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Abstract

This study aims to examine the effect of gold prices and interest rates on stock performance. The research was conducted at manufacturing companies listed on the IDX (Indonesia Stock Exchange) in January 2020 - July 2020. The sample selection was carried out by purposive sampling, namely determining the sample based on certain criteria. The number of samples in this study was 35 manufacturing companies. The analysis tool used is Warp-PLS. The results showed that the gold price had a significant negative effect on stock performance and the interest rate also had a significant negative effect on stock performance. The results of this study are useful for investors in making investment decisions and are beneficial for the government in increasing investment interest in Indonesia.

Keywords: gold price, interest rate, stock performance

I. INTRODUCTION

Investors are motivated to invest because they want to get a return. Return is a reward for the risk borne by investors for the investment made. The aim of investors to invest is to maximize returns without forgetting the investment risk factors that must be faced. There is no investment without risk. Risk is the difference between the actual return received and the expected return. Tendelilin (2001) argues that the greater the likelihood of the difference, the greater the investment risk. In other words, the relationship between risk and expected return is a unidirectional and linear relationship. The greater the risk that must be borne, the greater the resulting return (high risk-high return). Investors need to understand the factors that affect stock returns in order to make the right investment decisions. Macroeconomic conditions and technical factors need to get attention from investors because they will affect stock performance. This study focuses on the influence of the macroeconomic environment, including gold prices and interest rates on stock performance.

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II. LITERATURE REVIEW

Portfolio theory reveals that investors can arrange investment configurations on several sources of income to maximize profits and minimize risk. Return is one of the investment returns expected by investors. Returns can be in the form of realized returns that have occurred or expected returns that have not occurred but which are expected to occur in the future. Meanwhile, risk consists of systematic and unsystematic risks. These two risks are often referred to as total risks (Jogiyanto, 2000). Losses can be reduced by investing in various types of stocks by forming a portfolio.

The macroeconomic environment can affect the condition and performance of the company so that it affects stock prices. Macroeconomic changes that occur in exchange rates, gold prices, inflation, and interest rates (Chen et al., 1986; Pilinkus, 2010) can affect company performance so that it has implications for returns. With bad economic conditions, it is likely that the return on shares outstanding will reflect a comparable decline. Conversely, if the economy is good, it will reflect a good stock price, which will have a positive impact on stock returns.

Gold plays an important role in the economy and investment policy. Gold is proven to have a function of protecting value against inflation (Jaiswal and Voronina, 2011; Frankel, 2014). Gold can also be used for diversification purposes (Mansor, 2011). In accordance with the Modern Postulate Theory by Harry Markowitz, investors can enjoy the benefits of diversification if they increase the number of investment assets they hold in their portfolio (Hlupo, 2017). This theory provides an empirical basis for understanding investor behavior related to gold prices (Mangram, 2013; Tan et al., 2014). The right diversification allows for the maximization of return and minimization of risk. Gold also serves as a refuge in times of economic crisis. Investors prefer gold as a safe place to hold equity in bad times (Capie et al. 2005). The increase in the price of gold provides greater profit opportunities with less risk, thereby reducing interest in holding shares so that the stock price decreases. Thus, the following hypothesis can be formulated:

Hypothesis 1. The gold price has a significant effect on stock returns.

Interest rates have implications for firm value, such as interest in net profit margins, sales, and others. Interest rates also influence investor behavior. High-interest rates cause investors to change their investment portfolios from the capital market to the market for securities, which are fixed-term income, such as government bonds. Thus, the increase in interest rates reduces investor interest in buying shares. Previous research results (Ramsharan, 2019; Alam & Udin, 2009; Amarasinghe, 2015) show that interest rates have a negative effect on stock performance. Thus, the following hypothesis can be formulated:

Hypothesis 2. The interest rate has a significant effect on stock returns.

