CHAPTER II

LITERATURE REVIEW

A. Theories

1. Investment.

a. The Definition of Investment.

The definition of investment based on Mankiw N (2010) states that investment is a spending on a new capital; it can be goods, building, land etc. Investing can also be described as employing the fund of the owners to be invested and enhance the investor wealth. The wealth which is invested can be the assets-owned, assets-borrowed, or savings (Levisauskaite 2010).

b. The Types of Investment.

The types of investments are classified based on the type of risks that the investors are facing. The types of investments are divided into two types of investment, namely

1) Direct Investment.

The investors participate in financial market and manage the risk themselves.

2) Indirect Investment.

The investors participate in financial intermediaries. The risk is alleviated by participating in the financial intermediaries.

c. Real Investment and Financial Investment.

It is important to distinguish the real investment and the financial investment. Real investment typically employs the tangible assets, such as building land or machinery. However, financial investment deals with contract such as, stock, bonds or T-bill.

d. Types of Investors.

The types of investors can be divided into two ways, the first one is by a number of investors, and the second is by the risks that the investors are facing. The first type can be classified, as follow;

1) Individual Investors.

The investor owns their assets and invested by their own. The investors can either participate by direct or indirect investment.

2) Institutional Investors.

The investor is an entity such as banks, insurance companies, real estate companies and many others. Usually the institutional investors have larger fund than the individual investors.

Another type of investors can be classified by the type of risk that they are facing. There are three types of investors to be mentioned below:

1) **Risk Seeker.**

   This type of investors prefer to highest return of investment. Their behavior tends to be aggressive and speculative.

2) **Risk Neutrality.**

   The next type of investors demand the same return for every increasing risk they get. Their behavior tends to be prudent and flexible

3) **Risk Averse.**

   The last type is in contrary with the seeker investors. They tend to choose the lowest return of investment. This type of investor chooses the safest way on getting return without sacrificing too many assets.

   According to (Huda and Nasution 2007) the type of investor can be explained by using curve.

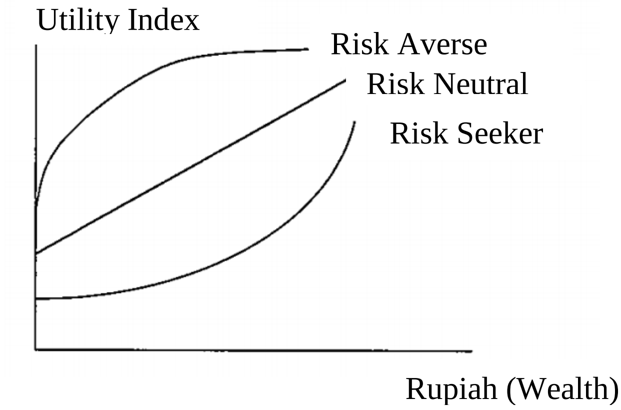


FIGURE 2.1

The Investor Utility Index

The risk averse investor has an arc utility with the decreasing income. The risk neutral investor has straight line curve. As for the risk seeker investor has an arc curve with the increasing income.

e. Investment Process.

The process of doing investment is a cycle. It goes continuously. Referring to Tandelilin (2010) the investment process can be divided into five processes:

1) The investment objectives
2) The investment regulation
3) The portfolio strategy
4) The asset and portfolio formulation
5) The estimation and evaluation of portfolio investment

2. **Islamic Investment.**

Islam is a religion that supports the knowledge to cope with the advancement. The investment concept is a knowledge that also has Sharia norms. It can be described from Surah Al-Hasyr verse 18

يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللَّهَ وَلْتَنْظُرْ نَفْسٌ مَا قَدَّمَتْ لِغَدٍ وَاتَّقُوا اللَّهَ إِنَّ اللَّهَ خَبِيرٌ بِمَا تَعْمَلُونَ (١٨)

Translation:

O you who have believed, fear Allah. And let every soul look to what it has put forth for tomorrow-and fear Allah. Indeed Allah is Acquainted with what you do.

