



EFFECT OF BI RATE, INFLATION AND INDEX DOW JONES AGAINST JAKARTA ISLAMIC INDEX (JII)

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ABSTRACT

The capital market in Indonesia is developing with the presence of the Islamic capital market through a collaboration between the Indonesia Stock Exchange and PT. Danareksa Investment Management by launching the Jakarta Islamic Index (JII) on July 3, 2000. The existence of Islamic mutual funds emerged as an answer to the concerns of Muslim investors regarding interest, speculation, and unclear investment in mutual funds. This study aimed to estimate the effect of inflation, BI Rate, Exchange Rate and Dow Jones Industrial Average Index on the Jakarta Islamic Index (JII). This study uses secondary data based on time series from Quarter 1: 2008-Quarter 4: 2018, obtained from the Indonesia Stock Exchange, Bank Indonesia, the Indonesian Central Bureau of Statistics and Financial Economics and Statistics. The analytical method used for this study uses an analytical approach multiple linear regression. Based on the simultaneous test shows that the Inflation, BI Rate, Exchange Rate and Dow Jones Index influence together on JII. Based on the results of the study it was found that the Inflation variable partially and significantly affected JII.

Keywords: BI Rate, Inflation, Index Dow Jones and Jakarta Islamic Index (JII)

Article History

Received : 13 June 2020

Revised : 14 July 2020

Accepted : 20 July 2020

Available online : 21 July 2020

<https://doi.org/10.14421/EkBis.2019.3.1.1177>

INTRODUCTION

The growth of a country's economy is linear with the development of the country's capital markets (Kuwornu, 2012). This happens because the capital market creates supply and demand activities between parties who have a surplus of funds and those who have a deficit of funds (Aisiyah, 2013). Based on past experience, the capital market is usually like a market that will always experience ups and downs, which are indicated by signs of bullish or bearish, so therefore in terms of investing there is no investment without risk (Jensen et al., 2006). The Indonesian capital market in the 20th century experienced a booming condition around the end of June 1997 in which the Composite Stock Price Index (IHSG) rose to 740 (Bala & Chin, 2017; Barney, 2001; White, 2013). But within a few months, at the end of September 1998, after a multidimensional crisis, the monetary-economic crisis continued in social chaos which led to a political crisis, the CSPI slid drastically to reach the lowest level 259, and on January 23, 2004 the Jakarta Stock Exchange again recorded history with the highest CSPI, which was 785,879, this was very encouraging (Hosseini et al., 2011; Schnabel, 2011). Turnover money in the capital market is very valuable every day which amounts to tens of trillions of rupiah. Transactions on the capital market can reach Rp. 6 Trillion-Rp. 8 trillion, coupled with bond transactions, mutual funds, and others, then the total per day money circulation in the capital market can penetrate the value of Rp. 15 Trillion (Usnan, 2016). The number of funds is very important for the interests of the nation and state because it can increase national growth and development. In accordance with the vision of the Financial Services Authority as the supreme authority of the Indonesian capital market watchdog which explicitly states that the capital market is a pillar of the national economy (Law & Ibrahim, 2014).

The capital market in Indonesia is developing with the presence of the Islamic capital market through a collaboration between the Indonesia Stock Exchange and PT. Danareksa Investment Management by launching the Jakarta Islamic Index (JII) on July 3, 2000. The existence of Islamic mutual funds emerged as an answer to the concerns of Muslim investors regarding interest, speculation, and unclear investment in mutual funds (Prasetyo Supadi & Amin, 2017). In addition, the existence of JII is a form of muamalah in economic activities to make it more beneficial for all people and stakeholders in the capital market world as the Word of Allah SWT in the Al-Quran translation of Al-Baqarah verse 275 which explains the prohibition of usury or interest in muamalah.

"People who eat riba' cannot stand but rather as a founding person who is possessed by devil because of a crazy disease. Their condition is caused by their opinion, Truly buying and selling is the same as riba, whereas Allah has justified the sale and prohibiting riba'"