III. RESEARCH METHODOLOGY

The population of this study is all shares of manufacturing companies listed on the IDX (Indonesia Stock Exchange) and reported on the ICMD (Indonesian Capital Market Directory) in the period January 2020 - July 2020. Sampling in this study was carried out by a purposive sampling method, namely sampling based on criteria. Specific according to research objectives. Samples taken are manufacturing companies that report financial statements consecutively on the Indonesia Stock Exchange in the period January 2020 - July 2020. During that period, the company has complete data regarding monthly closing prices. Based on data obtained from the Indonesia Stock Exchange, it is known that the number of manufacturing companies meeting the criteria is 35 companies.

Stock performance in this study is measured based on portfolio returns. A portfolio return is used to minimize the level of risk by diversifying several stocks. Secondary data used is the Composite Stock Price Index on the Indonesia Stock Exchange. A single return is the result obtained from investment in the form of realized returns and expected returns. Realized return is calculated based on historical data and serves as a measure of stock performance. Gold price variable data Information on gold prices can be obtained from the Indonesia Stock Exchange website. Changes in interest rates are calculated using the difference in interest rates each month. Interest rate data is taken from secondary data published by Bank Indonesia. The analysis uses inferential analysis to determine the effect of the independent variable on the dependent variable. The analysis tool used is Warp-PLS. The test uses the p-value to determine whether the hypothesis is accepted or rejected with a significance level of 5%.

IV. FINDING AND DISCUSSION

The results of this study indicate that the model is supported by good data and has quality indicators that meet the requirements in WarpPLS (Kock, N., 2015).

Table 1. Hypothesis Testing Results

Path	Standardized Estimates	Standardized Error	p-Value	Claim
(H1) Gold price → Stock performance	-0.440	0.064	0.000	Accepted
(H2) Interest rate → Stock performance	-0.554	0.062	0.000	Accepted

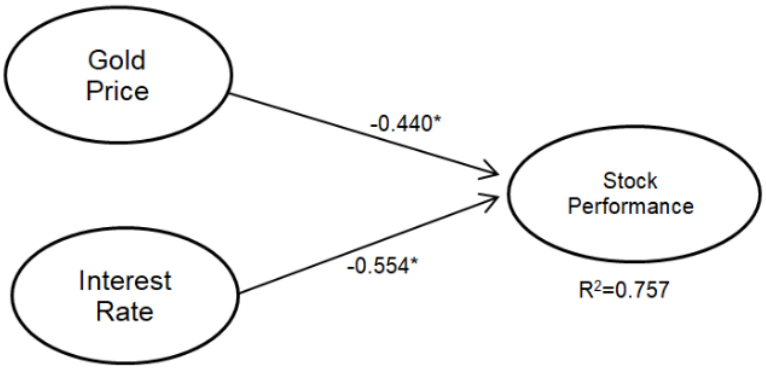

Figure 1. Structural Model
* signifikat pada 0.05

V. CONCLUSION AND FURTHER RESEARCH

This study shows that the price of gold has a significant effect on stock performance. The relationship between the gold price and stock performance shows a negative relationship, which means that the higher the gold price, the lower the stock performance. Vice versa, the lower the gold price, the higher the stock performance. It can be understood that when the price of gold increases, investors will choose gold because it is safer so that the stock price will decrease. However, when the price of gold tends to decline, investors buy shares in the hope of getting bigger profits. This is in accordance with the portfolio theory that investors try to maximize profits and minimize risks by placing their capital in several sources of income. The results of this study are in accordance with the research of Gaur and Bansal (2010) and Dwiati and Ambarwati (2016).

The results of this study indicate that the interest rate has a significant negative effect on stock performance. Shareholders will hold their shares until the interest rate returns to a level that is considered normal. Conversely, if the long-term interest rate increases, shareholders tend to sell their shares because the selling price is high (Suyati, 2018). It can be understood that an increase in interest rates can increase the burden on the company (the issuer) to fulfill its obligations/debts to the bank so that it can reduce company profits, and eventually, the share price will fall. Increased interest rates encourage investors to transfer their funds to the money market or savings or deposits so that investment on the stock exchange floor drops and, in turn, can lower stock prices. However, if the interest rate decreases, it can reduce the company's expenses, thereby increasing the company's profits, which in turn can increase the distribution of cash dividends to investors so that it attracts investors to buy company shares.

