HOW DO THE CRUDE OIL FLUCTUATIONS IMPACT THE INDIAN ECONOMY?

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ABSTRACT

This paper is related to the ongoing fluctuations in the global oil market due to the present oil glut and less demand by countries. It discusses the impact of the resulted decline in the oil prices on the Indian economy through various benefits and a few disadvantages incurred. Prime Minister, Modi recently in the Petrotech inauguration has asked the oil corporations to become multinational corporations and has aimed to reduce reliance on imports for crude oil by 10 per cent by 2022 as it is expected to increase to 90 percent and above by 2040 thus, attempting to strengthen the oil exploration and production. To meet the challenges, a few policies, schemes and initiatives taken by the government along with some suggested measures are discussed below in the paper.

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1. INTRODUCTION

India largely relies on the imports of crude oil from the Middle East including Iran and Iraq, as it covered nearly 61 per cent of 3.7 million barrels a day, of crude imports in the year ended 31 March 2014, as per the data given by the oil ministry. Africa contributed to make up 16 per cent of India's crude oil imports whereas, South America made up 17 per cent and.[1] Iran was the second biggest supplier to India until three years ago, when Iraq replaced it from the position due to the US-led sanctions which forced India's refiners to cut purchases from Iran to 11 million tonnes (hereinafter referred as mn) from a peak of 21.8 mt (in 2008-09), whereas, imports from Iraq were 24.6 mt[2],according to the data from the oil ministry. Eventually, lifting the US- led sanctions resulted in a five-year rise of Iran's crude oil imports in India[3]. Iran's export of crude oil to India has risen to 336 per cent in October of 2016. [4]

2. CRUDE OIL PRICES FACTORS

Although, there are many factors responsible for the fluctuations in crude oil prices like storage of crude oil by rich countries, changes in tax policy[5] and many more, some of the important factors are discussed below:

- The Organisation of Petroleum Exporting Countries (OPEC) nations produce a large part world's crude oil. Therefore, any decision made by the OPEC to increase or reduce production impacts the prices of crude oil in the global market.[6] Also, the production in manufacturing, transportation, electricity generation require a substantial amount of oil.

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[1]India plans to diversify oil imports. LiveMint. Retrieved September 12, 2016, from http://www.livemint.com/Politics/dtqX201kKrlYSwlaNuuH5N/India-plans-to-diversify-oil-imports.html.

[2] ibid.

[3]India's Iran oil imports rise to five-year high in July -tanker data. The Economic Times. Retrieved September 12, 2016, from http://economictimes.indiatimes.com/news/economy/foreign-trade/indias-iran-oil-imports-rise-to-five-year-high-in-july-tanker-data/articleshow/53709518.cms.

[4] India's imports of crude oil to India. Retrieved November 6, 2016, fromhttp://www.zeebiz.com/india/news-indias-crude-oil-imports-from-iran-rise-nearly-336-in-october-8627.

[5] What drives crude oil prices? The Economic Times. Retrieved September 13, 2016, from http://articles.economictimes.indiatimes.com/2008-05-18/news/27734891_1_oil-producers-and-consumers-opec-countries-prices-in-global-markets.

[6]ibid.

- Natural Causes also affect the oil prices due to the impact of calamities on the production and distribution of crude oil. For example, recently Hermine, the storm that affected Florida and Caribbean region caused over 25 percent of gulf oil production to be taken off line.[7]
- Inventories are built by countries to stock certain amount of crude oil for emergencies and immediate future needs. Any change in their levels also trigger volatility in crude oil prices.[8]

3. OIL IMPORTS AND OIL PRICES

India's predominance on the imports of oil, sincerely affects its economy at any instance of fluctuation of the oil prices. The moment demand and supply equilibrium gets into a tussle, the anticipations of its impact on the economies of the countries start rising. India, being a net importer benefits when oil-producing countries, supply oil generously and struggle, when the same is limited. However, in these couple of years' oil prices have followed the path ofpeak to trough i.e. falling from a high of $115/bbl (or an oil barrel, where one oil barrel = 159 litres) in the mid-2014 to a low of $28/bbl in early 2016. When Russia, United States and other major oil producers like Organisation of Petroleum Exporting Countries (OPEC) refuse to cut down on the production of oil and demanding countries like Europe and China show bleak responses due to their respective slow economic growth thus creating a weighty supply glut in the economy, it is the net importers that are the shiny grabbers of such an opportunity to fight inflation.[9]

