THE IMPACT OF EPS, FEDERAL FUNDS RATE, PREVIOUS FEDERAL FUNDS RATE INFLATION RATE, UNEMPLOYMENT RATE, AND REAL GDP TOWARD LQ45 AND RUSSEL TOP 50 MARKET INDEX.

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Abstract

This study aims to investigate the impact of microeconomics factors represented by EPS and macroeconomic factors represented by federal funds rate, inflation rate, unemployment rate and real GDP rate toward LQ45 and Russel Top 50 market indexes. In this research, the secondary data were retrieved from the official website of Indonesia Stock Exchange, Nasdaq official website, and Organisation for Economic Co-operation and Development (OECD) database. The data were analyzed with multiple regression model using SPSS application.

The findings show that EPS, Federal funds target rate, Previous federal funds target rate and Inflation rate do not have a significant effect on both LQ45 and Russel Top 50 market indexes. On the other hand, unemployment rate has a negative effect on Russel Top 50 index. In contrast, unemployment rate doesn’t have significant impact on LQ45 index. Furthermore, real GDP rate has a significant effect LQ45 on market index. However, there is no significant influence on Russel Top 50 index. The negative correlation means that the decrease of unemployment rate and real GDP rate will increase the stock price

INTRODUCTION

In the past 10 years, investment in stock market experienced phenomenal growth. During 2016, the number of investors has risen up to 26percent in Indonesia and about 3percent in America (KSEI, 2016; Gallup 2016). This growth was driven by the stocks market earnings which grows rapidly in the past 10 years (Bloomberg, 2016). According to ETF (Exchange Traded Fund) the Nasdaq has achieved a compounded annual growth rate of 26percent in earnings.

Several studies have investigated the factors influencing the growth of index price. In general, factors influencing market index price can be classified into Macroeconomic factors and Microeconomic factors.

One of the microeconomics factors is EPS or Earning Per Share. EPS. Increasing Earnings Per Share (EPS) will make the market reacts positively when the market tends to interpret that an increase Earning Per Share (EPS) is considered as a signal about the good corporate prospects in the future, and vice versa. This theory is supported by Pirie and Smith's (2008) results who found that EPS has significant effect on stock prices in Malaysia. However, the inconclusive results were found by another researcher. Study by Susilowati (2011) has find out that EPS does not have significant effect with stock price of manufacturing company listed in Indonesia Stock Exchange (IDX).

Secondly, the factors influencing market index price is macroeconomic factors. This factor can help investors to measure the current economic conditions of a country (Samsul, 2006). There are several indicators of macroeconomic that are often used by researcher to measure the change of stock market, those indicators such as federal funds rate, real GDP rate, unemployment rate and inflation rate has significant influence with stock index price (Gallo, Hann, Li; 2013, Witjaksono ;2010, Sudarsana and Cakraningrat;2011). In contrast, Sutanto (2013) and Tsai (2013) has found out the contradictory results.

In addition, the macroeconomic news of United States is one of the factors that drive the changes of emerging countries stock index, because United States is one of the biggest investors in the world. A recent research has identified significant relationship between United States macroeconomic news such as federal funds rate, GDP rate, Exchange rate with stock market in emerging countries (Nguyen and Ngo, 2011; Foo 2009). This finding suggests that emerging countries are dependent on America.

Given the explanation above, it is still interesting to studying about the impact of EPS as an indicator of microeconomic factors as well as Federal funds target rate, Previous federal funds target rate, Inflation rate, Unemployment rate and Real GDP rate are the indicator of macroeconomic factors can influence the changing of stock price.

Based on these research backgrounds, this study aimed to:

1. To analyze the partial influence of earnings per share information toward index price in LQ45 market index
2. To analyze the partial influence of earnings per share information toward index price in Russel top 50 market index.

3. To analyze the partial influence of federal funds rate toward index price in LQ45 market index
4. To analyze the partial influence of federal funds rate toward index price in Russel top 50 market index.
5. To analyze the partial influence of previous federal funds rate toward index price in LQ45 market index
6. To analyze the partial influence of previous federal funds rate toward index price in Russel top 50 market index.
7. To analyze the partial influence of inflation rate toward index price in LQ45 market index
8. To analyze the partial influence of inflation rate toward index price in Russel top 50 market index.
9. To analyze the partial influence of unemployment rate toward index price in LQ45 market index
10. To analyze the partial influence of unemployment rate toward index price in Russel top 50 market index.
11. To analyze the partial influence of real GDP rate toward index price in LQ45 market index
12. To analyze the partial influence of real GDP rate toward index price in Russel top 50 market index.