The word of *"waltanzhur nafsun maa qaddamat lighadin"* can be translated as count and check yourself out before being checked, and look at what you have saved (invest) from the god deed (after here investment) as a provision in front of Allah". It is a command from Allah SWT to believe and doing investment as a provision by doing the good deeds for facing Judgement day (Huda and Nasution 2007).

According to Chin, et al. (2008) explains that Sharia-compliant investments refer to a group of investment using the Islamic teaching on the practice. In order to maintain the consistency for the ICM, the Accounting and Auditing

Organization for Islamic Financial Institution (AAOIFI) was established.

a. Islamic Investment Principle.

The classification of Islamic investment principle from (Ismail 2012) can be seen below:

1) The prohibition of *Riba'*, *Gharar* and *Maisir*. *Riba*' is interest, *Gharar* is uncertainty and *Maisir* is gambling.
2) The objectives of investment aim for both success in the world and hereafter.
3) The investment should be chosen from *Halal* activities and products.
4) The investor final decision is not only about the return but also the affect for the society and environment.

b. Islamic Investment Product.

There are a number of products which are offered in Islamic investment. In Islamic investment, the investor shouldn't be worry on getting the profit. There is a higher aim which is achieving *falah* (victory) in hereafter life. On the table below are the different instruments comparison in the conventional investment and the Islamic investment.

TABLE 2.1

The Instrument of Conventional and Islamic Investment

Instrument of Conventional Investment	Instrument of Islamic Investment
Saving Accounts	Mudharaba Saving Account
Stocks	Sharia-Compliant Stock
Mutual Funds	Sharia-Compliant Mutual Fund
Bonds	Sukuk Bond
Options	N/A
Futures	N/A

Source: (Shah 2015)

3. **Capital Market.**

Capital market is a market for the long-term financial instruments namely; bonds and equities which are issued by the government or privates companies being traded. The long-term financial is characterized by period longer than a year.

According to report from Canada (2008) bond refers to one type of investment which entitles a loan from the issuer to the creditor. It shows the financial status of the money from the issuer to the creditor. In addition, equity refers to one type of investment which entitles securities in the basis of assets. It shows the ownership on a certain company’s stock.

a. Function of Capital Market.

The function of Capital Market based from Goldsmith (1965) has two explanations. Firstly, it refers to the allocation from the saving from the users within that market or as the supply of financing in certain period of time. Secondly, it refers as the media for transferring the assets; either tangible or intangible among the parties within the market.

b. Types of Capital Market.

Capital market is divided into two types; it might be primary market or secondary market Vihar (2007). The classifications are as follow:

1) Primary Market.

Primary market offers the initial stocks for the first time. The issuer of stocks can be either a new firm or an existing firm.

2) Secondary Market.

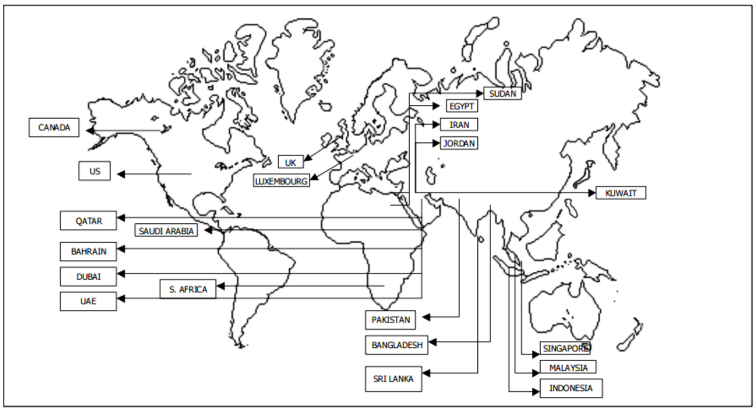
Product such as an outstanding security is traded in secondary market. It also known as stock market dominantly acts in equity shares.

