Oil Crisis - Who Slipped and Who Stands?

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ABSTRACT

Crude oil is the most important natural resource of the industrialized nations. It can generate heat, drive machinery, fuel vehicles and airplanes. The oil producing nations, with their history of booms and busts, are in the deepest downturn since the 1990s, if not earlier. They have been making millions or billions of dollars from the higher prices but are now finding themselves in trouble. One of the main reasons behind this changing oil prices is fall in demand of oil in the international market. United States domestic production has nearly doubled over the last several years, pushing out oil imports that need to find another home. Saudi, Nigerian and Algerian oil that once was sold in the United States is suddenly competing for Asian markets, and the producers are forced to drop prices. Also with the emerging technologies vehicles are becoming more energy-efficient. So, demand for fuel is lagging. The high price of oil is partly to blame. And because of the steep oil price, many countries have decided to save oil by using less of it. The result is that today the world is awash with oil simply because the demand for it has gone down. Its impact can be seen in all the major economies of the world as well as on the major industries and stock markets. It's having a great impact on Russia, the U.S., Saudi Arabia, Europe and Asian Countries. The 3 major areas of economic consequences due to fall in oil prices are-the impact on inflation, consumer spending, and auto sales. It has proved to be a boon for many countries while curse for other sectors and economies. India one of the greatest emerging economies and the major importer of crude oil have a net positive effect on the economy due to low prices of crude oil. Lower oil prices will cut inflation, and bring down our Current Account Deficit but it also has its downsides. It will affect the exporters of petroleum producers in the country. The current case discusses in detail the various reasons about the recent fall in oil prices, factors affecting its demand and supply, impact on oil importing and exporting countries as well as on Indian economy.

Keywords: **-** Crude Oil, Emerging Economies, Current Account Deficit, Inflation, Oil Producing Nations.

I INTRODUCTION

On June 22, 2014, in Eastern Libya, two tankers loaded with 1.3 million barrels of crude were ready for dispatch at the port of Tobruk after the nation reopened its ports and oilfields which were closed since the country's civil war in 2011. It was an incident that signaled the end of a decade-long boom in oil markets. It was the last time when the crude oil prices reached to its highest level in 2014 at almost $116 per barrel, before it began to sink down by more than 60 percent for the next seven months.

The falling oil prices has been one of the most important and concerned events recently. The oil-exporting countries as well as the oil-importing countries both had different impact of dropping oil prices. On one hand, it had certainly lower fuel bills for consumers, while on another hand it had drastically reduced the revenues of oil-exporting countries.

II OIL COMMODITY OF STRATEGIC IMPORTANCE

Oil is a commodity with huge strategic importance to all countries in the world. It can generate heat, drive machinery, fuel vehicles and airplanes. It is one of the most important sources of energy for driving the day to day activities in the world such as transportation, cooking, source of light, etc. Airplanes, ships, trains, and trucks powered by oil move the majority of the world's products. Manufacturing and transportation of many products have become affordable because of cheap energy source provided by oil.

A lot of conflicts and intrigue have been recorded for a long time all over the world over valuable energy supplies. Major wars over oil have been fought every decade or so since World War I. World is entering towards an era of intensified conflict over energy resources where we keep seeing a whole group of oil-related clashes stretching across the globe with more and more popping up all the time. Various countries are looking out the possession of energy assets especially oil and gas deposits as an essential to prop up national wealth, power, and prestige.

Oil played a crucial role in the defeat of Germany and Japan in World War II. Due to lack of internal sources of oil, both the countries were struggling with the availability of fuel for its army and their planes, as they were heavily depended on other countries for oil. At that point of time, United States - the major supplier to the world exported oil to fuel the Allied Armies in Europe, Africa, and the Pacific. Heavy weighed steam powered tractors which used coal or wood to power themselves were replaced by light weighted internal combustion tractors.

Industrial farm uses natural gas as the feedstock to manufacture most of the fertilizer. Oil is directly responsible for about 2.5% of world GDP. Approximately 17% of all crude oil is used as raw material to make various products such as shampoo, detergent, solvents, paint, ink, tires, lubricants, candle wax, roofing material, carpet, synthetic clothing materials, shoes, and thousands of other products are made from oil. From insulation on the wires of computer to the circuit boards, the plastic in the case of computer, flat screen monitors all are made from crude oil.