This research has significant benefit for company, further research, government and investor. For company, the findings of this study can be useful for company to develop its strategy to expand its business by obtaining capital from stock market. Moreover, for further research, this research can give more insight and knowledge for future researchers who are interested the same topic. Furthermore, the government can use the findings as inputs to make a decision to enhance its role to meet the needs of information. Furthermore, the government can use the results as a benchmark to create a new strategy to attract more investors. As for investors, the result of this research can be a reference for investors before making the investment decision.

LITERATURE REVIEW.

Investors often use EPS to compare the company performance and ability to generate profit in the future. The increase of EPS will lead to increase of stock prices. Gallo, Hann, and Li (2013), found out that earnings per share (EPS) has positive significant effect toward stock price of company that are listed in Dow Jones industrial average (DJIA). This result is supported by Pasaribu (2008) and Hunjra et al. (2014), suggested that EPS has positive significant effect toward stock price. Furthermore, as a result, this study proposed the following hypotheses:

H1: Earnings per share (EPS) has positive significant effect toward index price in LQ45 market index.

H2: Earnings per share (EPS) has positive significant effect toward index price in Russel Top 50 market index.

Kothari (2003) suggested that the decrease of federal funds rate as a signal of strong economy condition of United States. Investors often use federal funds target rate as a benchmark of economic condition. Federal funds target rate is one of the factors that influence the changes of stock market, according to Gallo, Hann, and Li (2013) federal funds target rate has negative significant effect on stock price. This study proposed the following hypotheses:

H3: Federal funds target rate (FED)

has simultaneous negative significant effect toward index price in LQ45 market index.

H4: Federal funds target rate (FED) has simultaneous negative significant effect toward index price in Russel Top 50 market index.

In Gallo, Hann, and Li (2013) research, they add previous quarter of federal funds target rate. Previous quarter data can help researcher to capture better reaction of the federal funds target rate. Gallo, Hann, and Li (2013) find out that previous quarter of federal funds target rate has negative significant effect on stock price. As a result, this study proposed the following hypotheses:

H5: Previous federal funds target rate (FED) has simultaneous negative significant effect toward index price in LQ45 market index.

H6: Previous federal funds target rate (FED) has simultaneous negative significant effect toward index price in Russel Top 50 market index.

High Inflation will lead the company profitability decrease. The decrease in company profit is a bad signal for investors which can cause the company stock price decline. Uwubanmwen and Eghosa (2015) have found out that there is negative impact between inflation and stock return. The object of study was Nigerian stock exchange market in the period of period 1995 to 2010. Another study by Boudoukh and Richardson (1993) has found out the similar results. Those findings indicate that higher inflation will lead to lower stock earnings. As a result, this study proposed the following hypotheses:

H7: Inflation rate has simultaneous

negative significant effect toward index price in LQ45 market index.

H8: Inflation rate has simultaneous negative significant effect toward index price in Russel Top 50 market index.

Unemployment rate is the key indicator of the economy health because the unemployment rate is closely related to the economy's aggregate output, announcements of each month's new figure followed by great interest by economists, politicians and policy makers. Holmes and Maghrebi (2015) investigated the relationship between unemployment rate and the stock return; the results turned out that there is negative significant effect between unemployment rate and stock return. This study had following hypotheses:

H9: Unemployment rate has simultaneous negative significant effect toward index price in LQ45 market index.

H10: Unemployment rate has simultaneous negative significant effect toward index price in Russel Top 50 market index.

Investors often use real GDP to measure the economic growth of a nation as the release of this data will almost always move markets. According to Nikiforos (2016), GDP has positive significant effect toward stock returns. The sample of their study were Argentina, Brazil, Chile, the Czech Republic, Estonia, Hungary. It indicates if GDP increases, the stock price will increase. As a result, this study proposed the following hypotheses:

H11: Real GDP rate has simultaneous positive significant effect toward index price in LQ45 market index.

H12: Real GDP rate has simultaneous positive significant effect toward index price in Russel Top 50 market index.

RESEARCH METHOD

Sample

The samples in this study are LQ45 index and Russel top 50 indexes. The researcher used those samples because those indexes have high market capitalization on stock market, so those indexes can represent the whole market. In addition, Russel Top 50 index can represent 40percent while LQ45 index can represent 70percent of the whole Indonesia stock market.

Data Analysis Method

In this study, we performed classical assumption test such as normality test, multicollinearity, heteroscedasticity test, and auto correlation test. F test is used to determining the simultaneous effect between independent variables on the dependent variable. Moreover, t test analysis is used to determine whether there is a partial influence of the independent variables on the dependent variable. Moreover, t test analysis is used to determine whether there is a partial influence of the independent variables on the dependent variable.

