# The Effect Of Fundamental Factors On Stock Return: An Empirical Study In Financial Institutions Listed On Indonesia's Stock Exchange

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Abstract - In this modern era, aspects related to stock returns are a very important part of the economy. The actions of entrepreneurs regarding stock returns are largely determined by fundamental factors that work as indicators for entrepreneurs interested in the stock exchange market. This research focuses on analysing the influence of fundamental factors on stock returns in a financial stock exchange market. The study aimed to reveal the influence of fundamental factors on stock returns with a small sector scale, in a financial field. This study uses a descriptive approach with empirical methods, to identify factors found in both consumer and financial industries listed on Indonesia's Stock Exchange. The population of study comprised of companies involved in the consumer and financial goods industry group, listed on the Indonesian Stock Exchange market. Data collection was conducted using interviews, questionnaires, observations. The results showed that inflation, exchange rates, interest rates and economic growth have an influence on stock returns in the financial sector in the Indonesia's Stock Exchange, reflected in the period between 2004 and 2018. It has been concluded that the financial institutions listed on Indonesia's Stock Exchange, their economic activities are influenced by inflation, exchange rates, interest rates and economic growth which are mainly considered by investors when it comes to calculating stock returns.

Keywords: Stock returns, financial institutions, Indonesia's stock exchange and marketing.

# 1. INTRODUCTION

Investment in stocks is a type of investment that is quite attractive to investors (Majeeb Pasha Shaik, 2012). There are two advantages that investors expect from stock investment, namely dividend capital gains (Bakel, Nagel dan Wurgler, 2012). Dividends are the distribution of company profits to shareholders, while capital gains represent a positive difference between the selling price and the purchase price of a stock. Stock prices are often considered by investors in making investment decisions (Bloomfield, 2011). Stock prices tend to increase in the short term will provide stock returns in the form of capital gains, while in the long run it means that the company's financial performance is getting better so that investors can get dividends. loss), while in the long term it shows the deterioration of the company's financial performance so that investors experience losses by not getting dividends (Gadiesh& MacArthur, 2008).

The stock price which has decreased will certainly have implications for the return obtained by investors (Gunasekarage & Power, 2006). Return is a comparison of initial costs with the

results obtained by investors. For stocks, the initial cost is the purchase price and the result is the difference between the purchase price and the selling price (capital gain). Investment return will be directly proportional to the risk borne by an investor. The higher the expected return, the higher the level of risk that must be borne by the investor (Lau, Quay & Ramsey, 2006).

Macro fundamental factors in the term of capital market analysis with the country's fundamental factors, this factor is uncontrollable so that it cannot be controlled by the company. Macro fundamental factors include factors: (1) Economy, (2) social, cultural, demographic and environmental, (3) political, governmental, and legal power, (4) technology, and (5) competition (David, 2003).

Micro fundamental factors in the analysis of capital markets are often referred to as the company's fundamental factors (Abadeni dan Razmi, 2014), these factors are controllable so that they can be controlled by the company. Micro fundamental factors can be grouped into factors of company policy and company performance factors (Cagno, et.al, 2014).

Focusing research on the financial sector on the Indonesia Stock Exchange (IDX) is a limitation of the scope of research aimed at ensuring economic fundamentals that influence stock returns. This is because each economic sector listed on the Stock Exchange has different characteristics, so focusing on one sector will be able to ensure that the fundamental economic factors that have a consistent influence.

#### 2. LITERATURE REVIEW

The factors that influence stock returns are macroeconomic factors and fundamental factors (Flannery, & Protopapadakis 2002). Macroeconomic factors stem from broad economic problems, one of which is inflation. These fundamental factors can be seen from financial statements, and from the issuer's financial statements can be seen the level of financial performance both in terms of ability to generate profits (Moser, 1989).

