

COLLAPSE OF OIL MARKET: CAUSES AND ITS IMPACT ON GLOBAL ECONOMIC FACTORS.

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INTRODUCTION

After four years of relative stability at about 100\$ a barrel, oil prices began a more than 50 percent slide in June 2014. The oil price decline is not an unprecedented event. Before the current collapse there were three large declines in oil prices. Each of those earlier declines coincided with major changes in oil markets and the global economy. The recent collapse in prices has triggered the intense debate about its causes and consequences. **Baumeister and Kilian (2015)** report that more than half of the oil price decline reflects the cumulative effects of earlier oil supply and demand shocks and, among the remaining half, the most Influential shock was associated with the weakening global economy. It would be fair to say that the timing of the sudden drop in the price of oil since June 2014 took energy and financial analysts by surprise.

Lower oil prices will have significant implications for monetary and fiscal policies. In oil-importing countries, declining inflation and current account improvements could allow central banks to maintain accommodative policies. In oil-exporting countries, the room for maneuver will be more limited. Central banks in those countries will have to balance the need to support growth against the need to maintain stable inflation and investor confidence. In most cases, fiscal policy will have to be tightened to make up for the loss of oil-related revenues. For oil exporters, the sharp decline in oil prices is also a reminder of the vulnerabilities inherent in a highly concentrated reliance on oil exports and an opportunity to reinvigorate their efforts to diversify. These efforts should focus on proactive measures to move incentives away from activities in the non-tradable sector and employment in the public sector, including encouraging high-value added activities, exports in non-resource intensive sectors, and development of skills that are important for private sector employment (**Gill et al. 2014; Cherif and Hasanov 2014a and 2014b**).

Review of literature:

Baumeister, C. and L. Kilian. 2015 claims that more than half of the decline in the price of oil between June and December 2014 was predictable as of June 2014 and this predictable component in the oil price in part to the cumulative effects of adverse demand shocks in the first half of 2014, reflecting an unexpected slowdown of the global economy. And also provide evidence that December 2014 oil price shock did not reflect the November 27 OPEC announcement that OPEC would not counter the production increases of other OPEC and non-OPEC producers.

Raju Huidrom and Tianlizhao (2015) describe about the recent decline in oil prices will have significant macroeconomic implications. If sustained, it will support global growth and disinflation. It will also trigger significant real income shifts from oil exporters to oil importers, strengthening growth and reducing inflation in a large number of oil-importing countries but dampening economic activity in oil-exporting countries.

Per Klevnäs, Nicholas Stern, and Jana Frejova (2014) elucidate that Oil prices offer welcome short-term economic relief for net consumer countries, while they hurt producers. Overall, cheaper oil provides a stimulus to a sluggish world economy. However, countries cannot bank on future low fossil fuel prices, even over the next five years. There is no consensus on future price trends, and even if there were, history has taught us that the consensus is often wrong.

Basu and Indrawati (2015) in an article "cheap oil for change" provide some deep insight into the matter how new players affect the existing players in the oil market. Unconventional source of oil supplies like shale oil is the main reason of fall in oil prices and Opec's decision November 2014 not to curtail supply because Saudi Arabia correctly reasoned that cutting output would not boost prices, but simply concede space for new players to step in and grab market share.

Badel and McGillicuddy (2015) explain the basic factor of fall in oil prices in comparison with the incident of 2008 crisis which is a demand factor. During the 2008 financial crisis, negative oil-specific demand shocks together with negative aggregate demand shocks caused a sharp decline in the price of oil. After mid-2014, the lion's share of the decline in oil prices has been caused by negative oil-specific demand shocks and, to a lesser extent, by negative aggregate demand shocks.

Empirical estimates of the size of the U.S. dollar effect cover a wide range: the high estimates suggest that a 10 percent appreciation is associated with a decline of about 10 percent in the oil price, whereas the low estimates suggest 3 percent or less (Zhang et al. 2008; and Akram 2009).