To understand this impact, we can look at theprice basket of buying oil that has been reduced for India to $37.34 (Rs. 2,494) a barrel from $84 a barrel in the financial year 2015 because of which India will save Rs. 2.14 lakh crore on its oil import bill alone in the financial year of 2016 (hereinafter FY16), according to the oil ministry.The ministry estimated that India will import 188.23 million tonnes (mt) of crude oil in FY16 at a cost of Rs 4,72,932 crore, as compared to 189.43 mt crude worth Rs 6,87,416 crore imported in FY15.[10]

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[7] Grisanti, Anthony (2016). Don't trust the Oil rally. Retrieved September 15, 2016, from http://www.cnbc.com/2016/09/09/dont-trust-the-oil-rally-crude-is-headed-back-to-the-30s-commentary.html.

[8] What drives (n 5).

[9] Kumar, Sanjay (2016). Why do Crude oil prices matter a lot to India? Retrieved September 16, 2016, from http://www.moneycontrol.com/news/commodity/why-do-crude-oil-prices-matterlot-to-indian-economy_6459121.html.

[10] Singh, Sudheer Pal (2015). India to save Rs 2 lakh crore. Business Standard. Retrieved September 17, 2016, from http://www.business-standard.com/article/economy-policy/india-to-save-rs-2-lakh-cr-on-crude-imports-as-oil-hits-11-year-low-115120900956_1.html.

India's oil imports from Iran climbed to 500,000 barrels per day (bpd) for a second time in the month of July 2016 marking it to its highest in at least five years. Thus, reflecting a 37 percent increase from June 2016 and higher than double from the last year.

Hence, the fall in crude prices has resulted in the increase of crude oil imports to 81 percent in 2015-16 from 78.5 percent in the previous year in the country. And helped India to save money on import bills and thus, narrow its current account deficit. Further,the fiscal deficit of the country ismanagedby the government easing the burden by lowering subsidies on products of petroleum such as kerosene and LPG. Indirectly, this decline lowers the transportation costs of petroleum products and further provides aid to the government to combat inflation which has been a serious issue for India for a long time. According to the macro experts, 10 barrels per stream day (or bpsd, is the quantity of oil product produced by a single refining unit during continuous operation for 24 hours) dip in crude oil prices helps India reduce its retail inflation by 20bpsd, other things remaining the same.[11] The impact of a decline in oil prices on inflation depends upon the depreciation of the currency along with the changes in the oil prices. The estimated weight of fuel products in Wholesale Price Index and Consumer Price Index are 9.36 per cent and 6.35 per cent respectively and thus, these price changes will impact inflation. But it is anticipated that the total price of oil in terms of rupee will still be lower in years 2016 and 2017 from the current level even at 10 per cent of depreciation. Therefore, maintaining an overall low cost of oil. The impact of the same would affect the Wholesale price index to the extent, the government permits the flow of price towards the market level keeping in mind the adjustments to be made in the products such as Kerosene or LPG that are being subsidized. Whereas, the effect on the Consumer price index will be indirect due to the impact it has on energy and transport costs as they normally don't come down along with the fall in oil prices. Thus, such decline in oil prices will affect inflation positively despite the declining rupee.[12]

At the subsidiary level, where the government pays to the companies who sell their fuel products at a lower rate, it will be able to reduce the subsidy because of the decline in oil prices and thus narrow its fiscal deficit. Petroleum subsidy saw 50 per cent downfall in 2016 from 2015 as it was targeted at Rs 30,000 crore for the current year. This, will in turn help the government to rationalize the same for LPG and Kerosene.[13]

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[11]Kumar, Sanjay (n 9).

[12] How will current crude oil scenario affect India? (2016). Hellenic Shipping News. Retrieved September 18, 2016, from http://www.hellenicshippingnews.com/how-will-the-current-crude-oil-scenario-affect-india/.

[13]ibid.

Tax collections in the forms of customs and excise duties might show a decline with the fall in oil prices but they also depend on other factors such as exchange rate, quantity of the imports etc.