Inflation has a large impact on a national economy (Asiedu, 2006). The high inflation will push the price of building materials to become increasingly expensive, causing high production costs that must be borne by the company. Decreasing purchasing power and high production costs will indirectly affect the condition of the capital market (Spath, et.al, 2005). The impact of inflation will be felt by all companies in the industry. This condition will affect the performance of the capital market, because many companies cannot operate optimally, consequently the capital market faces high uncertainty (Mullins & Sutherland, 2003).

Return is usually directly proportional to risk, namely the higher the level of risk faced, the higher the return on investment, and vice versa (Geriadi & Wiksuana, 2017). Interest rates have a large impact on investors to invest their capital, interest rates have an influence on stock returns with profitability as an intervening variable in Banking listed on the Indonesia Stock Exchange. In a previous study by Annisa (2012), it proved empirically that "the influence of the inflation rate partially has a positive influence on stock prices and the influence of interest rates partially has a negative effect on the price of shares in banks listed in LQ 45". Research by Dwijayanthy& Naomi (2009) requires empirical analysis of the effects of inflation, the BI Rate and Currency Exchange Rate on Bank Profitability (Kurniasari, Wiratno& Yusuf, 2018).

The rupiah exchange rate is an economic symptom that will have an impact on economic activities on a domestic and global scale, the depreciation of the exchange rate of Rupiah against US \$ causes most companies unable to pay their loans to the Bank. One of the policies adopted by the Government is to reduce the exchange rate fluctuations, namely by

raising interest rates through instruments of Bank Indonesia Certificates (SBI) and Money Market Securities (SBPU). As an investor there are a number of important information that must be considered in relation to the highly fluctuating stock prices, this greatly influences investors' decisions in making wise decisions in choosing and managing good and right shares. Accurate stock valuation can minimize risk while helping investors gain profits (Prasetioningsih, Taunay and Fathoni, 2016).

Economic growth that continues to increase makes companies sell more products, because of the high purchasing power of the people (Lewin, Giovannucci, & Varangis, 2004). Increased economic growth will of course increase people's purchasing power and investment patterns, so this will encourage companies to increase sales and profits. Sangkyun (1997) who examined the effect of macro variables in the form of consumer prices, GDP, inflation rates, and interest rates on stock returns found results that only GDP has a positive and significant effect on stock returns, while other variables have no effect.

Table 1: Data Processing of Stock Returns 2004-2018

Year	Stock Price	Stock Return		
Jan 01, 2018	9,400.00	65%		
Jan 01, 2017	5,700.00	16%		
Jan 01, 2016	4,910.00	-21%		
Jan 01, 2015	6,250.00	43%		
Jan 01, 2014	4,360.00	11%		
Jan 01, 2013	3,925.00	8%		
Jan 01, 2012	3,625.00	12%		
Jan 01, 2011	3,225.00	76%		
Jan 01, 2010	1,829.64	150%		
Jan 01, 2009	729.96	-56%		
Jan 01, 2008	1,649.52	-4%		
Jan 01, 2007	1,725.36	40%		
Jan 01, 2006	1,232.40	-20%		
Jan 01, 2005	1,554.72	29%		
Jan 01, 2004	1,208.70	2%		

Based on these data shows that stock returns for 16 years showed a significant increase. This indicates that economic growth in the financial sector continues to grow in Indonesia, as an emerging market country Indonesia has high voting, but in the financial sector shows a high increase, this is an attractive economic condition for research.

In Indonesia as an emerging market country it has a very high level of volatility, so fundamental factors have an influence on stock returns in the financial sector. In this study will focus on inflation, exchange rates, interest rates and national economic growth.