OBJECTIVE

- To know the source of volatility in oil market
- To know its impact on global economic factors
- What's next? : Future prospect

RESEARCH METHODOLOGY

The present research focuses on the collapse of oil market and its impact. According to requirement of the objective of a study the research design employed for the study is of a descriptive type. In the present study mostly secondary data have been collected from various interim and annual reports presented to the Ministry of OPEC, WORLD BANK & IMF. In addition to this, data have also been collected from various journals, articles, news paper archives. Keeping in view of the set objectives, this research design was adopted to have greater accuracy and in depth analysis of the research study.

IMPACT OF DECLINE IN OIL PRICES

Determining the macroeconomics causes of changes in oil prices is made difficult by the fact that most economic studies of oil prices consider oil as a major input in global economic performance. As such, the emphasis is on the impact of oil prices on macroeconomic performance on how “movements in the price of oil drive the economy”, instead of on the macroeconomic factors that determine oil prices.

➤ *Impact on importers:*

- Falling oil prices reduce overall energy cost as prices of competing energy products are forced down and oil-fired electrical power becomes cheaper to produce. For energy-intensive sectors, this should lead to higher profit margins and more supportive conditions for investment and employment. In addition, since oil is feedstock for various sectors, including petrochemicals, paper, and aluminium, the decline in prices directly impacts a wide range of processed or semi-processed inputs. The transportation, petrochemicals, and agricultural sectors, and some manufacturing industries, are thus usually major beneficiaries of lower oil prices. For consumers, lower energy costs and declining inflation more generally, increase real disposable income and support.
- Activity in oil importers should benefit from lower oil prices since a drop in oil prices raises household and corporate real incomes in a manner similar to a tax cut. A 10 percent decrease in oil prices could raise growth in oil-importing economies by some 0.1–0.5 percentage points, depending on the share of oil imports in GDP (Rasmussen and Roitman 2011).

- In oil-importing countries, savings from oil import bills can relax government budgets. Pre-tax subsidies, which arise when energy consumers pay less than the supply cost of energy, are high in many developing and emerging economies (Clements et al. 2014). The high real oil prices prevailing before the crisis contributed to mounting fiscal pressures in some countries as they responded to increasing global oil prices by raising price subsidies on domestic fuels. A decline in oil prices, therefore, presents an opportunity for many of these countries to reduce these subsidies and in the process remove long-standing distortions associated with them.
- The direct impact of falling oil prices on poverty are likely to be limited, the indirect effects may be substantial and largely beneficial. Energy consumption by the poor is low: households in the poorest quintile of the income distribution typically spend well below 10 percent of their income on fossil fuel-sourced energy (Vagliasindi 2012). As a result, the direct impact of falling oil prices on the poor is expected to be small. Indirect effects would work through growth and falling food prices. More than 70 percent of the world's poor live in oil-importing countries, where low oil prices (to the extent they are transmitted into local fuel prices) will support growth and real incomes. This will benefit the poor as well as the more prosperous. The poor could gain further if falling oil prices allowed expenditures on subsidies to be reallocated to better-targeted pro-poor programs.

➤ **Impact on exporters:**

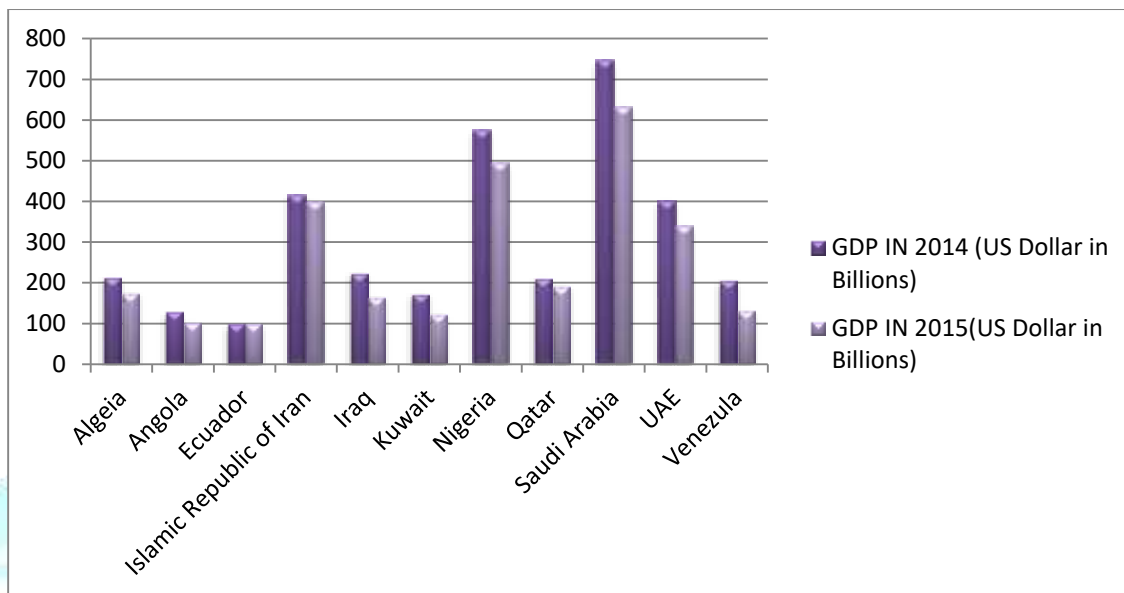
- OPEC is known to have suffered economic damage as a result of low oil prices, but exactly how much? We made the following estimates from the October 2015 world economic outlook database. They include all the OPEC countries except war-torn Libya, where the data is not particularly meaningful. All the figures given in this paper are in (or estimated from) US dollars unless otherwise specified:

GDP, 11 OPEC countries combined: Down from \$3,392 billion in 2014 to \$2,849 billion in 2015, a decrease of \$543 billion.

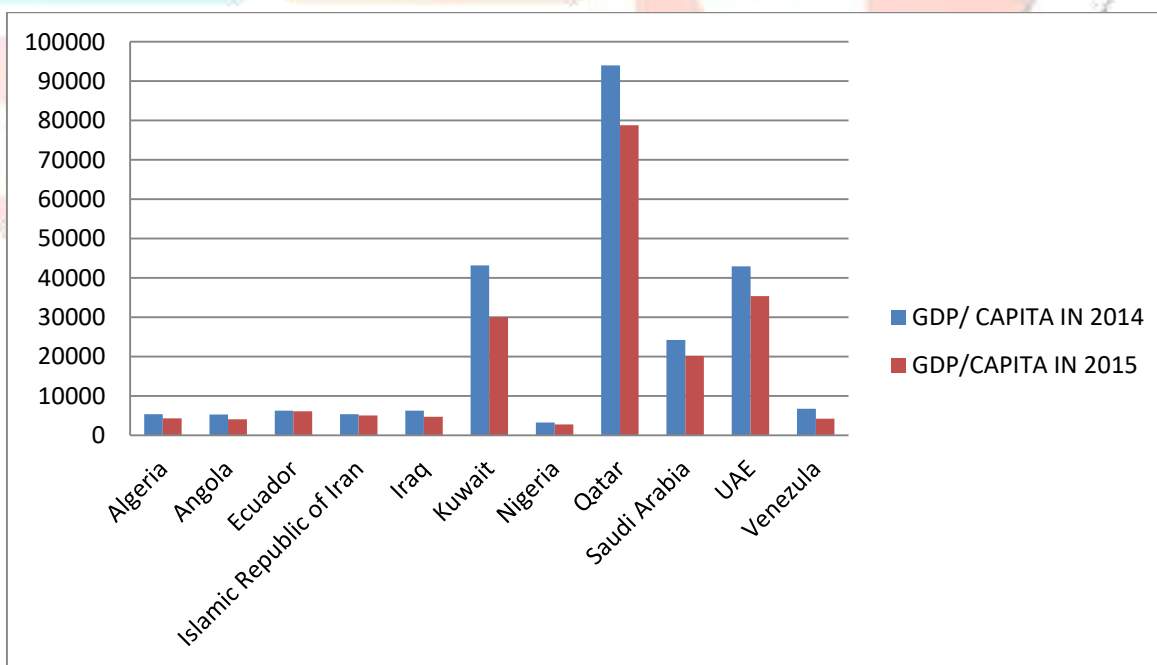
GDP per capita, 11 OPEC countries combined: Down from 243282.53\$/capita in 2014 to 195590.059\$/capita in 2015, a decrease of 47692.471\$/capita.