4. Islamic Capital Market

Alike with the Conventional Capital Market, the Islamic Capital Market (ICM) is a capital market comprises; the bond market and the equity market. The different is that it represents the

Islamic teaching and law within the activity. It leads to the offer that is slightly different offered to the investor. The ICM offers the Islamic bond securities, and the Islamic equity securities (Finance 2012).

The flourishing demand and awareness for the Sharia-compliant products result in the rapid growing of ICM among the countries. The growing development of capital market can also be seen from a number of Market Indices with the Sharia compliant basis.



Source: OICU-IOSCO Report

FIGURE 2.2

List of Countries Offering Islamic Capital Market

In Islamic literature, there is no explanation or terms related to the activity in Capital Market. However, it can be concluded that this activity is categorized as trading. In Islam, trading activity is allowed, while the interest activity has been forbidden. As Allah said in the Quran on Al Baqarah, verse 275:

...... وَأَحَلَّ اللَّهُ الْبَيْعَ وَحَرَّمَ الرِّبَا (٢٧٥)

Translation:

But Allah has permitted trade and has forbidden interest

a. Function of Islamic Capital Market

There are six functions of Islamic Capital Market that can be explained as follow (Sudarsono 2007):

1) Allowing the society to participate in business and get return from the risk they already put.
2) Allowing the shares owner to sell his shares and get liquidity.
3) Allowing the company to pool the capital to build production.
4) Separating business activity from short-term fluctuation.
5) Allowing the investment becomes one of the principles in economic activity.
6) Increasing Muslim economic activities in order to increase their welfare.

5. Risk and Return.

In the conventional capital market, the framework to forecast the expected return from the risk of investment can be calculated using the Capital Asset Pricing Model (CAPM). The calculation was formulated by several scholars, namely William Sharpe, Jack Treynor, John Lintner, and Jan Mossin back in the early of 1960. This calculation is very useful for the investor in order to know the relation on risk and return that not every risk has significant relation with the return (Perold 2004). The calculation of CAPM can be written as follow;

$$E_{s} = r_f + \beta\,(E_m - r_f)$$

Where:

r_f = return on risk with the free rate

β = systematical risk

E_m= market return

Based on Sadaf and Andleeb (2004) CAPM with the return risk free rate is inconsistent with the Islamic teaching. In the Quran, it is written in Al Baqara, Verses 278-279 that concludes the prohibition of interest. Several scholars then replaced the return on risk with free rate with other factors, such as; *Zakah* (alm), or nominal GDP. So, the equation can be written as;

$$E_{s} = Z + \beta\,(E_m - Z) \text{ or } E_{s} = NGDP_g + \beta\,(E_m - NGDP_g)$$

6. Stock Market Index.

a. Definition and Calculation of Stock Market Index.

A stock market mostly has stock price measuring trade performance. In Indonesia, the stock exchange has the price index commonly known as Jakarta Composite Index (IHSG) (Mulyono 2013).

On the calculation method, global majority index mostly uses the Market Value Weighted Average Index. The formulation is;

Index = $\frac{Market\ Value}{Basis\ Value}$ x 100

Market value is the total amount of noted stock (for index calculation) times with market value. Market value may also be explained as market capitalization. The formula to estimate the market value is:

Market value = $p_1q_1+p_2q_2+\ldots+p_nq_n$

Where:

p_1= closing price for company $_i$

q= the amount of listed stock for company $_i$

n= the amount of companies in the market

Basic value is the cumulative of stock amount times time the base day price. For example the base day for IHSG is August 10, 1982 (Exchange 2008).

b. Types of Stock Market Index.

Indonesia Stock Market has 8 types of indices, including:

1) Indeks Harga Saham Gabungan (IHSG)
2) Indeks Sektoral
3) Indeks LQ45
4) Jakarta Islamic Index (JII)

5) Indeks Kompas100

6) Indeks Papan Utama

7) Indeks Papan Pengembangan

8) Indeks Individual

7. Jakarta Islamic Index.

Islamic Capital Market in Indonesia has started in the year of 1997 when PT Danareksa Investment Management issued the Islamic Mutual Fund. Then on July, 3 2000, the company along with Indonesia Stock Exchange on (formerly known as Jakarta Stock Index) launched the Jakarta Islamic Index (JII).

