

THE IMPACT OF MACROECONOMIC INDICATORS TO STOCK MARKET PERFORMANCE. THE CASE OF INDONESIA AND MALAYSIA STOCK MARKET

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Abstract

The purpose of this research is to examine the impact of macroeconomic indicators to stock market performance in case of Indonesia and Malaysia period of January 2006 to December 2015. Macroeconomic indicators that used are gross domestic product growth rate, inflation rate, and interest rate. The proxies of stock market performance are stock market liquidity, market capitalization, and stock market return. Indonesia stock market represented by JKSE and Malaysia represented by KLSE. This research employs Multiple Regression analysis by using backward elimination method. By using classical assumption for least square, all the data are free from heteroscedasticity, autocorrelation, and multicollinearity. Regression result showed that Gross domestic product growth rate have no impact to all proxy of stock market performance. Inflation rate have negative impact to several proxies of stock market performance, which are market capitalization and market return in Indonesia and market capitalization in Malaysia. While interest rate have no impact to all proxy of stock market performance.

Keywords: Macroeconomic indicators, Stock market performance, Multiple regression, Backward elimination.

1. Introduction

1.1 Background of the study

Many studies about relation between macroeconomic indicators and the stock market performance have been done found that macroeconomic and fiscal environment is one of the building blocks which determine the success or otherwise of securities market (Paddy, 1992). Coleman and Tetey (2008) examined the effect of macroeconomic variables on Ghana Stock Exchange. Their results suggested that macroeconomic indicators should be considered for investors in developing economies. But there is still limited research on how macroeconomic indicators affecting stock market in developing economies especially emerging markets. This motivates researcher to examine the degree to which those conclusion is applicable to Indonesia and Malaysia as emerging markets.

As quoted from next.ft website, as an emerging market, Indonesia and Malaysia are sought by investors for the prospect of high returns, as they often experience faster economic growth. Indonesia often struggles to compete with the likes of India and China for investor interest. But even as sentiment towards emerging markets remains wary, the standout performance of Jakarta's stock market and a new confidence in the government of Southeast Asia's largest economy is attracting attention. As stated in factsheet financing Malaysia, in 2013 Malaysia gained recognition as an advanced

emerging market, with leading positions in regional bonds and global islamic capital market. It has one of the largest unit trust industries in ASEAN, the third largest bond market in Asia as a percentage of GDP and the largest sukuk market in the world. The good economic performance of Indonesia and Malaysia as emerging market, makes the relation between economic condition and stock market condition very interesting to be discussed.

The direct effect of money on stock prices sometimes referred to as the liquidity effect. As an increase or decrease in the money supply influences economic activity, it will eventually impact corporate earnings, dividends, and returns to investors (Hirt and Block, 2006). When the GDP increase, the demand of money will be increase because of the power of transaction increase. When the price level is increase, the rate of inflation will getting higher, this makes interest rate tend to increase. So these three macroeconomic indicators are relates each other. Based on that understanding, macroeconomic indicators that used in this research study are gross domestic product growth rate, inflation rate, and interest rate.

To represent the Indonesia stock market this research study uses Jakarta composite index (JKSE) and FTSE Bursa Malaysia KLCI index (KLSE) as representation of Malaysia stock market. According to Bloomberg, JKSE is a modified capitalization-weighted index of all stocks listed on the regular board of the Indonesia Stock Exchange, that is why the researcher choose JKSE as the index which can represent the Indonesia stock market clearly. Besides that the election of KLSE as the choosen index is based on the reason that FTSE Bursa Malaysia KLCI Index comprises of the largest 30 companies by full market capitalization on Bursa Malaysia's Main Board.

1.2 Problem Statement

Based on the explanation of the background of the research study, the main problem of this study is “What is the impact of macroeconomy indicators to the stock market performance? The case of Indonesia and Malaysia”

1.3 Objective of the research

The objective of this research is to analyze the impact of the macroeconomic indicators including gross domestic product growth rate, inflation rate, and interest rate on the stock market performance. The case of Indonesia and Malaysia stock market.

