Jurnal Ilmiah Ilmu Administrasi dan Manajemen
Vol. 15, No. 2, November 2021
ISSN: 1829-6629

Analysis of the Effect of Internal and External Factors on the Stock Price Index INFOBANK15

Kiki Riky[1], Widya Intan Sari[2]
Universitas Pamulang, Tangerang Selatan, Banten, Indonesia

Email: kikiriky015@gmail.com[1], dosen02451@unpam.ac.id[2]

(Received: 15 August 2021; Revised: 20 November 2021; Published:30 December 2021)

ABSTRACT

This study aims to determine the effect of Return on Equity, inflation and interest rates on the INFOBANK15 stock price index in 2013-2020. In this case, the Return on Equity ratio represents internal factors, while inflation and interest rates represent external factors. The sample used in this study was 7 samples of companies that were not delisted during the study period using purposive sampling method. The variables used in this study consist of Return on Equity, inflation and interest rates as independent variables and Infobank15 stock price index as the dependent variable. The technical analysis used is the multiple linear method. The results obtained indicate that Return on Equity has no significant effect on the infobank15 stock price index, inflation has a significant negative effect on the infobank15 stock price index while interest rates have a significant negative effect on the infobank stock price index15. Simultaneous test results (F test) show that the independent variables (Return on Equity, inflation and interest rates) simultaneously have a significant effect on the Infobank15 stock price index variable.

Keywords: Return on Equity; Inflation; Deposit Interest Rate; Stock Price Index

INTRODUCTION

Most countries in the world have capital markets which have an important role in the economy of a country because the capital market carries out economic and financial functions, even the capital market is an indicator of a country's economic progress. The existence of a capital market is very important for companies and investors because the capital market can be used as an alternative to obtain financing for the company's operations through financial instruments that can be traded in the capital market, namely stocks, bonds, warrants, rights, convertible bonds, and various derivative products (derivatives) such as options (put or call) and so on (Jasmani et al., 2020; Jasmani & Sunarsi, 2020; Sutrisno & Sunarsi, 2019).

(Papilaya et al., 2015) stated that the capital market is a market that brings together investors (parties with excess funds) with issuers (companies that need funds) to conduct securities buying and selling transactions. The securities traded in the capital market are generally medium-term and long-term securities such as stocks, bonds, and mutual funds. The place where the buying and selling of securities takes place is called the stock exchange. In the capital market, shares are one of the securities traded which

are quite attractive to investors but have a high risk. According to (Salam et al., 2021) shares are evidence of participation or ownership of a person or entity in a company.

The purpose of the company issuing shares is to obtain funds from investors where the funds obtained can be used for additional capital, expansion, and business development of the company. The company always tries to maximize the value of its shares so that investors are more interested in investing their capital in the company. One of the things that an investor considers is the stock price. The stock price expected by investors is a stable stock price and has a movement pattern that tends to rise from time to time, but in reality the stock price tends to fluctuate.

For investors, stock prices are an indicator of the success of company management. The higher the company's stock price on the stock exchange, the higher the company's success in managing its business, so that it can increase investor confidence in the issued capital. The high risk of a stock makes an investor need to know information about the market conditions of a stock that can be seen or measured using a stock price index.

Basically, the development of a country's capital market is reflected in the high number of shares traded, the number of listed companies, transaction volume, transaction value, and the Jakarta Composite Index (JCI), as well as market capitalization values, all of which have brought certain consequences. for issuer investors, and other capital market players.

To evaluate the performance of the capital market, index indicators can be used. The index is created and used as a benchmark and at the same time as a tool to monitor trends in business development and the development of the price level of the shares traded. IDX has several indices that can be used to monitor stock trading, namely the JCI, liquid quality index, individual index and sectoral index, and so on.

One of the indexes that investors often pay attention to when investing in the Indonesia Stock Exchange is the Composite Stock Price Index (IHSG). This is because this index contains all shares listed on the Indonesia Stock Exchange. Therefore, through the movement of the JCI, an investor can see whether the market is excited or sluggish. This difference in market conditions certainly requires a different strategy from investors in investing.