Household expenditure on energy is also reduced releasing the income for other domestic demands because around 30 percent of India's energy expenditure in the cities is allocated to gasoline and diesel.[14]

Amongst all the benefits the decline in crude oil prices has garnered to the Indian economy, there are however, few negativessuch as the growth in the Indian exports is affected by the fall because refinery products account for 20 percent of the total exports and have ranged between $ 55-56 billion in the last few years.[15] Also, India being the largest remittance receiving country in 2015 with an estimated $72 billion according to the 18 Dec World Bank report, it will face risk because its highest remittance (half of the total) were from West Asia. It is so, because oil exporters such as Saudi Arabia, UAE, Kuwait witnessed a sharp slowdown in their gross domestic product growth by the fall in oil prices. Remittances are the most stable source of the country for dollar inflows from expatriates.[16]

However, the fall in the oil prices is gradually slowing down and now the prices are ready to gain back their position as the US benchmark West Texas Intermediate or WTI is trading at around USD 47 per barrel whereas, Brent is standing at USD 49 per barrel currently. As per the BJP MP Subramanium Swamy, if the crude oil prices carry on with escalation to about USD 60 per barrel, India will face the brunt of economic crisis. Thus, inflation and economic growth will also get affected because of 80 percent dependency of the country on imports, to meet its oil needs. It will be required to spend Rs 9,126 crore (USD 1.36 billion) more, for one dollar per barrel increase in crude oil prices every year.[17]Recently, OPEC decided to cut down its production by 1.2 million barrels a day for the first time since 2008, asking the non-OPEC countries to cut by 0.6 million barrel per day, bringing Brent to USD 54.46 a barrel. The decision was a result of rising oil inventory and stressed financials speculating the figure of USD 70 a barrel. Thus, this

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[14] India Energy Outlook (2015). Retrieved September 18, 2016, from http://www.worldenergyoutlook.org/media/weowebsite/2015/IndiaEnergyOutlook_WEO2015.pdf.
[15]ibid.
[16] Steep fall in oil prices. LiveMint. Retrieved September 19, 2016, from http://www.livemint.com/Money/Ncf5QFCakB4RzOX41DrN9I/Steep-fall-in-oil-prices-takes-a-toll-on-remittances.html.

[17] India to be hit by economic crisis. Indian Express. Retrieved September 19, 2016, from http://indianexpress.com/article/business/economy/india-to-be-hit-by-economic-crisis-if-oil-price-crosses-60-subramanian-swamy-3002290/.

situation coupled with demonetization makes the tremors feel stronger in India because if crude oil reaches USD 60 then oil import bill will touch USD 15 billion from 1.54 bn a year.[18]

In addition to this, the decline in oil prices impact severely the domestic production of oil and gas which is relatively expensive by international standards and thus making many new projects no longer viable and slowing down India's oil production. Analyzing further, such combination of higher demands (reaching 10.3 mb/d by 2040) and lower domestic output (0.6 mb/d, where mb/d refers to one million barrels per day) will increase India's net oil imports rapidly and its reliance on the Middle East for lower cost of oil due to its increased production. Although, the efficient refinery sector of the country gives surplus of transport fuels for imports, it will face an even more competitive Middle East with its foreseen expansion of oil refinery coupled with increasing domestic demands of the country thereby, increasing the dependency on oil imports to 90 percent and above by 2040.[19]

4. IMPACT OF GST ON OIL AND GAS INDUSTRY

Goods and Services Tax is the 122nd Constitutional Amendment Bill. It is proposed to withdraw the encumbrance levied, from the manufacturers to the consumers of multiple taxes. It is a form of indirect tax which will incorporate various taxes into itself to form a single tax which will be effective on every stage of production i.e. beginning from manufacturing to purchasing. This tax is proposed by the government of India to levy the same on all the goods and services without any distinctions among them except on those which are exempted under the Goods and Services law. Therefore, constituting a uniform tax regime where the individual will not be bothered to distinguish between a good and a service. Howsoever, additional 1 percent tax will be imposed on goods that will be subjected to inter-state transfer.

Thus, GST will put an end to a number of taxes such as excise, Value Added Tax (VAT), service tax etc. It is a dual taxation system wherein, there will be a Central GST and a State GST. It will from hereinafter, negate the cascading effect or double taxation which in simpler terms means tax on tax and it will ease more competition on original goods and services benefitting the gross domestic product growth of the country.[20] Although, the rate at which the tax will be levied upon is yet to be decided.

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[18] OPEC cuts add to India. Money Control. Retrieved December 4, 2016, from http://www.moneycontrol.com/news/economy/comment-opec-cuts-add-to-indias-economic-stress-after-demonetisation_8056201.html.

[19] India Energy Outlook(n 14).

[20] http://www.gstindia.com/goods-and-service-tax-a-detailed-explanation-with-examples-2/.

