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MACRO ECONOMIC REVIEW OF JA KARTA ISLAMIC INDEX STOCK RETURNS

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Abstract

This study tries to examine the problem of whether there is macroeconomic influence (inflation, Indonesian interest rates) on JII stock returns on the IDX. The data used in this study is secondary data using combined time series data (time period) with Cross Section data (8 selected companies) based on the annual financial statements of shares that are incorporated in the JII from 2018-2023. The results of both simultaneous and partial data processing show that Macroeconomics (inflation and Indonesian interest rates) affect stock returns with a significance level below 0.05. Stocks of companies classified in the Jakarta Islamic Index are those whose types, products, services provided, contracts, and management methods do not contradict Sharia principles. Similarly, regarding profit-sharing, it must also comply with Sharia principles, devoid of interest elements, as interest falls under usury, and activities involving usury are prohibited in the Sharia capital market in accordance with the fatwa decision of the National Sharia Council No: 40/DSN-MUI/X/2003.

Keywords : Bank Indonesia interest rate, Inflation and Stock Returns

1. INTRODUCTION

The stock market is one of the key financial instruments that influence the growth of a country's economy and is the primary focus for long-term investment planning by investors. Stock market performance is influenced by several factors, including macroeconomic conditions such as economic growth, inflation rates, monetary and fiscal policies, political stability, as well as global factors affecting the domestic economy (Hasibuan Abdul Nasser: 2022). In the Indonesian stock exchange, there is an index called the Jakarta Islamic Index, which trades Sharia-compliant stocks according to the principles of Islamic teachings. According to Sharia, transactions in the capital market are not prohibited as long as they do not contradict the provisions outlined by Islamic law. This is because the development of the capital market is closely tied to the economic progress of a country. Sharia-compliant capital markets have been developed in various countries. Therefore, investing in the capital market may not always comply with Islamic principles. Hence, investing in the capital market must be done very selectively and carefully to ensure it does not violate Sharia principles (Habib Nazir et al., 2004).

Before making investments, investors typically analyze a company using various information related to stock price dynamics, obtained from both the capital market and directly from the company. This is done by investors to decide on which company's stocks are worth investing in. Investors who allocate their capital to a specific company naturally expect returns (profits). In investing, the greater the risk of a security, the higher the expected return. Conversely, the lower the expected return, the lower the risk to be borne. When the return on a company's stock is considered moderate, it implies that the investor's return remains stable, resulting in investors being less ambitious as there is no progress or improvement. If the return on a company's stock decreases, it will result in investors receiving continuously diminishing returns, thereby leading investors to refrain from investing in that company (Windari, 2018). Analyzing the health and performance of a company is crucial for investors in allocating their capital as a strategy to consider macroeconomic factors in the investments they are about to make.

Macroeconomics is also crucially observed in stock returns, especially inflation and the interest rates set by the Central Bank of Indonesia. Fluctuations in the Central Bank's interest rates affect investments. This is because investors prefer to deposit their funds in banks in the form of savings or deposits, rather than investing in the stock market with certain risks. Return and risk are inherent in every investment, especially in investments in every type of stock, whether conventional or Sharia-compliant. In recent decades, understanding the relationship between macroeconomic factors and stock returns has become a significant focus of research in the fields of economics and finance. Researchers and financial practitioners have conducted various studies to explore how changes in macroeconomic conditions affect stock market behavior. The importance of understanding the relationship between macroeconomics and stock returns cannot be underestimated, especially in the context of efficient investment decision-making and risk management.

Macroeconomic analysis enables investors to identify trends and patterns in stock market behavior that may be associated with changes in macroeconomic conditions. With a deep understanding of these factors, investors can make more informed investment decisions, potentially reducing risks and increasing the potential returns of their portfolios. Therefore, to comprehensively understand the dynamics of the stock market, a thorough review of the macroeconomic factors influencing stock returns is necessary. This review not only provides insights into the mechanisms behind stock market movements but also provides a strong foundation for investors to make smart and effective investment decisions. Based on the above background, the author formulates the problem as follows: Does macroeconomic factors (inflation, Central Bank of Indonesia interest rates) influence the stock return of the Jakarta Islamic Index on the Indonesia Stock Exchange?

