

## COMPARATIVE ANALYSIS OF STOCK EXCHANGE PERFORMANCE WITH MACROECONOMIC INDICATORS BETWEEN INDONESIA AND MALAYSIA

by:

**Michelle Inri Fifalia Nangka<sup>1</sup>**  
**Sifrid S. Pangemanan<sup>2</sup>**  
**Merinda Pandowo<sup>3</sup>**

<sup>1,2,3</sup>Faculty of Economics and Business  
International Business Administration (IBA) Program  
University of Sam Ratulangi Manado  
email: <sup>1</sup>[michelle\\_nangka@yahoo.com](mailto:michelle_nangka@yahoo.com)  
<sup>2</sup>[sifridp\\_s@unsrat.ac.id](mailto:sifridp_s@unsrat.ac.id)  
<sup>3</sup>[iinpan@yahoo.com](mailto:iinpan@yahoo.com)

### ABSTRACT

Growth of economy on the country shows the growth of the country. It can be seen from several elements. Stock market is one of the elements that play the vital role of economic. Stock market has purpose to play the important thing of economic and industry growth of the country and also as a measurement that the sector industry growth well as the growth of economy with their performance. There are several macroeconomic indicators used to compare the stock exchange performance between two countries. This study aimed to compare stock exchange performance based on macroeconomics indicators such as inflation of Consumer Price Index (annual %), Real Interest rate and PPP conversion factor (GDP) to market exchange rate ratio between two countries namely Indonesia and Malaysia during the period of year 2003 until 2012. The type of this research is comparative study with secondary data collection techniques. Independent Sample t-test was used to test the average difference. The conclusion of this study is there is a different of stock exchange performance between Indonesia and Malaysia that based on inflation. There is no different of stock exchange performance between Indonesia and Malaysia based on interest rate and exchange rate.

**Keywords:** *stock exchange performance, inflation, interest rate, exchange rate*

### INTRODUCTION

#### Research Background

Growth of economy shows the growth of the country. The fluctuation of global economy makes various effects for emerging country, such as ASEAN country. Crisis because increasing the price of oil fuel and commodity price given effect to macroeconomic of emerging country. One of sector that influences the growth of the economy of country is financial sector. An economy's financial markets are critical to its overall development. Strong financial systems provide reliable and accessible information that lowers transaction costs, which in turn bolsters resource allocation and economic growth. Indicators include the size and liquidity of stock markets; the accessibility, stability, and efficiency of financial systems; and international migration and workers remittances, which affect growth and social welfare in both sending and receiving countries.

Stock market is the financial sector that influences the economy and the growth of that country. Stock market is financial sector's key institution which provides a platform, where borrower and lender can easily fulfil their financial needs (Zafar 2013). When we talk about the stock market the first thing come into our mind is this is an important element of an economy because stock market plays a vital role in the growth of key sectors of the economy and that ultimately affects the economy of the country (Aurangzeb, 2012). Stock market has purpose to play the important thing of economic and industry growth of the country. The company in that country who want to find the advantage usually sell their stock to stock Exchange Company in their country with follow the rules and the regulation of Stock Exchange Company. When the index of the stock increase, that

is a sign that the economic was grow and when the index of the stock decrease, that is a sign instability of economic growth of that country. By investing in a company, the party has the claim for the company's income, assets, and right to attend the General Meeting of Shareholders. Stock sells by Stock exchange of every country. Every country in the world has their stock exchange and every stock exchange or stock market has their regulation. Stock exchange or stock markets also give information about the price, the rules, and the other information for investor who wants to invest. Indonesia and Malaysia is ASEAN countries that have own stock exchange. Both countries have different rules and regulation of their stock exchange. The stock exchange of both countries also can be compare based on macroeconomics indicators such as inflation, interest rate, and exchange rate that affect the performance of stock exchange.

## Research Objective

This research objective is to analyse if there any difference in stock exchange performance based on macroeconomic indicators which is inflation, interest rate and exchange rate between Indonesia and Malaysia.