2. Theoritical Background

2.1 Literature review

Macroeconomic Indicators

As stated by Coleman and Tettey (2008), generally, the barometers for measuring the performance of the economy include real GDP growth rate, rate of inflation and interest rate. These three macroeconomic indicators actually related to each other. Researcher will analyze these relations first before discuss each indicators. This relations can be understood by theory of money demand.

The quantity theory of money holds as the supply of money increases relative to the demand of money (Hirt and Block, 2006). The demand of money is the amount

of wealth that individuals, households, and businesses choose to hold in the form of money. Increase in real GDP raise the nominal volume of transactions and thus demand of money also increase (Frank and Bernanke, 2001). In the long run, the main influence on aggregate demand is the growth rate of the quantity of money. At times when the quantity of money increase rapidly, aggregate demand increases quickly and the inflation rate is high (Parkin, 2008). When the inflation rate is increase the interest rate tend to increasing as well. This relationship is called as *Fisher effect*. This is the direct effect of money on stock prices sometimes referred to as the liquidity effect. As an increase or decrease in the money supply influences economic activity, it will eventually impact corporate earnings, dividends, and returns to investors (Hirt and Block, 2006).

Gross Domestic Product

Gross Domestic Product is the value of all final goods and services produced in the country within a given period (Frank and Bernanke, 2001). Economic growth is a sustained expansion of production possibilities measured as the increase in real GDP over a given period (Parkin, 2008). The growth rate of GDP tells how rapidly the total economy is expanding. This measure is useful for telling about potential changes in the balance of economic power among nations.

Inflation

Inflation is a persistent rise in the average of all prices (Parkin, 2008 : 471). Unpredictable inflation brings serious social and personal problems because it retributes income and wealth, and diverts resources from production.

Economists have long realized that during periods of high inflation, interest rate tend to be high as well (Frank and Bernanke, 2001). This relationship can be explained by *Fisher effect* which is the tendency for nominal interest rate to be high when inflation is high and low when inflation is low (Frank and Bernanke, 2001).

This tendency actually hurts stock market performance in two ways. First, it slows down economic activity, reducing the expected sales and profit companies whose sahres are traded in stock market. Lower profits, in turn, reduce dividends those firms are likely to pay their shareholders. Second, higher real interest rate reduce the value of stocks by increasing the required return for holding stocks, reducing the demand for stock and reduce the stock price as well.

Interest Rate

The interest rate is the amount of interest paid per unit of time expressed as a percentage of the amount borrowed (Samuelson and Nordhaus, 2002). Economists refer to the annual percentage increase in the real purchasing power of a financial asset as the real interest rate.

Higher interest rates provide incentives to increase the supply of funds, but at the same time they reduce the demand for those funds. Lower interest rates have the opposite effects (Rose and Marquis, 2009 : 119). High interest rate reduce the present value of future cash flows, thereby reducing the attractiveness of investment opportunities (Bodie *et al*, 2003).

As explined in their book, Rose and Marquis (2009) stated that as with bonds and other debt securities, there tends to be an inverse relationship between interest rates

and corporate stock prices as well. If interest rates rise, debt instruments now offering higher yields become more attractive relative to stocks, resulting in increased stock sales and declining equity prices. Conversely, a period of falling interest rates often leads investors to dump their lower-yielding bonds and switch to equities, driving stock price upward.

Stock Market Performance

Capital markets are the channels through which firms obtain financial resources to buy physical capital resources (Parkin, 2008: 400). Stock market is a place where the shares in publicly owned companies, the titles to business firms, are bought and sold (Samuelson and Nordhaus, 2002: 531). A market can be classified as primary and secondary. Primary markets are security markets where new issues of securities are initially sold. A secondary market is a market where securities are resold. In this research study, secondary markets are discussed.

Stock market performance can be figured out by indexes. Indexes allow investors to measure the performance of their portfolios against an index that approximates their portfolio composition. Each index is intended to represent the performance of stock traded in a particular exchange or market.