2. IMPLEMENTATION METHOD

The population refers to the entire subjects of the research. The population in this study is the stocks listed in the JII on the IDX during the period 2018 – 2023. In determining the sample, the researcher used purposive sampling, which is done by directly selecting a subset of the population based on specific criteria, aiming to obtain a representative sample according to the predetermined criteria. The sample size used consists of 8 companies. The analysis model used in this research is multiple linear regression. Using the computer program EViews to obtain accurate and precise results, and data processing is carried out quickly. The tests conducted for this research are classic assumption tests, namely normality, autocorrelation, and multicollinearity. The multiple linear regression analysis is formulated as follows:

$$TR = a + b_1X_1 + b_2X_2 + e_i$$

Where:
- (TR) = Total Stock Return
- (a) = Constant
- (b_1) - (b_2) = Regression Coefficients
- (X_1) = Inflation
- (X_2) = Central Bank of Indonesia Interest Rate
- (e_i) = Error

3. RESULTS AND DISCUSSION

3.1 Results of Research Model Testing

The estimation model used in this study is based on the Fixed Effect Model (FEM) with cross-section weights for panel data regression because it produces better estimation results compared to regular FEM.

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Table 1. Estimation Results of Pooled Regression Model - Cross-Section Weights

Dependent Variable: RETURN?
Method: GLS (Cross Section Weights)
Date: 03/03/24 Time: 04:14
Sample: 2018 2023
Included observations: 5
Number of cross-sections used: 8
Total panel (balanced) observations: 40
Convergence achieved after 36 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLASI?	-0.236654	0.041941	-5.642483	0.0000
SBI?	0.487922	0.063760	7.652445	0.0000
Fixed Effects				
_AT—C	-1.349174			
_BR—C	-1.276950			
_ITP—C	-2.264794			
_IN—C	-1.603743			
_KF—C	-1.414120			
_TBB—C	-1.463375			
_TI—C	-2.197427			
_UI—C	-0.156845			
Weighted Statistics				
R-squared	0.914975	Mean dependent var		1.312440
Adjusted R-squared	0.872463	S.D. dependent var		2.173904
S.E. of regression	0.776352	Sum squared resid		15.67078
F-statistic	21.52257	Durbin-Watson stat		2.409170
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.408258	Mean dependent var		0.696500
Adjusted R-squared	0.112387	S.D. dependent var		0.824041
S.E. of regression	0.776356	Sum squared resid		15.67094
Durbin-Watson stat	2.980019			

Source: EViews Output

3.2 Hypothesis Testing

The goodness of fit test was conducted to determine the suitability of a regression model. The Adjusted R-squared value was used for this purpose. The Adjusted R-squared value obtained from data processing can be seen in Table 2 below:

Table 2. Goodness of Fit Test

R-squared	0.914975	Mean dependent var	1.312440
Adjusted R-squared	0.872463	S.D. dependent var	2.173904
S.E. of regression	0.776352	Sum squared resid	15.67078
F-statistic	21.52257	***Durbin-Watson stat***	***2.409170***
Prob(F-statistic)	0.000000		

Source: EViews Output

This indicates that 87.24% of the variation in Stock Return can be explained by Macroeconomic factors (inflation, Indonesian interest rates), while the remaining 12.76% is influenced by other variables not explained by this research model. To test whether the coefficient parameters of Adjusted R-squared are significant or not, a test was conducted using the Fisher statistic (F-test) with a confidence level of 95%. The criteria used for the test are if F-calculated > F-table then Ho is rejected; and if F-calculated ≤ F-table then Ho can be accepted. The F-calculated value is 21.52257 with a significance level of 0.000. While the F-table at a confidence level of 95% (α = 0.05) is 2.46. Since the calculated F is greater than the tabulated F (21.52257 > 2.46), it indicates that there is a simultaneous effect of Macroeconomic variables (inflation and Indonesian interest rates) on stock returns, which can be accepted overall.

The partial test results are depicted in Table 3 below:

Dependent Variable: RETURN?
Method: GLS (Cross Section Weights)
Date: 03/03/23 Time: 04:14
Sample: 2018 2023
Included observations: 5
Number of cross-sections used: 8
Total panel (balanced) observations: 40
Convergence achieved after 36 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLASI?	-0.236654	0.041941	-5.642483	0.0000
SBI?	0.487922	0.063760	7.652445	0.0000
Fixed Effects				
_AT—C	-1.349174			
_BR—C	-1.276950			
_ITP—C	-2.264794			
_IN—C	-1.603743			
_KF—C	-1.414120			
_TBB—C	-1.463375			
_TI—C	-2.197427			
_UI—C	-0.156845			
Weighted Statistics				