Oil is the blood line of the global economy, without it everything will come to halt. It supplies 40 percent of the world's total energy needs and therefore undoubtedly it is the ruler of all the commodities.

III TUMBLING CRUDE OIL PRICES REASONS BEHIND

Recently the entire world witnessed the end of a decade-long boom in oil markets. The price drop pushed the industry into crisis, with major international oil companies cancelling billions of dollars' worth of projects planned for 2015 and 2016, affecting the economies of all the countries.

Various factors were held responsible for the sudden plunging of industry into a catastrophe. One such reason was sudden decline in the demand of Oil in U.S. market. U.S. is one among the major importers of oil, but its consumption of gasoline, diesel, jet fuel and other refined products declined by more than 12 percent between the time ranging from 2005 to 2013, despite of the fact that during the same period country's population increased by more than 20 million and real economic output grew by 10 percent witnessing the biggest drop in fuel demand in history. The cause behind this was that United States domestic production had nearly doubled over the last several years, pushing out oil imports that need to find another home. Also due to high oil prices in the global market new technologies have emerged which had made vehicles more energy-efficient. Thus, demand for fuel was lagging. Also because of the steep oil price, many countries decided to save oil by using less of it.

High prices did not only guard the demand but they were also responsible for the emergent of U.S. Shale boom, which resulted in the fastest growth in oil production in history during 2013 and 2014. According to a report of U.S. Energy Information Administration the highly efficient shale drillers were able to locate more wells and drill them even faster resulting in increasing the output from 0.16 million bpd in 2011, 0.85 million bpd in 2012, 0.95 million bpd in 2013 to 1.2 million bpd in 2014. This created an overall misbalance between the demand and supply of oil. The only solution of which was a sharp fall in oil prices, which had been above $100 per barrel, to restrain demand destruction.

Another factor behind this changing oil prices is fall in demand of oil in the international market. Demand is low because of weak economic activity, increased efficiency, and increase in frequency of shifting from oil to other fuels.

Saudi, one of key members of OPEC realized that if the prices are artificially being raised by cutting down the production it will cause more harm to Saudi Arabia and OPEC as they will lose a majority of their market share and will provide shale production to expand more. So, the Saudi policy makers came to the conclusion to not to sacrifice their own market share. And therefore, decided to let the prices decline as enough so that to prevent the investment in new shale wells and formations. They could have lower down the production sharply, but then the main benefits would go to their rival countries such as Iran and Russia. Over the year 2014 Crude Oil dropped to $86 per barrel at the end of October, $70 by the end of November, $57 by the end of December and less than $47 in January 13, 2015, which caused Saudi Arabia to suffer a double hit to its revenues from lower prices and reduced output. The result is that today the world is awash with oil simply because the demand for it has gone down.

IV EFFECT ON ECONOMIES FEW SLIPPED AND FEW STANDS

Falling oil prices have impacted the inflation, consumer spending, and auto sales are the vital areas of an economy. It has proved a boon for many countries while curse for other economies and sectors.

(a) Saudi Arabia

Saudi Arabia is the world's largest oil exporter and OPEC's most influential member. Oil is the prime source of revenue for Saudi Arabia, contributing 90% of the government's revenues. The recent drop in oil prices resulted in a drastic change in the overall economy of Saudi Arabia. It had led to a higher government deficit and lower government spending. For short term, this fall in oil prices may not have any severe effect on Saudi Arabia due to their billion-sovereign wealth fund for revenues but in longer term it will have a larger impact as they need to balance their budget. It will cause a significant impact on job creation within the country, as most of the private sector jobs are based on government contracts and the recent fall in oil prices is likely to result in a higher government deficit leading to lower government spending.

Even after the drastic fall in oil prices, Saudis haven't cut their oil production as they wanted to push oil prices upward. The lower oil prices were likely to hurt shale oil production in the US, which would be proved as beneficial for Saudis for the long term. Also, they are hoping to pick up market share in the longer run, if this period of lower prices would force to shut down some of the higher cost producers.

