

# Oil Prices Turn-down and its Effects on Global Economy: A Descriptive Study of Saudi Arabia

Jalal Al-Baqshi  $^{1*}$  Hussain Al-Salamin  $^2$ 

- 1. Al-Ahsa College of Technology, Saudi Arabia, P O box 80415, Hofuf 3198
- 2. University Campus , King Fiasal University, Saudi Arabia, (Wasel), Building No. 7547 Agricultural land, Unit No.2, Al Hasa 36344-4072

#### **Abstract**

This paper highlights oil prices turndown and its effect on the global economy in a descriptive study of Saudi Arabia. The reasons, consequences and an adaptation approach for the current oil crisis in Saudi Arabia have been addressed. Oil prices will most likely maintain the current low prices for at least the next two years as OPEC has not succeeded to offset oil supplies. Reasons of the oil price turndown were found to be merely politically motivated than purely economic. However, both aspects will negatively affect the oil price and the crude oil sales volume. Consequences of oil price turndown manifest itself in reducing the levels of the currency valuation, business survival, and social standards. As a result, governmental subsides in fuel, water, and electricity will be revised. This will lead to several aggressive decision to stall or completely eliminate costly projects. The consequences are that private industries relying heavily on business with the public sector will be badly impacted, leading to significant layoffs. Unemployment rate will, therefore, sharply increase, affecting the "Saudization" program. Inflation would in turn increase and the economic growth decreased. To rectify the oil price crisis, a comprehensive approach has to be taken into consideration. The most important of which is to adopt a sustainable economy approach where dependence on oil export be alleviated.

Keywords: OPEC, Oil, Turn-down, Global economy

#### 1. Introduction

As the world depends on energy, oil plays a major role in the global economy. Hence, any fluctuation in its prices should make a direct contribution to the wellbeing of both macro and micro economy. For oil-producing countries where crude oil represents most of their economic income, the change in the oil price will adversely impact their GDP growth (Tilak Abeysinghe 2001) as there is a strong correlation between oil prices and inflation indicators (J. Cunado and F. Perez de Graciab 2005). The impact of the crude oil prices as manifested from the value of crude oil exports on the GDP is illustrated in Table 1 (OPEC website). In addition, oil prices and currency prices are related (Radhamés A. Lizardo and André V. Mollick 2010). It was found that the currencies of oil importers, such as Japan, depreciate relative to the USD when the real oil price goes up. The less currency inflows into the economy, the weaker its currency tends to be. Long run and forecasting results are remarkably consistent with an oil-exchange rate relationship. Increases in real oil prices lead to a significant depreciation of the USD against net oil exporter currencies, such as Canada, Mexico, and Russia. On the other hand, the currencies of oil importers, such as Japan, depreciate relative to the USD when the real oil price goes up. In the case of the oil-producing countries, oil sales are one of the main source of the currency inflows.

As a result, stability of oil prices is vital for decision makers. While oil export is usually stable as set forth by OPEC, world oil prices are subject to supply and demand episodes (Kiseok Lee and Shawn Ni 2002). To absorb such fluctuation in the oil price, economists normally project and simulate the expected changes in the oil price to help with setting strategic planning in their respective country. Al-Baqshi and et al. ,(2015) showed that there is a relatively declining trend of the world oil demand along with a sharp price decrease ranging from \$50 to \$61 until 2019. Compared with the actual prices in 2015 which was \$50.75 and \$32 in the first quarter of 2016, the simulated average price in 2015 and 2016 was \$50.64 .



Table 1. Important Numbers of OPEC Counties (curtesy of OPEC website)

Country	GDP Per Capita (\$)	Value of Exports (Millions \$)	Current Account Balance	Crude Oil Production
·	1	<b>,</b>	(Millions \$)	(1,000 p/d)
Angola	5,273	63,908	3,775	1,654
Ecuador	6,308	26,604	718	557
Indonesia	N/A	N/A	N/A	N/A
Iran	5,226	98,981	29,473	3,117
Iraq	6,208	85,298	16,113	3,110
Kuwait	42,119	104,165	50,513	2,867
Libya	6,623	15,186	-12,391	480
Nigeria	3,150	83,897	6,187	1,807
Qatar	95,040	131,716	54,760	709
Saudi Arabia	24,454	372,829	109,309	9,713
UAE	47,096	380,347	48,453	2,794
Venezuela	6,757	80,663	13,212	2,683
Algeria	5,836	60,040	-9,100	1,193

Table 2. Simulated Prices of oil (Al-Bagshi et al. 2015)

Year	Simulated price
2014	\$50.64
2015	\$50.64
2016	\$50.64
2017	\$61.08
2018	\$50.64
2019	\$61.60
2020	\$105.87

Several studies were conducted on the effect of oil prices turndown. Abdoulkarim Esmaeili and Zainab Shokoohi (2011) investigated the effect of oil price on the world food prices using principal component analysis and found that crude oil prices have an indirect effect on food prices. According to Tilak Abeysinghe (2001) there is a negative effect of high oil prices on the GDP growth; however, for only small open economy. According to Perry Sadorsky (1999) both oil prices and oil price volatility play important roles in affecting real stock returns in the studied countries. Rong-Gang Cong et al. (2008) investigateed the interactive relationships between oil price shocks and the Chinese stock market and found no statistically significant impact of the oil price shock on the real stock returns of most Chinese stock market indices. James D. Hamilton (1996) showed that the recent data were consistent with the historical correlation between oil shocks and recessions.