R-squared	0.914975	Mean dependent var	1.312440
Adjusted R-squared	0.872463	S.D. dependent var	2.173904
S.E. of regression	0.776352	Sum squared resid	15.67078
F-statistic	21.52257	Durbin-Watson stat	2.409170
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.408258	Mean dependent var	0.696500
Adjusted R-squared	0.112387	S.D. dependent var	0.824041
S.E. of regression	0.776356	Sum squared resid	15.67094
Durbin-Watson stat	2.980019		

Source: EViews Output

After conducting the above tests, it can be concluded that the proposed model in this study, tested with multiple regression method using fixed effect, is significant and proves the level of influence between the variables under investigation. This model testing is used to test the hypotheses proposed in the study. From the coefficient table calculation of the t-test above, the regression model that can be formed is:

Substituted Coefficients:
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RETURN_AT = -1.349173594 - 0.2366541516*INFLASI_AT + 0.4879222578*SBI_AT
RETURN_BR = -1.276949523 - 0.2366541516*INFLASI_BR + 0.4879222578*SBI_BR
RETURN_ITP = -2.264794046 - 0.2366541516*INFLASI_ITP + 0.4879222578*SBI_ITP
RETURN_IN = -1.603743233 - 0.2366541516*INFLASI_IN + 0.4879222578*SBI_IN
RETURN_KF = -1.414119522 - 0.2366541516*INFLASI_KF + 0.4879222578*SBI_KF
RETURN_TBB = -1.463374985 - 0.2366541516*INFLASI_TBB + 0.4879222578*SBI_TBB
RETURN_TI = -2.197427369 - 0.2366541516*INFLASI_TI + 0.4879222578*SBI_TI
RETURN_UI = -0.1568451658 - 0.2366541516*INFLASI_UI + 0.4879222578*SBI_UI

The t-test results show that partially, the Inflation and SBI variables have significance levels below 0.05. The results of the hypothesis testing conducted partially on stock returns are as follows:

1. The constant values for each company are different from each other as indicated by the fixed effect model. For example:

Fixed Effects	
_AT—C	-1.349174
_BR—C	-1.276950
_ITP—C	-2.264794
_IN—C	-1.603743
_KF—C	-1.414120
_TBB—C	-1.463375
_TI—C	-2.197427
_UI—C	-0.156845

This indicates that when the values of INFLATION and SBI are zero, the stock return will be -1.3 for AT, -1.2 for BR, -2.26 for ITP, -1.6 for IN, -1.5 for KF, -1.4 for TBB, -2.19 for TI, and -0.15 for UI.

2. The regression coefficient of INFLATION (X5) at -0.2366 indicates that a 1% change in INFLATION will result in a -0.2366% impact in the opposite direction.

3. The regression coefficient of SBI (X6) at 0.4879 indicates that a 1% change in SBI will result in a 0.4879% impact in the same direction.

4. DISCUSSION

The testing conducted on the model shows that the proposed model significantly proves the simultaneous effect of Macroeconomic factors (inflation, Indonesian interest rates) on stock returns. This effect is not too significant when viewed from the determination coefficient which is only around 87.23%. The results of this study are not in line with various previous studies in the capital market, which showed a strong relationship between fundamental analysis and technical analysis with stock returns. This is because the model used is different, and the model in this study is better than previous results. The results obtained often are inconsistent, so no clear conclusions can be drawn. This inconsistency is indicative that there is no strong pattern related to this issue. The suspected factors causing this often lie in the time span of accounting information announced which has already been predicted by investors. This condition often leads to the effect of accounting information not being in the same period as the stock returns taken as research data, so research conducted by pairing data in the same time interval cannot prove a significant relationship. Partially, no single variable shows that there is a variable that gives a positive impact on stock returns.

5. CONCLUSION

Based on the data analysis and discussion conducted in the previous sections, this research yields several conclusions as follows: 1). Stocks of companies classified in the Jakarta Islamic Index are those whose types, products, services provided, contracts, and management methods do not contradict Sharia principles. Similarly, regarding profit-sharing, it must also comply with Sharia principles, devoid of interest elements, as interest falls under usury, and activities involving usury are prohibited in the Sharia capital market in accordance with the fatwa decision of the National Sharia Council No: 40/DSN-MUI/X/2003. 2). Simultaneously, the variables of Macroeconomic factors (inflation and Indonesian interest rates) on stock returns can be accepted overall, with the calculated F-value being 21.52257, with a significance level of 0.000. Meanwhile, the F-table at a confidence level of 95% ($\alpha = 0.05$) is 2.34. Since in both calculations, the calculated F-value is greater than the F-table (21.52257 > 2.34), this conclusion supports various previous research findings.