FINDINGS

Descriptive Test

	Min	Max	Mean	Std. Deviation
R	604.8	848.46	736.5017	94.5193
dEq	94.19	118.27	103.96	3.3487
Target	-0.03	0.03	0.005	0.02429
Target1	-0.03	0.02	-0.0017	0.01941
Inflation	4.28	6.42	5.665	0.88399
Unemployment	5.9	7.1	6.35	0.43243
RGDP	1.19	1.59	1.3717	0.15677

Descriptive Analysis for LQ45

Descriptive Analysis for Russel 50

From the table above, the mean of dEq of LQ45 is Rp. 103.96, while dEq of Russel Top 50 is $0.9713. from this result, we can conclude that company that listed in Russel Top 50 able to generate more profit than company that listed in LQ45.

The average inflation in Indonesia during 2010 - 2015 is 5.665 percent, while in United States the average inflation shows lower inflation namely 0.390 percent. The higher inflation in Indonesia is driven by the government decision to stop subsidize the petrol price. This decision lead producer to raise the price of their product due to the increase of petrol price.

Furthermore, Unemployment rate of United States during 2010 - 2015 is 7.6 percent, whereas in Indonesia is 6.35 percent. This

	Min	Max	Mean	Std. Deviation
R	83.3	140.22	111.9113	23.67495
dEq	0.78	1.1	0.9713	0.12613
Target	-0.03	0.03	0.005	0.0228
Target1	-0.03	0.02	-0.0004	0.01713
Inflation	0.12	0.82	0.3904	0.23612
Unemployment	5.29	9.61	7.5979	1.64005
RGDP	0.32	0.68	0.5267	0.14657

condition is caused by the American company have not fully recovered after the economy crisis that hit Economy of America in 2008 so that companies cannot absorb more employee. Moreover, real GDP rate in Indonesia (1.37percent) is higher than United States (0.53percent). The lower GDP rate in United States is influenced by the increase of tax rate in America lead American household to cut their spending. Another factor causing the lower rate of GDP comes from the government, the United States government cut their spending by 15 percent.

Normality Test

Based on the Kolmogorov-Smirnov test significant (asymptotic significance) score is 0,200; where the value is greater than $\alpha = 0.05$. The assumptions of normality have been met so the data are normally distributed.

Heteroscedasticity Test

From the test, we see that dots formed on the scatterplot chart do not form a clear pattern and they are scattered above and below the number 0 on the Y-axis. Therefore, it can be concluded that the regression model used in this research is free from Heteroscedasticity

Multicollinearity Test

From the regression model, all variable scored less than 10 which mean all the variable is free from multicollinearity.

Autocorrelation Test

One of the requirements that must be met by a regression model is there should be no Autocorrelation. To detect the presence of autocorrelation, it can be seen from the value of its Durbin Watson. The assumptions of autocorrelation have been met so the data is free from autocorrelation.

Hypotheses Testing

Multiple linear regression aims to find out the influence between dependent variable and independent variables. Multiple linear regression in this research is used to find the influence of dependent variable with independent variable. Multiple linear regression test results are presented in the following table:

Multiple Regression Results

Variable	*B*	Sig.	Desc.
H1	0,166	0,746	Not Significant
H2	20,829	,300	Not Significant
H3	-394,423	0,318	Not Significant
H4	-14,364	,732	Not Significant
H5	408,234	0,388	Not Significant
H6	-18,048	,709	Not Significant
H7	-15,257	0,245	Not Significant
H8	-0,450	,849	Not Significant
H9	-40,075	0,470	Not Significant
H10	-12,723	,000	Significant
H11	-551,268	0,005	Significant
H12	0,475	,885	Not Significant

Data Source: Processed researchers, 2017

From the regression analysis, the results show that EPS (H1), federal funds rate (H3), previous federal funds rate (H5), inflation rate (H7), unemployment rate (H9) of LQ45 market index scored more than significant score (0,05), so we can conclude that those variable doesn't have significant influence toward LQ45 market index. In contrast, real GDP rate (H11) scored less than significant score (0,05), so we can conclude that real GDP rate variable have significant influence toward LQ45.

Furthermore, from the table we can see that EPS (H2), federal funds rate (H4), previous federal funds rate (H6), inflation rate (H8), real GDP rate (H12) of Russel Top 50 market index scored more than significant score (0,05), so we can conclude that those variables do not have significant influence toward Russel Top 50 market index. In contrast, unemployment rate (H10) scored less than significant score (0,05), so we can conclude that unemployment rate variable have significant influence toward Russel Top 50.