Market Liquidity

Liquidity is a measure of the speed with which an asset can be converted into cash at its fair market value. Liquid market exist when continuous trading occurs, and as the number of participants in the market becomes larger, price continuity increases along with liquidity. Because the liquidity feature of financial assets tends to lower their risk, liquid assets carry lower interest rates than illiquid assets (Rose and Marquis, 2009 : 218).

The liquidity of the market can be measured by trading volume, frequency of trades, and average trade size. Bongdan *et al.* (2012) stated that trading volume measure is trying to capture the quantity of shares per time measure the depth dimension of liquidity, it is also an increasing function of liquidity. Stock with a higher volume are more liquid, they also have lower spreads. In this research study, the market liquidity measured by volume of transaction on an average monthly basis.

Market Capitalization

According to investopedia website, market capitalization can be a tool to know the performance of capital market. Market capitalization is the total dollar market value of all of a company's outstanding shares. Market capitalization is calculated by multiplying a company's shares outstanding by the current market price of one share. The investment community uses this figure to determine a company's size, as opposed to sales or total asset figures.

Market Return

According to investopedia.com, a return is the gain or loss of a security in a particular period. The return consists of the income and the capital gains relative on an investment. It is usually quoted as a percentage.

The return on an investor's portfolio during a given interval is equal to the change in value of the portfolio plus any distribution received from the portfolio, expressed as a fraction of the initial portfolio value (Fabozzi and Modigliani, 2009).

The Relation Between Economic Condition and Capital Market

As written by Hirt and Block (2006), the direct effect of money on stock price sometimes referred to as the liquidity effect. The quantity theory of money holds that as the supply of money increases relative to the demand for money, people will make adjustment in their portfolio assets. The indirect effect of money on stock prices would be its impact on gross domestic product and corporate profits. As an increase or decrease in the money supply influences economic activity, it will eventually impact corporate earnings, dividends, and returns to investors.

2.2 Hypothesis development

Raza *et al.* (2015) in their research concluded that economic growth have a significant positive relationship with the stock market capitalization in long run as well as in short run. It is also suggested that the economic growth is a better leading indicator for stock market capitalization in Pakistan. So based that theory and previous research, the researcher can conclude that real gross domestic product growth rate give positive impact to stock market performance.

H1 : There is positive impact of real Gross Domestic Product growth rate to stock market performance.

In their book, Frank and Bernanke (2001), explained that inflation hurts stock market performance. It slows down economic activity, reducing the expected sales and profit companies whose shares are traded in stock market. Lower profits, in turn, reduce dividends those firms are likely to pay their shareholders. Kyereboach-Coleman and Agyire-Tettey (2008) examined how macroeconomic indicators affect the performance of stock markets by using the Ghana Stock Exchange as a case study, their result concluded that Inflation rate is found to have a negative effect on stock market performance. Based on that theory and previous research, researcher conclude that the inflation rate have negative impact to the stock market performance.

H2 : There is negative impact of inflation rate to stock market performance.

According to Rose and Marquis (2009), as with bonds and other debt securities, there tends to be an inverse relationship between interest rates and corporate stock prices as well. Kyereboach-Coleman and Agyire-Tettey (2008) in their research found that lending rates from deposit money banks have an adverse effect on stock market performance and particularly serve as major hindrance to business growth in Ghana. Based on that reason, the researcher conclude that interest rates have negative impact to the stock market performance.

H3 : There is negative impact of interest rate to stock market performance.