The economic damage has clearly been serious, but how much of it was a result of lower oil prices? Data from the 2014 OPEC Annual Statistical Bulletin indicate that OPEC exported about 8.5 billion barrels of oil in 2015 at an average “OPEC basket” price of \$49.49/bbl. This is \$46.80 lower than the \$96.29/bbl average basket price in 2014 and represents almost \$400 billion in decreased revenue. Allowing for the

damping effect on other sectors of the OPEC economies it's reasonable to assume that most if not all of the damage was done by lower oil prices.



Source: IMF



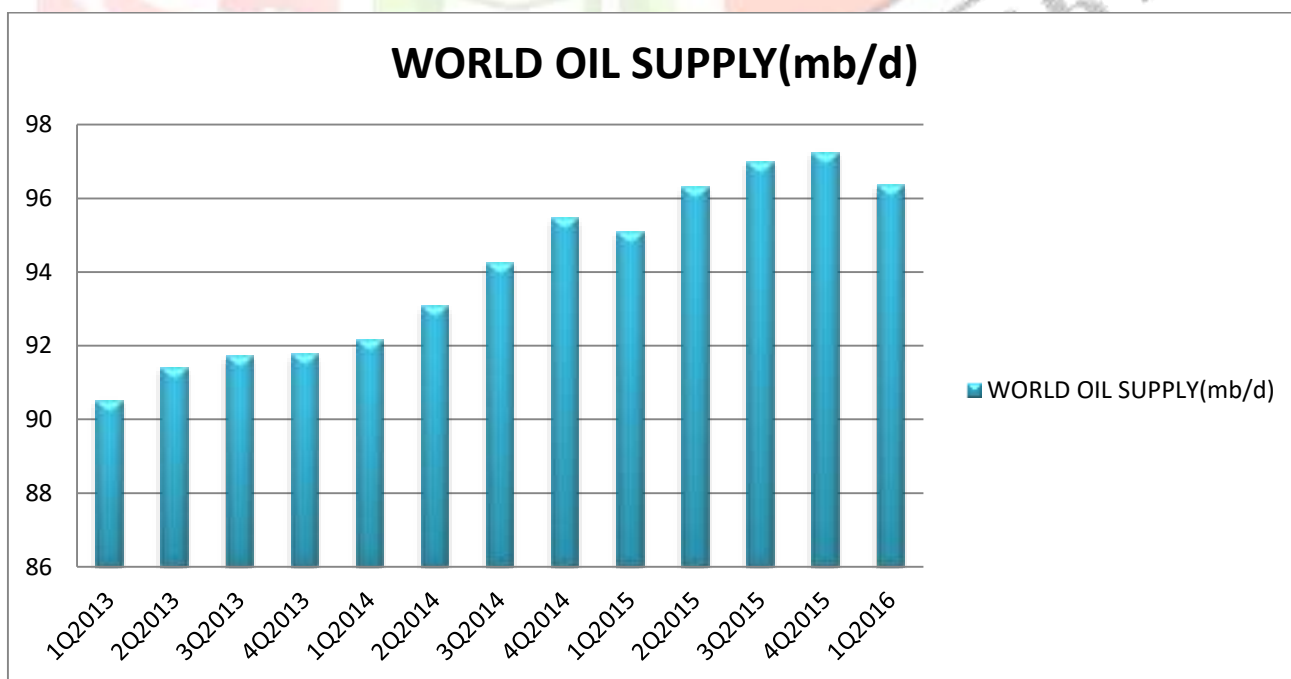
Source: IMF

CAUSES OF VOLATILITY IN OIL MARKET

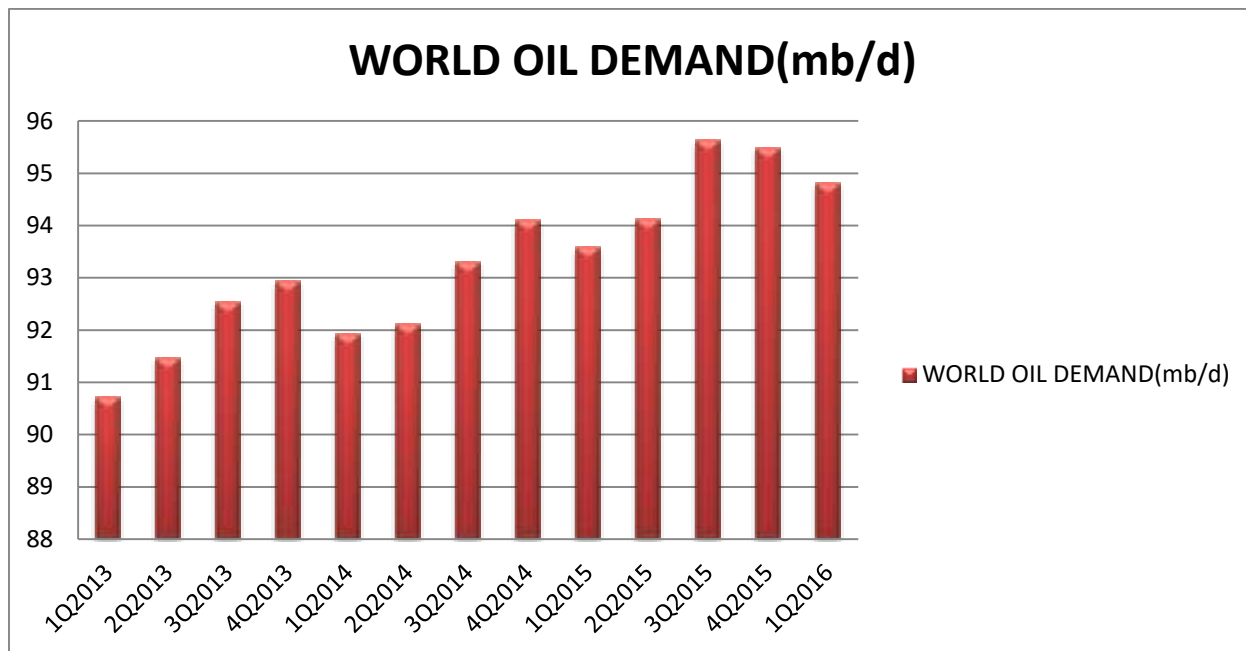
➤ *Demand and Supply Factor:*

An International Monetary Fund report suggests that increased supply accounts for 60 percent of the plunge. We believe the major factor behind the recent price decline is a shift in supply. World oil production grew at a significantly faster pace than demand in 2014, with some of the supply increase largely expected, such as expansion of U.S. shale and other unconventional sources (such as Canadian oil sands and the production of bio fuels). These unconventional oil projects differ from standard drilling operations in that they have relatively low capital cost and a much shorter life cycle—2.5 to 3 years from the start of development to full extraction compared with decades for conventional drilling.

However, there were some surprises to the upside, particularly steady production from Russia, Iraq and Libya, while OPEC decided in November not to lower its production target. In addition, global demand for oil has been softening and oil demand forecasts for 2014 and 2015 have been repeatedly revised downwards. As a result, at the end of 2015 oil production had increased by about 3 percent compared to the 2014 average, from 94.25 to 96.98 million barrels per day. This increasing supply puts downward pressure on oil prices.