Jakarta Islamic Index (JII) is a stock index consisting of 30 shares with the largest average market capitalization and has the highest average regular trading liquidity value, which is released twice each year (Nur et al., 2019; Qizam et al., 2017). Shares in JII must meet Islamic sharia principles established by the MUI National Sharia Board (DSN), where the company's business activities are not related and not related to alcohol, gambling, do not carry out production activities with raw materials of pigs, pornography, and do not contain ribawi funds Based on the Quarter IV-2015 report, the Financial Services Authority regarding Sharia Capital Markets containing Sharia Securities includes 335 types of Equity Stocks of Public Companies and other Sharia Securities (Shakina et al., 2017; Yudianto & Muharam, 2018). Sharia shares are engaged in the Trade, Services and Investment sectors (25.89%), the Property, Real Estate & Construction sector (16.37%), the Basic and Chemical Industry sector (13.99%), the Infrastructure, Utilities and transportation sectors (10.12 %) and other sectors below 10% each (Aisiyah, 2013; Setyani, 2018). The Indonesian Sharia Stock Index (ISSI) rose 7.94% to 145.06. The stock market capitalization value is also increased by 6.20% to Rp. 2,600.85 trillion with a market share of around 53.38% of the total market capitalization of JII shares increased by 8.50% to 603.35. The JII stock market capitalization value also increased by 7.91% to Rp1,737.29 trillion with a market share of 35.65% of the total market market capitalization listed on the Exchange, its own capitalization It is a calculation of the number of shares listed on the stock market multiplied by the price of each stock which shows the value of the securities listed on the stock exchange (Adiningtyas, 2018).

Several studies have analyzed the relationship between economic variables and the capital market in a country. One of the frequent and popular approaches used is the Arbitrage Pricing Theory (APT) approach developed by (Ross, 1976). The results of the research (Schellhorn & Sharma, 2013), using the APT approach, prove that macroeconomic variables have a systematic influence on stock market returns. Macroeconomic conditions are considered to be able to influence the discount rate, the company's ability to drive cash flow, and future dividend payout (Auliyah & dan Hamzah, 2006; Hsing, 2008; Musthafa, 2017). This mechanism shows that a country's economic condition is an important factor in the equity market (Shyu, 2013). The results of the study (Taurida, 2008) regarding the relationship of stock prices and macroeconomic factors such as inflation, SBI, SWBI and exchange rates. (Wilkens et al., 2006) said market risk is closely related to changes in stock prices of certain types or certain groups caused by investors' anticipation of changes in expected returns. The level of risk is

measured by the beta coefficient (β) of the stock, that is, a measure of market risk that affects the price of a stock. The stability of the company will affect the return obtained on the capital market. Another factor that has a big influence on return is macroeconomic factors because these factors are indicators of a country's stability. The results of the research (Sivaramakrishnan et al., 2017) found that each macroeconomic variable has a negative relationship to the return of AGR (agribusiness). The results showed that the return AGR did not have a significant relationship to macroeconomic variables (inflation, SBI, SWBI and exchange rates). This study aimed to estimate the effect of inflation, BI Rate, Exchange Rate and Dow Jones Industrial Average Index on the Jakarta Islamic Index (JII).

METHODOLOGY

This study uses secondary data based on time series from Quarter 1: 2008-Quarter 4: 2018, obtained from the Indonesia Stock Exchange, Bank Indonesia, the Indonesian Central Bureau of Statistics and Financial Economics and Statistics. The object of this study analyzes the factors that influence the stock price of Jakarta Islamic Index in Indonesia in the period of Quarter 1: 2008 - Quarter 4: 2018. The periodization of the study is considered sufficient to represent the extent of the influence of independent variables on the dependent variable. The analytical method used for this study uses an analytical approach multiple linear regression is a test to determine the coefficient of determination, partial and simultaneous influence with the hypothesis test (t test and F test) and the classical assumption test (normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test) first (Ivanisevic Hernaus, 2019). The regression equation is as follows:

$$JII = \beta_0 + \beta_1 INF + \beta_2 BIR + \beta_3 Kurs + \beta_4 IDJ + \varepsilon$$

Where JII is the Jakarta Islamic Index As the dependent variable and Inflation (INF), BI Rate (BIR), Exchange Rate, Dow Jones Index (IDJ) are the independent variables (independent)

RESULT

OLS analysis results based on the results of statistical calculations that have been done can be concluded that the regression equation model used has a normally distributed residual with a probability value of JB $0.65 > 0.05$ and has performed a series of classical tests. In the Autochoras test it produces a prob value. F-count of $0.128 > 0.05$ which indicates that the regression model does not have autocorrelation problems. Test results produce each coefficient value < 0.8 for all variables so that it can be concluded that there is no multicollinearity in the four independent variables. The test results for the heteroscedasticity test indicate

that the prob. F-count is $0.5553 > 0.05$. It was concluded that the regression model used did not occur heteroscedasticity.