## 2. Discussion

There was a dramatic collapse in the oil prices since the middle of 2014 until the first quarter of 2016 from over 100 to less than 30 US\$ per barrel as it is mapped in Figures 1 (World Bank report 2016)



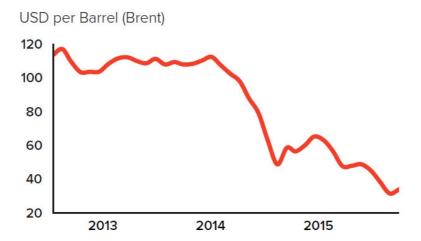


Figure 1. Crude oil prices (curtesy of world Bank. (2016)

The drop of prices is followed by the OPEC's decision to maintain the current production rate. There are some countries such as Venezuela, Libya and Algeria which can be specifically more harmed by the current oil prices since their balance is already in the minus area (Table 1). McEndree (2015) described the influence of the price on Venezuela as "teetering on the brink of insolvency and humanitarian disaster" though the production price is low.

Table 3 . Demand –supply equilibrium for influential countries by Millions (Researchers efforts from OPEC website)

Producer	Actual	Price	Value	Reduced	Expected	Value
	Export			export	price	
KSA	9,713	\$ 38	\$ 369,094,000	8,500	\$ 50	\$ 425,000,000
Iran	3,117	\$ 38	\$ 118,446,000	2,742	\$ 50	\$ 137,100,000
Iraq	3,110	\$ 38	\$ 118,180,000	2,736	\$ 50	\$ 136,800,000

Table 3 is a hypothetical case about oil product in relation to elasticity. In fact, crude oil is elastic and sensitive to demand and supply power. Saudi Arabia, Iran (after the sanction was removed) and Iraq are the three major producers of crude oil that sell their products at \$ 38 to \$ 40 at their current level of production.

Saudi Arabia, Iran and Iraq can, for example, cut their crude oil sales by %12 to push up the prices to around \$50 (Table 3). In such a case, the total revenue from crude oil sales will be \$425,000,000 for Saudi Arabia, which is even greater by 15% as compared to the value from its actual export.

#### 3. Reasons of oil price turn-down

In fact, the problem is politically motivated rather than economically based. Iran did not attend Doha Oil conference in April 2016 to agree on freezing the level of production. Therefore, the absence of Iran leaves an influential gap in the effectiveness of the conference results. In fact, Iran insists on regaining its market share before sanction with 4,300,000 barrels and this creates a conflict and disagreement among producing countries. This conflict may prolong the crisis period.

### 4. Consequences of oil price turn-down

#### 4.1 Economical Consequences

On the economical aspect, the current oil price can lead to a crisis especially to those countries that their most GDP depends on oil such as Arabian Gulf countries, Venezuela, Libya, Algeria, and Iraq (Table 1). The consequences will be different from the crisis in the 90s, because the governmental spending increased dramatically through the last decade and even with cutting from spending will not solve the entire problem. This could lead these countries to stay in a minus balance as Saudi Arabia already requested for an external loan of US\$ 10 billion. On the other hand, oil prices at this level (\$ 42) could also create more political disagreement



because producing countries will dispute more and may try to use oil as a push card in the political settlements. On the whole, both political and economic sides will be affected by oil prices and export quantity and this would create a negative effect.

#### 4.2 Reduced governmental subsides and spending

Countries whose economies heavily depend on oil will defiantly be affected by low prices. Expectedly, the reaction to the lower revenue, the governments will reduce or cut their support to subsidized commodities, like fuel, water, and electricity. Saudi Arabia government for instance has already passed a decision on 28<sup>th</sup> December, 2015 to reduce its support to these important commodities and reflected by GulfTalent (2016). Moreover, impacted governments have suspend or canceled some unimportant projects that need huge finance which will in turn have badly affected local industries that rely heavily on governmental projects. As result, some industries were closed or downsized and consequently many employees were laid off. This will have a significant tool on the Saudization program in Saudi Arabia. On the other hand, inflation will increase, economic growth will decrease, salary raises will be ceased, commodities prices will increase as a result of indirect taxation, as demonstrated in Figure 3 below for the Gulf Corporation countries (GCC). (Gulf Talent research website)



Figure 3. (curtesy of Economist Intelligence Unit, GulfTalent Surveys. (2016)



The effect of the crude oil low price has also impacted the government supported scholarships to overseas universities and academic institutions known as King Abdullah Grant program which is obviously clear in Table 4.