## THEORETICAL FRAMEWORK

### Theories

#### Financial Management

Riley (2012) explain that Financial Management can be defined as the management of the finances of a business/organisation in order to achieve financial objectives. Bovee, (2008:175), stated that Financial management is effective acquisition and use of money. Financial management involves making decisions about alternative sources and use of funds, with the goal of maximizing a company's value. To achieve this goal, financial managers develop and implement a financial plan, monitor and manage cash flow, establish and manage budgets, and raise capital to finance continued growth. Brigham, et al (2010:5) stated that Financial Management also called corporate finance focuses on decision relating to how much and what types of assets to acquire, how to raise the capital needed to buy assets, and how to run the firms so as to maximise its value.

#### Stock

Slater (2008:492) stated Stock is equity capital rose through sale of shares also the proportional part of a company's equity capital represented by fully paid up shares. Companies sell shares of ownership in their company to raise money to finance operations, plan expansion, and so on, that ownership of shares called stocks. Reeve, et al (2009:575) stated stock is shares of ownership.

#### Stock Exchange and Stock Market

Bovee (2008: 197) stated that Stock exchange is location where traders buy and sell stocks and bonds. The Stock market, in which claims on the earnings of corporations (share of stock) are traded, is the most widely followed financial market in almost every country that has one. Mishkin, (2009:5) stated that the stock market is an important factor in business investment decision, because the price of shares affects the amount of funds that can be raised by selling newly issued stock to finance investment spending.

#### Stock Exchange Performance

Zafar (2013) found that Stock market performance, economic and political condition of a country is interrelated and has been an important debating issue. Many studies directly or indirectly have been dealing with the macro and institutional factors and their correlation with the stock market performance at both theoretical and empirical levels. Stock market performance is factual reflection of country's economic performance.

#### Macroeconomic Indicators

Brigham, et al (2010) stated that macroeconomic factors have an important effect on both the general level of rate and the shape of the yield curve.

## Inflation

Bovee (2008:19) stated that Inflation is steady rise in the price of goods and services throughout the economy. Inflation is the amount by which prices increase over time (Brigham, et al, 2010:151). Mishkin (2010:637) stated that Inflation is defined as the condition of a continually and rapidly rising price level. Reilly and Brown (2012:377) defined the precise effect of inflation on the aggregate profit margin is unresolved. Case, et al. (2009:436) stated that inflation is an increase in the overall price level. Several price indices are often used to measure inflation, among others: cost of living index/CPI (Consumer Price Index), wholesale trade price index (Wholesale Price Index) and the GNP deflator (Case, et al, 2009 #:458)

## Interest Rate

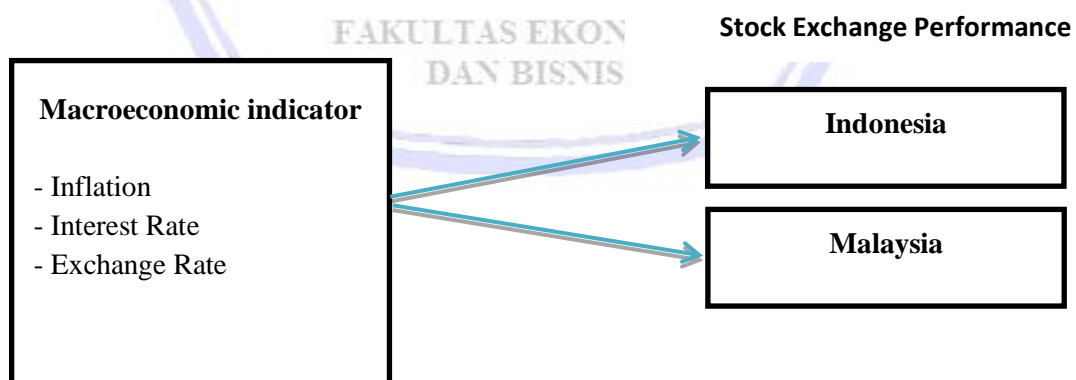
Interest rate is that rate of interest that must be paid on the face amount for the term of the note (Reeve et al 2009: 410). Interest rate is the price that lenders receive and borrowers pay for debt capital (Brigham, et al, 2010). Mishkin (4:2010) stated that interest rate is the cost of borrowing or the price paid for the rental of funds.