REFERENCES

Ardi Hamzah, *Analisa Karakteristik Perusahaan, Industri Dan Ekonomi Makro Terhadap Return Dan Beta Saham Syariah Di Bursa Efek Indonesia*, (Solo : Jurnal SNA-8, 2005).

Achsien, Inggi H. *Investasi Syariah di Pasar Modal*: Menggagas Konsep dan Praktek Manajemen Portofolio Syariah, (2000), Jakarta: Gramedia.

Ahmad Kamaruddin, *Dasar-dasar Manajemen Investasi dan Portopolio*, (2004), Jakarta : Rineka Cipta.

Alwi, Iskandar Z, *Pasar Modal, Teori dan Aplikasi*, (2003, Jakarta:Nasindo Internusa.

Ade Fatma Lubis, *Pasar modal*, (2008), Jakarta : FEUI.

Ang, Robert, *Buku Pintar Pasar Modal Indonesia*, (1997), Jakarta: Media Staff Indonesia.

Darmaji, Tjiptono & Fakhruddin, *Pasar Modal Ind*onesia, (2001), Jakarta: Salemba Empat.

Freddy Rangkuti, *Teknik Membuat Perencanaan Bisnis dan Analisis Kasus*, cetakan ketiga, (2001), Jakarta : Gramedia Pustaka Utama.

Hasibuan, A. N., Lubis, A. F., Hasyim, S., & Sadalia, I. Effects of auditor quality on market-based and accounting-based financial statement quality and its impacts on economic consequences (a case on Indonesia capital market). *International Journal of Economic Research*. Vol. 14, No.12 (2017), pp. 205-230.

Hasibuan, Abdul Nasser, dkk, Company Monitoring Analysis on Financial Report Quality in Indonesia Stock Exchange Manufacturing Sector, Academic Journal of Economic Studies Vol. 4, No. 4, December 2018.

Hasibuan, Abdul N. "The Role of Company Characteristics in the Quality of Financial Reporting in Indonesian." Peuradeun Scientific Journal, vol. 10, no. 1, 2022, pp. 1-12, doi:10.26811/peuradeun.v10i1.666.

Hasibuan, A. N. (2018). Konsep Pemasaran Islam Di Bank Pembiayaan Rakyat Syariah Di Kabupaten Tapanuli Selatan. Al-Masharif: Jurnal Ilmu Ekonomi dan Keislaman, 6(2).

Hasibuan, A. N., Efendi, S., & Windari, W. (2022). Analysis Of Accounting Treatment Of Gold Pawn Loans At Islamic Banks In Padangsidimpuan. International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS), 2(5), 657-668.

Iskandar Muda, Abdul Nasser Hasibuan, public discovery of the concept on money with the value of time, emersld reach proceeding series(proceeding of micoms 2017: vol 1 pp 255-261, http://www.emeraldinsight.com/doi/pdfpluss/10.1108/978-1-78756-793-1-00050

Jogiyanto, *Teori Portofolio dan Analisis Investasi Edisi 2*, (2003), Yogyakarta : BPFE.

Jones, Charles.P, Investments Analysis and Management, (2004), 9th edition, New York, NY: John Wiley & Sons, Inc..

Mankiw, Rommer, Weil, Quarterly Journal of Economics:, 1992, hal. 407-437, Data IMF juga menunjukkan hal yang sama (IMF, World Economic Outlook:, 1995).

Taddelilin, Eduardus, *Analisis Investasi dan Manajemen Portfoli*,(2008), Yogyakarta : BPFE, 2001.

Tjiptono Darmadji, dan Hendy M Fakhrudin, *Pasar Modal di Indonesia, Pendekatan Tanya jawab*, Cetakan Ketiga, (2008) Jakarta : Salemba Empat.

Windari, W. (2018). Pengaruh Karakteristik Perusahaan Terhadap Return Saham Jakarta Islamic Indeks Di Bursa Efek Indonesia. Imara: Jurnal Riset Ekonomi Islam, 2(1). DOI: https://doi.org/10.31958/imara.v2i1.1033 .