DISCUSSION AND CONCLUSION

The results of this study showed that the Hypotheses 1 and Hypotheses 2 are rejected. the results indicate that the changes in EPS doesn't affect investor's interest to invest their money in Indonesia and United States. It's caused by the high number of stock trader in Indonesia and United States (Susilowati, 2011; Lev 2014). Stock traders purchase the stocks based on trend not from company's fundamental factors as they never keep their money in a company for a long time. Moreover, traders purchase the stock when the majority of the shareholders purchase certain stock and sell them when the price start to decrease. Consequently, they likely to ignore the condition of the company that they invested.

In Hypotheses 3, Hypotheses 4, Hypotheses 5 and Hypotheses 6, this study finds out that the changes in federal funds rate and previous federal funds rate don't affect investor's interest to invest their money in Indonesia or United States. Investors usually try to get profit from short-term price volatility (Kewal, 2012). Most investors are the investors who do short term transaction or usually called trader. As a result, they purchase the stocks based on the price rather than considering the macroeconomic factors. This finding supports previous study by Kewal (2012).

Furthermore, Hypotheses 7 and Hypotheses 8 showed that the changes in inflation rate don't affect investors interest to invest their money in Indonesia or United States. The reason of the insignificant findings is because the inflation rate is still on the tolerance level (Tiwari et al, 2015). According to OECD (Organisation for Economic Cooperation and Development) the average inflation rate in during 2010 to 2016 is 5.7percent in Indonesia and 2.1 percent in United States. Therefore, investors still tolerate the inflation rate in both countries, so investors tend to ignore the change on inflation rate. This finding supported the previous findings from Kewal (2012) and Tiwari et al (2015).

For Hypotheses 9, the results show that unemployment rate doesn’t have a significant effect on the LQ45 market index price. This finding shows that the rise of unemployment is not always bad news for investors (Budiman, 2015). Investors in Indonesia might not interpret rise of unemployment rate as the representation of the decline of company production ability. Moreover, in Indonesia, the rise of unemployment rate mostly comes from agriculture sector which is not the dominant sector in capital market (BPS, 2015).

As for hypotheses 10, the results show that the Unemployment rate has significant negative effect on Russel Top 50 market index price. When unemployment rate increases, consumers begin to cut spending and slow down investing. Businesses react to a decline in spending by reducing costs by not expanding or hiring. Previous study by Holmes and Maghrebi (2015) found out the same results.

Hypotheses 11 shows that GDP has a negative significant effect toward LQ45 index price in Indonesia, these results are supported by Sholikhah (2016) who found out that GDP has significant negative impact on banking and financial sector listed in Indonesia Stock Exchange. When real GDP rate increase, investors will put their money on stock market rather than in bank. The transfer of funds by investors from the bank to the stock market would decrease on bank profit, and leading to decrease in the bank stock price. consequently, financial and banking sector is the biggest sector in LQ45 index (Antara, 2015), they have a dominant role in LQ45. Therefore, the change on this sector will influence the changes in LQ45 market index.

Furthermore, in Hypotheses 12 shows that GDP rate doesn't have significant negative effect on Russel Top 50 market index price. the growth of GDP of United States from 2010 to 2016 was relatively stagnant at the range from 0.3percent to 0.6percent. This condition is totally different from emerging countries such as Indonesia which tend to volatile. Since the real GDP rate is relatively stagnant, investors tend to disobey the real GDP rate. This finding supports previous study by Kewal (2012).

RECCOMENDATION

For Company

Based on the results of the study, Indonesian companies should consider the change of real GDP to underlying in planning corporate strategy. While for American companies, the change of unemployment rate should be considered before developing company strategy.

For Further Research

This study focuses on Indonesia as the representative of emerging countries and United States as the representative of developed market. Further research can compare the country with the same characteristics and economic condition such as the comparison between east Asia country, so researcher can capture better understanding. Moreover, further researcher can do interview the investors to capture better understanding on investor behavior.

For Government

The government should anticipate the changes of the unemployment rate and real GDP rate, as those factors have a significant effect on stock prices. Furthermore, Indonesian and American government should make policy that helps the country to boost the number of investors as well as the number of money.

For Investor

Investors should prepare their strategy to make their investment profitable. In investment decision making process the investors in Indonesia, should consider the changes of GDP as variable that may affect price changes. While investors in the US companies should anticipate the changes of unemployment rate.

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