## Exchange Rate

Bovee (2008:65) stated that Exchange rate is rate at which the money of one country is traded for the money of another. Mishkin (499:2010) said the price of one currency in terms of another is called the exchange rate. Based on Brigham, et al (2010:602), Exchange rate is the number of units of a given currency that can be purchased for one unit of another currency

## Previous Research

Aurangzeb (2012) examined to identify the factor affecting performance of stock market in South Asia. The method using on this study are Multiple Regression Analysis and Descriptive Analysis. The result Interest rates have the significant negative impact on stock market. Negative relations exist between CPI inflation and stock market performance but this relationship is not significant enough. Exchange rate shows the positive and significant impact on stock prices. Foreign Direct Investment have the most significant, positive and strong impact on stock price. Zafar (2013) examines the determinants of stock market performance in Pakistan period 1988-2008 using the set of macroeconomic. He identified that FDI and value traded have positive impact on stock market performance. Negative relationship between interest rate and banking sectors development has no significant impact on stock market performance. Oskenbayev, et al (2011) study is consistent with the theory and introducing new dummy variable to capture the crisis impact demonstrated the practical evidence for KASE evolution. Long run relationship of KASE index with microeconomics variable shows the evidence of internationally inefficiency of KASE.



**Figure 1. Conceptual Framework**

*Source: Theoretical Framework*

## Research Hypotheses

Based on the research problems, the hypotheses are:

- H<sub>1</sub> : There is a significant difference in Stock Exchange performance based on Inflation between Indonesia and Malaysia
- H<sub>2</sub> : There is a significant difference in Stock Exchange performance based on Interest rate between



Indonesia and Malaysia

H<sub>3</sub> : There is a significant difference in Stock Exchange Performance based on Exchange rate between Indonesia and Malaysia

## RESEARCH METHOD

### Type of Research

This research is type of comparative design that is research about comparing Stock Exchange performance based on macroeconomic indicators between Indonesia and Malaysia from period year 2003 until 2012. This research classified on descriptive research that explains about the variables which used.

### Place and Time of Research

This Study was conducted in Sam Ratulangi University in Manado between June – November 2013. The data collected from World Bank, Bank Indonesia and Bank Negara Malaysia at June until October, and the result was found in November.

### Population and Sample

Sekaran and Bougie (2010:262), Population is the entire group of people, events, or things of interest that the researcher wishes to investigate. Population of this research is the countries that are listed in World Bank, specified the countries in Association of Southeast Asia Nation (ASEAN).

The sample is small subset of population. Sample of this research used 2 samples of countries: Indonesia and Malaysia. This research uses historical data taken during the period of year 2003 until 2012. The data will be obtained from data that published that is Statistical Data from 2003 until 2012 from World Bank with website [www.worldbank.org](http://www.worldbank.org).

### Data Collection Method

The research is quantitative research. This research using secondary data is that have already been gathered by researcher, data published in statistical and other journals and information available from any published or unpublished source available either within or outside the organization, all of which might be useful to researcher (Sekaran and Bougie, 2010:184). This research will be conducted with one sources data that is secondary data which is data published and downloading from [www.worldbank.org](http://www.worldbank.org) as mainly data source, annual report from 2003 until 2012 from [www.bi.com](http://www.bi.com) and [www.bnm.org](http://www.bnm.org) and also from some textbook, journal and relevant literature from library and internet.

### Operational Definition of Research Variable

Operational definitions used of research variable are:

**1. Inflation Consumer Prices Index (annual %)**

Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used.

**2. Real interest rate (%),**

Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator

**3. PPP Conversion factor (GDP) to market exchange rate ratio**

Purchasing power parity conversion factor is the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as a U.S. dollar would buy in the United States. The ratio of PPP conversion factor to market exchange rate is the result obtained by dividing the PPP conversion factor by the market exchange rate. The ratio, also referred to as the national price level, makes it possible to compare the cost of the bundle of goods that make up gross domestic product (GDP) across countries. It tells how many dollars are needed to buy a dollar's worth of goods in the country as compared to the United States.