The results of linear regression testing produce an R^2 of 0.9293 which means that Inflation, the BI Rate, the Exchange Rate and the Dow Jones Index have an effect on the Jakarta Islamic Index of 92.93%. The remaining 7.0% is influenced by other variables and prob values. F-count of The results of linear regression testing produce an R^2 of 0.9293 which means that Inflation, the BI Rate, Exchange Rate and the Dow Jones Index have an effect on the Jakarta Islamic Index of 92.93%. The remaining 7.0% is influenced by other variables and prob values. F-count of $0.000000 < 0.05$ so that the Inflation, BI Rate, Exchange Rate and Dow Jones Index together influence the JII variable and the regression model is feasible to use. From the regression test results obtained by the model equation as follows:

$$JII = 537.14 + 9.14 INFL - 79.68 BIR - 0.003 KURS + 0.040 IDJ + \varepsilon$$

The test results are known that the value of prob. t-count of the INFL variable of $0.0281 < 0.05$. It was concluded that INFL has a significant effect on JII. Then the BIR variable to the JII variable has a calculated t-value of $0.0000 < 0.05$. It is concluded that the BIR has a significant effect on JII. However, the EXCHANGE variable to the dependent variable JII has a prob value. t-count of $0.4905 > 0.05$ can be said that KURS has no significant effect on JII. Finally, the JONS variable to the JII variable has a prob value. t-count of $0.0000 < 0.05$ It was concluded that JONS had a significant effect on JII. Thus, in each of the INFL independent variables, BIR and IDJ significantly influence the JII variable at a 95% confidence level. But this does not occur on the KURS variable because it does not have a significant effect on the JII variable at a 95% confidence level. If Inflation, Exchange Rate, BI Rate, Dow Jones Index are 0, then the JII is 537,1446. Inflation rises, the percentage of JII will also increase. An increase in inflation of 1% will increase the value of JII by 9,146189. The BI Rate is -79.68557 with a negative value meaning that if there is a BI Rate growth of 1% it will decrease the percentage of the value of the Jakarta Islamic Index by 79.68. Exchange Rate Coefficient of -0.003 thus the KURS regression coefficient is negative meaning it shows the opposite effect, where when KURS rises the percentage of JII decreases. When the Rupiah value against the Dollar strengthens, the value of JII will experience Weakening. Likewise, when the Rupiah value against the Dollar weakens, the JII value will experience a strengthening. An increase in the value of the Rupiah against the Dollar by 1000 will decrease the percentage value of JII by 0.003761 and vice versa, a decrease in the value of the Rupiah against the Dollar 1000 will increase the percentage of JII by 0.003761. But this has no effect on JII because the probability value of t-statistic (t-count) 0.4905 is greater than $\alpha = 5\%$ ($0.4905 > 0.05$). The coefficient of

IDJ is 0.0400 so that the regression coefficient of IDJ has a positive value meaning it shows a direct effect, where when the DJIA Index value rises, the percentage of JII will also increase. Likewise, when the DJIA Index value drops, JII also falls. An increase in the DJIA Index by 1000 will increase the value of JII by 0.040 and vice versa, a decrease in the DJIA Index by 1000 will decrease the percentage of the value of JII by 0.040.

CONCLUSION

Based on the simultaneous test shows that the Inflation, BI Rate, Exchange Rate and Dow Jones Index influence together on JII. Based on the results of the study it was found that the Inflation variable partially and significantly affected JII. The influence that occurs is a positive effect, where when inflation increases then JII will increase. Based on the results of the study it was found that the Exchange Rate (IDR / USD) had no partial effect on the JII variable. Although the influence that occurs is negative, where when the exchange rate strengthens then JII will experience a weakening. Based on the results of the study it was found that the Dow Jones Index variable has a partial and significant influence on the JII variable. The influence that occurs is a positive effect, where when the Dow Jones Index rises, the JII will experience an increase. Based on the results of the study it was found that the BI variable had a partial and significant influence on the JII variable. The influence that occurs is a negative effect, where when BI Ratenaik the JII will experience weakness.