The findings of this study have study implications by extending previous research that has examined the effect of gold prices and interest rates on stock performance. The price of gold has a negative effect on stock performance. These results corroborate previous research conducted by Gaur and Bansal (2010) and Dwiati and Ambarwati (2016). The results of research by Al-Ameer et al. (2018) in Germany also show that gold prices have a significant negative effect on the stock market in normal situations (after the crisis). However, Hlupo (2017) actually found that the price of gold is not correlated with the stock price of mining companies in Zimbabwe. This is an interesting research gap to re-explore the discrepancies between the results of one study and another so that furthermore comprehensive research is needed.

These findings are relevant to the results of previous research conducted by Ramsharan (2019) and Alam & Udin (2009) that the interest rate has a negative effect on the stock market. These findings also support Amarasinghe (2015), who stated that interest rates have a significant and negative effect on the stock price in Colombo. The results of this study further strengthen the argument that stock performance is determined, among other things, by the interest rate.

This finding also has practical implications for investors and governments in making stock investment policies. Macroeconomic conditions are considered in decisions to buy or sell shares. The results of this study indicate that gold prices and interest rates have a significant negative effect on stock performance. In accordance with portfolio theory, investors or potential investors should consider gold prices and interest rates to maximize profits and minimize investment risk. The government is also interested in the results of this research in order to increase the spirit of stock investing. The JCI, which is one of the economic barometers, can be managed by setting gold prices and interest rates at a level that is favorable to investors so that it will attract foreign investment into Indonesia.

This study has several limitations. First, the scope of this research is limited to only the manufacturing industry so that it cannot generalize to all types of industries in Indonesia. Second,

this study is less able to represent long-term economic conditions because the data analyzed is six months. Further research can take research locations in other types of industries, both in Indonesia and in other countries, so that it can be more generalized. Further research is also suggested to increase the time period of the study so that it reflects long-term economic conditions. In addition, it can also compare the economic conditions before the crisis, when the economic crisis occurred, or after normal conditions returned.

REFERENCES

Abayomi, S, Oladapo, F., Adeyeye, P., Oluwagb, S. 2017. Exchange Rate Volatility and Stock Market Performance in Nigeria. *Nigerian Journal of Management Sciences* Vol. 6 No.1, 2017

Alam, M., and Udin, G.S., 2009. Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries, I*nternational Journal of Business and Management (ISSN 1833-3850), Vol. 4(3), pp. 43-51, 2009*

Al-Ameer, M., Hammad, W., Ismail, A., and Hamdan, A., 2018. The Relationship of Gold Price with the Stock Market: The Case of Frankfurt Stock Exchange. *International Journal of Energy Economics and Policy* ISSN: 2146-4553 available at Http: www.econjournals.com International Journal of Energy Economics and Policy, 2018, 8(5), 357-371.

Amarasinghe. 2015. Dynamic Relationship between Interest Rate and Stock Price: Empirical Evidence from Colombo Stock Exchange. *International Journal of Business and Social Science* Vol. 6, No. 4; April 2015.

Bagh, T., Azad, T., Razzaq, S., Liaqat, I., Khan, M.A., 2017. The Impact of Exchange Rate Volatility on Stock Index: Evidence from Pakistan Stock Exchange (PSX). In*ternational Journal of Academic Research in Accounting, Finance and Management Sciences* Vol. 7, No.3, July 2017, pp. 70–86 E-ISSN: 2225-8329, P-ISSN: 2308-0337.