## Data Analysis Method

### Descriptive Statistic

Descriptive statistics are used to gain an overview of the sample data. Outcome of descriptive statistics from a sample of research data can be viewed through the amount of data, the average (mean) of the sample, the standard deviation and the extreme value (maximum and minimum).

### Independent Sample t-test

Independent sample t-test is run in order to see the significant differences in the means between two groups in the variable (Sekaran and Bougie, 2010:345). It is used to test the two means from two independent or unrelated samples. Results from decision step are to test whether to accept the  $H_0$  or to reject  $H_0$ . The step to accept or reject  $H_0$  is by seeing the probability score compared to the alpha ( $\alpha$ ) that used with some criteria, which are: if the P-value (significance)  $> 0.05$  ( $\alpha$ ) then  $H_0$  is accepted and if the P-value (significance)  $< 0.05$  ( $\alpha$ ) then  $H_1$  is accepted. If the  $H_0$  is accepted, it means there is no difference in stock exchange performance based on macroeconomic indicators between Indonesia and Malaysia and if the  $H_1$  is accepted instead, that there is significant difference in stock exchange performance based on macroeconomic indicators between Indonesia and Malaysia.

## RESULT AND DISCUSSION

### Result

#### Descriptive Analysis

This is the tool to summarize the data and provide the measures of the sample data. This formulates two different tables for this analysis because this research has the data of two countries and they all have different dimensions.

**Table 1. Descriptive Statistics of Economic Indonesia**

	N	Minimum	Maximum	Mean	Std. Deviation
Inflation	10	4.28	13.11	7.2160	2.90538
Interest_Rate	10	-3.85	10.85	3.7140	4.04793
Exchange_Rate	10	.39	.75	.5460	.13509
Valid N (listwise)	10				

Source: Data Processes 2013

Table 1 shows the stock exchange performance based on macroeconomic indicators in Indonesia. It also shows total number of observation, minimum value, maximum value, mean value and standard deviation of all variable. The total observation is 10 year that is from 2003 until 2012. From the 10 years the minimum value of CPI inflation is 4.28 which were observed in 2012 and the maximum value of CPI inflation is 13.11 which were observed in 2006. That value show the range of inflation in Indonesia is between 4.28 until 10.13 in the last 10 years. The average of CPI inflation is 7.2160 and standard deviation is 2.90538 which mean the data enough variant which is more than 30% of Mean value.

Real Interest rate touch the low value of -3.85 which were observed in 2008 and the peak of 10.85 which was observed in 2003, average interest rate of Indonesia in last 10 years was observed is 3.7140 and the standard deviation 4.04793 which mean the data more variant because the standard deviation more than 30% of Mean value. Exchange rate shows the low of 0.39 in 2003 and high of 0.75 in 2011. That value shows the range of PPP conversion factors to market exchange rate ratio for 2003 until 2012 in the range 0.39 until 0.75 because the crisis and the increasing of fuel price in Indonesia. The mean value is 0.5460 and standard deviation is 0.13509. The standard deviation less than 30% of Mean value shows there is much stability in this variable compared to CPI inflation and Real Interest rate.

**Table 2. Descriptive Statistics of Economic Malaysia**

	N	Minimum	Maximum	Mean	Std. Deviation
Inflation	10	.58	5.44	2.3700	1.44859
Interest_Rate	10	-3.90	11.78	1.6380	4.31703
Exchange_Rate	10	-.57	.62	.4060	.35012
Valid N (listwise)	10				

Source: *Data Processes 2013*

Table 2 shows the stock exchange performance based on macroeconomic indicators in Malaysia. It also shows total number of observation, minimum value, maximum value, mean value and standard deviation of all variable. The total observation is 10 year that is from 2003 until 2012. The minimum value of CPI Inflation of Malaysia is 0.58 which was observed in 2009 and the maximum value is 5.44 in 2008. That means the range of CPI inflation of Malaysia in the range 0.58 until 5.44 in the last 10 years. That show Malaysia more stable and have low CPI inflation compare with Indonesia. The Mean value of CPI Inflation is 2.3700 and the standard deviation is 1.44859 that show the CPI inflation data of Malaysia more variant because standard deviation more than 30% of Mean value.