(b) Russia

Russia has been most adversely affected by the recent changes in oil prices. It has drastically affected the overall revenues and the GDP rate of the Russian economy as Russia's oil revenues constitutes more than half of its budget revenues and 70% of its export revenues. Hike in interest rate up to 17% in support of its troubled ruble, signifies how heavily its economy depends on energy revenues, with oil and gas accounting for 70% of export incomes. Due to the collapse of Russian currency the interest rates went up high and the central bank was left with no option but to only sell its foreign reserves to support the ruble. If the prices fall below US $105 it will either cause the Russian government to run deficits or force it to cut down on its other development programs.

(c) U.S.

Falling oil prices have a sweeping impact on the domestic economy, for both better and worse. Consumers are certainly benefiting from the cheapest oil and gas prices in years but there is also a darker side to these low oil prices. Perhaps the biggest is that well-paying oil sector jobs are being lost at a massive rate. U.S. giant oil service companies such as Schlumberger, Halliburton, and Baker Hughes have already announced 51,000 layoffs since the oil crash began. Worldwide job losses due to low oil prices have already reached to 200,000.

Due to continuation of the cheap oil prices, the negative consequence has hurt American manufacturing industry. The Petrochemical industry is one of the most developing American manufacturing sectors that produced chemicals that were used to make everything from car tires to fertilizer to fabrics. According to the American Chemistry Council, these chemical companies have committed an investment in production of $153 billion, which will create an opportunity of more than 800,000 permanent jobs, paying an average salary of over $69,400 and generating more than $322 billion in annual economic output. Low oil prices could bring a wrench over these investments leading to delay or cancellation of these new projects and decreasing the new job opportunities in U.S.

One more impact on the economy, which is based on simple economic theory of demand and supply, is with the decrease in oil prices gas prices also decreases as it is also a key product of crude oil. Now this will increase the demand of more gas-guzzling Cars, Trucks and Sports utility vehicles. The customers will be willing to buy more gas guzzling vehicles which will increase the demand of gas, resulting in the increase in demand of Oil which will drive the price of both gas and oil back up.

(d) China

China is one of the largest importers of oil in the world, as 60% of its consumption is catered through imports. Yet it seems that despite of low oil prices Chinese economy is not able to get any major benefit out of it. Reason behind this is hike in taxes by the government on oil products and also low demand of oil from China. This lower demand has increased the chances of deflation due to which the central bank has reduced the total amount of reserves that banks are supposed to maintain. The overall growth rate and real estate has gone down resulting in increased household savings rather than investment. However, China has smartly used this opportunity to increase its strategic oil reserves which would help china to improve its current account surplus and lower down the cost for business.

(e) Japan

Importance of oil can be traced from Japan's history, where it got defeated in the World War II due to shortage of oil. The country imports most of the oil it consumes, therefore the fall in oil prices should lead to a significant improvement in Japan's trade deficit. This fall in oil prices will significantly raise corporate profits and uplift the household income but the depreciation of the Yen relative to the Dollar has counter balanced the entire effect. Low oil prices will decrease the inflation rate of Japan.

After the Tsunami of 2011, Japan lost its nuclear reactors which were the main source of electricity generation and therefore had no other choice but to shift to oil power plants to make up the lost capacity of nuclear reactors. The recent tsunami trauma had devastated the livelihood of thousands of Japanese due to which Japan was unable to pass on this higher cost of oil power plants to their consumers. Therefore this low oil prices are beneficial for Japan in many ways.

V EVEN INDIA NOT LEFT UNTOUCHED

India imports 80% of its total consumption of crude oil that means the falling oil prices should be boon to Indian economy as it has cut inflation, and has brought down country's Current Account Deficit. According to a report given by live mint – "fall in oil prices by $10 per barrel helps reduce the current account deficit by $9.2 billion which amounts to nearly 0.43% of the Gross Domestic Product - a measure of the size of the economy". In a way, it will be a benefit because this cut in inflation would lead to a fall in commodity prices which will improve consumer spending and decrease the interest rates, increasing credit availability in the economy and boosting overall growth prospects for infrastructural and corporate investment. Every $10 per barrel fall in crude oil price helps reduce retail inflation by 0.2% and wholesale price inflation by 0.5% says the report of Money control. The sectors like automobile and agricultural will get a direct benefit as the demand for the automobile will go high also the transportation charges will be reduced, resulting in low commodity goods prices.

