CHAPTER II
LITERATURE REVIEW

A. Theoretical Framework

1. The Fed Rate

The fed rate is the US Bank of America's benchmark interest rate set by The Federal Open Market Committee (FOMC), the Fed which is the central bank in the United States responsible for monitoring and responding to overall economic development, and the stock market is part of the economy. According to Misgiyanti and Zuhroh (2009), the Fed is one of the central banks of institutions designed to oversee the banking system and regulate the amount of money circulating in the economy. Meanwhile, according to Mankiw (2002), the Fed finance agency responsible for regulating banks and regulating the money supply in the economy is the Federal Reserve (Fed of the US) which is often abbreviated as the Fed.

According to A.Mceachrn (2000), said that the Fed Rate is the interest rate set by the Fed on loans granted to banks. Theory of interest calculation of the central bank of the United States Taylor (1992) is as follows:

\[
FFR = r + I + 0,5 (I - I*) + 0,5y ........................................ (2.1)
\]

The Fed (Federal Reserve) oversees the stock market and may affect interest rates and economic activity for Indonesia. The Fed's policy considers US international transactions, dollar exchange fluctuations and
other economic developments, but on the other hand the Fed's activity will also affect the international economy as well as foreign exchange transactions conducted by the Federal Reserve will affect the dollar exchange rate which ultimately affects world finance (The Federal Reserve Publication). Until now, the influence of the United States economy greatly affects all countries (Sunariyah, 2006).

According to Mankiw (2004), the Fed is responsible for monitoring and responding to the development of the economy as a whole, and the stock market is part of the economy. As stock markets rise, households become richer, and this increase in wealth drives consumer spending. In addition, the rise in stock prices also makes the company more interested in selling new shares, and this encourages investment spending.

Currently almost all stock markets are included in the region, closely watching stock developments in the United States. What the Fed says will be highly followed by the market. The market will react quickly to the Fed's policy plans. While the Fed is watching the stock market, stock market participants also oversee the Fed, because the Fed can affect interest rates and economic activity, so the Fed can also affect the value of the stock (Misgiyanti and Zuhroh, 2009).

Wongswan (2005) states that the US monetary policy (The Fed Fund Rate) can affect stock prices in other countries through several channels as follows:
a. A rise in the Fed rate will lead to an increase in discount rate that affects dividend expectations that will lower the stock price level in the US. Because the Fed rate affects the global interest rate it does not rule out the Fed rate increase will also cause the rise in domestic interest rates which will ultimately lead to falling stock prices.

b. Fed rate changes can be used as a benchmark of economic activity that will be done by America. On the one hand rising Fed rate resulted in sluggish economic activity, but on the other hand high Fed rate is also a signal strengthening the American economy. This has the potential to affect global activities, making it possible to influence the capital market.

c. The change in Fed rate will affect the foreign exchange rate, while the exchange rate can affect the stock price through the discount rate or expected future cash flow component or through both. The magnitude of this effect depends on the ability of the exchange rate to adjust global interest rate changes.

d. Fed Rate changes affect global share prices through multiple adjustment portfolios in multiple interconnected markets such as global mutual funds, hedge funds and brokerage firms.

Based on interest rate parity theory and portfolio adjustment theory, the change of foreign interest rate will affect investment decision of investor. Higher foreign interest rates than domestic interest rates will lead to capital outflows as investors judge more profitable investing
abroad than investing domestically. Therefore, an increase in foreign interest rates coupled with a decrease in domestic interest rates will have a negative impact on domestic capital market conditions.

Based on the theory and some sources of previous research above, it was concluded that the fed rate is very influential on the movement of the world economy, including in both conventional and sharia-based capital markets. Until now, the influence of the United States economy greatly affects all countries (Sunariyah, 2006). What the Fed says will be highly followed by the market. The market will react quickly to the Fed's policy plans. While the Fed is watching stock markets, stock market participants also oversee the Fed, because the Fed can affect interest rates and economic activity, so the Fed can also affect the value of stocks (Misgiyanti and Zuhroh, 2009).

2. Gold Price

Gold is a solid, soft, shiny metal, and one of the most flexible metals among other metals. Compared to other metal types, gold has several advantages, such as the opinion of the weatherford jack "wherever people want to touch it, wear it, play with it and also have it, because unlike copper turned green, the iron is easily rusted and the silver is faded, pure gold remains pure and unchanging ". It is this natural nature that causes the value or price of gold to be very valuable (Dipraja, 2011).
Gold is a kind of precious metal known throughout the history of human life, not just for jewelry, gold is also widely used as an investment alternative. In addition, gold is also an indicator of the level of wealth of individuals and a nation (Anwar, 2009). Gold has long been used as an asset to protect the value of a wealth (Romadhan, 2010).