The Indonesian capital market as a place of investment for investors certainly has a track and record, so that investors are interested in investing their capital. This can be seen from the performance of the JCI or Indeks Harga Saham Gabungan (IHSG) (JCI = IHSG). To observe the performance of the JCI, which includes the development of the number of companies that went public, the composite stock price index, and market capitalization, which can be seen in table 1.

Table 1
Phenomenon of Performance Development of the Composite Stock Price Index (JCI)/ IHSG in 2013-2020

Years	Number of Issuers	IHSG	Capitalization (Rp)	▲%
2013	483	4,274.177	4,219,020.24 (Miliar)	-0,98
2014	506	5,226.947	5,165,736.12 (Miliar)	22.29
2015	521	4,593.008	4,796,803,823,046,190	-12.13
2016	537	5,296.711	5,753,612,759,029,200	15.32
2017	566	6,355.654	7,052,388,625,802,900	19.99
2018	619	6,194.498	7,023,496,769,390,570	-2.54
2019	668	6,299.539	7,299,282,639,470,200	1.70
2020	713	5,979.073	6,968,941,253,736,650	-5.09

Source: Financial Services Authority (OJK) – Statistics 2020

It can be seen from table 1 that the JCI performance fluctuated where in 2013 the JCI was 4,274,177 and increased in 2014 by 22.29% to 5,226,947. However, the index value decreased in 2015 by 12.13% to 4,593,008. Then it increased again in 2016 by 15.32% to 5,296,711, as well as the following years until 2020 where there was the corona virus, due to the force majeure, the JCI decreased by -5.09% to 5,979,073. In line with the performance of the JCI, which fluctuates every year, the number of issuers tends to increase every year. In 2013 the number of issuers was 483 companies and continued to increase by 32.25% to 713 companies in 2020 and the capitalization of the JCI also fluctuated with a tendency to increase even more, where in 2015 to 2017 it periodically continued to increase. The increase in the number of issuers and the larger fluctuations in the JCI value, which can reach more than 22.29%, indicate that the opportunity to earn returns on the Capital Market or on the Stock Exchange is very large.

Observing the development of the Indonesian capital market is quite interesting in the last eight years, especially after the monetary crisis in 1997 and the global financial crisis in 2008. After the crisis, the Indonesian economy continued to grow and at the same time macroeconomic variables also improved, as well as investor confidence in Indonesia's capital market has also rebounded. This can be seen from the increasing number of stock transactions carried out by investors. This growth has contributed to the improvement in the performance of the Indonesia Stock Exchange, which is reflected in

the tendency of the JCI value to increase at any time. The rapid development of the JCI after the crisis in 1997 and 2008 became a question mark. Therefore, this phenomenon is interesting to study by examining the factors that encourage the increase in the movement of the JCI value on the IDX.

The stock instrument itself is classified as a high-risk investment commodity due to the nature of the commodity which is very sensitive to changes that occur, both from internal factors and external factors. Internal factors in question are factors originating from within the company that describe the company's performance, prospectus and financial statements. Investors need financial information to help determine whether to buy, hold or sell their investments.

In this study, internal factors are represented by the ratio of Return on Equity (ROE). The ratio is widely used to help investors predict stock prices. ROE itself is used to measure the effectiveness and ability of the company to generate profits by utilizing its own capital. The higher the ROE number gives an indication to shareholders that the stock price and the rate of return on investment are getting higher. This is important because investors want to get a prediction that every investment made will generate the maximum profit.

While external factors come from outside the company such as macroeconomic conditions, market conditions, social and political factors in a country. Macroeconomic conditions themselves can be in the form of interest rate movements, currency exchange rates, inflation, stock indexes on world markets as well as security and political conditions. In this study, the researcher limits the external factors used, namely inflation and interest rates.

Inflation occurs when economic conditions experience demand for products that exceeds product supply capacity, so prices tend to increase. The increase in prices caused by inflation can have an impact on decreasing purchasing power due to the increase in the cost of living that must be spent. This will have an impact on decreasing investor interest in investing and allocating their funds for consumption or choosing other alternatives. The lack of demand for shares will result in a decrease in the stock price index. Based on this, (Aras et al., 2020; Bly, 2018; Saputra et al., 2020; Shimizu, 1979) suggests that the relative increase in inflation is a negative signal for investors in the capital market.