In Indonesia, the first step that is made by the Ulema Council formulated the first fatwa or law in regard to the capital market by Fatwa No. 20/DSN-MUI/IV/2001 as the framework for the Sharia Mutual Fund. The Financial Service Authority formed a team in 2003 to work on the Islamic Capital Market in Indonesia. On March 2004, as the authority to regulate the market along with the Indonesian Ulema Council (DSN-MUI), they created MoU to develop ICM in Indonesia more.

As for the rules, the Financial Service Authority or Otoritas Jasa Keuangan (OJK) has issued the rules package as the guideline for the ICM. The rules are as mentioned here; Rule Number II.K.1, Rule Number IX.A.13, and Rule Number IX.A.14. All rules are regulated:

- Sharia Securities List,
- Sharia Securities Insurance
- Akad on the Sharia Securities.

a. Screening Process.

According to Sudarsono (2007) screening process in Jakarta Islamic Index can be divided into three steps, namely;

1) Sharia screening including; companies should involve in gambling and forbidden industry. Company is not a conventional financial institution. It shouldn't involve in selling *haram* (forbidden) food and beverages. Lastly, company shouldn't sell, distribute or supply goods which destroy morality or known as *mudharat*.
2) Capitalization screening screens 60 stock companies with highest market capitalization in BEJ then minimizes into screening 30 stock companies with highest average transaction in BEJ. The minimizing process will only include companies which passed the first step.
3) Evaluation process every 6-month is necessary to be conducted.

TABLE 2.2
List of Companies in Jakarta Islamic Index (JII) Period December 2015-May 2016

Number	Company Codes	Company Names	Notes
1	AALI	Astra Agro Lestari Tbk.	Fixed
2	ADRO	Adaro Energy Tbk.	Fixed

Cont Table 2.2

3	AKRA	AKR Corporindo Tbk.	Fixed
4	ASII	Astra International Tbk.	Fixed
5	ASRI	Alam Sutera Realty Tbk.	Fixed
6	BSDE	Bumi Serpong Damai Tbk.	Fixed
7	ICBP	Indofood CBP Sukses Makmur Tbk.	Fixed
8	INCO	Vale Indonesia Tbk.	Fixed
9	INDF	Indofood Sukses Makmur Tbk.	Fixed
10	INTP	Indocement Tunggal Prakarsa Tbk.	Fixed
11	JSMR	Jasa Marga (Persero) Tbk.	Fixed
12	KLBF	Kalbe Farma Tbk.	Fixed
13	LPKR	Lippo Karawaci Tbk.	Fixed
14	LPPF	Matahari Department Store Tbk.	Fixed
15	LSIP	PP London Sumatera Indonesia Tbk.	Fixed
16	MIKA	Mitra Keluarga Karya Sehat Tbk.	Fixed
17	PGAS	Perusahaan Gas Negara (Persero) Tbk.	Fixed
18	PTBA	Tambang Batubara Bukit Asam (Persero) Tbk.	New
19	PTPP	PP (Persero) Tbk.	Fixed
20	PWON	Pakuwon Jati Tbk.	Fixed
21	SCMA	Matahari Putra Prima Tbk.	New
22	SILO	Siloam International Hospitals Tbk.	Fixed
23	SMGR	Semen Indonesia (Persero) Tbk.	Fixed
24	SMRA	Summarecon Agung Tbk.	Fixed
25	SSMS	Sawit Sumbermas Sarana Tbk.	Fixed
26	TLKM	Telekomunikasi Indonesia (Persero) Tbk.	Fixed
27	UNTR	United Tractors Tbk.	Fixed
28	UNVR	Unilever Indonesia Tbk.	Fixed
29	WIKA	Wijaya Karya (Persero) Tbk.	Fixed
30	WSKT	Waskita Karya (Persero) Tbk.	Fixed

Source: OJK Report

8. Exchange Rate.

Exchange rate can be considered as the foreign currency per unit of domestic currency (Krugman and Obstfeld 2009).