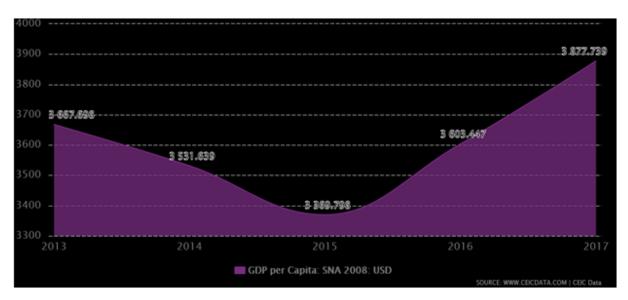


Fig.1: Data on Indonesian Economic Growth

(Source:https://www.ceicdata.com/id/indicator/indonesia/gdp-per-capita)

Indonesia's GDP per Capita was reported at 3,877,739 USD in 2017. This record rose compared to the previous 3,603,447 USD for 2016. Indonesia's GDP per Capita data was updated annually, with an average of 3,635,573 USD from 2010 to 2017, with 8 observations. This data reached the highest number of 3,877,739 USD in 2017 and the lowest record of 3,167,010 USD in [GDP per Capita.MIN\_DATE. Indonesian GDP Per Capita data remains active in CEIC and reported by CEIC Data. Data is categorized in the World Economic Plus Global Economic Monitor - Table ID.AB001: Gross Domestic Product per Capita.

Inflation	Final	Previous	Min	Max	Unit	Frequency	Range
Consumer Price Index CPI growth	▼ 2.9 Sep 2018	▲ 3.2 Aug 2018	-5.1 Nov 1969	82.4 Sep 1998	4	Monthly	Jan 1996 - Sep2018 Updated 2018-10-01
Changes in Core CPI	▼ 2.724 Jun 2018	▲ 2.748 May 2018	2.584 Feb 2018	7.425 Feb 2009	3	Monthly	Jan 2009 - Jun 2018 Updated 2018-07-02
CPI: Changes in Food Beverages and Non Alcoholic Beverages	▼ 3.747 Sep 2018	▼ 4.898 Aug 2018	-0.486 Nov 2017	20.120 Sep 2008	4	Monthly	Jan 2008 - Sep 2018 Updated 2018-10-01
Estimates: Growth in the Consumer Price Index	▼3.004 2023	▼ 3.129 2022	3.004 2023	58.020 1998	1	Annually	1980 - 2023 Updated 2018-07-12

Fig 2: Data on inflation in Indonesia

(Source: https://www.ceicdata.com/id/country/indonesia)



Fig 3: Exchange Rate in Indonesia

(Source: https://finance.yahoo.com/currency-converter/)

Based on these data indicate that the lowest inflation rate is -5.1 is in the CPI growth consumer price index category and the largest is in the same category, namely 82.4.

Based on these data shows that for 15 years, from 2004-2018 Indonesia underwent an increase in the exchange rate against the Dollar. At the end of 2011 it almost touched the price of 8,000, but towards the end of 2018 there was a very high increase, which was at more than 15,000, an increase of almost 100% from 2011 was the worst number for Indonesia.



Fig 4: Indonesian interest rates

(Source: https://www.ceicdata.com/id/indicator/indonesia/policy-rate)

Indonesia's benchmark interest rate is reported at 5.75% pa in 2018-09. This record is up compared to the previous 5.50% pa for 2018-08. Interest Rate Data The Indonesian benchmark is updated monthly, with an average of 4.88% pa from 2015-06 to 2018-09, with 40 observations. This data reached the highest figure of 6.25% pa in 2015-12 and a record low of 4.25% pa at [Policy Rate.MIN\_DATE. Interest Rate Data The Indonesian reference

remains active in CEIC and reported by the Bank of Indonesia. Data is categorized in the Global Economic Monitor World Trend Plus - Table ID.MB001: Bank of Indonesia: Monetary Policy Rate.

#### 3. METHODOLOGY

In conducting this research, the author uses empirical research methods. According to Geiger & Gross (2018) empirical studies are ways that can be observed by the human senses, so that others can observe and know the methods used. The objects in this study are fundamental factors found in the financial sub-sector listed on the IDX. In this study the authors used an associative descriptive approach because of the variables to be examined in relation to the purpose and to present a structured, factual, and accurate picture of the facts and the relationships between the variables studied.