The fall in international oil prices have a soothing effect on inflation but as every coin has two faces there is another face of this low oil price which is not as good as the first one. India may face some negative impact of this oil crisis. India is one of the major players in the global export market. And this overall global economic imbalance may directly affect FII/FDI fund inflows from foreign countries whose economies may be adversely affected by the fall in oil prices. The falling market demand and imposition of new restrictions and laws on imports may contract the Indian export market and reducing the overall investment of foreign countries in India.

The Indian government had budgeted Rs. 63,426.95crores as oil subsidy for the financial year (April 2014 to March 2015) which includes the oil subsidies that had not been paid for during the previous financial year which nullifies the large decline of the fiscal deficit. Any further continuation in the low oil prices will benefit the government on the fiscal deficit front of the next year. However, the dropping oil price has become a blessing to Indian economy. The government has raised the excise duty on petrol and diesel which together make up for around 2% of the consumer price index. Also, the subsidized LPG and kerosene which already have higher weights in the consumer price index, will not directly affect their retail prices.

Another major aspect to be considered is about the risk that remittances from workers abroad will be hit because of low oil prices on the fortunes of the major oil exporters. According to World Economic Outlook report given by International Monetary Fund's (IMF's) in coming next three years (2016-2018) lower oil prices will shave off 2.25 % points from the economic growth of energy exporters. The six Gulf Cooperation Council (GCC) countries are accounted for 60% of India's cross-border private remittances. Which means any disruption in these countries will impact India's net private remittances affecting the India's title of being the largest recipient of cross-border remittances, even ahead of China. Also, these gulf countries absorb around 96% of annual labor emigration from India, majority of which are low-skilled jobs that include construction workers. To sustain most of these gulf countries are looking out to diversify their economy to different sectors instead of majorly depending only upon the energy sector. Any such kind of diversification in their economy may lead to layoff of Indian workers in masses affecting the earnings of the Indian diaspora and remittances and increasing unemployment rate.

VI THE WAY FORWARD

Although the falling oil prices have both positive and negative impact on economies where some got slipped and some are standing firmly. The crude oil prices are showing the sign of recovery, but the question remains that whether this stability in prices will stay for a longer way or it will last for a limited period. Moreover, day to day emerging new technologies, would pose a threat for the golden days of oil industry. Furthermore, such oil crisis will force the countries to shift their demand for oil and look out for other better substitute or the technology oriented companies like Shale will be deciding the fate of oil producing countries. Opinions about the future of oil are mixed and it's impossible to say how soon and how far the prices will remain unaffected. The answer to all these questions lies in future.

VII CASE FITS FOR

The case is appropriate for undergraduate as well as post graduate management students for teaching subject of Macro Economics. The concepts that can be drive through this case is demand and supply, their factors, employment, effect on GDP, CAD and other macro-economic variables.

VIII TEACHING OBJECTIVES

This case has been developed with an aim to make students understand the effects of change in oil prices on different economies and also its impact on macroeconomic variables.

The case highlights the recent crash in oil prices, factors affecting the demand for crude oil and its impact of various economies. Key areas which should be focused discussing the case in the class are:-

(a) Why oil prices are falling?
(b) Why dip in oil prices has become the major concern for many economies?
(c) Segregate the countries into oil exporting and importing countries.
(d) Discussion on whether the plunged oil prices will prove a boon or bane for each economy or not?
(e) What is the way ahead?

IX TEACHING PLAN

(a) The discussion should start with the introductory paragraph which talks about the falling oil prices.
(b) Moving further the importance of oil for all countries should be deliberated.
(c) Thereafter, the various reasons that contributed towards falling oil price and the role of Saudi and USA as an oil producer should be considered in detail.
(d) Impact on each economy and their dependency on oil and impact on various macroeconomics variables should be examined in detail and a maximum time of class should be allocated for elaborating this section.
(e) What is the future of oil prices? Will another substitute will replace the oil or reduce the dependency on it or technology will be the decisive factor in oil price fixation. This is the point where class will have a different opinion.