In 1996 before the crisis occurred in Indonesia gold price in the market only about Rp. 26,000/gram, until the middle of 1997 the price of gold around Rp.30,000/gram. Beginning in 1997 the price of gold jumped dramatically to Rp.75,000/gram, when the crisis came in early 1998, the price of gold rose to about 108,000/gram, in March 2008 and January 2009 gold reached the highest point up to $ 1,000/oz from the data it is clear that the price of gold has increased and decreased (Dipraja, 2011). When investment rises, gold prices also rise, the higher the rate of inflation the higher the increase in gold prices that have. Therefore, the rise in gold prices will lead to a decline in the stock price index because investors who invest in the stock market will divert their money to invest in gold that is relatively more secure than investing in the stock market.

In the previous research investments in gold are believed to be one of the most profitable commodities in addition to their increasing prices, gold is also a very liquid investment, as it can be accepted in any region or country. When the potential returns to invest in stocks or bonds are no longer attractive and deemed incapable of compensating for the existing risks, investors will divert their funds into real assets such as precious
metals or properties deemed more viable and secure. When compared with other investments in financial markets, gold holds only a very small portion.

Gold prices tend to be stable and rising making people think investing in gold has a lower risk with high enough returns. When gold prices rise, investors tend to sell gold for profit. Conversely, when gold prices fall then investors tend to buy gold as an investment tool. when the gold price rises then the investors tend to sell the gold commodity because it is more profitable and switched investment to Capital Market, so the rise in gold price can be one of the causes of investors move investment to Capital market after selling gold commodities, from the shift of the investors it will have an impact also on movement of JII index. but different from the research done by the previous reasearchers that gave the another assumption like The rise in gold prices will encourage investors to choose to invest in gold rather than in the capital market. Because with a relatively lower risk, gold can provide a fairly high return. When many investors shift their investment portfolios to gold investment instruments, this will result in a decrease in investment activity in the capital market by investors which will lead to a decrease in stock price index returns (Sunariyah, 2006). Twite (2002) and Lawrence (2013) prove empirically the effect of world gold price on the stock price index, the higher the world gold price the lower the stock price index return.
Supported by a study titled "The Price of Gold and Stock Price Indications For The United States" (Smith, 2001), his research results show that gold prices had a negative impact on the US stock market index in 1996.

Based on the theory and previous research above, it can be shown that the price of gold can be one of the indicators affecting the capital market. The movement of gold prices also affects the IHSG; in this case, the Jakarta Islamic index is part of the capital market, so the movement of gold prices can also affect the movement of the Jakarta Islamic index.

3. Inflation

Inflation is a general price increase, or a decrease in purchasing power by money. The higher increase in price increase produces the value of money down (Sukirno, 2006). Meanwhile, according to Nopirin (2000), inflation is an increase in the price of goods continuously. Increases that occur only once in a high percentage do not mean it's inflation. In addition, according to Rahardja (2008), inflation is the tendency of prices to increase in general and continue.

Inflation is also one of the macro variables that have a major impact on economic activity, both on the real sector and especially on the financial sector. Inflation is a general rise in prices of goods or services over a given period. The inflation rate is measured using a general price level change, usually the price level used by the consumer price index, the producer price index, or the implicit gross domestic product deflator.
(GDP deflator) which measures the average price all goods are weighted by the quantity of goods actually purchased (Karim, 2008).

Boediono (1982) various kinds of inflation in for some groups according to our goals. The first class in the top of the "severity" of inflation is here we distinguish some kind of inflation:

a. Mild inflation (below 10% a year)
b. Moderate inflation (between 10-30%)
c. Severe inflation (between 30-100%)
d. Hyperinflation (above 100% a year)

The second census is on the basis of the initial causes of Inflation. On this basis we differentiate into two kinds of inflation:

a. The inflation that arises from the demand of the people will share the goods too strong. Such inflation is called demand full inflation
b. Increases arising from increases in production costs. This is called cost push inflation.

The third classification is based on the origin of inflation here divided into:

a. Inflation originating from within the country
b. Inflation coming from abroad

One of the indicators that become important information in making investment decisions. Inflation can be interpreted as a general price increase that occurs continuously over most goods and services. The
increase in inflation will affect the rising prices of raw materials. When production costs rise due to inflation, this will be very detrimental to entrepreneurs and this causes investment activities to switch to activities that are less encouraging national products, such as the actions of speculators who want to seek profit for a moment. At a time when prices are uncertain (inflation) the owners of capital tend to invest their capital in the form of purchases of land, houses, buildings. Such diversion of investments will result in reduced productive investment and declining economic activity. Rising raw material prices will result in decreased productivity of the company and will eventually result in lower profitability of the company, which will have an impact on the decrease of dividends and prospects of the company.