Source: OECD/IEA



Source: OECD/IEA

➤ *OPEC Objectives:*

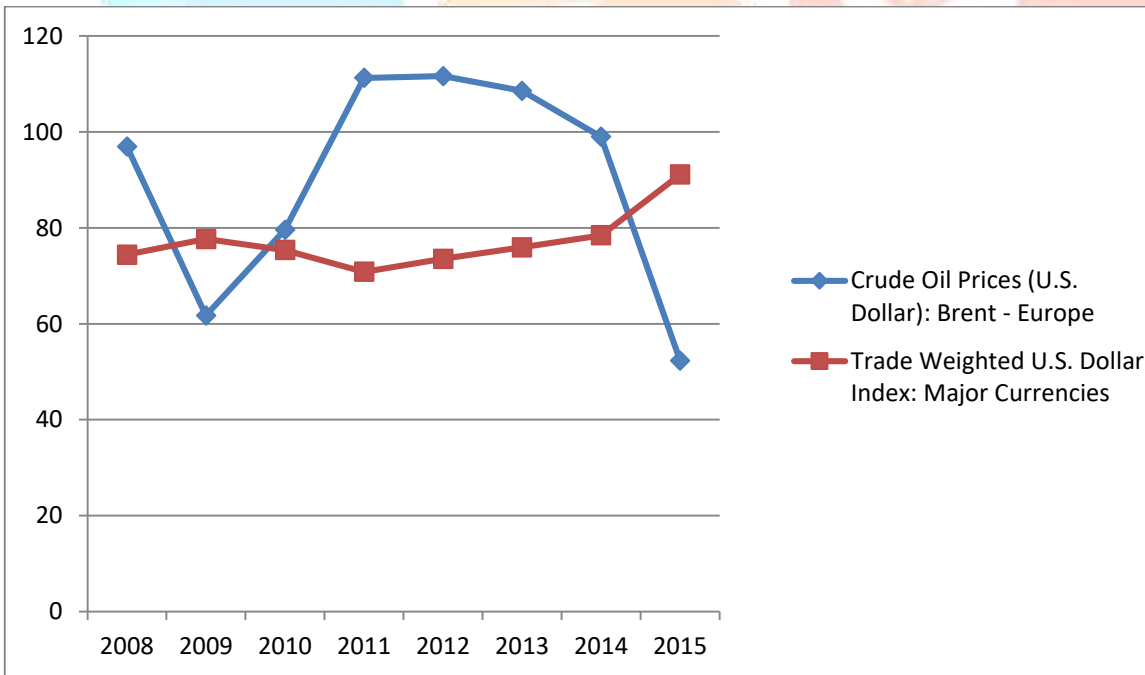
OPEC countries produce account for 40 percent of global oil supply, and although its share of global production is less than it was a decade ago, OPEC still has the potential to be the swing producer in global oil markets if it chooses. That is, OPEC has enough spare production capacity to easily increase or decrease the supply of oil to affect its price. However, OPEC, Saudi Arabia in particular, declined to cut oil production back in late 2014 in order to maintain market share, and has not changed its tune. Ever since then, oil markets have had to deal with an excess of supply, driving down prices.

However, as a result of this policy and rising unconventional oil production, OPEC's share of global oil supply has been steadily eroded. To stem further losses of market share, several OPEC members began in the third quarter of 2014 to offer discounts to Asian oil importers, thus signaling OPEC's intentions to abandon price targeting.

In the late 2015 Saudi Arabia, had said it would freeze production if all other members of the cartel agreed. But Iran, which recently has seen international sanctions against it eased, refused to curb production to levels reached in January. Oil prices were coming off a 12-year low reached in January ahead of the Doha meeting, but the failure of the talks are likely to send them lower.

➤ *Appreciation of US Dollar:*

Commodities such as oil are dollar denominated and oil can be viewed as another store of value, much like gold or FX. With a rise in dollar, the value of oil relative to the dollar falls. The correlation between changes in the U.S. dollar and oil prices has been quite strong historically, and indeed, the fall in crude oil prices has coincided with the strength of the dollar, strength that reflects stronger relative U.S. economic performance. This can be explained with the example, as we know US Dollar is currency of international trade, so for all practical purpose all buy and sales on international level is defined in terms of USD. Now, say Dubai Fateh 32 API benchmark oil in local currency is at 200 UAE Dirham per barrel and 50 USD/barrel in international market. Now, if USD strengthens, it will mean one dollar should be able to buy more than what it earlier bought - which means that what is locally priced at 200 Dirham should now be available at say 45 USD. Thus the price of crude goes down. This is the relation Dollar value and crude oil share - one strengthens other weakens. All the numbers I have used are hypothetical, just to explain the concept here. In the below figure, the alliance of us dollar and crude oil is shown. As the figure exhibit appreciation in u.s. dollar result in plunge in the oil prices and the major fall occur in the year 2009 and 2015. In 2010 and 2011 as u.s dollar depreciates, the outcome is rise in the prices of oil.