Talking about inflation will not be separated by interest rates. The interest rate is the cost of renting money for the use of a capital. High interest rates will increase the cost of capital that must be borne by the company. Besides that, high interest rates will also cause the return required by investors from an investment to increase. In this case, the deposit interest rate is higher than the savings interest rate. This can be one of the considerations for investors who want to invest their funds. If the deposit interest rate is higher, investors can withdraw their investment in stocks and transfer them to deposit

investments. The above phenomenon is in line with the statement put forward by (Kumar & Mittal, 2020) that high interest rates are a negative signal to stock prices.

The object of this research is the INFOBANK 15 Index Component, which is 15 stocks selected from the Bank sub-sector in the Financial sector. The fundamental factors that become the basic criteria for selecting the components of the INFOBANK15 Index are the bank rating and the measure of Good Corporate Governance, both of which are assessed by Infobank Magazine. Furthermore, the selection of the INFOBANK15 Index component also pays attention to transaction activities such as transaction value, transaction frequency, number of transaction days, market capitalization, and the free float ratio of shares.

IDX and Infobank Magazine will periodically review the components of the INFOBANK15 Index using the Market Capitalization Weighted method every 6 months, namely in May and November each year so that the components of the INFOBANK15 Index will be updated every early June and December.

Tabel 2
The Phenomenon of Stock Price Index Data on INFOBANK15 in 2013-2020

Years	Stock Price Index at INFOBANK15		
	Close	**High**	**Low**
2013	398,48	409.66	380.85
2014	563,17	566.29	540.75
2015	524,79	531.98	494.92
2016	613.80	618.86	559.60
2017	900.64	917.04	821.66
2018	910.52	934.88	881.81
2019	1,033.43	1,044.35	965.06
2020	993.40	1,041.11	947.20

Based on table 2 above, the INFOBANK15 index shows that from 2013 the average stock price index (IHS) has increased until 2020, while in 2015 and 2020 it decreased due to force majeure but did not experience a decrease that was not too large. This is proof that investors are still interested in collecting banking stocks. The reason is, of course, because the opportunity for the increase in banking shares is still quite large and the positive financial performance of banks which always generate profits.

As previously stated, the higher the Return On Equity, the higher the company's stock price. Research conducted by (Liu & Almor, 2016; Nitha & Sari, 2019; Siregar & Dewi, 2019; Suhartono et al., 2019) rejected this statement and stated that Return On

Equity had no significant effect on the stock price index. On the other hand, it is accepted by (Ramlah, 2021) who conclude that Return On Equity has a significant effect on the stock price index.

Previous research examining the effect of inflation on stock prices was conducted by (Cameron, 1978; Dolnicar & Ring, 2014; Drezgić et al., 2019; Prawoto et al., 2020; Sharif et al., 2015) which stated that the inflation rate had a significant negative effect on the stock price index. However, these results contradict the research conducted by Surahman, et al (2020) which states that the inflation rate has a significant positive effect on the stock price index.

While previous studies that examined the effect of interest rates on the stock price index were conducted by (Chhotray & Stoker, 2009; Sharif et al., 2015; Zekos, 2003) where the results of the research said that interest rates had no significant effect on the stock price index. This statement was rejected by (Prawoto et al., 2020). which states that the interest rate has a significant negative effect on the stock price index.

METHOD

In conducting research, it is necessary to have a method, method or tactic as the steps that must be taken by a researcher in solving a problem to achieve a goal (Creswell & Creswell, 2017; John W Creswell, 2013). The method that the author uses in this research is a quantitative descriptive method. The data analysis method used in this study is the Multiple Linear Regression Method, which is to calculate the magnitude of the quantitative effect of a change in the incidence of variable X on variable Y. In using the regression equation there are several assumptions that must be met for later analysis. These assumptions use the Classical Assumption Test, Coefficient of Determination (R2), Simultaneous Significance Test (F Statistics Test), and Individual Parameter Significance Test (T Statistical Test) so that the test results can be interpreted correctly.