The declined in the prospect of the company going public will have an effect on decreasing investor interest to invest and decreasing the price of composite stock index. In this case, Jakarta Islamic Index is one of the instruments recorded at the price of the composite stock index so that when inflation occurs then the Jakarta Islamic Index will also be affected inflation. This theory is supported also by Slifer and Carnes in Sriwardani (2009) theoretically there is a negative relationship between inflation and stock price performance. Inflation is considered to reduce the real value of the company including dividends, so that when an increase in inflation rate will lead to weakening stock prices, otherwise if the inflation rate declines then the stock price will strengthen. Inflation
rate is the percentage of annual increase in the general price level measured by the consumer stock price index. With the inflation, the price of goods has increased so that people's purchasing power will decrease. This will lower investor interest to invest and there will be a decline in the stock price of the company. Consequently, it will cause the composite stock price index to decline (Adyuta, 2011). When the IHSG decreases the index incorporated in the IHSG will decrease as well. In this case the JII index is one of the indexes in the IHSG.

4. Money Supply

a. Money

Money is the inventory of goods used to make the payment of goods and services. Money, or the money supply, is most commonly defined to cover all coins and coins circulating outside the financial institutions and coffers of the government, together with accounts that can be examined at the depository institutions including commercial banks, savings and credit associations, joint savings banks, and credit unions owned by individuals and companies (Thomas 1997).

1) Theory of Money Demand

a) Classic

(1) The Irving Fisher(1936)

Theory Quantity Theory of Money

\[ M \cdot V = P \cdot T \]
The value of the goods or services purchased should be equal to the value of the goods sold.

\[ M = \text{(Money)} \] Money in the community.

\[ V = \text{(Velocity of Circulation)} \] The velocity of money.

\[ P = \text{(Price)} \] Average price.

\[ T = \text{(Transaction)} \] Transaction Volume.

Next comes the equilibrium of the monetary sector, with the equation:

\[ \text{Md} = \text{Ms} \]

\[ \text{Md} = \text{Money of Demands (Money Demand)} \]

\[ \text{Ms} = \text{Money of Supply (Money Offers)} \]

\[ \text{Md} = \frac{1}{V \cdot PT} \]

\[ \text{Ms} = \frac{1}{V \cdot PT} \]

Fisher's theory requires always in the position of Full Employment (Say Law). Fisher says: that the demand for money arises from the use of money in the transaction process.

(2) Cambridge Theory (Alfred Marshall and A. C Pigou)

Money is held by someone because it greatly facilitates transactions and other economic activities (convenience factor) On the other hand, holding money means sacrificing the possibility of earning income in
the form of interest or capital gains if he holds wealth in the form of securities or goods.

The demand for money is not only influenced by the volume of transactions and institutional factors (Fisher's Theory), but also influenced by interest rates, residents' wealth and community expectations about the future. Furthermore, Cambridge's theory considers that ceteris paribus the demand for money is proportional to the level of national income.

\[ Md = k P. Y \]

Where:

- \( Md \) = Money of Demands
- \( Y \) = Real National Income
- \( P \) = Price Level
- \( K \) = Proportion
- \( Ms = Md \)
- \( Ms = k P. \)

\[ YP = 1 / k Ms. Y \]

If interest rates rise, the tendency of citizens reduces the money they want to hold, even though the volume of transactions they plan to keep is. (Effect of expectations)
(3) The Keynesian Money Demand Theory (John MajorKeynes)

His book The General Theory and A Track on Monetary Reform 1923, His theory was named Liquidity Preference Motive holds money according to Keynes:

(a) Transaction Motives

(b) Watchful Motives

(c) Speculation Motive

The total demand for money from Keynesian theory:

\[ \frac{M_d}{P} = [k \cdot Y + (R \cdot W)] \]

Where:

\[ \frac{M_d}{P} = \text{Total Money Request} \]

\[ k \cdot Y = \text{Request money for transactions and just in case} \]

\[ (R \cdot W) = \text{Demand money for speculation} \]

\[ R = \text{(Interest) Interest rate applicable} \]

\[ W = \text{(Wealth) Wealth is in the community} \]
b. Money Supply

Thomas (1997), Some experts classify money into two categories:

1) Narrow Money (M1)

   In a simple explanation money in narrow money is all currency and demand deposits in the hands of the public. While the government currency in deposits in commercial banks and central banks does not include M1. While checking accounts is a checkable deposit in the community including M1. Demand deposits represent M1 because the money can be used anytime.

   In the narrow sense money is all the currency and demand deposits available for use by the public.

   a) Currency is cash in the form of banknotes or metals issued by the Central Bank (government) and those outside the commercial banks and the Central Bank.

   b) Demand deposits are the entire amount of the current account balances (giro) held by the public in commercial banks. The balance of a bank account (giro) belonging to a bank to another bank is not a demand deposit. Money supply in this narrow sense is often referred to as M1. Can also be formulated:

   \[ Ms = K + D \]

   (where K is currency, D is demand deposit or demand deposit)
2) Broad Money (M2)

In a broad sense M2 represents the combined money of M2 which includes savings, small deposits, and money market funds. In the monetary system money in the broadest sense is often called economic liquidity (Thomas, 1997).