Source: US Energy Information Administration

FUTURE PROSPECT

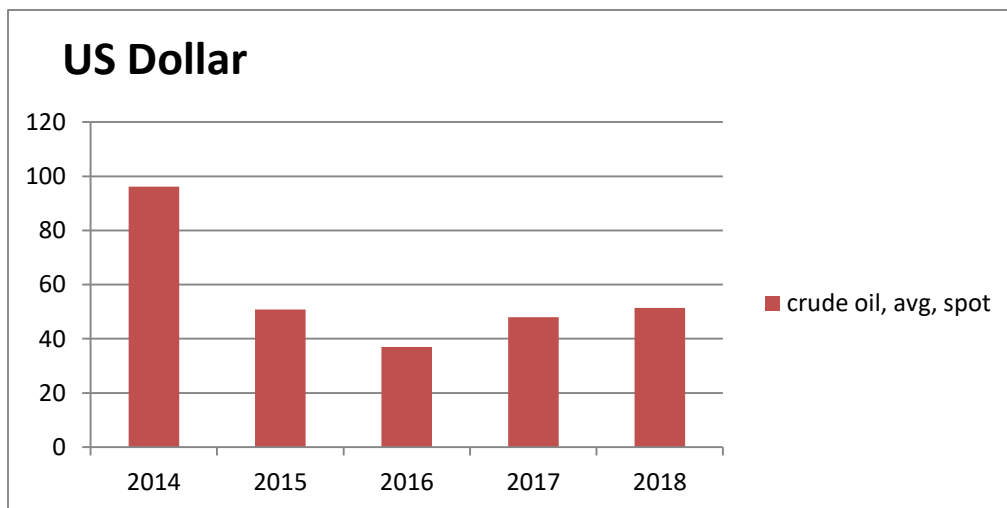
Brent crude oil spot prices increased by \$6/b in March to a monthly average of \$38/b. Declines in the U.S. rig count and some improvement in global economic indicators contributed to higher oil prices in March.

However, market expectations of ongoing growth in global oil inventories contributed to falling prices at the end of March, with Brent prices ending the month below \$37/b. With global oil inventory builds expected to average 1.4 million b/d in 2016, oil prices are forecast to remain near current levels. Forecast Brent prices average \$35/b in 2016.

Global oil inventories are expected to grow by 0.4 million b/d in 2017. Lower forecast inventory builds contribute to a moderate price recovery in 2017, with Brent prices forecast to average \$41/b. Forecast Brent prices reach an average of \$46/b in the fourth quarter of 2017, as the global oil market is expected be relatively balanced late in 2017, with the potential for significant inventory draws beyond the forecast period. Estimates for the price per barrel for crude oil from leading financial and multilateral institutions are thus closely monitored by governments, investors, and consumers alike. Here's a summary of some recent crude oil price forecasts:

- The World Bank estimated in its January 2016 commodity forecast report that the average spot price for crude oil will fall slightly further in 2016 to \$37/bbl from \$51/bbl in 2015.
- The IMF's January report revealed a similar expected decline from \$51.6/bbl in 2015 to \$50.4/bbl in 2016.
- In September, Goldman Sachs Commodities Research slashed its oil price forecast for 2016 to \$49.5/bbl for the international benchmark Brent crude oil from \$53.7/bbl in 2015, allowing for a short-term price decline to \$20/bbl.

Future prediction according to World Bank report



Source: World Bank

CONCLUSION

What will be the future of oil market? The short answer is nobody really knows. There are too many factors which directly or indirectly have impacts on it like economic, geo-political and technological variables. No one can easily predict the future prospect of market because it mainly depends upon what OPEC countries will decide in their next meeting. Will they cut their supplies or rely on the same decision. According to our study if they continue with same supply to control the major share in the market then there are chances of volatility in oil market remains continue in the near future. If the same trend continues then plunge in oil prices has significant macro-economic, financial and policy implications and it will support growth, reduce inflationary, external, and fiscal pressure in a large numbers of oil importing countries. On the other hand, sharply lower oil prices will weaken fiscal and external positions and reduce economic activity in a few oil-exporting countries. A new study conducted by Goldman Sachs (see Adams, 2014) concludes that the lower oil prices means that \$1 trillion of oil investment funds are now at risk of being withdrawn from projects, and this would reduce production by 7.5 million barrels of oil per day over the coming decade. According to our findings GDP of 11 OPEC countries has been fallen by \$543 billions and combined per capita of these countries decreased to 195590.059\$ in 2015 from 243282.53\$ in 2014 to, a decrease of 47692.471\$/capita. Not all but major effect is due to plunge in oil prices according to our study.

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