According to Warjiyo (2013) exchange rate movement in Indonesia doesn't always represent the basic value. The volatility of exchange rate can be caused by the capital flows volatility, the market behavior, and the influence from the offshore market. The role from Central Bank is also needed in order to maintain the exchange rate in stabile position.

The fluctuation of exchange rate of USD to IDR is highly effecting by the worldwide economy condition, especially USA. On some occasions, market reacts differently on the economic condition, sometimes the actual things occur aren't in line with the expectation from market. That is why the weakening or strengthening in the market depends on the market reaction on the economy (Untara, Sugiharto and Lestari 2010).

In 1978, Indonesia exchange rate changed into a managed float regime from the fixed exchange rate regime. The system was completely managed by the Central Bank (BI) with the supervisory board. Then, on August 1997, the exchange rate was changed into the floating exchange rate regime from managed float regime (Hidayat 2014).

According to the book from Mankiw (2007), he distinguishes the exchange rate by two types, namely;

1) Nominal exchange rate defines as the respective price of domestic currency against foreign country, or commonly known as *e*.
2) Real exchange rate defines as the respective price of domestic goods comparing to foreign goods.

There are two approaches on the association of exchange rate and stock market. Based on Tian and Ma (2010) the approaches can be defined as follow:

1) The goods market theory or known as traditional approach explains that appreciation of domestic currency gives disadvantages to the exporters. The company' shares likely become undesirable and affected the export-country. So that the relation between stock prices and exchange rate is positive.
2) The portfolio balances theory known as stock-oriented-approach explains that the causality relation is from stock market to exchange rate. If the price in shares increases then it will attract the capital inflow that results in the depreciation of domestic exchange rate. So that, the relation between exchange rate and share market is negative.

9. Oil Price.

Oil is one of the determinants on country's macroeconomic stability. The impact of oil crisis in 1973 becomes the starting point for the researchers to employ this variable on the macroeconomic condition (Berk and Aydogan 2012). The International Oil Price uses Brent's price as the standard (Arouri and Nguyen 2010).

The report from Europe (2013) explains that Brent oil is a high rank crude oil taken from the North Sea or precisely is the location among British, Europe and Scandinavian. The characteristic is light yet comparing to another type of crude oil (West Texas Intermediate), it is heavier. There are two majors benchmark for international standard oil price, namely; Brent Crude Oil and West Texas Intermediate (WTI).

The increasing price of oil has various results on global economy condition. Such as the shift of the consumers to the producers of oil, the increasing prices of goods and services, and also financial markets worldwide (Lin, Fang and Cheng 2009).

Theoretically, Rafailidis and Katrakilidis (2014); explains that the association between the oil price and stock market can be seen from the changes in expected cash flow or the discount rates. The cash flow can be predicted by the oil prices because most companies use oil in the production process. That in the end causing the different dividend or earning and the stock price importantly.

According to the study from Berk and Aydogan (2012) the oil price contributes in significant role in a country economic. It influences the operational cost from a company so that affect its revenues. If the stock market is efficient the increasing of oil price is likely negatively affecting the cash flow and in the end causing the declining return in stock market. The low return in stock market causing one index cannot attract investors to put the investment.

10. FTSE Malaysia.

The integration of global financial system is likely integrated each day. The international integration occurs because the residents whether national or overseas residents can decide to hold the financial instrument in other countries. The increasing rate of participation from international investors in one country affects regulation made by the government, such as; exchange rate, diversification, etc. (Kearney and Lucey 2004).

From Baele, et al. (2014) shows that the explanation on financial integration can be described by these following explanations;

1) The single rule is set to conduct the financial activity.
2) There's no asymmetric information on the financial system.
3) The treatment for each participant is equal.