In a broad sense (M2) is the entire currency of currency + quish money + quasi money or quasi or near money. M2 is often referred to as the liquidity of the economy. When formulated:

\[ \text{Ms} = K + D + T \]

(T is the balance of deposits and savings) Quotes can be in the form of time deposits, savings deposits, and foreign-owned domestic currency accounts. The amount of coins and banknotes is determined by government policy with respect to:

a) Credit to companies (government and private)

b) The amount of goods and services produced

c) Price level

d) Inflation

For deposits, savings and foreign currencies are influenced by the government through the interest rate. Money circulating equals Supply money equal to economic liquidity, is a concept of stock, meaning it represents the position of a single point in time, for example one year, quarter, or month. Examples are national income, national product, or company such as income
statement. The development of money supply and economic liquidity from year to year can be seen in the Financial Statements published by Bank Indonesia or by BPS.

According to Samsul (2006), if the money supply is increased, the interest rate will increase and the Composite Stock Price Index will decrease, whereas if the money supply decreases, the interest rate will decrease and the Composite Stock Price Index will increase. When the Composite Stock Price decreases the index incorporated in the Composite Stock Price will decrease as well. In this case the JII index is one of the indexes in the IHSG.

5. Jakarta Islamic Index

Jakarta Islamic Index (JI) is the stock exchange index or stock average price index to facilitate the trading of public companies that are run according to sharia principles. The Jakarta Islamic Index (JI) stock index is one of the indexes in Indonesia Stock Exchange (IDX). On July 3, 2000, PT Bursa Efek Indonesia in cooperation with PT Danareksa Investment Management (DIM) established a syariah-based stock index, the Jakarta Islamic Index (JI) stock price index. This index is a benchmark for the performance of sharia-based stocks and to develop syariah capital markets. In the Jakarta Islamic Index (JI) there are 30 shares selected in accordance with the conditions that have been determined. Jakarta Islamic Index (JI) itself is a stock group that meets the criteria of Islamic sharia investment in Indonesia capital market. The
purpose of the establishment of JII is to guide investors in investing shares by keeping in mind the sharia regulations. In addition, JII became a benchmark of performance (benchmark) in choosing a stock portfolio.

In the election of shares that meet the qualification to enter the JII index must meet the criteria of sharia. The sharia criteria are as follows:

a. Issuers do not operate gambling and gambling or gambling businesses.

b. Not conventional financial institutions that apply the usury system, including conventional banking and insurance.

c. The business undertaken is not producing, distributing and trading illegal food or beverages.

d. Not run a business of producing, distributing, and providing goods or services that are morally destructive and harmful.

e. Does not exceed the following financial ratios:

1) Total interest-based debt compared to total equity of not more than 82% (interest-based debt compared to total equity of not more than 45%; 55%)

2) Total interest income and other unlawful income compared to total revenue (revenue) is not more than 10%

Sharia shares which become JII constituents consist of 30 shares which are the most liquid stocks of sharia and have large market capitalization. The selection procedure is as follows (Jogiyanto, 2008).
a. Shares selected should have been recorded for at least the last 3 months.

b. Has a debt to assets ratio of not more than 90% in the annual or mid-year financial statements.

c. From the entry criteria of the number 1 and 2, selected 60 shares with the largest average order of market capitalization during the past year.

d. Then selected 30 shares with the order of the level of liquidity averaging the value of tension for the past year.

IDX conducts a JII review every 6 months, adjusted for the period of DES issuance by Bapepam & LK. After the selection of Sharia shares by Bapepam & LK as set forth in DES, BEI conducts an advanced selection process based on its trading performance.

By Rusbariand, Masodah, Riskayanto and Septi Herawati, (2012). Companies that are included in the JII index will continue to be monitored by the relevant authorities. The review will be conducted once every semester. While changes in the main types of issuers of the issuer will be monitored continuously based on available public data. Where a company that changes the type of business with inconsistencies in sharia principles will be excluded from the JII index and replaced by other issuers that meet the criteria.
B. Previous Research

In this literature review the researcher will put forward previously conducted studies unearthed from various literatures. Where the research has a link or bond with research that will be done at this time.

Yuwono and Nugroho (2011), conducted a study entitled "The Impact of Macro Economic Dynamic Fluctuations, IHSG, and Sibor against the Jakarta Islamic Index". The method used in this study is Vector Autoregression (VAR) using data 2003 to 2010. In this study, researchers tried to show the movement of JII index before and after the monetary crisis that occurred in 2008. The results of this study was in 2003 -2007 development of JII and IHSG has increased, after that the period of 2008 has decreased due to the financial crisis in the world economy. While in the period 2009-2010 JII index and IHSG experienced post-crisis recovery by showing improvement results on index JII and IHSG.

