



OIL: PRICE, PRODUCTION AND CONSUMPTION

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Abstract

The worlds have seen huge changes in the crude oil price and that have significant impact on all economies across the globe. India, predominantly depend upon import of oil, have a far more impact of Crude Oil Prices at international market. India have seen growth in consumption of Crude Oil, but the productions have not increased in the same fashion. Various countries across the globe have made significant expenses towards exploration activities and have seen the benefit of it by being able to increase the production level.

There are various factors, which have contributed negatively towards increase in production of oil in India, but the end result is that that today, we produces about 1% of total oil production, whereas, we have a consumption of approximately 4% of total oil consumption.

Key Words: Crude Oil, Brent, Consumption, Production, Rate (\$/bbl).

Introduction

Oil have immersed as the single most important commodity which holds the position of key factor in every economy across the globe. Every nation today need oil and its by-products and if the reserve or production in the nation is less, they have to import the same at whatever cost available. Crude Oil alone bears about 50% share to meet the global energy needs in the current scenario. Any variation in the prices of crude oil has direct/indirect effect on the economies and the price of crude oil being very volatile in nature, have a great impact on share markets too. Crude oil is often called "black gold", it is refined to produce various usable products including gasoline, diesel, etc. and various other forms of petrochemicals.

India is one of the non-OPEC countries much dependent on its imports to fulfill the domestic consumption demand as it has a much lower level of production. India is a developing country and the requirement for the oil as a primary energy constituent from the industries in the country is at its peak. The country has much depended on coal to satisfy its energy needs in the earlier times but the use of crude oil and gas is taking over the dominance of coal with the change in time. The Indian oil-refining sector has been regulated by the government historically and is still dominated. Various factors which impact the crude oil includes demand supply scenario of the crude oil and exchange rate variation.

Papapetrou (2001)¹, Ciner (2001)², Anoruo (2007)³, Kilian (2008)⁴ and Miller (2009)⁵ have investigated the effects of oil prices on stock prices in developed countries. Wherein the impact of prices of crude oil has been

¹ Papapetrou, E. (2001), "Oil price Shocks, Stock Market, Economic Activity and Employment In Greece."Energy Economics 23, pp. 511-532

² Ciner C. (2001), "Energy Shocks and Financial Markets: Nonlinear Linkages", Studies in Non- Linear Dynamics and Econometrics, 5, pp. 203-212

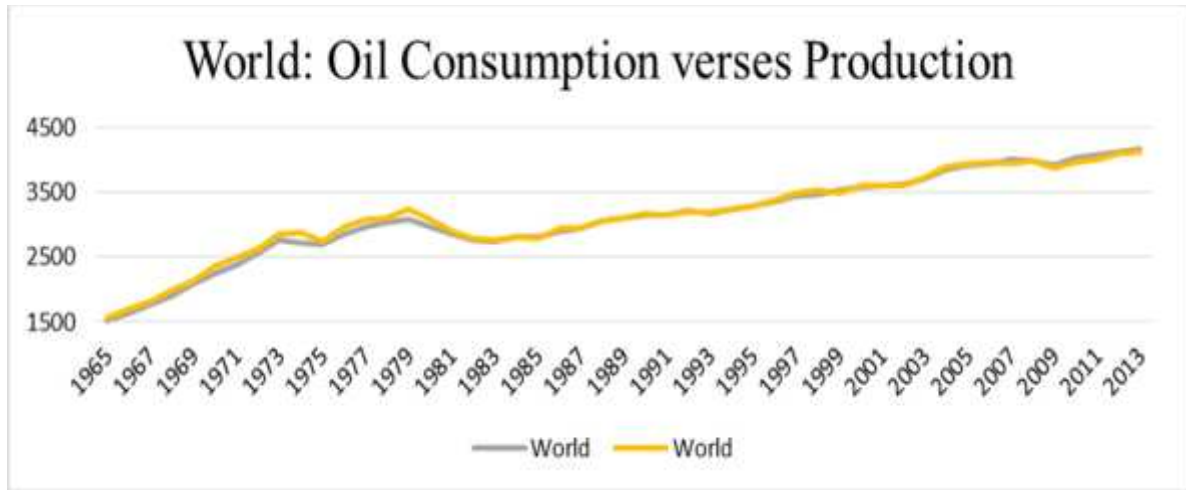
³ Anoruo, E., Mustafa, M. (2007), "An empirical investigation into the relation of oil to stock market prices", North American Journal of Finance and Banking Research,1(1), pp. 22-36.



analyzed and it have found a positive relationship between the two. Radhika Pandey (2005)⁶ examined one of the significant developments affecting the global economy in the current scenario is the phenomenal increase in the crude oil prices and explore the possible conflicts which policy makers experience while framing policies for curbing the adverse impact of oil price hike.