Because of the economy liberalization, investors can freely choose in which countries they are willing to invest. One way to consider the strength of a country economic is from the stock market. Generally, the regional stock market is likely effecting each other. The neighbor countries such as KLSE or FTSE in Malaysia, STI in Singapore or Hangseng in Hong Kong are the major stock markets are influencing Indonesian stock market (Mie and Agustina 2014).

FTSE Malaysia has become the prominent stock index in ASEAN. Launched in 2006, the stock prominently rose to the top index in market. According to Rashid, Hassan and Yein (2014) the emergence of Islamic capital market attracts both Muslim and non-Muslim investors to invest in that market. FTSE Bursa Malaysia has several screening process in order to list the company into the index. The screening process is conducted by the Securities Commissions Sharia Advisory Committee (SAC) along with Yasaar Ltd. So that the factors that are effecting stock market different from the others.

A number of screening processes can be classified as two main processes. The first one is the core activities from the company and the second one is the source of income. The company can be classified as the Sharia-compliant company if the activities are not involving with gambling, interest (*riba*), or the selling goods related with the non-*halal* activities, such as: gaming, entertainment, or conventional insurance (Sanusi, et al. 2015)

There are several strengths from FTSE Burse Malaysia, such as: the standard that is used in calculation is much clearer in the stock market. Second is the barometer used in calculation depicts the accurate state of market condition in Malaysia. The limitation of a number companies listed give better potential to the market (Romli , Mohamad and Yusof 2012).

The capital market integration occurs because the stock trade integration between countries keeps increasing. The trades involving the foreign investors buy the domestic share, and the domestic investors buy the international share. Thus if the trade increases between countries, the share price increases altogether in the same time (co-movement). The regional capital markets are likely having the same investors, so that the change in one market will be transmitted to others (Mansur 2005).

11. Gold Price.

The thing that can be summarized from the CAPM model is that there are a lot of factors influencing stock market. The CAPM model tells that the investor decides the portfolio based on Markowitz criterion. The stock market can be affected by various factors, such as: gold price, house price, and other macroeconomic variables (Yahyazadehfar and Babaie 2012).

As gold price becomes one of the indicators in stock market performance, then it is interested to observe this variable. Gold has become one of the precious gold to be traded. Based on Khan, Naseem, and Khan (2016) states that gold variously becomes a commodity to be used in the industry; it can also be the exchange commodity, and saving. Due to its superiority and the frequent trade, the price of gold is closely monitored by the economic factors. There is also the investor sentiments on picking put gold as an investment to acknowledge the importance of gold price (Omag 2012).

Gold is the kind of investment that firstly used as reserve if the instability occurs. Yet by the time goes, it is used as the primary goods for portfolio investment. The gold market in London is an international benchmark for gold trading. The price is set twice a day (AM & PM) under the surveillance from Bank of England. The regulator to decide the price is The London Gold Market Fixing Ltd.

Gold has relatively-low risk as an investment. It can be used as safe haven and has no effect from the inflation. The increasing price of gold makes the investor prefer invest invests in gold to stock market. So that, the stock market will have a lower price because the investors sell the shares to be converted to gold. In the contrary, when the price decreases investors will sell the gold in order to be converted into shares. Thus, the value of shares increases due to the decreasing price of gold (Handiani 2014).

B. Previous Study

The researches or studies on factors which affecting stock market have been conducted plenty of times. The studies are conducted in the domestic market or in the international markets. The findings show the various results in order to enrich the previous studies material. Here are a number of the studies on the factors affecting the stock market.

Based on the finding from Hsing (2011) shows that Czech stock market is negatively effected by the CZK/USD variable. The study is using the GARCH method in the research, and the scatter graph on the test shows the depreciation value of the Czech currency causes the stock market to decline. In the contrary, according to Barakat, Elgazzar, and Hanafy (2016) shows the positive relationship between exchange rate and stock market performance. However the evidence of non-relationship exchange rate on stock market is studied by Gay (2008).