But the taxes that are exempted from the current GST law are alcoholic liquor for human consumption, electricity duty, stamp duty and others. Also, most importantly from the objective of this paper, is the exemption of mainly five petroleum products: crude, natural gas, high speed diesel, motor spirit and aviation turbine fuel till further notice where the GST council will consider its inclusion. Although, industrial fuels such as liquefied petroleum gas, Naptha, kerosene etc. are included. However, services like transportation related to petroleum products seem to be included in the GST.[21] Thus, the government has taken away much of the benefits of one-tax-one-nation regime by excluding oil and gas industry from the GST because of which it will have to follow the dual taxation[22] i.e. the industry will have to comply with both the current tax regime and GST regime. Thus, this will have a negative impact on this industry and will lead to increase in cost. *"Also, it would result in non-creditable tax costs wherein a refiner will pay GST on the procurement of plant, machinery and services to produce Motor Spirit, Aviation Turbine Fuel and High Speed Diesel however the input GST would not be creditable against the excise duty and value added tax levied on these fuels."*[23]

The upstream part of the industry constitutes the process of searching, recovering and production of crude oil while the downstream encompasses refining of petroleum crude oil, processing and purifying raw natural gas along with marketing and distributing products derived from crude oil and natural gas. Since, the five petroleum products play a significant role in the production of the upstream and downstream of the industry, it will lose out from the benefits under the GST. Also, it will impact the products produced by the feed stocks on the other downstream products resulting in inflationary rise in their prices. Since, the prices of the petroleum products depend upon the import parity mechanism and trade parity mechanism, the government needs to allow the producers to pass on the tax to the consumers related to under recoveries as the profits of refining and marketing companies will feel the blow due to non-creditable tax costs.[24] 'Under recoveries' is a term in the Indian Petroleum attributed to the losses incurred by the oil marketing companies because of the difference arising, by selling certain products like kerosene, diesel, LPG etc. at a subsidized price and the price which they should have had received to meet their cost of production. Such

[21] Impact of GST on Oil and Gas Sector (2016). Petrofed. Retrieved September 14, 2016, from http://petrofed.org/Upload/12_July_16_GST.pdf.
[22] GAIL (2016) Times of India. Retrieved September 20, 2016, from http://www.gail.nic.in/final_site/pdf/2016/NEWS-17Aug.pdf.
[23] Impact of GST on Oil and Gas Industry (2016) ICRA. Retrieved September 20, 2016, from http://www.niveza.in/PDF/ICRAstudyonImpactofGSTonOilGasIndustry.pdf.

[24]ibid.

exclusion of the stated petroleum products from the GST regime will increase the capital intensity or the fixed amount of capital present in relation to other factors of production such as labour, of the exploration and developmental projects in respect of upstream industry because of the lack of creditability of tax costs of goods and services like compressors, pipes, mud chemicals and others. By ‘non-creditable tax costs’ one expresses the inability of the taxpayer to subtract a certain amount of money from the total tax the individual owes to the government.

However, besides the above stated irregularities, there are many others as stated by ICRA such as the ambiguity in the inclusion of compressed natural gas, liquefied natural gas, piped natural gas within natural gas or whether the offshore supplies will be subjected to the Central, State or Integrated GST of upstream industry.[25]

5. STEPS BY GOVT

In this section, the measures and initiatives taken by the Government of India (hereinafter, as GoI) will be discussed while emphasizing mostly on crude oil.

Initially in 1997, New Exploration Licensing Policy was formed to fill the gap between India’s demand and supply of oil and natural gas by attracting Indian and Foreign companies to invest, bring concepts, new technologies etc. The policy came into effect in 1999. 100 percent Foreign Direct Investment was allowed under this.[26] Howsoever, the Hydrocarbon Exploration Licensing Policy replaced NELP on 10thof March 2016 aiming to enhance the domestic exploration and production of oil and gas, bringing substantial investment and generation of sizeable employment.[27]

Under Skill India Initiative, the Hydrocarbon Sector Skill Council set up by the GoI, plans to train nearly 1.9 million people in the oil and gas sector for the required skills for the next 10 years.[28]

India has also planned to bring online its first ever Strategic Petroleum Reserve (SPR) whose first phase includes three locations: Visakhapatnam, Mangalore and Padur collectively constituting 39.1 million barrels

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[25]ibid.

[26] New Exploration Licensing Policy (2015). Retrieved September 20, 2016, from http://petroleum.nic.in/docs/exp.policy.NELP2015.pdf.