Based on research Rusbariand, et al (2012) entitled "Influence Analysis Inflation Rate, World Oil Price, World Gold Price, and Rupiah Exchange Rate of Movement Jakarta Islamic Index in Indonesia Stock Exchange" analyze about macro economic variables affecting movement jakarta islamic index, invariable which is in use in this research is world gold price, world oil price, inflation rate, and rupiah exchange rate. While dependent variable in this research is jakarta islamic index. This study uses secondary data in the form of monthly data from the period januari 2005-March 2012, The method in use in this research is multiple regression and produce output that the price of gold has no significant
effect on jakarta islamic index. While inflation has a significant negative effect on jakarta islamic index.

In addition, Antonio, Hafidhoh and Fauzi (2013) conducted a study on the comparisons of sharia stocks with sharia stock Malaysia, this study entitled "Sharia Capital Market Volatility and Economic Indicators: Comparative Study of Malaysia and Indonesia." global and domestic macroeconomic factors that affect the volatility of the Indonesian Sharia share price represented by the Jakarta Islamic Index (JII) and the Malaysian sharia share price represented by the FTSE Bursa Malaysia Hijrah Shariah Index (FHSI). The study used monthly data from January 2006 to December 2010 and resulted in the conclusions of the fed rate having a significant negative effect on JII, while inflation positively signifies positive against JII.

Nofiatin (2013), conducted a study entitled "Inflation Relations, Interest Rates, Gross Domestic Product, Exchange Rate, Money Supply and Stock Price Index (IHSG) for 2005-2011" in this study using macroeconomic variables and IHSG in BEI with data in use in the form of time series data year 2005-2011. The analytical technique used is the Vector Autoregression (VAR) method. The results of this analysis show that there is a cointegration relationship between inflation, interest rate, exchange rate, and IHSG, but there is no similarity of movement between GDP, the money supply, and the IHSG. In addition, there is no two-way causality relationship between macroeconomic variables and IHSG. The results of this study show there is some one way causality relationship between macroeconomic variables and IHSG in the research period.
Then, Riadi, Nimran and Musadieq (2013) conducted a study on "Influence of Inflation Rate, Interest Rate of Bank Indonesia Certificate, and Nnilai Rupiah Exchange Against Jakarta Islamic Index (JII) And Index LQ-45 (Study On Indonesia Stock Exchange Period January 2008 - December 2012) ". This study aims to analyze: the influence of inflation rate, SBI interest rate, and rupiah exchange rate against Jakarta Islamic Index (JII) simultaneously, inflation rate influence on Jakarta Islamic Index (JII), Influence of SBI interest rate to Jakarta Islamic Index JIII), The effect of rupiah exchange rate on Jakarta Islamic Index (JII), Influence of inflation rate, SBI interest rate, and rupiah exchange rate on LQ45 Index simultaneously, inflation rate influence on LQ45 Index, SBI interest rate influence on LQ45 Index, rupiah exchange rate influence on LQ45 Index. This research is explanatory quantitative research. Data used as sample are monthly data of Jakarta Islamic Index (JII), LQ45 Index, Inflation rate, SBI interest rate, and rupiah exchange rate, during period of January 2008-December 2012. Data analysis method using multiple linear regression analysis. The result of data analysis shows that inflation rate, SBI interest rate, and rupiah exchange rate have significant effect to Jakarta Islamic Index (JII) simultaneously, but inflation rate has no significant effect on Jakarta Islamic Index, SBI interest rate significantly influence to Jakarta Islamic Index , the rupiah exchange rate significantly influences the Jakarta Islamic Index, the inflation rate, the SBI interest rate, and the rupiah exchange rate significantly influence the LQ45 Index simultaneously, the inflation rate has no significant effect on the LQ45 Index, the
SBI interest rate significantly affects the LQ45 Index, the rupiah exchange rate has a significant effect on the LQ45 Index.

Continue with research done by Maqdiyah, Rahayu, Topowijono (2014). This research entitled "The Influence of Deposit Rate, Inflation Rate, Gross Domestic Product (GDP), and Rupiah Exchange Rate of Stock Price Index Jakarta Islamic Index (JII), this research uses monthly time series data from 2009-2013 period and using multiple regression method. Independent variables used in this research are deposit interest rate, inflation rate, domestic product demand (GDP), rupiah exchange rate. While the dependent variable that is used in this research is jakarta islamic index. This study resulted in the analysis that inflation has no significant effect on jakarta Islam index.