Real interest rate touch the low of -3.90 which was observed at 2008 and the peak of 11.78 which was observed in 2009 which shows the negative trends of this variable. Average Real interest rate of Malaysia in the last 10 years was observed is 1.6380 and the standard deviation of 4.31703 which shows that this variable highly fluctuated in this region. Exchange rate shows the low of -0.57 in 2010 and high 0.62 in 2011 until. The means value is 0.4060 and standard deviation 0.35012 which means the data of exchange rate of Malaysia is much variant because more than 30% of Mean value.

### Independent Sample t-test

**Table 3. Independent Sample t-test**

		t-test for Equality Means	
		t	Sig (2-tailed)
Inflation	Equal Variances Assumed	4.720	.000
	Equal Variances Not Assumed	4.720	.000

Source: *Data Processed, 2013*

Table 3 indicates there is a difference in stock exchange performance between Indonesia and Malaysia. It is shown by the mean of Inflation Indonesia 7.2160 and Inflation Malaysia 2.3700. The value of F-count for Inflation with Equal Variances Assumed is 4.732 with probability or significance 0.043, because of the probability data above is less than 0.05 ( $0.043 < 0.05$ ) so decision to choose  $H_a$ . Therefore, the Equal Variances Assumed is chosen to compare the means. The value of t-count for Inflation using the Equal Variances Assumed is 4.720 with significant (2-tailed) at the  $0.000 < 0.05$  means  $t\text{-count} < t\text{-table}$ . So that can be concluded the  $H_0$  from the hypothesis test is rejected and  $H_a$  "there is a significant difference in stock exchange performance based on inflation between Indonesia and Malaysia" is accepted.

**Table 4 . Independent Sample t-test**

		t-test for Equality Means	
		t	Sig (2-tailed)
Interest Rate	Equal Variances Assumed	1.109	.282
	Equal Variances Not Assumed	1.109	.282

Source: *Data Processed, 2013*

Table 4 indicates there is no difference in stock exchange performance between Indonesia and Malaysia. It is shown by the mean of Interest rate Indonesia 3.7140 and Interest Rate Malaysia 1.6380. The value of F-count for interest rate with Equal Variances Assumed is 0.004 with probability or significance 0.949, because of the probability data above is more than 0.05 ( $0.949 > 0.05$ ) so decision to choose  $H_0$ . Therefore, the



Equal Variances Assumed is chosen to compare the means. The value of t-count for Interest rate using the Equal Variances Assumed is 1.109 with significant (2-tailed) at the  $0.282 > 0.05$  means t-count > t-table. So that can be concluded the  $H_a$  from the hypothesis test is rejected and  $H_0$  "there is no significant difference in stock exchange performance based on interest rate between Indonesia and Malaysia" is accepted.

**Table 5. Independent Sample t-test**

		t-test for Equality Means	
		t	Sig (2-tailed)
Exchange Rate	Equal Variances Assumed	1.180	.253
	Equal Variances Not Assumed	1.180	.262

Source: Data Processed, 2013

Table 5 indicates there is no difference in stock exchange performance between Indonesia and Malaysia. It is shown by the mean of Exchange rate Indonesia 0.5460 and Exchange Rate Malaysia 0.4060. The value of F-count for exchange rate with Equal Variances Assumed is 0.854 with probability or significance 0.368, because of the probability data above is more than 0.05 ( $0.368 > 0.05$ ) so decision to choose  $H_0$ . Therefore, the Equal Variances Assumed is chosen to compare the means. The value of t-count for Exchange rate using the Equal Variances Assumed is 1.180 with significant (2-tailed) at the  $0.253 > 0.05$  means t-count > t-table. So that can be concluded the  $H_a$  from the hypothesis test is rejected and  $H_0$  "there is no significant difference in stock exchange performance based on inflation between Indonesia and Malaysia" is accepted.