RESULTS AND DISCUSSION

This study aims to determine Return on Equity, inflation and interest rates on the INFOBANK15 stock price index based on testing, so the discussion of the research results is as follows:

Effect of Return on Equity (ROE) on Stock Price Index

Based on the results of the partial test (t test) shows that the Return on Equity (ROE) variable has no significant effect on the Infobank stock price index variable15. From the test, it was found that the significance level of 0.665 is greater than the 0.05 significance level and the tcount -0.436 is smaller than the 1.680 t table, indicating that H0 is accepted and H1 is rejected. So the initial hypothesis which states that Return on Equity has a significant positive effect on the Infobank stock price index15 is rejected. This shows that the higher the ROE value obtained by the company does not affect the stock price to increase or decrease. These results are reinforced by previous researchers conducted by (Johnson et al., 2020; Rohlinger et al., 2020; Wood, 2000) which stated that Return on Equity had no significant effect on the stock price index.

The Return on Equity ratio is used to measure the effectiveness of the company's ability to generate profits for shareholders and is often used by investors to predict stock prices. However, this study shows the opposite where the Return on Equity value does not have a significant effect on stock prices. This shows that compared to predicting stock prices through fundamental factors or company performance, investors tend to prefer predicting stock price movements by paying attention to trends in market price movements in the past compared to the present. The size of the ROE also does not make investors interested in investing in the company.

This result is contrary to the results of research from (Nitha & Sari, 2019) which states that the greater the ROE ratio, the greater the return on investment that can be obtained by investors. So that investors will be interested in investing their funds in the company and make the stock price increase.

The Effect of Inflation on the Stock Price Index

The results of the partial test (t test) show that the inflation variable has a significant negative effect on the stock price index variable INFOBANK15. This can be seen from the significance value which is smaller than the significance level value, which is 0.031 <0.05 and can be seen from the negative tcount value. So that the initial hypothesis which states that inflation has a significant negative effect on the stock price index of INFOBANK15 is accepted. This shows that the higher the inflation rate, the lower the stock price. These results are reinforced by previous researchers conducted by (de Senna & Souza, 2016; Sharif et al., 2015; Zekos, 2003) which stated that inflation had a significant negative effect on the stock price index. The condition where inflation occurs is the result of demand for products that exceeds the capacity of product supply, causing prices to tend to increase. Companies increase their production to meet the demands of society so that the increase in production costs and labor costs is

unavoidable. Then the price increase resulted in a decrease in people's purchasing power because it was not matched by an increase in income and the high cost of living. This decrease also has an impact on the decline in company profits and the low rate of return on investment that can be given to investors so that investors are not interested in investing their funds in the company.

The results of this study are contrary to previous research by (Dolnicar & Ring, 2014) which stated that inflation had a significant negative effect on stock indexes. This condition is based on the assumption that inflation occurs due to demand pull inflation, where inflation occurs due to excess demand for available goods supply. When inflation occurs, the increase in company costs can be passed on to consumers by adding a larger proportion so that company profits increase. Increased company profits can increase the company's ability to pay dividends and will give a positive assessment of stock prices, so that investors' interest in investing in stocks increases and the stock price index increases.

Effect of Interest Rates on Stock Price Index

Based on the results of the partial test (t test) shows that the interest rate variable has a significant negative effect on the stock price index variable INFOBANK15. This can be seen from the significance value which is smaller than the significance level value, which is 0.000 <0.05 and is seen from the negative tcount value. So that the initial hypothesis which states that interest rates have a significant negative effect on the INFOBANK15 stock price index is accepted. This shows that the higher the interest rate, the lower the stock price. These results are reinforced by previous research conducted by (Prawoto et al., 2020) which stated that interest rates had a negative and significant effect on stock prices.