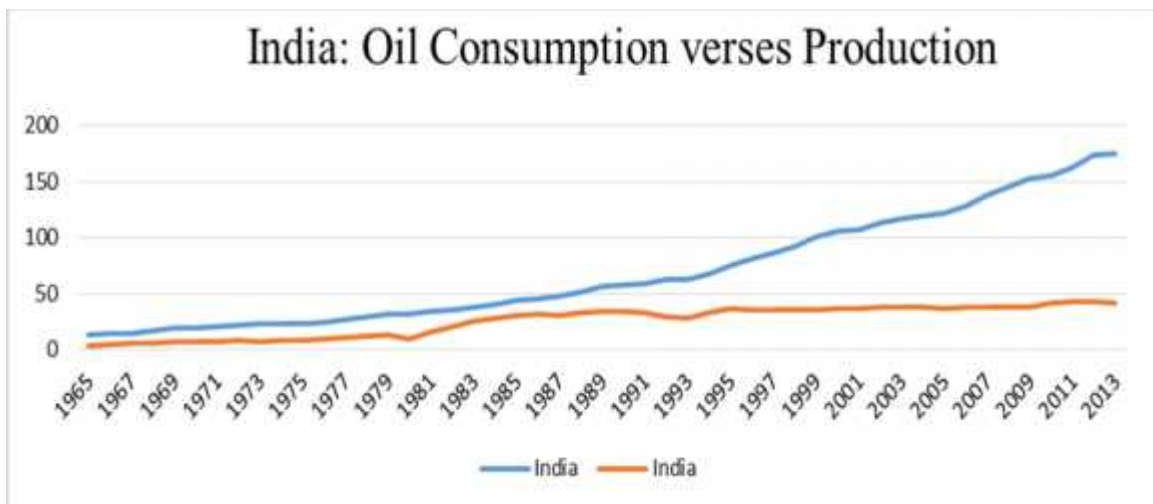
Oil: Consumption & Production

As a theory of economics, the consumption and production should match each other, depending on what is higher, the rate will be decided and will move accordingly. The same whole goods, if we consider the world as a single economics for Oil.



Source: BP Statistical Review

But, if we take India on a standalone basis, the variation is very large between consumption and production and the same have been keep increasing. Consumption in India had been more than 3 times the production, leading India to heavily depend on Oil Import.



Source: BP Statistical Review

⁴ Kilian, L. (2008), "Exogenous Oil Supply Shocks: How Big Are They and How Much Do They Matter for the US Economy?", Review of Economics and Statistics, 90, pp. 216-40.

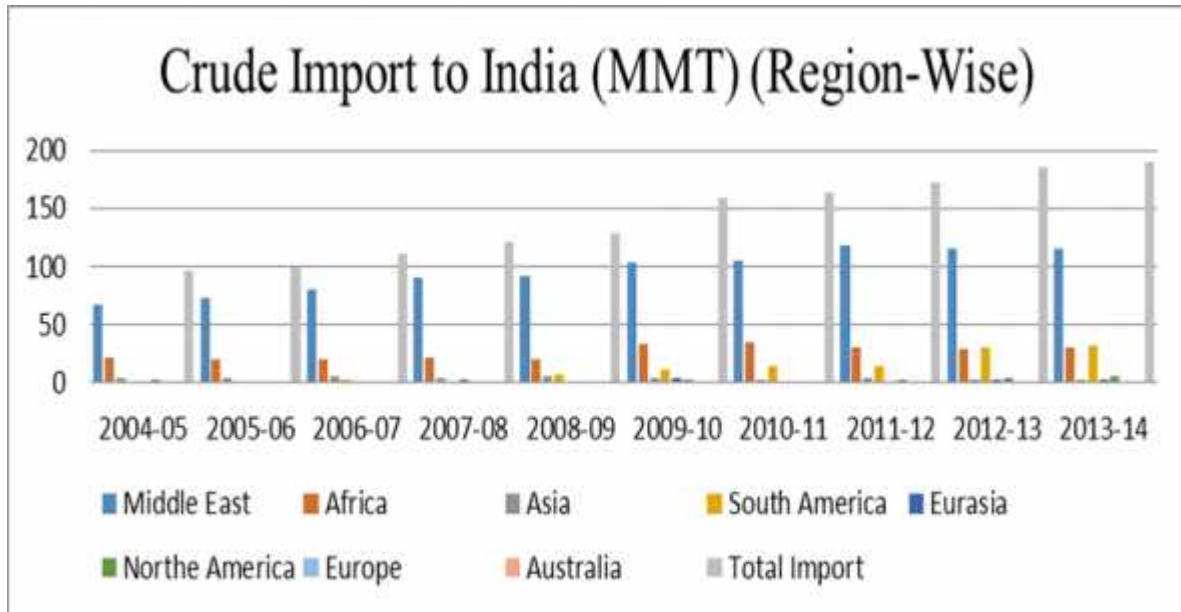
⁵ Miller, J.I., Ratti, R.A. (2009), "Crude oil and stock markets: Stability, instability, and bubbles", Energy Economics, 31, pp. 559-568.