## Discussion

### Inflation

Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used. Inflation is one of macroeconomic indicators that influence the performance of stock exchange especially in Indonesia and Malaysia. From the result, for period year 2003 until 2006 CPI Inflation of Indonesia rose at 10.45% in 2005 and still up to 13.11% in 2006 because the hikes of global fuel price. CPI inflation of Malaysia also increases from 2003 at 0.99% to 3.61% at 2006 because the fuel price, but Government of Malaysia achieved a steady growth of economics amidst an environment of moderating inflation. Economic expansion of Malaysia strengthens, driven by strong domestic demand and reinforces by the improvement in external demand. At 2007 CPI Inflation of Indonesia down become 6.41% because BI rate decreasing of BI Rate. CPI Malaysia also decreased at a slower pace 2.03 at 2007. CPI inflation of Malaysia touches the peak at 2008 at 5.44%. CPI inflation increases the fuel subsidy restructuring in a sharp increase in the headline inflation rate. Even Malaysia touches the peak but CPI inflation in Indonesia still more than Malaysia that is 9.78%. The trend of spiralling global energy and food prices persisted, which forced the Government to raise fuel prices in order to preserve fiscal sustainability. In addition, this also triggered a sharp rise in inflation become 9.78%, in particular due to the second-round effects of the fuel price hikes, which intensified inflationary pressures further.

At 2009 Malaysia decreasing the CPI Inflation into the low levels of period year of research, meanwhile Indonesia just little decrease from the previous year. CPI Inflation Indonesia modest to 4.81% level past decade. The lower of target inflation was largely attributable to the policy actions attitude of BI and Government change in economic condition in comparison to the underlying assumption in the inflation projection. The marked decline in headline CPI Inflation of Malaysia at 0.58% during the year was driven by supply related factors and subdued demand conditions. At 2010 until 2011 CPI Inflation of Indonesia and Malaysia increase, driven by supply factors arising from the higher food and commodity prices and adjustments to administered prices. At 2012 both countries CPI inflation decrease supported by all its constituting components by the core, food and administered price inflation. Even CPI Inflation Malaysia still lower than Indonesia. Based on that explanation, it is clear that both countries have stock exchange performance differences, especially based on CPI inflation. It can be seen that CPI Inflation of Indonesia has higher than CPI Inflation of Malaysia. CPI inflation Indonesia in the range more than 4% until reaching 13.11%, but CPI inflation in Malaysia just under 6%. It can be seen that

Malaysia can keep the CPI inflation at the low level although the pressure of global crisis because the hikes of fuel price than Indonesia. Statistically (by Independent Sample t-test) also show a significant difference in stock exchange performance based on inflation between Indonesia and Malaysia.

Control of inflation cannot be done only through monetary policy, but also economic policies such as fiscal policy and policy on the real sector. For this reason inter-agency coordination and cooperation across sectors is essential in addressing the problem of inflation. Inflation control requires cross-agency cooperation and coordination, which is between Bank Indonesia and the Government. Hopefully with the harmonization and synchronization policies, low inflation and stable can be achieved, which in turn supports the welfare of the community. To solve the problem of inflation that is one way to review the operation of the market for the price that the market price is not too high, provide subsidies to help people whose economy is still low, and lowering taxes to ease the burden on manufacturers and consumers.

### **Interest Rate**

Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator. Interest rate is one of macroeconomic indicators that influence the performance of stock exchange especially in Indonesia and Malaysia. From the result at the section before, Real interest rate Indonesia and Malaysia increased from 2003 to 2005. Both country touch negative interest rate at 2005. Real interest rate at Indonesia decreased because the decreasing of BI rate. Negative in real interest rate could lead to distortions in the form and allocating savings, as well as the use of capital. At 2006, real interest rate of both country increase but still at the low level. In the next year Real interest rate Indonesia increase but Malaysia decrease. At 2008 both country touch the negative real interest rate again. Real interest rate at Malaysia decrease to negative interest rate following the sharp increase in inflation. Interest rate at Indonesia that was lower than the BI Rate and extremely volatile in early 2008. This left the PUAB interest rate structure vulnerable to liquidity risk and disrupted the process of monetary policy transmission.