3. Methodology

3.1 Data and Source

The data which is used in this research is secondary data. The data used for this research are :

- a. Monthly data of Indonesia and Malaysia Gross Domestic Product growth rate period of January 2006 – December 2015. The data taken from Asia Regional Integration Center website (aric.adb.org).
- b. Monthly data of Indonesia and Malaysia Inflation Rate period of January 2006 – December 2015. The data taken from Asia Regional Integration Center website (aric.adb.org).
- c. Monthly data of Indonesia and Malaysia Interest Rate period of January 2006 – December 2015. The data taken from central bank of each country, which is Bank Indonesia and Bank Negara Malaysia website (bi.go.id and bnm.gov.my).
- d. Monthly data of volume of transactions and adjective closing price from JKSE and KLSE period of January 2006 – December 2015 taken from Yahoo! Finance website (finance.yahoo.com)
- e. Monthly data of market capitalization taken from statistic annual report of Indonesia stock exchange (idx.co.id) and Bursa Malaysia (bursamalaysia.com)

3.2 Variable measurement

- a. Gross Domestic Product growth rate

In this research, the economic growth rate expressed by the percentage change of GDP. To calculate this growth rate, according to Parkin (2008) the formula is :

$$\text{GDP growth rate} = \frac{\text{GDP current period} - \text{GDP previous period}}{\text{GDP in previous period}} \times 100$$

- b. Inflation Rate

The inflation rate of Indonesia and Malaysia in this research taken directly from Asia Regional Integration Center's website. The calculation of inflation rate is based on consumer price index in each country.

- c. Interest Rate

The interest rate in this research taken directly from the website of central bank each country. Interest rate for Indonesia is the monthly BI Rate from Bank Indonesia's website. Interest rate for Malaysia from Bank Negara Malaysia's website.

- d. Market Liquidity

The market liquidity in this research taken directly from volume column in JKSE and KLSE index. The volume data is from number of shares trading in a month. This research use the change of market liquidity in the regression process. So the number of variable ML is the result of shares traded in month n minus shares traded in previous month (n-1) then divided by the shares traded in previous month (n-1). Below is the formula :

$$\text{ML} = \frac{\text{shares traded in this month} - \text{shares traded previous month}}{\text{shares traded in previous month}}$$

- e. Market Capitalization

The market capitalization of Indonesia stock market data taken directly from Indonesia stock exchange website. The measurement of market capitalization based on Indonesia Stock Exchange (IDX) is aggregate number of shares multiplied by regular market closing price. The market capitalization data of KLSE expressed in RM billion and

data of JKSE in IDR billion. This research use the change of market capitalization each month in the regression process. So the number of variable MC is the result of market capitalization in month n minus market capitalization in previous month (n-1) then divided by the market capitalization in previous month (n-1). Below is the formula :

$$MC = \frac{\text{market cap in this month} - \text{market cap in previous month}}{\text{Market cap in previous month}}$$

f. Market Return

In this research, the market return is calculated by researcher based on adjective closing price of each index. Based on Hirt and Block's book (2006), the rate of return from an investment can be masured as :

$$\text{Rate of return} = \frac{(\text{Ending value} - \text{Beginning value})}{\text{Beginning value}}$$

The ending and beginning value taken from adjusted closing price column in JKSE and KLSE index. The ending value is adjusted closing price in t month. The beginning value is adjusted closing price in t-1 month.

3.3 Method of Analysis

There are three models approach that use to estimate the hypothesis: First model is to test the macroeconomic indicators to stock market performance which is market liquidity by using independent variabels which are gross domestic product growth rate, inflation rate, and interest rate.

$$ML_{i,t} = \alpha + \beta_1 Gdp_{i,t} + \beta_2 Inf_{i,t} + \beta_3 Int_{i,t} + \varepsilon$$

Second model is to test the macroeconomic indicators to stock performance which is market capitalization by using independent variables which are gross domestic product growth rate, inflation rate, and interest rate.

$$MC_{i,t} = \alpha + \beta_1 Gdp_{i,t} + \beta_2 Inf_{i,t} + \beta_3 Int_{i,t} + \varepsilon$$

Third model is to test the macroeconomic indicators to stock performance which is market return by using gross domestic product growth rate, inflation rate, and interest rate as the independent variables.

$$MR_{i,t} = \alpha + \beta_1 Gdp_{i,t} + \beta_2 Inf_{i,t} + \beta_3 Int_{i,t} + \varepsilon$$

The method of analysis in this research study divided into three steps. The first is descriptive statistic of the variables. In this section, the variable of the sample will be described in detail. The second step is testing the classical assumptions of each model by using *eviews* software. The classical assumption testing consists of heteroscedasticity, multicollinearity, and autocorrelation tests. The third step is analyze the impact of macroeconomic indicators to stock market performance that consists of market liquidity, market capitalization, and market return, by using simple linear regression in backward elimination method. In this regression, will be used *t* – test to investigate the significancy impact of independent variable to dependent variable.