In the same year Mulyani (2014) conducted a study entitled "Influence Analysis of Inflation, Interest Rates, Rupiah Exchange Rate, and Gross Domestic Product Against Jakarta Islamic Index". This study uses monthly data of time series with the period 2009-2011, The method used in this study is multiple linear regression. The independent variables used in this research are inflation, interest rate, rupiah exchange rate, and gross domestic product, while the dependent variable in use is jakarta islamic index. The result of this research shows that inflation rate have a positive and significant effect to jakarta islamic index. This reinforces and supports research conducted by Muhammad Syafii Antonio, Hafidhoh and Hilman Fauzi who proved through his research that the inflation variable has a significant positive effect on JII.
Beik and Fatmawati (2014), conducted a study on "The Influence of Sharia International Stock Index and Macro Economy Variable Against Jakarta Islamic Index". This study aims to examine the influence of international sharia stock price index and macroeconomic variables on Jakarta Islamic Index (JII). This study uses the Vector Error Correction Model (VECM) method, with monthly time data from January 2007 to October 2012. The study results show that JII is positively and significantly influenced by DJIEU, DJIMY and IPI, and influenced negatively and significantly by DJIJP, IMUS, M2 and SBIS. JII most quickly achieve stability when responding to shocks to the amount of money in circulation (M2). This study recommends strengthening the coordination of monetary authority with the financial services authority, strengthening the real sector, strengthening efforts to minimize the influence of interest on sharia financial market, and the need to build an early warning system to anticipate the financial crisis.

Based on research conducted by Primary, Hidayat and Firdausi N (2015) entitled "The Relationship Between Macroeconomic Variable (Inflation, BI Rate and Rupiah to US Dollar Currency) on Jakarta Composite Index Price (Period January 1, 2009- 31 December 2013)"; The purpose of this study is to analyze the influence of Interest Rates, Inflation, Rupiah Exchange Rate to Composite Stock Price Index by using multiple linear regression analysis. In addition, to assess the feasibility of the model, we use the test coefficient of determination, F test and t test. The data for this study is the monthly data from January 2009 - December 2013 for each variable. The results of this study indicate that the interest rate of Bank Indonesia, and the level of the rupiah has negatively influenced the IHSG.
While the inflation variable, has a positive effect on IHSG. For the F test, all independent variables have an influence on the Composite Stock Price Index.

Murtini, Hidayah and Barotuttaqiyyah (2015), conducted research with some of the same and more developed variable. The research is entitled "The Influence of Circulating Money (M2), Exchange Rate, Inflation and SBIS Rewards Rates Against Sharia Beta Shares (Jakarta Islamic Index) and Composite Stock Price Index (IHSG)". In this study the authors use monthly data time series period 2009-2013 and Natural Quantitative. Analyzer used in this research is path analysis, where result of analysis is done after model filling condition test of normality, outlier data, multiocolinieritas and singularitas. This study uses path method analysis, using goodness fit test that is every single variable using 1% level of significance. The results showed that money supply (M2), exchange rate and inflation have significant effect on SBIS return rate. Money supply (M2) and SBIS returns have no significant effect on the Islamic Sharia Stock Index (JII). Inflation variable and SBIS rate of return have a significant influence on Jakarta composite index, while the variable stock syariah beta has no significant effect on Jakarta composite index.

Continue with the research by Hasanah and Panjawa (2016) which in his research do comparison JII movement before monetary crisis that happened in year 2008 and after monetary crisis of year 2008. This research entitled "The Effectiveness of Monetary Policy Toward Stock Index Case Study: Jakarta Islamic Index 2006-2014 ". This research uses monthly data of time series with period 2006-2014. The methodology used is multiple linear regression with chow
test method and dummy variable to compare and know the behavior of each independent variable. Before the global monetary crisis in Indonesia in 2008, inflation and money supply did not have a significant impact on the Jakarta Islamic Index. However, after the global monetary crisis in Indonesia in 2008, in part, the money supply variable had a significant positive influence on the Jakarta Islamic Index, while at the same time inflation did not significantly affect JII. The results of this study simultaneously variable inflation, money supply, exchange rate, and birate affect the Jakarta Islamic Index.

In contrast to research conducted by Rusbariand, dkk, which resulted in gold price research has no significant effect on JII. Basuki, Karima (2017). Conducting Research entitled "The Analysis of Macroeconomics Variables, Regional Stock Index, and Gold Price Impact on the Jakarta Islamic Index: An approach of Vector Error Correlation Model (VECM)" in this study discusses and analyzes the effect of macroeconomic variables, oil prices and also FTSE Malaysia sharia stocks to Jakarta Islamic Index using monthly time series data with period of time October 2012 until March 2016. In this research yield conclusion that gold price negatively influences Jakarta Islamic index, this happened because gold can become alternative for the investor to invest when the economy is unstable.

In the same year, the investigation concerning Islamic capital market especially JII index was carried out by Pranata and Nurjanah (2016) who examined "Conventional and Islamic Indices in Indonesia: A Comparison on Performance, Volatility, and The Determinants" this is to evaluate the performance and volatility of Islamic and conventional stock indices along with
variable determinants in Indonesia. The present study adopted the Capi-Talet Asset Pricing Model (CAPM) to compare the performance of the Jakarta Islamic Index (JII) representing the Islamic index and LQ45 to represent conventional beta calculations in addition to measuring volatility, an Autoregressive Distributed Lag (ARDL) to capture the determinants and the reason behind his outperformance. In this study used data from January 2006 to November 2015. This study finds and produces the assumption that: First there is no significant difference in performance between JII and LQ45, the second JII is less volatile than LQ45, except in 2010, and the third performance of JII is less affected by external factors for crude oil prices. In addition, the results imply challenges for the authorities to educate the public, particularly those concerning sharia principles, with information that the Islamic index of its performance is not much different from its conventional and slightly fluctuating index.