[27] Hydrocarbon Exploration and Licensing Policy (2016). PIB. Retrieved September 21, 2016, from http://pib.nic.in/newsite/PrintRelease.aspx?relid=137638.

[28] Oil and Gas Industry in India (2016). IBEF. Retrieved September 25, 2016, from, http://www.ibef.org/industry/oil-gas-india.aspx.

of crude oil in the southern part. Based on the consumption and production data, these will provide for 13 days of net imported crude oil when filled. But India's aim by SPR, is an estimated 90 days' net coverage of imported crude oil as it plans to unveil another 91 million barrels of SPR in the second phase by 2020 which is still under planning.[29]

Recently, PM Modi while inaugurating Petrotech, 12th International oil and gas conference put forth an ambitious agenda for global energy management upon four pillars: energy access, efficiency, sustainability and security.Firstly, he asked national oil companies in the upstream sector and oil marketing companies to become multi-national and has aimed to increase crude oil production to reduce imports by 10 per cent by 2022. And has expected from oil and gas sector companies to tie up with their foreign counterparts to explore more equity oil.[30] Besides conventional methods of oil and gas exploration offshore and onshore he suggested to explore shale gas and coal bed methane gas to achieve the target set for 2022.

6. SUGGESTIONS

Although, the GoI has indulged in many investments related to the oil and gas sector, the dependence of the country on oil imports have not experienced a fall. Crude oil imports continue to rise as we have already seen despite the measures taken up to expand the domestic refineries due to the stiff competition from the Middle East.

Hence, few suggestions that can be looked up to would be substituting oil and natural gas by alternative means such as bio-gas and ethanol. As per the Union Minister, Mr. Nitin Gadkari, ethanol can be generated from biomass and even from municipal waste. The country will be able to save Rs. 5 lakh crores annually by production of ethanol and bio-gas from the waste, as per the Union Minister.[31]

"Plans for the NELP X rounds, include more than 166 000 km^2 of previously unavailable acreage, more than 80% of which will be in offshore regions. Some important innovations, due to be introduced in NELP X, are to be tested in a pending auction, announced in September 2015, of 69 marginal fields previously held

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[29] India Continues Developing its Strategic Petroleum Reserves (2016). US EIA. Retrieved September 22, 2016, from http://www.eia.gov/todayinenergy/detail.cfm?id=27132.

[30]Economic Times. Retrieved December 9, 2016, from http://energy.economictimes.indiatimes.com/news/oil-and-gas/full-text-of-prime-minister-modis-energetic-speech-at-petrotech-2016/55806415.

[31] India will soon stop importing Petroleum Products (2016). NDTV. Retrieved September 29, 2016, from http://www.ndtv.com/india-news/india-will-soon-be-zero-petroleum-import-country-nitin-gadkari-1455160.

by ONGC and Oil India Limited (OIL), but not developed because of their location, the size or complexity of the reserves or high development costs. The new terms will allow a license holder to produce any oil and gas, conventional or unconventional, found in the field (previously it was possible to produce only the hydrocarbon stream for which a license was granted)."[32]

Another move taken is the introduction of revenue sharing contracts instead of production sharing arrangements. This change allows the government to be entitled to a share of gross revenue from oil and gas sales from the beginning rather than, to be entitled to the revenue after the operators recover their costs and share revenue from subsequent production.

"Revenue sharing contracts are, in principle, potentially more straightforward to administer and their introduction could prevent some of the disputes over cost accounting that have burdened previous projects. But it remains to be seen whether the balance of risk and reward will be sufficient to attract new investors in the upstream, especially for acreage that requires exploration."[33]

7. CONCLUSION

To conclude, one can safely say that the reliance of crude oil is majorly on imports for India which will by 2040 increase to 90 per cent. Also the major share in India's imports is that of Middle East which is also set to rise in the near future.

India, has been benefitted largely from the fall in the oil prices and has also faced some of the negatives which already have been discussed. But this glut and the decline will not stay for long in the market as the US Brent slowly coming back on track.

The impact of GST Bill is that a large part of the oil and natural gas sector has been excluded from it and thus, the sector will have to bear with dual taxation wherein, it will have to work according to the current tax regime as well as the GST tax regime. Although, not much has been researched on this aspect currently.

India has also taken few steps as establishing a special petroleum reserve but such steps won't be sufficient to lower the extreme reliance of it on imports and thus it will have to look into other alternative energy means for the same.

[32]India Energy Outlook(n 14) 116.
[33]ibid.