4. Data Analysis

4.1 Descriptive Statistics

Table 1
Descriptive Statistic of Dependent Variables

	Market Liquidity		Market Capitalization		Market Return	
	MLI	MLM	MCI	MCM	MRI	MRM
Mean	0.190852	0.044216	0.031709	0.008058	0.000133	-2.790E-05
Median	-0.01013	-0.03101	0.02351	0.01104	0.00019	9.00E-05
Maximum	15.60535	1.3671	1.79228	0.13915	0.00201	0.00135
Minimum	-0.56599	-0.63491	-0.3123	-0.14951	-0.00314	-0.01
Std. Dev.	1.485254	0.313707	0.174985	0.038853	0.00064	0.000994
Skewness	9.559935	1.396467	8.573033	-0.506906	-1.039275	-8.580601
Kurtosis	99.23947	6.326582	87.7585	5.572636	8.066788	86.72947
Jarque-Bera	47736.88	93.54703	37078.37	37.91276	148.7138	36221.27
Probability	0.0000000	0.0000000	0.000000	0.000000	0.000000	0.0000000
Sum	22.71138	5.26171	3.77334	0.95886	0.01578	-0.00332
Sum Sq. Dev.	260.3056	11.61263	3.613121	0.178131	4.83E-05	0.000117
Observations	119	119	119	119	119	119

Source : Data processed by *evIEWS*

From the table above seen that Indonesia (JKSE) have higher average of market liquidity than Malaysia (KLSE). For market capitalization and market return, Indonesia (JKSE) also have higher average rather than Malaysia (KLSE). The standard deviation means the distribution of the data or in this term, means the volatility. For market liquidity and market capitalization, standard deviation of Indonesia are higher than Malaysia. It means that Indonesia market liquidity and market capitalization are more volatile than Malaysia's. Only for market return, the standard deviation of Malaysia is higher than Indonesia. It means that Malaysia market return is more volatile than Indonesia's.

Table 2
Descriptive Analysis of Independent Variables

	GDP Growth		Inflation rate		Interest Rate	
	GDPI	GDPM	INFI	INFM	IRI	IRM
Mean	0.019123	0.016428	0.068057	0.02565	0.076646	0.030924
Median	0.019345	0.017885	0.0629	0.025975	0.075	0.03075
Maximum	0.0271	0.03642	0.1792	0.08522	0.1275	0.0379
Minimum	0.01349	-0.02095	0.02396	-0.0248	0.0575	0.0202
Std. Dev.	0.00297	0.009703	0.033016	0.017452	0.017361	0.004569
Skewness	0.519019	-2.02109	1.502794	0.614346	1.439573	-0.97129
Kurtosis	3.250159	8.08963	5.018402	6.715356	4.818997	3.341578
Jarque-Bera	5.700519	211.2174	65.53755	76.56776	57.99118	19.45158
Probability	0.057829	0	0	0	0	0.00006
Sum	2.29477	1.9714	8.16689	3.07797	9.1975	3.7109
Sum Sq. Dev.	0.00105	0.011203	0.129713	0.036243	0.035869	0.002484
Observations	120	120	120	120	120	120

Source : Data processed by *evIEWS*

As seen from the average of GDP growth rate, inflation rate, and interest rate, macroeconomic indicators of Indonesia have higher number than macroeconomic indicators of Malaysia. For standard deviation of GDP growth rate, Malaysia have higher number than Indonesia. But for inflation rate and interest rate, Indonesia have higher standard deviation than Malaysia. It means that the GDP growth rate of Malaysia is more volatile than Indonesia's. While the inflation and interest rate of Indonesia are more volatile than Malaysia's.