Wijayaningsih, Rahayu and Saifi (2016), conducted research on "The Influence of BI Rate, The Fed Rate, and Rupiah Exchange Rate Composite Stock Price Index (IHSG) Study on Indonesia Stock Exchange Period 2008-2015", This study aims to test the influence of BI Rate, FED Rate, and Rupiah Rate simultaneously, partially, and the dominant variable influence on Composite Stock Price Index by using multiple linear analysis. The data used are monthly data from January 2008 to December 2015 with sample number 96 time series data for each independent and bound variable. Simultaneously, the analysis shows BI Rate, FED Rate, and Rupiah Exchange significantly influence Composite Stock Price Index. Partially, the first analysis shows the BI Rate shows a negative
influence on the Composite Stock Price Index, secondly, the FED Rate does not affect the Composite Stock Price Index, thirdly, the Rupiah exchange rate shows a negative influence on the Composite Stock Price Index (IHSG). The dominant variable of the Composite Stock Price Index is the Rupiah exchange rate variable. The findings in this study identify the diversity of information on changes in FED Rate so that investors tend to be confident in self-assessment to decide on stock investing.

Further research was undertaken by Pranata and Nurzanah (2016) under the title "Conventional and Islamic Indices in Indonesia: A Comparison of Performance, Volatility, and The Determinants" study. The independent data used by researchers for short runs include USD, Oil Price, BI Rate, The Fed Rate, Net Foreign, CPI, Production Index, and M2. From the results of the short-term regression in this study shows that the Fed rate has a positive coefficient value, meaning the fed rate has a positive effect on the movement of JII, While for the variable M2 coefficient value is negative, meaning that in this study money supply negatively impact the movement JII.

Ardana (2016), in his research entitled "Analysis of the Influence of Macroeconomic Variables on Indonesian Sharia Stock Index (May 2011 - September 2015 period with ECM model) suggests the results of his research where the final result is to measure the effect of macroeconomic independent variable on the dependent variable stock index sharia both in the long run and also short term. The conclusion of his research is that there is no short-term relationship between the variable of BI interest rate and Sharia Stock Index of
Indonesia, and corrected in the long-term relationship so that the relation between BI rate and Sharia Saham Shares variable is a significant negative. Then there is the short-run relationship between exchange rate variable and Sharia Stock Index of Indonesia but corrected in the long-term relationship so that the relationship between exchange rate variable and Indonesian Sharia Sharia Index is a significant negative. There is no short-term and long-term relationship between the inflation variable and the Indonesian Sharia Stock Index. Furthermore, there is a short-run and long-term relationship between SBIS variable and Indonesian Sharia Stock Index. Finally, there is no short-term relationship between the world oil price variable and the Sharia Indonesia Stock Index but corrected in a long-term relationship so that the relationship between the world oil price variable and Indes Sharia Indonesia Shares is a significant positive.

Continued by Melmambessy's research, Kindangen and R.Tumiwa (2017), in his research entitled "Analysis of the Influence of Macroeconomic Variables on Stock Prices in Indonesia Stock Exchange from Sector 2 Period 2006-2016). This study aims to analyze the relationship between macroeconomic variables and stock market prices of sector 2 in Indonesia Stock Exchange. This study was conducted to determine the simultaneous and partial effects between stock market prices and macroeconomic variables such as world oil prices, interest rates, gross domestic product, sectoral stock prices and money supply. Secondary data is the source for this study and uses quarterly data from January 2006 to December 2016. The results show that independent variables simultaneously affect stock
market prices. And partially, the results confirm that the money supply and sectoral stock prices. Greatly affect the stock market price.

In research by Wicaksono and Yasa (2017), Conducted research on "The Influence of the Fed Rate, Dow Jones Index, Nikkei 225, Hang Seng Against Composite Stock Price Index" This study aims to examine the influence of United States Central Bank Interest Rate, Dow Jones Index, Nikkei 225 and Hang Seng Against Composite Stock Price Index. The population studied was the Fed Rate and the price index of all stocks recorded in the 2010-2015 period. The sample selection technique used is the Saturated Sampling method. The number of samples is 72 samples for each variable. Data analysis techniques used in this study is multiple linear regression analysis. The analysis results in this study indicate The Fed Rate does not affect the Composite Stock Price Index. The Dow Jones Index positively affected the Composite Stock Price Index, Nikkei 225 did not positively affect the Composite Stock Price Index and Hang Seng had a positive effect on the Composite Stock Price Index.
C. Research Framework

Based on the theory and previous research that has been described above, the authors will create a framework that connects the link between independent variables of the fed rate, gold price, inflation, and money supply on Jakarta Islamic index:

1. The effect of The fed rate toward JII

The fed rate is very influential on the movement of the world economy including in both conventional and sharia-based capital markets, Jakarta Islamic index including one of the Sharia index. Until now, the influence of the United States economy greatly affects all countries (Sunariyah, 2006). What the Fed says will be highly followed by the market. The market will react quickly to the Fed's policy plans. While the Fed is watching the stock market, stock market participants also oversee the Fed, because the Fed can affect interest rates and economic activity, so the Fed can also affect the value of stocks (Misgiyanti and Idah Zuhroh, 2009).

