = RETURN_PASAR - (0.1338*GDP + 0.0019*SUKU_BUNGA + 0.0008 *INFLASI + 0.8548*IHSG -0.2678*EX__RATE -0.0125)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	121.0859	10%	2.08	3
k	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15

Source : Eviews 10 Test Results

The estimation result of the ARDL model above states that GDP and IHSG have a significantly positive affect on the Islamic stock market return or it can be said to be strong in the long term, while the USD / Rupiah exchange rate has a negative and weak impact at the 10% significance level.

Discussion

The Effect of GDP Growth on Islamic Stock Market Return

In the period of short growing economy, which is calculated by GDP in research is projected to IPI, the period before (lag 1) has the effect that a positive and significant during the period October 2014 - December 2019. That result mean increasingly large GDP, resulting Indonesia then stock return will getting up and vice versa. Not only in the short term, the relationship between economic growth and Islamic stock returns also has an effect in the long term. That means increased GDP in a country indicates the improvement of the welfare of the people in that country (Kewal, 2012) both short run or long run.

The existence of an increase in the welfare of the community will encourage people to do the consumption of the goods and services that enhance the growth of investment in the sector real. The existence of investment growth in the real sector is followed by developments in the Islamic stock market in this study.

Increased GDP is a signal positive for investors because of the increase in the show that the level of consumption of the community increases. With a signal that the investors will feel safe to invest in Indonesia and the Islamic stock market, so the demand will be growing a lot and returns are generated also will increase. It is in accordance with the research that is done by Maqdiyah, et al (2014) who find that the growth of GDP influence significantly to the stock price and return it. But the result is different from the research that is done by Kewal (2012) who find that the growth of GDP was not followed by the growth of return the market.

Effect of Interbank Interest Rate to Indonesia Stock Market Return

In the short run, the growth interest rate on the period of time is influence significantly negative, but not for the influence of interest rate on the period before that is significantly positive. It means when the interest rate rises in the period of this, the market will respond it and make a stock market return down things have such a theory that disclosed by Gujarati. The theory that explains that the level of interest and the stock price has a relationship that is reversed (Gujarati, 2006). So when interest rate higher than stock price lower, because it makes the value of the return of the deposit bank and bonds more attractive to investors, so many investors are stock market transferred a portfolio of shares to the investment that, and investors will undertake the sale of shares.

However, the studies have found results that the interest rate period previously more have strong influence than the period of time is, the effect also is positive whereby when the interest rate rose in the period before, then the return of shares in the market shares of sharia joined rose, as did the opposite. It is caused by characteristic Islamic stock which limits the company related interest, making investors believed to still hold shares. Because in the future will come investors believe that Islamic stock will grow and flourish. In the run length, the interbank interest rate no effect on the rise and fall return of market share. It is because of the change rate of interest that is applied tends stable and does not fluctuate so it does not have the impact to the holders of shares. Stocks will be relatively stable as well as the resulting returns.

Influence of Inflation on Islamic Stock Market Return

Inflation has no effect on market returns both in the short and long term. It indicates that investors who invest in Islamic stock, inflation is not bad news because every country will face inflation. But during stable and in the bottom 10% it is considered safe. In theory, the rate of inflation can affect positively or negatively depending on the degree of inflation it alone. Inflation that high can bring down the price of shares in the market, while inflation are very low will result in the growth of the economy is very slow, and ultimately the stock price is also moving with slow (Samson, 2006).

When seen from the data, the growth of inflation in the period of the study are likely stable at under 1% with such economy is still able to otherwise stable. Besides that, the company would be able to survive with inflation that is stable that much less to be able to enter the Islamic stock would have to pass the criteria are quite stringent associated profit. If the company already has a fundamentally strong as that registered in the ISSI, ofcourse will survive in the conditions of the economy are difficult. Den Gan said investors were assessing of factors fundamental companies still persist in spite of inflation experienced a rise.

The Effect of IHSG on Islamic Stock Market Return

In the short run, IHSG has influence positively on the Islamic stock market return. That is, when the Islamic stock market return rises, then the value of IHSG also will increases. IHSG is an illustration of the movement of the entire shares are listed on the Indonesia Stock Exchange (BEI), IHSG is also used as a reference for investor to determine the development of activities in the capital market. If the return of the IHSG is up, certainly stocks that exist in Islamic stock market participate will up, let alone to be able to enter into the list of Islamic stocks required selection are quite strict, so that only those companies whose performance either be elected, so the Islamic stock market return itself will increase.

In this study, in the long term IHSG also has a significantly positive effect on Islamic stock prices. It is proved that the ISSI or Islamic stock market having regard are strong with IHSG. If IHSG were experiencing a decline, the Islamic stock would be experiencing a decline as well, as did IHSG become a reference for the entire stock that exist in Indonesia.

Effect of Exchange Rate of the Islamic Stock Market Return

In the short run, the exchange rate USD / IDR affect not significantly negative to Islamic stock market return. Keep in mind that the exchange rate that is taken from USD to Rupiah (USD / IDR), then if the coefficient is negative it means Rupiah strengthened and the USD weakened. The result in this study have demonstrated the negative correlation between exchange rate and Islamic stock price. It means that when the USD weakens, you can say that the Rupiah strengthens, the return of Islamic stocks will increase. The results obtained are consistent with the theory, where the strengthening of the Rupiah exchange rate against the USD is a positive signal for the economy.

In theory, the weakening of the Rupiah have an impact on the decrease in income net were acquired by the company so that resulted in stock price also participate decreased (Patar, Darminto, and Saifi, 2014). If the USD strengthened, prices will rise, of course the company will expend the cost of production is more substantial then profits will also go down. Costs are more substantial and profits are reduced course will get a response from the market. Demand will stock be down, which will affect to price and Islamic stock market return.

In the length run, the exchange rate also has the effect of which is negative and not significant to Islamic stock market return. The insignificant effect of the exchange rate on stock return because the value tends to be stable at Rp 13,000 - Rp 14,000, which of course the company is already accustomed to going to respect these. It would be different if the exchange rate jumped to IDR 17,000, of course the impact would be bigger. Holders of shares was realized that the value of exchange USD / IDR does not fluctuate so that they would maintain the stock them. So that with the movement of the exchange rate or the value of the exchange Rupiah does not impact significantly on the stock return.

CONCLUSION

The study is assessing the dynamics of the term short and term length between the variables of macroeconomic and stock market return in Indonesia during the reign of president Joko Widodo. Based on the analysis, the growth of the economy, interbank interest rate, IHSG and exchange rate affect the Indonesia stock market return in the run short. In the long run, the only ones affecting the stock market returns in Indonesia are economic growth and the IHSG. The results of these can be targeted precisely to be focused by the government, in order to stabilize stock market and push over a lot of the flow of capital to the capital markets so as to achieve the stock return.

Although the findings of the study is interesting, but the research is to evolve more distant. Besides combine period the samples were more long, covering over much Islamic stock market in the entire world and includes other macroeconomic variable that has the potential to affect the Islamic stock market can improve analysis and implications is more advanced than the research into the problem is.

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