The next year Malaysia touches the peak of interest rate that is 11.78% affected by the collapse in the world trade which started on the second half of 2009 and Indonesia increase from the previous year that is 5.78% because the economy of Indonesia is still in under pressure from the crisis during 2009. The next years real interest rate of both country continue decrease until Malaysia come back touch negative real interest rate at 2011 because rising inflation rate have result in decrease real interest rate. At 2012 the average interest rate was slow revised following the upgrade of Indonesia's credit rating to investment grade. And Interest rate of Malaysia remained stable in 2012, reflecting the stance of monetary policy to promote balanced and sustainable growth in the economy. That is just a little different of real interest rate between Indonesia and Malaysia statistically, because the economic expansion to improve the credit rating and the influence of inflation. But, the major statistic show that the same real interest rate of that countries same as the result of Independent Sample t-test that there is no significant difference in stock exchange performance based on Interest rate between Indonesia and Malaysia.

### **Exchange Rate**

Purchasing power parity (PPP) conversion factor is the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as a U.S. dollar would buy in the United States. The ratio of PPP conversion factor to market exchange rate is the result obtained by dividing the PPP conversion factor by the market exchange rate. The ratio, also referred to as the national price level, makes it possible to compare the cost of the bundle of goods that make up gross domestic product (GDP) across countries. It tells how many dollars are needed to buy a dollar's worth of goods in the country as compared to the United States. Exchange Rate is one of macroeconomic indicators that influence the performance of stock exchange especially in Indonesia and Malaysia. At 2003 until 2006 Exchange rates in Indonesia become stable because decreasing of BI rate. Meanwhile in Malaysia, the system of a fixed exchange rate for the ringgit at RM 3.8 to US \$1 was maintained with strengthening economic fundamental. Developments of the ringgit 2004 until 2005 were driven mainly by the depreciation of the US Dollar and the consequent realignments of major and regional currencies against the US currency. The increase of exchange rate movements at 2006 of the ringgit against US dollar arising from the two way movements of the ringgit during the year coincided with expansion in the volume of foreign exchange rate transactions in the Kuala Lumpur interbank foreign exchange market.



At 2007 the hikes of global fuel price make negative sentiment surrounding the exchange rate Indonesia triggered by the subprime mortgage crisis in the United States. At Malaysia Ringgit exchange rate is appreciation against US dollar. At 2008 the global financial crisis, commodity price volatility and gloomy expectations of an economic recession in various regions also significantly affected domestic foreign exchange supply. As a result, the rupiah was subjected to intense depreciative pressures. Despite the strong underlying demand for the ringgit due to the positive net trade balance, the ringgit was significantly affected by the global development. Ringgit exchange rate weakened against US dollar compare 2007. At 2009 appreciated ringgit exchange rate against US dollar following improved sentiments driven by the faster pace of recovery in the region the advanced economy. Meanwhile in Indonesia correlation the interest rate differential and exchange rate down during the crisis period, indicative of magnitude of foreign investor risk aversion despite the steep interest rate differential at the time. Rupiah appreciated with low volatility. This performance was supported by sustainable positive perception on Indonesia economy, as indicated by the upgrading of Indonesia's sovereign credit rating and improvement in risk indices in 2010. The ringgit exchange rate movements remained orderly, while sterilisations ensured that the impact of the excess liquidity on domestic monetary condition was contained.

As in the previous year, ringgit exchange rate developments in 2011 were heavily influenced by the significant two way flows of portfolio investment arising primarily from exerted factors. Consistent with the strong Indonesia Balance of payments during 2011, Rupiah Exchange rate was relatively stable and tended to strengthen against US Dollar. As current account suffered from deficit, rupiah exchange rate come under depreciative pressure throughout 2012. The exchange rate of the ringgit during the course of 2012 was driven by two way flows of trade, direct investment and portfolio funds, which reflected a combination of external and domestic factors. That is just the little difference of exchange rate between Indonesia and Malaysia because the hikes of fuel, commodity price and the global crisis make Indonesia and Malaysia exchange rate appreciated and depreciated. But from all that and from the statistical testing using Independence Sample t-test shows that there is no have significant difference between these two countries based on exchange rate.