This situation is based on the desire of investors to get optimal returns on their investments. Theoretically, if the BI interest rate increases, the existing banks will increase their deposit rates. When deposit rates rise, the benefits offered are even more optimal and make investors withdraw their investments in stocks and move them to deposit investments. This will encourage a stock sell-off which will result in an increase in stock offerings so that the stock price will decrease. If the company's stock price falls, the INFOBANK15 stock price index will also fall.

Conversely, if interest rates decline, investors will switch to withdrawing their deposits and turn to buying shares. This will increase the demand for the stock and make the stock price increase again.

The results of this study are contrary to previous research by (Sharif et al., 2015) where the research results say that interest rates have no significant effect on stock prices. This happens because investors consider the profits to be more optimal by

investing in stocks than the profits to be obtained from deposit investments. So it can be concluded that investors are not affected by any increase or decrease in interest rates.

The Effect of Simultaneous Independent Variables on the Stock Price Index

The results of the simultaneous test (F test) show that the independent variables simultaneously have a significant effect on the INFOBANK 15 stock price index variable. This can be seen from the significance value which is smaller than the significance level value, which is 0.000 <0.05 and can be seen from the positive Fcount value. This shows that the higher the value of the independent variables simultaneously, the higher the stock price.

CONCLUSION

Internal factors as measured by the Return on Equity ratio show a significance result of 0.665, which is greater than the 0.05 significance level and the t-value -0.436 is smaller than 1.680, thus Return on Equity does not have a significant effect on the INFOBANK stock price index15. External factors measured by the inflation rate show a significance value that is smaller than the significance level value of 0.031 < 0.05 and judging from the negative t-value, inflation has a significant negative effect on the INFOBANK stock price index15. Other external factors measured by the interest rate show a significance value that is smaller than the significance level value of 0.000 < 0.05 and judging from the negative t-value, the interest rate has a significant negative effect on the INFOBANK stock price index15. The independent variables (ROE, inflation and interest rates) together show the Fcount value of 31.879 with a significance of 0.000. With a significance value that is smaller than the significance level of 0.000 <0.05, it can be concluded that the independent variables jointly have a significant effect on the INFOBANK stock price index15.

REFERENCES

Aras, M., Syam, H., Haris, H., Jasruddin, M., & Akib, H. (2020). *The Analysis of Mix Marketing System Toward The Perfomance of Convection Business in Makassar*. *226*(Icss), 1104–1107. https://doi.org/10.2991/icss-18.2018.233

Bly, R. W. (2018). *The Digital Marketing Handbook: A Step-by-step Guide to Creating Websites that Sell*. Entrepreneur Press.

Cameron, K. (1978). Measuring Organizational Effectiveness in Institutions of Higher

Education. *Administrative Science Quarterly*, *23*(4), 604. https://doi.org/10.2307/2392582

Chhotray, V., & Stoker, G. (2009). *Governance Theory and Practice: A Cross-Disciplinary Approach*. Palgrave Macmillan.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

de Senna, V., & Souza, A. M. (2016). Assessment of the relationship of government spending on social assistance programs with Brazilian macroeconomic variables. *Physica A: Statistical Mechanics and its Applications*, *462*, 21–30. https://doi.org/10.1016/j.physa.2016.05.022

Dolnicar, S., & Ring, A. (2014). Tourism marketing research: Past, present and future. *Annals of Tourism Research*, *47*, 31–47. https://doi.org/10.1016/j.annals.2014.03.008

Drezgić, S., Žiković, S., & Tomljanović, M. (2019). *Economics of Digital Transformation* (Nomor February).

Jasmani, J., & Sunarsi, D. (2020). The Influence of Product Mix, Promotion Mix and Brand Image on Consumer Purchasing Decisions of Sari Roti Products in South Tangerang. *PINISI Discretion Review*, *1*(1), 165–174.

Jasmani, J., Sutiman, S., & Sunarsi, D. (2020). Analysis of the Effect of Prices, Promotions and Products on Purchase Interest Impacts on Consumer Satisfaction of VIVO Brand Mobile Phones in South Tangerang Region. *Jurnal Ad'ministrare*, *7*(1), 73–82.

John W Creswell. (2013). *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed* (Tiga). Pustaka Pelajar.