In this study, a descriptive approach will be used to identify the factors found in the financial sub-sector listed on the IDX. Associative methods of research statements that are asking about the relationship between two or more variables (Cherry, 2018). This associative approach is used for factors found in the financial sub-sector listed on the IDX on stock returns.

The population in this study are companies that are included in the financial sub-sector listed on the IDX. The technique of collecting data uses interviews, questionnaires, observations, and a combination of the three.

This study uses a hypothesis test conducted to test the suitability of the theory based on regression coefficients with each independent variable.

## 3.1 Partial Hypothesis

# 1.Inflation

Ho :  $\rho \le 0$  : Inflation has a positive or negative effect on stock returns in the financial subsector listed on the IDX.

Ha:  $\rho > 0$ : Inflation has a positive effect on stock returns in the financial sub-sector listed on the IDX.

#### 2. Interest Rate

Ho :  $\rho \le 0$  : Interest Rate has a positive or negative effect on stock returns in the financial sub-sector listed on the IDX.

Ha:  $\rho > 0$ : Interest Rate has a positive effect on stock returns in the financial sub-sector listed on the IDX.

### 3. Exchange Rate

Ho :  $\rho \le 0$  : Exchange Rate has a positive or negative effect on stock returns in the financial sub-sector listed on the IDX.

Ha :  $\rho > 0$  : Exchange Rate has a positive or negative effect on stock returns in the financial sub-sector listed on the IDX.

## 4. Economic Growth

Ho:  $\rho \leq 0$ : Economic growth has a positive or negative effect on stock returns in the financial sub-sector listed on the IDX.

Ha:  $\rho > 0$ : Economic growth has a positive or negative effect on stock returns in the financial sub-sector listed on the IDX.

Simultaneous Hypothesis

Ho:  $\rho = 0$ : Inflation, Interest Rate, Exchange Rate and Economic Growth have no effect on stock returns in the financial sub-sector listed on the IDX.

Ha:  $\rho \neq 0$ : Inflation, Interest Rate, Exchange Rate and Economic Growth affect stock returns in the financial sub-sector listed on the IDX.

#### 4. RESULTS AND DISCUSSION

The results of this study examine four dependent variables, namely inflation, interest rates, exchange rates and economic growth on the independent variable namely stock returns. The results showed that the t count of inflation amounted to 4.107 which was greater than t table = -2.578 with a significance level greater than 0.025 which is 0.005 which means that Ho was accepted and refused Ha, there is an influence between inflation and stock price.

The results showed that the t count of interest rate was 4.407 which was greater than t table = -2,481, with a significance level greater than 0.025 which is 0.004 which means that Ho was accepted and refused Ha, there is an influence between interest rate with stock prices. The results showed t count of kurs of 4.785 which is greater than t table = 2.564 with a significance level smaller than 0.025 which is 0.006 which means that Ho is rejected and accepts Ha means that there is an influence between kurs and stock price.

The results showed t count of economic growth of 4.502 which is greater than t table = 2.545 with a significance level smaller than 0.025 which is 0.005 which means that Ho is rejected and accepts Ha means that there is an influence between economic growth and stock price.

The results showed that there was a significant or simultaneous influence between fundamental factors and stock returns because the F count = 56.233 which is greater than Ftable which is 5.41 with a significance level smaller than 0.05, which is 0.000 which means rejecting Ho and accept Ha.

There is a significant influence between the analysis of fundamental factors on stock returns because fundamental factors are closely related to the thinking and psychological abilities of entrepreneurs related to the motivation to make stock returns.

According to Suta (2000), that in macroeconomic activities contained aspects of production, income, expenditure, national budget, money supply and balance of payments. Stable macroeconomic conditions are the driving force for the development of the capital market. Macroeconomic growth is usually, first measured by gross domestic product (GDP) growth.

Emerging market countries such as Indonesia, including developing countries, aspects of production are very important in the economic growth of developing countries, because weak production will affect the state of the national economy. Analyzed from various factors related to macroeconomics, aspects of production are important aspects of emerging market finance.