4.2 Classical Assumption Testing

This research uses White - test method in to test whether heteroscedasticity happen or not. The criteria of decision making is if the value of Probability Obs*R-square > 0.05 then there is no heteroscedasticity, if the value of Probability Obs*R-square < 0.05 then there is heteroscedasticity. Based on the table below can be concluded that there is no heteroscedasticity in all equation model of this research.

Table 3
Heteroscedasticity Test Results

Dependent variable	Countries	Probability Value of Obs*R-squared	Decision
Market Liquidity	Indonesia	0.4618	No Heterescedasticity
Market Capitalization		0.0585	No Heterescedasticity
Market Return		0.2142	No Heterescedasticity
Market Liquidity	Malaysia	0.3707	No Heterescedasticity
Market Capitalization		0.3963	No Heterescedasticity
Market Return		0.8767	No Heterescedasticity

To detect autocorrelation, this research employ 2 method. The first is Breusch-Godfrey Serial Correlation LM Test that used in Indonesia equation model and the second is Durbin-Watson value method that used in Malaysia equation model.

In the Breusch-Godfrey Serial Correlation LM Test, he criteria of decision making is if the value of Probability Obs*R-square > 0.05 then there is no autocorrelation, if the value of Probability Obs*R-square < 0.05 then there is autocorrelation. In the Durbin Watson method, the autocorrelation can be seen from the Durbin Watson scores. A regression model is called as having no autocorrelation if the result of Durbin Watson value is lay between dU value and 4-dU ($dU < d < 4 - dU$). In this research because the number of data (n) is 120 data and the coefficients except constanta (k) is 3, so the dU value is 1.7536.

Table 4
Autocorrelation Test Results

Dependent variable	Countries	Probability Value of Obs*R-squared	Decision
Market Liquidity	Indonesia	0.9456	No Autocorrelation
Market Capitalization		0.7041	No Autocorrelation
Market Return		0.0979	No Autocorrelation

Durbin Watson Score

Market Liquidity		2.240.463	No Autocorrelation
Market Capitalization	Malaysia	1.892.718	No Autocorrelation
Market Return		2.121.578	No Autocorrelation

Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. The multicollinearity in this research was detected by correlation table analysis. Based on the correlation table analysis in all equation model, there is no correlation value that more than 0.9. It means there is no multicollinearity in all equation model.

4.3 Hypothesis Testing

Multiple Regression Analysis

Table 5
The Impact of Macroeconomic Indicators to Market Liquidity in Indonesia

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,046	1,292		1,583	,116
	GDPI	-77,043	46,777	-,155	-1,647	,102
	INFI	3,596	8,036	,077	,447	,655
	IRI	-8,171	15,355	-,092	-,532	,596
2	(Constant)	1,823	1,188		1,534	,128
	GDPI	-75,805	46,534	-,152	-1,629	,106
	IRI	-2,387	8,261	-,027	-,289	,773
3	(Constant)	1,594	,882		1,807	,073
	GDPI	-73,348	45,571	-,147	-1,610	,110
4	(Constant)	,191	,136		1,402	,164

Based on table 5 above, the final model is model 4 that removed all the independent variables from the model. So it can be concluded that all variable independent which are GDP growth rate, inflation rate, and interest rate does not give impact to dependent variable. In other words, macroeconomic indicators in Indonesia period of 2006 – 2015 does not give impact to stock market performance in term of market liquidity of JKSE.

Table 6
The Impact of Macroeconomic Indicators to Market Liquidity in Malaysia

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,081	,210		,386	,700
	GDPM	-,868	3,185	-,027	-,272	,786
	INFM	2,918	1,951	,163	1,495	,138
	IRM	-3,153	7,884	-,046	-,400	,690
2	(Constant)	,089	,208		,427	,670
	INFM	3,000	1,920	,167	1,562	,121

	IRM	-3,924	7,330	-,057	-,535	,593
3	(Constant)	-,019	,051		-,374	,709
	INFM	2,470	1,640	,138	1,506	,135
4	(Constant)	,044	,029		1,538	,127

Based on the table 6 above, the final model is model 4 that removed all the independent variables from the model. So it can be concluded that all variable independent which are GDP growth rate, inflation rate, and interest rate does not give impact to dependent variable. In other words, macroeconomic indicators in Malaysia period of 2006 - 2015 does not give impact to stock market performance in term of market liquidity of KLSE.