As for the oil price relationship to the stock market, there are a number of researches show various results. The finding from Gatuhi (2013) gives the information on the negative relationship between oil price and stock market in Kenya. The negative relationship between oil price and the stock market also shows by the result from Sauter and Awerbuch (2002). Study from Antonio, Hafidhoh, Fauzi (2013) declares the existence of significant and positive relationship on the oil price movement to stock market. The research uses JII as the dependent variable in the research. Another positive relationship between oil price and JII shows by the study from Rusbariand, et al. (2012).

The non-relationship between FTSE Malaysia and JII can be concluded from the study conducted by Husin, et al. (2013). However, the negative relationship between FTSE Bursa Malaysia and JII is explained by the research from Darsono, Muqorobin and Yudhi (2016). As for the positive relationship, the study between FSE Malaysia and IHSG can be seen from Jayanti, Darminto, Sudjana (2014). The positive relationship between gold price and stock market can be seen from the research conducted by Irianto (2002) that uses IHSG as the dependent variable. The negative relationship between gold price and JII is shown by the conducted by Putra and Damansyah (2015). The last is the non-relationship between gold price and stock market done by the research from Surbakti, Achsani and Maulana (2016). The dependent variable uses JCI (Jakarta Composite Index).

C. Research Framework

Based on those theories and previous study, it will be revealed the relationship among independent variables on dependent variable along with the research framework. It can be seen as follow:

1. Effect of exchange rate towards JII.

   The relationship between exchange rate and JII is that the fluctuations of exchange rate may affect JII. The depreciation of domestic currency gives advantages to the exporters. The company' shares likely affected the export-country. So that the relation between stock prices and exchange rate is positive.

2. Effect of oil price towards JII.

   If the stock market is efficient the increasing of oil price is likely negatively affecting the cash flow and in the end causing the declining return in stock market. Hence, the relation between oil price and stock market is negative.

3. Effect of FTSE Malaysia towards JII.

   The regional capital markets are likely integrating on each other. The downturn in certain capital market will reduce the return in other country's stock market. Hence, the relation of two variables is negative.

4. Effect of gold price towards JII.

   The increasing price of gold makes the investor prefer invest invests in gold to stock market. So that, the stock market will have a lower price because the investors sell the shares to be converted to gold. Hence, the relation between gold price and share market is negative.

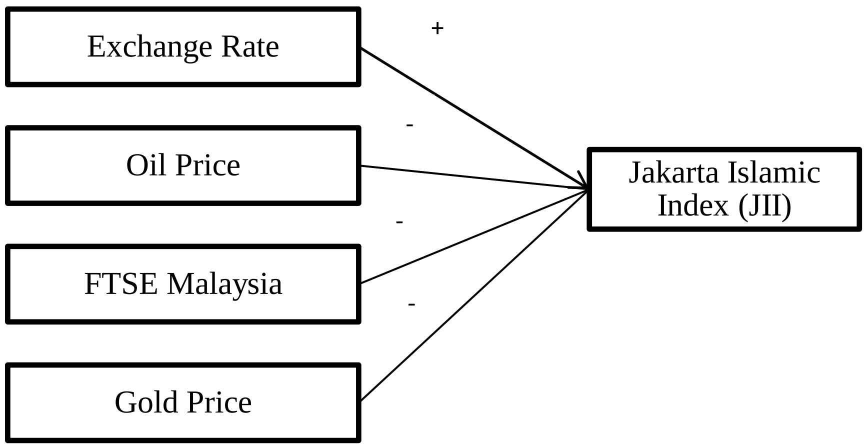


FIGURE 2.3

Research Framework

D. Hypothesis

Based on theoretical background, previous research results and research framework, this study develops the hypothesis:

1) Exchange rate has significant and positive impact on JII both in short-run and long-run.
2) Oil price has significant and negative impact on JII both in short-run and long-run.
3) FTSE Malaysia has significant and negative impact on JII both in short-run and long-run.
4) Gold price has significant and negative impact on JII both in short and long run.