The Fed is responsible for monitoring and responding to the development of the economy as a whole, and the stock market is part of the economy as well as the Jakarta Islamic index which is one of the instruments in the stock market. As stock markets rise, households become richer, and this increase in wealth drives consumer spending. In addition, rising stock prices also make the company more interested in
selling new shares, and this encourages investment spending. Mankiw (2004).

2. The effect of Gold Price toward JII

Gold prices tend to be stable and rising making people think investing in gold has a lower risk with high enough returns. When gold prices rise, investors tend to sell gold for profit. Conversely, when gold prices fall then investors tend to buy gold as an investment tool. When the gold price rises then the investors tend to sell the gold commodity because it is more profitable and switched investment to Capital Market, so the rise in gold price can be one of the causes of investors move investment to Capital market after selling gold commodities, from the shift of the investors it will have an impact also on movement of JII index. but different from the research done by the previous reasearchers that give assumption The rises in gold prices will encourage investors to choose to invest in gold rather than in the capital market. Because with a relatively lower risk, gold can provide a fairly high returns. When many investors shift their investment portfolio to gold investment instruments, this will result in a decrease in investment activity in the capital market by investors which will lead to a decrease in stock price index returns (Sunariyah, 2006). By Twite (2002) and Lawrence (2013) proves empirically the effect of world gold price on the stock price index, the higher the world gold price the lower the stock price index return.
Based on the theory and previous research above shows that the price of gold can be one of the indicators that affect the capital market. The movement of gold prices also affects the IHS, in this case, Jakarta Islamic index is part of the capital market so that the movement of gold prices can also affect the movement of Jakarta Islamic index.

3. The effect of inflation toward JII

Inflation is one of the indicators that become important information in making investment decisions. When inflation occurs when the price will generally increase. Rising raw material prices will result in decreased productivity of the company and will eventually result in lower profitability of the company, which will have an impact on the decrease in dividends and prospects of the company.

The decrease in the prospect of the company going public will have an effect on decreasing investor interest in investing and decreasing the price of the composite stock index. In this case, Jakarta Islamic index is one of the instruments recorded on the price of the composite stock index so that when inflation occurs then the Jakarta Islamic Index will also be affected inflation. This theory is also supported by Slifer and Carnes in Sriwardani (2009) theoretically there is a negative relationship between inflation and stock price performance And research by Maqdiyah (2014) which suggests that inflation has no significant effect on JII.
4. The effect of money supply toward JII

Money supply (M2) is used to block the money supply including foreign currency deposits. So M2 is a lot of money supply in this country. The increase in the money supply increases the liquidity in the economy so as to generate money for consumption and investment.

In this research use money circulating in a broad sense (M2) commonly called Broad Money (M2) that is M1 plus with time deposit and saving belongs to society at the bank.

\[ M2 = M1 + TD + SD \]

Where:

TD = Time deposits (time deposits)

SD = Savings Deposits (Savings Account). Source: Fitriawati (2009)

Based on research conducted by Murtini, Hidayah and Barotuttaqiyah (2015) Improvement the money supply usually lower the interest rate, so it will cause increased investment and put more money in the hands of the consumer, thus stimulating the investment expenditure. Murtini, Hidayah and Barotuttaqiyah (2015) with his research entitled "The Influence of Circulating Money (M2), Exchange Rate, Inflation and SBIS Return Rate on Sharia Beta Stocks (Jakarta Islamic Index) and Composite Stock Price Index (IHSG)" proves empirical test with Maximum Likelihood estimates, it is found that Sharia (beta) stock performance is influenced by amount of money in circulation (M2) with standarized coefficient value equal to -0.069 with significance level 0.158 at significance level at (\( \alpha = 0.01 \)). This
means that the money supply also affects the movement of the Jakarta Islamic Index.

5. Framework Figure

The following is a set of conceptual developers who will do for further research:

![Figure 2.1 Research Framework](image)

6. Hypothesis

Based on theoretical framework, previous research, and research framework above, the writer put forward some hypothesis:

H1: The Fed rate has a significant negative effect on JII
H2: Gold price has a significant positive influence on JII
H3: Inflation has a significant negative effect on JII
H4: Money supply has a significant positive effect on JII.