Table 7
The Impact of Macroeconomic Indicators to Market Capitalization in Indonesia

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-,256	,148		-1,733	,086
	GDPI	3,504	5,348	,060	,655	,514
	INFI	-2,784	,919	-,506	-3,031	,003
	IRI	5,351	1,755	,513	3,048	,003
2	(Constant)	-,178	,088		-2,027	,045
	INFI	-2,749	,915	-,499	-3,004	,003
	IRI	5,180	1,732	,497	2,991	,003

Based on the table 7 above, the final model is model 2 that removed GDPI as the independent variables from the model. So it can be concluded that only INFI and IRI which give impact to the dependent variable. The impact of inflation rate to Indonesia market capitalization is negative significantly, it can be seen from the coefficient and significant t value ($0,003 < 0,05$). The impact of interest rate to Indonesia market capitalization is positive significantly, it can be seen from the coefficient and significant t value ($0,003 < 0,05$).

Table 8
The Impact of Macroeconomic Indicators to Market Cap in Malaysia

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	,054	,024		2,287	,024
	GDPM	-,482	,360	-,121	-1,339	,183
	INFM	-,804	,221	-,362	-3,643	,000
	IRM	-,577	,891	-,068	-,647	,519
2	(Constant)	,040	,008		5,094	,000
	GDPM	-,566	,335	-,142	-1,688	,094
	INFM	-,879	,186	-,396	-4,716	,000

Based on the table 8 above, the final model is model 2 that removed IRM as the independent variables from the model. So the GDPM and INFM are remain. Based on the significant t value, the only independent variable that give impact to dependent variable is INFM because it has lower significant t value than alpha value ($0,000 < 0,05$). Then it can be concluded that the only macroeconomic indicators that give impact to stock market capitalization in Malaysia is inflation rate.

Table 9
The Impact of Macroeconomic Indicators to Market Return in Indonesia

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	,000	,001		-,444	,658
	GDPI	-,004	,020	-,019	-,207	,836
	INFI	-,010	,003	-,475	-2,823	,006
	IRI	,014	,006	,377	2,220	,028
2	(Constant)	,000	,000		-1,026	,307
	INFI	-,010	,003	-,477	-2,852	,005
	IRI	,015	,006	,382	2,285	,024

Based on the table 9 above, the final model is model 2 that removed GDPI as the independent variables from the model. So it can be concluded that only INFI and IRI which give impact to the dependent variable. The impact of inflation rate to JKSE market return is negative significantly, it can be seen from the coefficient and significant t value ($0,005 < 0,05$). The impact of interest rate to JKSE market return is positive significantly, it can be seen from the coefficient and significant t value ($0,024 < 0,05$).

Table 10
The Impact of Macroeconomic Indicators to Market Return in Malaysia

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-3,80E-005	,001		-,057	,955
	GDPM	-,008	,010	-,083	-,835	,405
	INFM	-,008	,006	-,135	-1,237	,219
	IRM	,011	,025	,051	,445	,657
2	(Constant)	,000	,000		1,106	,271
	GDPM	-,007	,009	-,067	-,726	,469
	INFM	-,006	,005	-,109	-1,184	,239
3	(Constant)	,000	,000		,836	,405
	INFM	-,006	,005	-,112	-1,221	,225
4	(Constant)	-2,79E-005	,000		-,306	,760

Based on table 10 above, the final model is model 4 that removed all the independent variables from the model. So it can be concluded that all variable independent which are GDP growth rate, inflation rate, and interest rate does not give impact to dependent variable. In other words, macroeconomic indicators in Malaysia period of 2006 – 2015 does not give impact to stock market performance in term of market return of KLSE.