X QUESTION FOR DISCUSSION ALONG WITH SUGGESTED ANSWERS

(a) Why oil prices have plunged?
   (i) Decline in the demand of oil in major oil importing countries such as U.S.
   (ii) New emergent technologies making vehicles more energy efficient.
   (iii) U.S. Shale technology development.
   (iv) In spite of low demand OPEC Countries continued the production of oil in order to maintain their market share and prevent the investment in new shale wells and formations.
   (v) Demand is low because of weak economic activity, increased efficiency, and increase in frequency of shifting from oil to other fuels.
(b) What are the factors affecting the demand and supply of oil?
   (i) With the emerging technologies vehicles are becoming more energy-efficient. So demand for fuel is lagging.
   (ii) Due to high oil prices many countries have decided to save oil by using less of it.
   (iii) Production of oil is more than the Demand.
(c) Why there is need for substitute of oil? Which are some of the substitutes used by various countries?
   (i) Due to high oil prices and limited availability of resource one needs to explore and find out other sources of energy.
   (ii) The substitutes include solar energy, Wind Power, Geothermal energy, Nuclear energy, Hybrid cars and Shale formation natural gas.
   (iii) For ex. USA- Shale Technology, India – Solar, Germany – Wind & Hybrid Cars, Sweden – Electrical Highways
(d) The downfall in oil price is a cyclical or real? Whether it will shift and to what extent?

(i) It is cyclical which depends upon various time to time changing economic activities. With emerging technologies a large number of substitutes of oil have been evolved.

(ii) The future of oil industry is unassured, reason being the limited deposits of oil resources throughout the world, so the world has no other option but to shift from the oil to other renewable sources of energy.

(e) Elaborate in detail about the effect on each economy of falling oil prices.

(i) Most of the economies are dependent on oil for driving the day to day activities such as transportation, cooking, source of light etc. It supplies 40 percent of the world's total energy needs and is responsible for about 2.5% of world GDP. Oil producing countries such as Saudi Arab depends on oil for 90% of its national revenue. Falling oil prices have impacted the inflation, consumer spending, and auto sales which are the vital areas of an economy. For oil importing countries this plunged oil prices will be a boon as it has lower fuel bills for consumers, while on another hand it had drastically reduced the revenues of oil-exporting countries. Various world major economies having different impact which is mentioned in case.

XI STUDENT EVALUATION

The case should be given in advance to the students and can be discussed on the scheduled class.

The evaluation of case can be segregated into two components participation during case discussion in class and written assignment.

