

# CHAPTER I

## INTRODUCTION

### 1.1. Background

Nowadays, there are three important things in the economy of the world. Those are the decreasing of oil prices, the getting stronger of dollar, and the revolution by United States. The average price of world crude oil in the previous year tends to be fluctuated. The decreasing of the world crude oil price was caused by some factors, one of them is the revolution of shale gas in United States. Shale gas is a natural gas that was obtained from a flake of shale.

The production of shale gas causes the decreasing of another energy sources prices because of the expansion and the stock of shale gas is quite abundant. Shale gas was considered decreasing production cost. The production of shale is also able to increase energy resilience and reducing the dependency on expensive fossil energy such as oil and coal. This shale gas revolution will have a huge impact on the United States especially the advantage of opening new jobs.

Another study was done by Sheikhs (2014) about a drastic plunging oil price phenomenon in the end of 2014 and early 2015. The OPEC (Sheikhs) kept the oil production in regular volume even the world was flooded by oil from shale oil technology. By keeping the volume, they intended to pull down the oil price; thus, it

will halt shale oil production due to its expensive production cost. Regardless of the OPEC aims to keep the price stable, the OPEC acted contrary on the increasing oil supply due to the shale oil. This action successfully cancelled at least 150 billion of higher-cost-oil investment in 2015 and more cuts to come next year which could have an effect on oil supply in the future.

From economic literature, there are few mechanisms that explains how the world crude oil price can hamper the economy. In the supply side shock, the role of world crude oil price is as an input factor for the production. The decreasing of oil supply will hamper the productivity and turn to lessen the real wage growth. If the wage plunging goes downward, the economy will be decreasing and causes the increasing of unemployment and generates further reduction in the economy.

In the demand side, the increasing of world crude oil price will shift the purchasing power from the oil importing countries to the oil exporting countries. This phenomenon will increase the demand of consumer in the oil exporting countries and vice versa. Meanwhile, as a net, the effect will be decreased in consumer demand and it causes the increasing of world saving. More savings tend to make the interest rate decrease and push to higher investment and it leads to the constant GDP. However, the impact of consumer decreasing will cause the decreasing of GDP (Brown & Yücel, 2002).

Another factor that affect the decreasing of world crude oil price is the increasing of production by a country that joined in OPEC (Organization of the

Petroleum Exporting Countries). When the production of crude oil increasing but the demand does not change or constant, there will be an excess of crude oil production that makes the price decrease.

When there is a fluctuation of world crude oil price, it will affect the changes of crude oil price in Indonesia because it follows world crude oil price. The current condition is when the production of crude oil is excess, meanwhile the needs of crude oil does not increase or maybe decrease, thus the price of crude oil will be decrease. There is a study of crude oil fluctuation from Roubini and Setser (2004). They said that fluctuation or the increasing of world crude oil price will affect the economy of every country in the world. The size of the impact depends on few things. Such as, how big the shock of crude oil price and the newest energy that was chosen as an alternative.

Indonesia is a country with an open economic system. There will be a big possibility which is influenced with the condition of world economy. We can also see when the fluctuation happens, the crude oil price will affect the local economy. When fluctuation of world crude oil price happens, it will affect the price of oil derivative products that are commonly consumed by the public such as premium fuel oil, diesel, kerosene, and pertamax.

The role of fuel subsidy is still questionable. Thus, this study attempted to address this issue. To conduct this research, first, this research chose Indonesia to be the case study. Indonesia is a right case because of some reasons. First, it represents a country that provides quite huge amount of subsidy (Mourougane, 2010). Second,

Indonesia already changed its fuel subsidy policy after Asian crisis. Thus, it will be possible to test several policies in one country. The last, Indonesia is a unique case that changed its status from a net-oil-exporting-country to a net oil-importing-country (BP-British Petroleum, 2013; IEA, 2015).