Hypothesis Analysis

H1 : There is positive impact of Gross Domestic Product growth rate to stock market performance.

Table 11
Summary of Hypothesis 1

Dependent Variables	Country	Coefficients	Sig. Value	Decision
Market Liquidity		-73,348	0,110	Not Supported
Market Capitalization	Indonesia	3,504	0,514	Not Supported
Market Return		-0,004	0,836	Not Supported
Market Liquidity		-0,868	0,786	Not Supported
Market Capitalization	Malaysia	-0,566	0,094	Not Supported
Market Return		-0,007	0,469	Not Supported

Table 11 above shows the summary of Hypothesis 1. There are the coefficient and the significant value of one independent variable which is Gross Domestic product growth rate. From the table it can be concluded that in all equation model, H1 is not supported. It is because all the significant values are higher than the alpha value ($> 0,05$). So the conclusion for all equation model both Indonesia and Malaysia is there is no positive impact of Gross Domestic Product growth rate to stock market performance.

H2 : There is negative impact of inflation rate to stock market performance.

Table 12
Summary of Hypothesis 2

Dependent Variables	Country	Coefficients	Sig. Value	Decision
Market Liquidity		3,596	0,655	Not Supported
Market Capitalization	Indonesia	-2,749	0,003	Supported
Market Return		-0,010	0,005	Supported
Market Liquidity		2,47	0,135	Not Supported
Market Capitalization	Malaysia	-0,879	0,000	Supported
Market Return		-0,006	0,225	Not Supported

Table 12 above shows the summary of Hypothesis 2. There are the coefficient and the significant value of one independent variable which is inflation rate. From the table it can be concluded that not in all equation model, H2 is supported. Based on stock market capitalization of Indonesia, stock market return of Indonesia, and stock market capitalization of Malaysia, H2 is supported. It is because the coefficient values shows negative sign that means negative impact and the significant values are lower than alpha value ($< 0,05$). Based on stock market liquidity in Indonesia, stock market liquidity in Malaysia, and stock market return in Malaysia, H2 is not supported. It is because the significant values are higher than alpha value ($> 0,05$).

H3 : There is negative impact of interest rate to stock market performance.

Table 13
Summary of Hypothesis 3

Dependent Variables	Country	Coefficients	Sig. Value	Decision
Market Liquidity		-2,387	0,773	Not Supported
Market Capitalization	Indonesia	5,18	0,003	Not Supported
Market Return		0,015	0,024	Not Supported
Market Liquidity		-3,924	0,593	Not Supported
Market Capitalization	Malaysia	-0,577	0,519	Not Supported
Market Return		0,011	0,657	Not Supported

Table 13 above shows the summary of Hypothesis 3. There are the coefficient and the significant value of one independent variable which is interest rate. From the table it can be concluded that in all equation model, H3 is not supported. It is because several of the significant values are higher than the alpha value ($> 0,05$), although there are two significant values that lower than alpha value, which are market capitalization and market return in Indonesia, but the coefficient shows positive impact that not fit with the hypothesis. So the conclusion, for all equation model both Indonesia and Malaysia is there is no negative impact of interest rate to stock market performance.

5. Conclusion

From the result of this research study on the impact of macroeconomic indicators to stock market performance in Indonesia and Malaysia, it can be concluded as follows :

1. Gross domestic product growth rate have no impact to all proxy of stock market performance which are market liquidity, market capitalization, and market return in Indonesia and Malaysia in time period of 2006 to 2015.
2. Inflation rate have negative impact to several proxies of stock market performance, which are market capitalization and market return in Indonesia and market capitalization in Malaysia. While inflation rate have no impact to market liquidity in Indonesia and Malaysia and also market return in Malaysia. These all for macroeconomic indicators and stock market performance period of 2006 to 2015.
3. Interest rate have no impact to all proxy of stock market performance which are market liquidity, market capitalization, and market return in Indonesia and Malaysia in period of 2006 to 2015. From the hypothesis testing result the interest rate seen to have significant positive impact to market capitalization and market return in Indonesia.

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