REFERENCES

- Adiningtyas, D. T. (2018). Pengaruh Variabel Makroekonomi Terhadap Indeks Harga Saham Syariah (Studi Kasus Di Indonesia Dan Malaysia). *ISLAMICONOMIC: Jurnal Ekonomi Islam*, 9(2), 151–172.
- Aisiyah, S. S. (2013). *Analisis Dampak Variabel Makro Ekonomi Terhadap Indeks Saham Syariah Indonesia*. 398–412.
- Auliyah, R., & dan Hamzah, A. (2006). Analisa karakteristik perusahaan, industri dan ekonomi makro terhadap return dan beta saham syariah di Bursa Efek Jakarta. *Sna*, Vol I(23-26 Agustus).
- Bala, U., & Chin, L. (2017). Oil Price, Exchange Rate and Disaggregate Consumer Prices : Causality, Impulse Response , and Variance Decomposition. *International Journal of Economics, Commerce and Management*, V(6), 37–59.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643–650. [https://doi.org/10.1016/S0149-2063\(01\)00115-5](https://doi.org/10.1016/S0149-2063(01)00115-5)
- Hosseini, S. M., Ahmad, Z., & Lai, Y. W. (2011). The Role of Macroeconomic

- Variables on Stock Market Index in China and India. *International Journal of Economics and Finance*, 3(6), 233–243.
- Hsing, Y. (2008). The impacts of the stock price and country risk on the exchange rate in Singapore. *International Journal of Development Issues*, 7(1), 56–61.
- Ivanisevic Hernaus, A. (2019). Exploring the strategic variety of socially responsible investment: Financial performance insights about SRI strategy portfolios. *Sustainability Accounting, Management and Policy Journal*, 10(3), 545–569.
- Jensen, M. R. H., Marshall, B. B., & Pugh, W. N. (2006). Does quantity reflect quality? Financial disclosure size and future performance. *Managerial Finance*, 32(1), 39–50.
- Kuwornu, J. K. M. (2012). *Agris on-line Papers in Economics and Informatics Effect of Macroeconomic Variables on the Ghanaian Stock Market Returns : A Co-integration Analysis Key words. IV(2), 15–26.*
- Law, S. H., & Ibrahim, M. H. (2014). The response of sectoral returns to macroeconomic shocks in the Malaysian stock market. In *Malaysian Journal of Economic Studies* (Vol. 51, Issue 2, pp. 183–199).
- Musthafa, M. (2017). Analisis Pengaruh Faktor Ekonomi Makro Terhadap Harga Saham Pada Perusahaan Manufaktur Yang Go Public Di Bursa Efek Indonesia. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 13(1), 1.
- Nur, S., Ela, N., & Qoyum, A. (2019). Short-run and Long-run Relationship between Economic Growth, Foreign Direct Investment, Trade Liberalization and Education on Income Inequality: Evidence from Indonesia. *Journal of Islamic Finance*, 8, 047–055.
- Prasetyo Supadi, D. B., & Amin, M. N. (2017). Pengaruh Faktor Fundamental Dan Risiko Sistematis Terhadap Return Saham Syariah. *Media Riset Akuntansi, Auditing Dan Informasi*, 12(1), 23.
- Qizam, I., Ardiansyah, M., & Qoyum, A. (2017). *The Resilience of Non-Sharia Compliant Company in Indonesia Stock Exchange (IDX) and its Determinants : Evidence from 2005-2013. 11(2), 269–290.*
- Schellhorn, C., & Sharma, R. (2013). Using the Rasch model to rank firms by managerial ability. *Managerial Finance*, 39(3), 306–319.
- Schnabel, J. A. (2011). Deriving competitive advantage from real exchange rate changes. *Competitiveness Review*, 21(3), 322–327.
- Setyani, O. (2018). Pengaruh Inflasi Dan Nilai Tukar Terhadap Indeks Saham Syariah Indonesia. *ISLAMICONOMIC: Jurnal Ekonomi Islam*, 8(2), 213–
- Shakina, E., Barajas, A., Parshakov, P., & Chadov, A. (2017). Status-quo vs new strategy in intangibles. *Journal of Economic Studies*, 44(1), 138–153.
- Shyu, J. (2013). Ownership structure, capital structure, and performance of group affiliation: Evidence from Taiwanese group-affiliated firms. *Managerial Finance*, 39(4),

- Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing*, 35(5), 818–841. <https://doi.org/10.1108/IJBM-01-2016-0012>
- Usnan. (2016). *Pengaruh Nilai Tukar Rupiah Terhadap Indeks Saham Syariah Indonesia (ISSI)*. 1(2), 42–54.
- White, A. (2013). Search engines: Left side quality versus right side profits. *International Journal of Industrial Organization*, 31(6), 690–701.
- Wilkins, K. A., Heck, J. L., & Cochran, S. J. (2006). The effects of mean reversion on alternative investment strategies. *Managerial Finance*, 32(1), 14–38.
- Yudianto, I., & Muharam, H. (2018). *THE EFFECT OF INFLATION , USD AND YUAN EXCHANGE RATE , CRUDE OIL WTI AND ICP TO INDICES SECTORAL RETURNS IN INDONESIAN STOCK*. 27(1).