Table 4 . Number of Students abroad (Ministry of Education website)

Year	Number of Students
2012	145,545
2013	149,742
2014	207,000
2015	172,099
2016 (Q1)	10,000

## 5. Conclusion and Recommendations

This paper shows reasons, consequences and an adaptation approach for the current oil crisis. Oil prices will most likely maintain the low prices for at least the coming two years as OPEC and other producers have not succeeded to balance the oil prices to an acceptable range. This could be due to both economic and political reasons. This slump in oil prices affect currencies, world trading, business survivals and even social standards. Therefore, there is a noticeable reaction from producers in their strategic planning. This is demonstrated in governmental spending large budget cut, largely influencing both people and local businesses. An adaptation approach for such global case can be considered from both political and economical point of view. Creating sustainable economy that reduce the dependability on oil for developing countries is another feasible approach.

## 6. Acknowledgment

The authors would like to thank King Faisal University for allowing us to publish the paper. Our thanks should also go to Mr. Adnan Al-Hajji for his insight in this paper.

## References

Abeysinghe, T. (2001). Estimation of direct and indirect impact of oil price on growth. *Economics Letters*, 73(2), 147-153. Retrieved March 15, 2016.

Cunado, J., &Gracia, F. P. (2005). Oil prices, economic activity and inflation: Evidence for some Asian countries. *The Quarterly Review of Economics and Finance*, 45(1), 65-83. Retrieved March 15, 2016.

Esmaeili, A., & Shokoohi, Z. (2011). Assessing the effect of oil price on world food prices: Application of principal component analysis. *Energy Policy*, 39(2), 1022-1025. Retrieved March 15, 2016.

Hamilton, J. D. (1996). This is what happened to the oil price-macroeconomy relationship. *Journal of Monetary Economics*, 38(2), 215-220. Retrieved March 15, 2016.

KiseokLee a, Shawn Nib, (2002) On the dynamic effects of oil price shocks: a study using industry level data; Journal of Monetary Economics 49, p 823–852

Lake E. A. and Constantinos Katrakilidis (katrak@econ.auth.gr) European Research Studies Journal, 2009, vol. XII, issue 1, pages 149-161

Lee, K., & Ni, S. (2002). On the dynamic effects of oil price shocks: A study using industry level data. *Journal of Monetary Economics*, 49(4), 823-852. Retrieved March 15, 2016.

Lin, C., Fang, C., & Cheng, H. (2010). Relationships between oil price shocks and stock market: An empirical analysis from Greater China. *China Economic Journal*, *3*(3), 241-254. Retrieved March 15, 2016.

Lizardo, R. A., &Mollick, A. V. (2010). Oil price fluctuations and U.S. dollar exchange rates. *Energy Economics*, 32(2), 399-408. Retrieved March 15, 2016.

McEndree, Dalan. "Are OPEC Countries Creditworthy At \$50 Crude?" *Oil Price*. CNBC, 30 Nov. 2015. Web. 9 Apr. 2016.

Member Countries. (n.d.). Retrieved February 5, 2016, from <a href="http://www.opec.org/opec\_web/en/about\_us/25.htm">http://www.opec.org/opec\_web/en/about\_us/25.htm</a>



Number of students abroad. (n.d.). .). Retrieved June 20, 2016, from

https://www.mohe.gov.sa/ar/studyaboard/King-salman-hstages/Pages/default.aspx

Rong-Gang Cong, Yi-Ming Wei, Jian-Lin Jiao and Ying Fan (2008): Relationships between oil price shocks and stock market: An empirical analysis from China, Energy Policy, 2008, vol. 36, issue 9, pages 3544-3553

Sadorsky, P. (1999). Oil price shocks and stock market activity. *Energy Economics*, 21(5), 449-469. Retrieved March 15, 2016.

**First A. Author:** Jalal Albaqshi is a lecturer of English and the head of Curriculum committee at AlAhsa College of Technology, Saudi Arabia. He completed his Master's degree in TESL from Arkansas Tech University 2011, USA. Also, he completed another Master's degree in Business Administration 2015 from King Faisal University, Saudi Arabia. His professional interest is researching in English assessment, teacher training, Economics and Supply Chain.

Second A. Author Hussain Al-Salamin is holding MBA from King Fiasal University (KFU) (2014) with highest performance in his class. He completed B.A. in Electrical Engineering from King Fahad University of Petroleum and Minerals (2007). Eng. Hussain joined KFU in 2010 as project engineer at new construction of University Campus. His professional interest in researching include: Operation Management, Supply-Chain Management, Marketing Management, E-Business, Consumer behaviour, and Environment and Recycle. He has eleven published papers.