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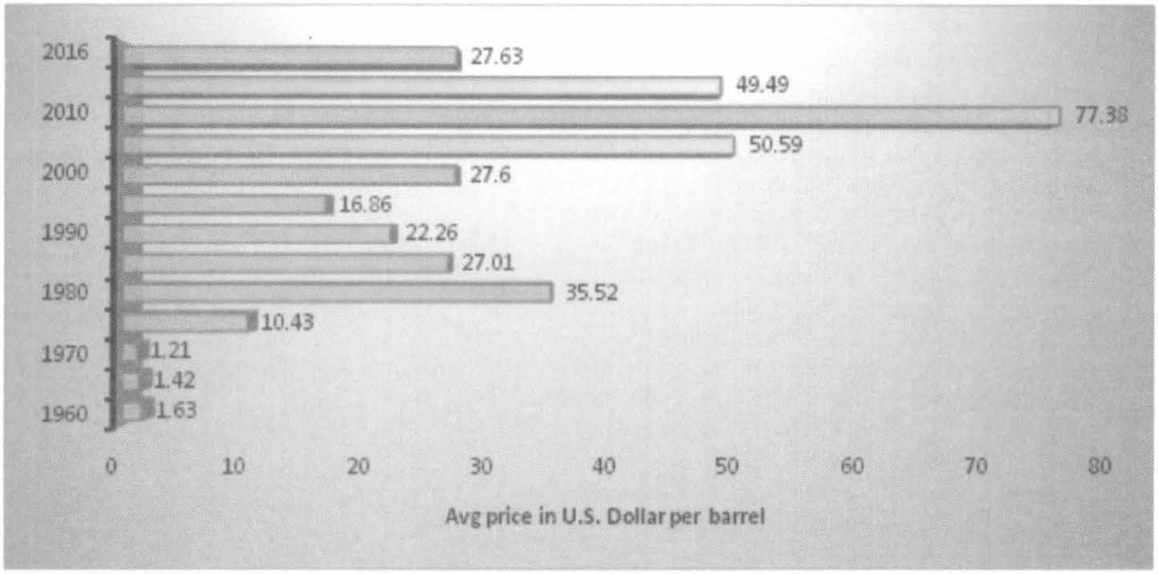
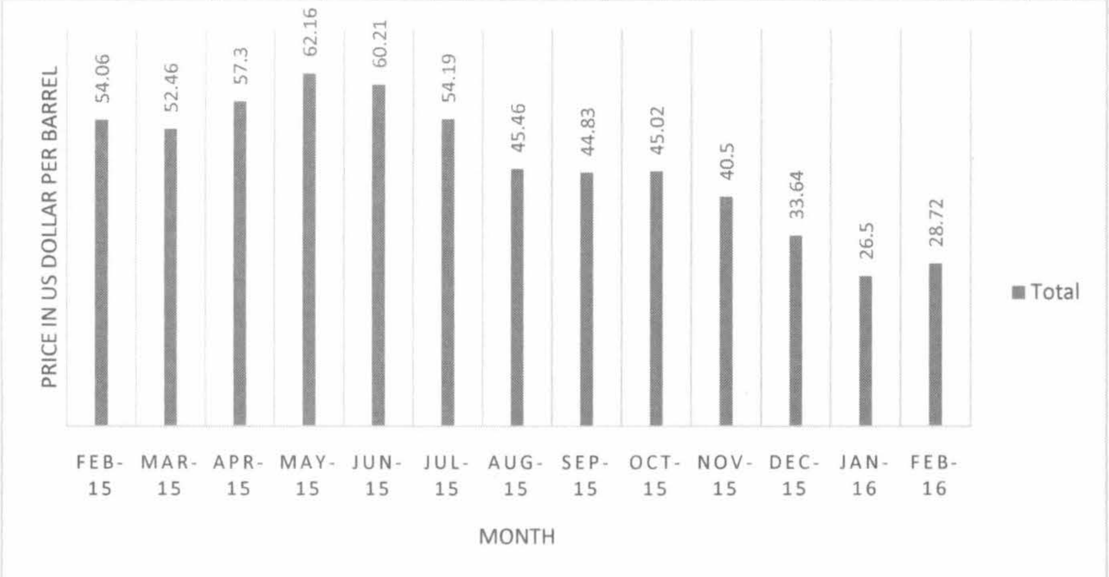
Exhibit I -Average Annual OPEC Crude Oil Price from 1960 to 2016