Realizing the importance of the existence of fuel oil in economic activities, the intervention from government is very important to intervene and control the price level of fuel oil to be bought by all society. One example of intervention that has been done by the government for the supplier of fuel oil is in the form of subsidies. The fuel subsidy that has been carried out by the Indonesian government began in the new era and until now subsidies for fuel are still being implemented, but the subsidy that provided by the government is now reduced.

The fuel subsidy that has been set by the Indonesian government makes the energy subsidy budget in the State Budget (APBN) every year tend to increase. Subsidy of fuel was assumed as a reason of the unstable primary State Budget (APBN) from the spending side; thus, it makes the State Budget (APBN) deficit. The over consumption makes Indonesia as an oil importing country which is very dependent from the fluctuation of world crude oil price and exchange rate of Rupiah to United States Dollar.

According to Luthfi, Senevirathne & Kaneko (2017), one of the factors that affect fuel subsidy is from the internal. It means that the increasing of fuel consumption is an impact from the increasing of total population, oil imports, while the external

factors were such as dollar exchange rate and fluctuation of world crude oil price. The government policy in a big fuel subsidy causes the budget for other sectors will be ignored such as the budget for the education, economy, and health.

By the background of study mentioned and stated above, researcher would like to propose this thesis title, that is: **THE IMPACT OF WORLD CRUDE OIL PRICE FLUCTUATION ON INDONESIA'S MACROECONOMY.**

## **1.2. Research Problem**

Realizing that the role of crude oil price is very important, the implication occurred was caused by oil price fluctuation that varied as well. Some of studies that has been conducted after oil shocks in 1970s confirmed that the shock of oil price has a negative impact and significant to Gross Domestic Product (GDP). From the fact of international oil price that is fluctuative and high and from some of the results of previous empirical study, this research tries to find the impact of oil price fluctuation in international market to Indonesia's macroeconomy.

This research examined the factors effecting the Indonesia's macroeconomy. The variables used for Indonesia's macroeconomy were Gross Domestic Product (GDP), Balance of Payment (BOP), and Inflation. Based on the background mentioned above, the followings are the research problem on this research:

1. Does world crude oil price fluctuation affect Gross Domestic Product (GDP)?
2. Does world crude oil price fluctuation affect Balance of Payment (BOP)?

3. Does world crude oil price fluctuation affect inflation?

### **1.3. Research Objective**

Based on the research problems proposed above, the followings are the research objectives to measure the impact of World Crude Oil Price Fluctuations on Indonesia's Macroeconomy.

1. To analyze the effect of world crude oil price fluctuation on Gross Domestic Product (GDP).
2. To analyze the effect of world crude oil price fluctuation on Balance of Payment (BOP).
3. To analyze the effect of world crude oil price fluctuation on inflation.

### **1.4. Research Contribution**

This research made was done to provide additional advantages in conducting studies to these following parties:

- a. Researcher

This research is intentionally made to provide references to economic researcher whose study is in the same topic which is The Impact of World Crude Oil Price Fluctuation to Indonesia's Macroeconomy.

- b. Economics Students

This research is intentionally made to provide knowledge related with Indonesia's macroeconomy topic to economics major students.

## **1.5. Systematic of Writing**

This research is divided into five chapters. Each chapter will be explained and described as follows:

### **CHAPTER I: INTRODUCTION**

This chapter explains the background of study, research problem, research objectives, research contribution, and systematics of writing.

### **CHAPTER II: REVIEW OF RELATED LITERATURE**

This chapter describes previous studies used in this research, including related theories used inside this research to help writer in providing reliable results. This chapter also describes all the hypotheses proposed by writer, result of previous studies, and research framework.

### **CHAPTER III: RESEARCH METHOD**

This chapter described population and sample, research operational variables, and statistical tools. This chapter is the information on how the writer analyzed the data.

### **CHAPTER IV: DATA ANALYSIS AND DISCUSSION**

This chapter provides results from stationary test, optimal lag length, estimation VAR model and stability test model.

### **CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS**

This chapter provides the conclusions based on discussion on Chapter IV. It also provides recommendations for further research and its limitation.