Boediono. 2016. *Seri Sinopsis Pengantar Ilmu Ekonomi*, Yogyakarta : *BPFE*

Capie, F., Mills, T.C., and Wood, G. 2005. Gold as a Hedge against the Dollar, *Journal of International Financial Markets, Institutions and Money*, Vol. 15, No. 4, pp. 343- 52, 2005

Chen, Nai-Fu, Richard Roll, and Stephen A. Ross. 1986. Economic Forces and the Stock Market. The Journal of Business 59: 383–403

Djayani, Nurdin, 1999, Resiko Investasi Pada Saham Preperti Di Bursa Efek Jakarta. *Usahawan* No.3 Th XXVIII Maret

Dwiati, A.R. dan Ambarwati, Y.B. 2016. Pengaruh Harga Emas Terhadap Indeks Harga Saham Gabungan Indonesia Dengan Nilai Kurs Sebagai Variabel Moderating. *National Conference and Call for Papers.* Implementasi dan Kontribusi Ilmu Akuntansi, Manajemen, & Bisnis dalam Pembangunan Ketahanan Ekonomi Nasional. Jakarta 25-26 Februari 2016

Frankel, J.A., 2014. *How can commodity exporters make fiscal and monetary policy less procyclical?*. HKS Faculty Research Working Paper Series RWP11-015, John F. Kennedy School of Government, Harvard University, 2014.

Gaur, A. dan Bansal, M., 2010. A Comparative Study of Gold Price Movements in Indian and Global Markets. *Indian Journal of Finance*, Vol. 4, No. 2. P. 32-37

Hlupo, P., 2017. The Relationship Between Gold Prices And Equity Market Performance: Evidence From The Zimbabwe Stock Exchange. *Proceedings of The IRES International Conference*, Harare, Zimbabwe, 13 th -14 th August 2017

Jaiswal, U.K., and Voronina, V. 2011. *Relationship between Gold and Stock Returns: Empirical evidence from BRICs, M.S.* Thesis, Dept, Finance, Umea University, Sweden, 2011

Jogiyanto. 2000. *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BPFE UGM.

Khumalo, John. 2013. Inflation and Stock Prices Interactions in South Africa: Var Analysis. *International Journal of Economics and Finance Studies* Vol 5, No 2, 2013 ISSN: 1309-8055 (Online)

Mangram, M.E., 2013. A simplified perspective of the Markowitz, *Global Journal of Business Research*, Vol.7, No. 1, pp. 59-70, 2013.

Mansor, H., 2011. Financial market risk and gold investment in an emerging market: The Case of Malaysia, *Romanian Journal of Economic Forecasting*, Vol. 11, pp. 79-89. 2011

Mechri, N., Hamad, S.B., Peretti, C., and Charfi, S. 2018. The Impact of the Exchange Rate Volatilities on Stock Markets Dynamics: Evidence from Tunisia and Turkey. *HAL.* 01766742v2f

Pilinkus, D., 2010. Macroeconomic Indicators and Their Impact on Stock Market Performance in the Short and Long Run: The Case of the Baltic States. Technological and economic development OF ECONOMY Baltic Journal on Sustainability 2010 16(2): 291–304

Ramsharan, N. 2019. Impacts of Interest Rate on Stock Market: Challenges for Investors. IJISET - *International Journal of Innovative Science, Engineering & Technology*, Vol. 6 Issue 4, April 2019 ISSN (Online) 2348 – 7968

Seri, S., and Dileep Kumar M. 2015. Impact of Exchange Rate on the Stock Market. International Review of Economics & Finance 5(5):10-11

Tan, K.L., Kang, C.K., Koh, W.H., Lau, H.Y. and Ng, C.Y. 2014. *The nexus between stock market performance and gold price: The case of Hang Seng index*, Doctoral dissertation, Universiti Tunku Abdul Rahman, Utar, 2014

Tandelilin, Eduardus. 2001. *Analisis Investasi dan Manajemen Portofolio.* Yogyakarta: BPFE UGM

Yousuf, A., and Nilsson, F. 2013. *Impact of Exchange Rates on Swedish Stock Performances: Empirical study on USD and EUR exchange rates on the Swedish stock market*. Student Umeå School of Business and Economics

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