The second macroeconomic indicator, which can affect the capital market is the inflation rate. The third macroeconomic magnitude, which affects the capital market is the exchange rate. Fluctuations in the value of the rupiah against a stable foreign currency will greatly affect the investment climate in the country, especially the capital market. Fiscal is the fourth macroeconomic quantity, which affects the capital market. As is known, fiscal policy concerns taxation, the state development expenditure budget. In addition, in the Indonesian context the interest rates of Indonesian bank certificates can also affect stock prices.

In the Indonesian context, macroeconomic factors that influence stock prices have many factors or variables that affect stock prices, including macroeconomics consisting of (Boediono, 1990):

- Inflation rate, defining inflation is the tendency of prices (goods and services) to rise in general and continuously. The increase in goods and services resulted in the decline in the ability to buy rupiah money so that the value of money could also be reduced. The relationship between inflation and stock prices, that in the presence of inflation prices will rise, followed by an increase in stock prices. Conversely if inflation falls then the stock price will be low.
- Bank Indonesia Certificate (SBI) Interest Rate. Theoretically, investors want to invest because they want profit or increase their capital without taking risks. In Indonesia, investment facilities that are considered to have no risk are Bank Indonesia Certificates (SBI), deposits and savings, or government bonds. While stock trading has a high risk with relative benefits.
- Exchange Rate of Rupiah to US Dollar (Exchange Rate). Each country has its own type of currency. If there is trade between these countries, a medium of exchange can be accepted by both parties. Trade transactions between countries can be related to the ability of the exchange rates of their own currencies to the currencies of other countries, so the term exchange rates or exchange rates emerge.

In theory there are many indicators that can measure macroeconomic variables, including indicators of economic politics. The results of Lestari's (2005) study show that "macro variables have a significant effect on stock price fluctuations, meaning that this study supports the theory which states that macro variables affect stock prices". However, of the many indicators that are quite commonly used to predict stock fluctuations are variables that are directly controlled through monetary policy with the mechanism of transmission through financial markets (Bank Indonesia, 2004). These variables include the exchange rate and inflation. Many researchers believe that several macroeconomic variables, such as high exchange rate fluctuations and high inflation rates, cause companies to experience financial difficulties that can reduce the value of the company (Putra, 2014).

Signal theory is the basis of analysis in understanding stock return activities carried out by investors (Kotlewski, & Dudzińska-Jarmolińska, 2018), on the aspects of financial difficulties and accounting conservatism, signaling theory explains that if the financial condition and prospects of the company are good, managers signal by holding liberal accounting reflected in positive discretionary accruals to show that the current financial condition of the company and profit in the present and future period is better than that implied by the present period non-discretionary profit (Sun, Man & Wang, 2015).

In the opposite condition the company is in financial difficulties and has bad prospects, managers give a signal by holding conservative accounting reflected in negative discretionary accruals to show that the company's financial condition and current and future earnings are worse than the present period non-discretionary earnings. Thus, the higher level of corporate financial difficulties will encourage managers to raise the level of accounting conservatism, and vice versa (Kumar & Sivaramakrishnan, 2008).

This theory basically assumes that investors can understand themselves the financial condition and prospects of the company is good or not good (Newland, & Tanaka, 2010), so in practice it is very dependent on the ability of investors to understand the signals given by the manager. So that research related to stock returns is still inconsistent but has not found the

right formulation in explaining and predicting stock return activities that will be carried out by investors.

## 5. CONCLUSION

This study shows that there are effects of four variables, namely open rates, exchange rates, inflation and economic growth on stock returns in the financial sector on the Indonesia Stock Exchange. This indicates that theoretically signal investors will look at these four aspects as a consideration in deciding on a stock return delivered by the manager.

For further research, it is very necessary to focus on other sectors outside of finance regarding the influence of fundamental factors on stock returns. research conducted with a different focus will give a full picture of the influence of fundamental factors on stock prices.

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