Johnson, O. W., Han, J. Y.-C., Knight, A.-L., Mortensen, S., Aung, M. T., Boyland, M., & Resurrección, B. P. (2020). Intersectionality and energy transitions: A review of gender, social equity and low-carbon energy. *Energy Research & Social Science*, *70*, 101774. https://doi.org/https://doi.org/10.1016/j.erss.2020.101774

Kumar, V., & Mittal, S. (2020). Mobile marketing campaigns: practices, challenges and opportunities. *International Journal of Business Innovation and Research*, *21*(4), 523–539.

Liu, Y., & Almor, T. (2016). How culture influences the way entrepreneurs deal with uncertainty in inter-organizational relationships: The case of returnee versus local entrepreneurs in China. *International Business Review*, *25*(1), 4–14.

Nitha, W. E., & Sari, M. (2019). Analisa Roe (Return On Equity) Dalam Memprediksi Pertumbuhan Laba (Studi Kasus pada 9 Perusahaan Farmasi yang Terdaftar di Bursa Efek Indonesia Periode 2010-2014). *Jurnal Ilmiah Binaniaga*, *12*(02), 73–80.

Papilaya, J., Soisa, T. R., & Akib, H. (2015). The influence of implementing the strategic policy in creating business climate, business environment and providing support facilities towards business empowerment on small medium craft enterprises in Ambon Indonesia. *International Review of Management and Marketing*, *5*(2).

Prawoto, N., Purnomo, E. P., & Zahra, A. A. (2020). *The Impacts of Covid-19 Pandemic on Socio-Economic Mobility in Indonesia*. *VIII*(3), 57–71.

Ramlah, R. (2021). The Effect of Profitability and Leverage on Stock Return of Food and Beverage Companies. *Point of View Research Management*, *2*(2), 139–150.

Rohlinger, D. A., Olsen, A., & Hewitt, L. (2020). Dualing discourse: Democracy, gender equity and discursive politics in rural Morocco. *Women's Studies International Forum*, *81*, 102373. https://doi.org/https://doi.org/10.1016/j.wsif.2020.102373

Salam, A., Hikmat, I., Haquei, F., & Badariah, E. (2021). The Influence of Share Ownership, Funding Decisions, Csr and Financial Performance of Food Industry. *Annals of the Romanian Society for Cell Biology*, 12698–12710.

Saputra, E., Wulandari, E., & Hardianto, R. (2020). *Digital Marketing: Komunikasi Bisnis Menjadi Lebih Mudah*. Yayasan Kita Menulis.

Sharif, I., Adnan, A. L. İ., & Jan, F. A. (2015). Effect of dividend policy on stock prices. *Business & management studies: an international journal*, *3*(1), 56–87.

Shimizu, K. (1979). The New Framework of Marketing Management : Constructing the 7 Cs COMPASS MODEL. *Josai Keizaigakukaishi*, *15*(1), 63–98.

Siregar, R., & Dewi, A. (2019). Analysis of the effect of fundamental financial ratio of ROA, DER, CR, TATO, and PBV on stock return of plantation sub-sector industry at IDX 2014-2017. *International Journal of Innovative Science and Research Technology*, *4*(7), 405–414.

Suhartono, A., Jati, W., & Sunarsi, D. (2019). Pengaruh earning per share dan return on asset terhadap harga saham pada PT. Bank negara indonesia tbk periode 2009-2018. *Jurnal Manajemen, Bisnis dan Organisasi (JUMBO)*, *3*(3), 182–194.

Sutrisno, S., & Sunarsi, D. (2019). The Effect of Work Motivation and Discipline on

Employee Productivity at PT. Anugerah Agung in Jakarta. *Jurnal Ad'ministrare*, *6*(2), 187–196.

Wood, L. (2000). Brands and brand equity: definition and management. *Management decision*, *38*(9), 662–669.

Zekos, G. I. (2003). MNEs, globalisation and digital economy: legal and economic aspects. *Managerial Law*, *45*(1/2), 1–296. https://doi.org/10.1108/03090550310770875