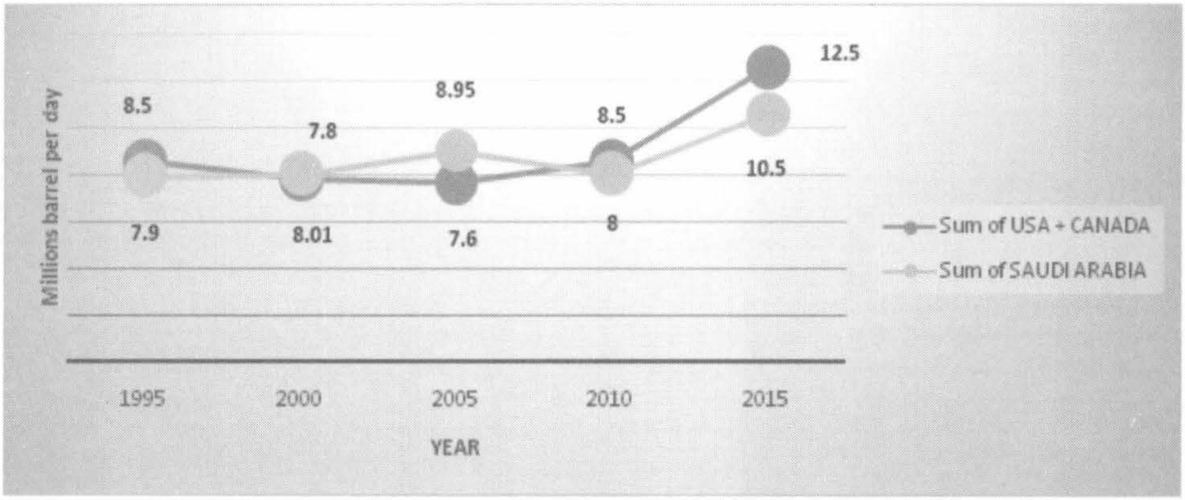
Data Source – Compiled by authors from http://www.statista.com/statistics/262858/change-in-opec-crude-oil-prices-since-1960/retrieved on April 19, 2016

Exhibit II- Average monthly OPEC basket crude oil price from February 2015 to February 2016



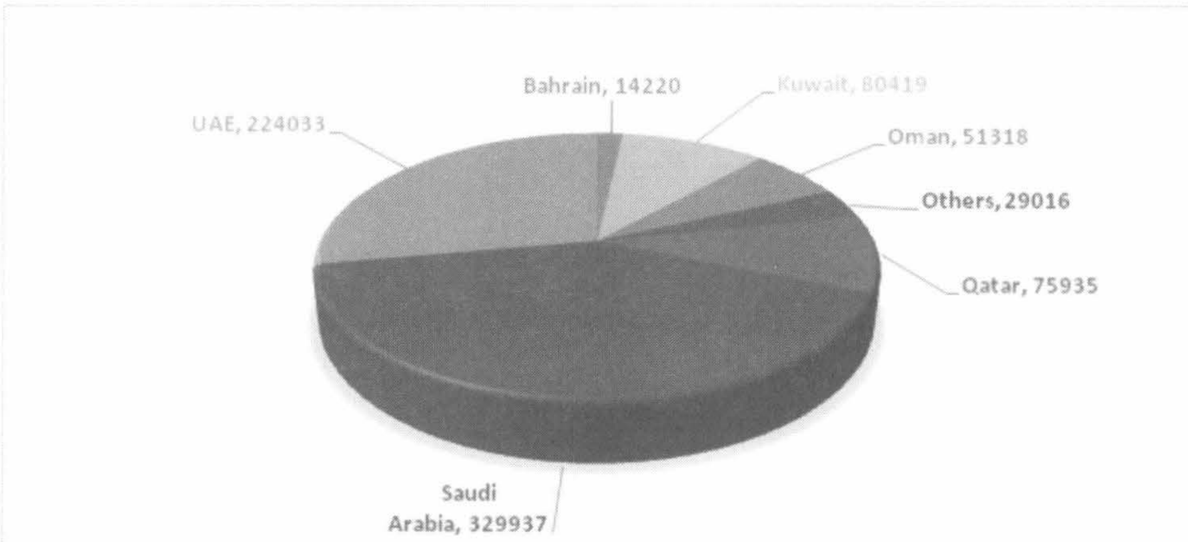
Data Source: - Compiled by authors from http://www.statista.com/statistics/277914/monthly-average-prices-of-the-opec-crude-oil-basket/retrieved on April 19, 2016

Exhibit III - Crude Oil Output: USA + Canada V/S Saudi Arabia



Data Source: - Compiled by authors from Energy Briefing: Global Crude Oil Demand & Supply, Page 26 / January 26, 2016 / retrieved on April 19, 2016

Exhibit IV- GCC Absorbs 96% Of India's Labor Emigration



Data source: - Compiled by authors from http://www.livemint.com/Opinion/NfrNMoe66lLqXG4eBI5v7I/The-negative-side-of-falling-oil-prices-for-India.htmlretrieved on April 19, 2016