## CONCLUSION AND RECOMMENDATION

### Conclusion

The conclusions of this study are:

1. Indonesia touches the low Inflation at 2012, low Interest rate at 2008 and low exchange rate 2003. And the peak Inflation at 2006, the highest interest rate 2003 and the highest exchange rate 2011 for period year 2003 until 2012.
2. Malaysia touches the low Inflation at 2009, low Interest rate at 2008 and low exchange rate 2010. And the peak Inflation at 2008, the highest interest rate 2009 and the highest exchange rate 2011 for period year 2003 until 2012.
3. There is a significant difference of Stock Exchange Performance between Indonesia and Malaysia based on Inflation
4. There is no significant difference of Stock Exchange Performance between Indonesia and Malaysia based on Interest Rate.
5. There is no significant difference of Stock Exchange Performance between Indonesia and Malaysia based on Exchange Rate.

### Recommendation

The recommendation on this research:

1. For the Indonesian Government, is expected to keep the economy remains stable although facing the global crisis.
2. For people, to be able to consider factors such as inflation, exchange rates and interest rates in the capital markets to invest in Indonesia and Malaysia

## REFERENCES

- Aurangzeb., 2012. Factors Affecting Performance of Stock Market: Evidence from South Asian Countries. *International Journal of Academic Research in Business and Social Sciences*. Vol. 2, No. 9. ISSN: 2222-6990. Available online at <http://www.hrmars.com/journals>. Pp 1-15.
- Bank Indonesia. *Annual Report 2003 – 2012*. Available on <http://www.bi.go.id/id/publikasi/laporan-tahunan>. Accessed on September, 17<sup>th</sup> 2013
- Bank Negara Malaysia. *Annual Report 2003 – 2012*. Available on [http://www.bnm.gov.my/index.php?ch=en\\_publication\\_synopsis&pg=en\\_publication\\_annual\\_report&ac=1&lang=en](http://www.bnm.gov.my/index.php?ch=en_publication_synopsis&pg=en_publication_annual_report&ac=1&lang=en). Accessed on September, 17<sup>th</sup> 2013.
- Bovee, CL., & Thill, JV. 2008. *Business in Action*. 4<sup>th</sup> ed. Pearson Education. Inc. USA.
- Brigham, E., & Houston, J. 2010. *Essentials of Financial Management*. 2<sup>nd</sup> ed. Cengage Learning. Inc. Singapore.
- Case, KE., Fair, RC., & Oster, SM. 2009. *Principles of Economics*. 9<sup>th</sup>ed. Pearson Education. Inc. New Jersey.
- Mishkin, FS. 2009. *The Economics of Money, Banking and Financial Markets*. 2<sup>nd</sup> ed. Pearson Education. Inc. USA.
- Oskenbayev, Y., Yilmaz, M. & Chagirov, D. 2011. The Impact of Macroeconomic Indicators on Stock Exchange Performance in Kazakhstan. *African Journal of Business Management*. Vol. 5, No. 7. ISSN 1993-8233. Available online at <http://www.academicjournals.org/AJBM>. Pp 2985-2991.
- Reeve, J., Warren, C. & Duchac, J. 2009. *Principles of Accounting*. 23<sup>rd</sup> ed. South-Western Cengage Learning. Inc. China.
- Reilly, FK. & Brown, KC. 2012. *Analysis of Investments and Management Portfolios*. 10<sup>th</sup> ed. South-Western Cengage Learning. Inc. USA.
- Riley, J. 2012. *Introduction to Financial Management*. 1<sup>st</sup> ed. Tutur2u. Inc. USA.
- Sekaran, U., & Bougie, R. 2009. *Research Methods for Business, A skill building approach*. 5<sup>th</sup> ed. John Wiley & Sons Ltd. Chichester. United Kingdom.
- Slater, J. 2008. *Practical Business Math Procedures*. 9<sup>th</sup> ed. McGraw-Hill International Edition. Inc. USA
- World Bank. *World Bank Data by Indicators*. Available on <http://data.worldbank.org/indicator>. Accessed on August 30<sup>th</sup> 2013.
- Zafar, Mehwish. 2013. Determinants of Stock Market Performance in Pakistan. *Interdisciplinary journal of contemporary research in business*. Vol. 4, No.9 . Available online at <http://www.ijcrb.webs.com>. Pp 1017-1026.