⁶ Pandey Radhika (2005), "Macroeconomic Implications of Oil Price Hike", National Law University. Working paper series



Crude Oil Import by India

India majorly Imports crude oil from Middle East (Saudi Arabia followed by Iraq, Kuwait, UAE) followed by Africa (Nigeria, Angola, Libya), South America (Venezuela). In the year 2013-14 India imported a total of 189.25 MMT of crude oil out of which import from Middle East was 115.86 MMT i.e. 61.22 % (Saudi Arabia-38.18MMT (20%), Iraq-24.63 MMT, Africa was 30.39 MMT (16%), and South America was 31.73 MMT (16.77%).



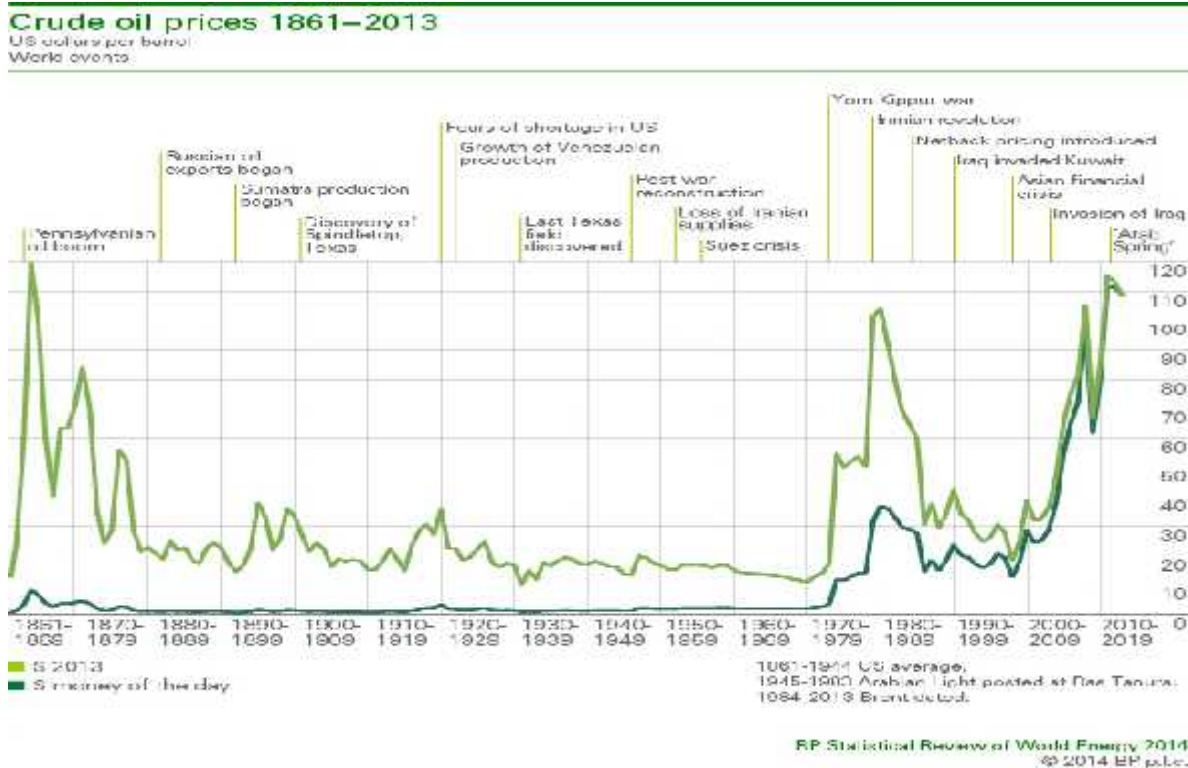
Source: India Infraline

Supply disruptions in several countries, including Iran, Libya, Sudan, and Nigeria, in tandem with India's growing dependence on imported crude oil, have compelled India to diversify its crude oil import slate. Iran accounted for 5.5% of India's crude imports in 2013, down from 8.3% in 2011-12 as a result of the U.S. and European sanctions imposed on Iranian oil exports. Also, Indian refiners are trying to reduce crude oil import costs by purchasing less expensive crude oil. Prices of Middle Eastern crude oil grades in the past year have been high relative to prices of oil from the Western Hemisphere, prompting Indian companies to import more crude oil from Latin America, primarily from Venezuela, Colombia, and Mexico. Major noticeable changes from the general trends are as follows:

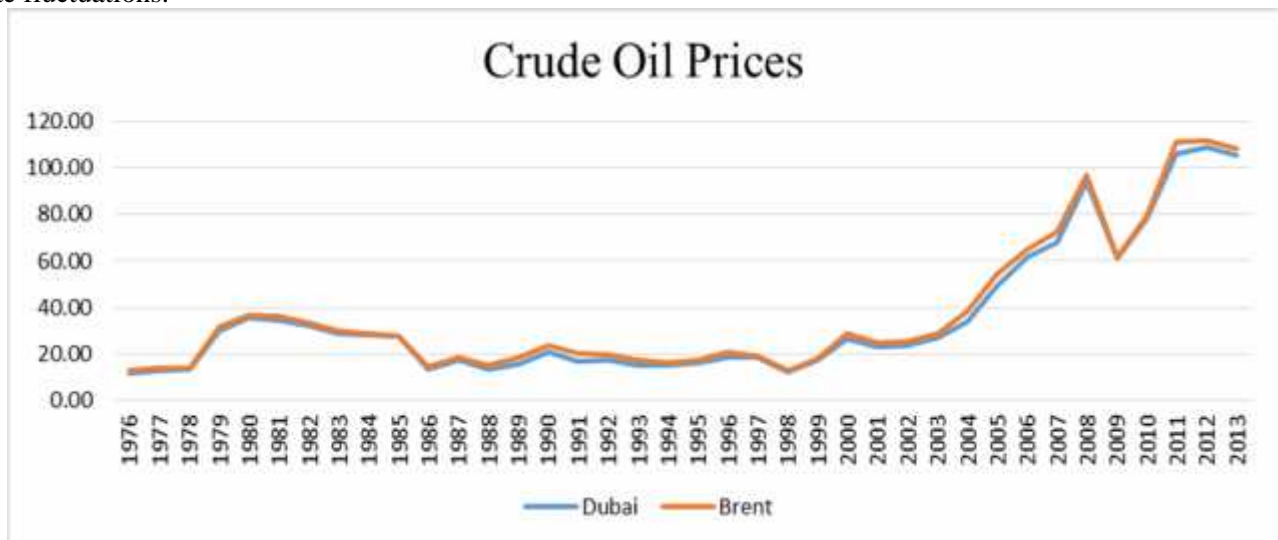
- Gradual increase in Import from South America, which was only 0.44 MT in the year 2004-05. Now since last two years we have been importing approximately 16% of our total imports. The major importer is Venezuela (6.96 MT in 2008-09 to 21.59 MMT in 2013-14).
- Indian demand of crude increase from 128 MMT in 2008-09 to 159 MMT in 2009-10.
- Initial import from Yemen in 2004-05 was 3.51 MT which gradually decreased to reach 2.92 in 2009-10 and 0.49 MT in 2013-14.
- Import from Kuwait increased from 11.49 MMT in 2010-11 to 17.73 MMT in 2011-12.

Crude Oil Prices

There are various internationally recognized indexations which are referred to understand the price of crude oil worldwide. The prices vary in these primarily because of varying quality of the Oil. There are others factors, including makeup of the oil and its market penetration too, which can also influence the price. The world have seen huge variation in Oil prices because of various factors/reasons, the same is depicted as under:



The Indian crude basket constitutes of Oman/Dubai sour crude and Brent (sweet) in approx. 70:30 ratio. The change in price of Indian basket depends on the changes in crude prices in international market and the exchange rate fluctuations.



Source: BP Statistical Review

India have always been trading oil, but, more on side of buyer. Because of lack of proper exploration and thus exploitation of natural resources in India, we are not being able to harness the natural resources lying beneath us. Our consumption have increase many folds, but contrary to the same, our production have sometime stagnant. So, we need to incentivize organizations to come and invest in India so that we can generate proper data, which can further be processed and used for discovery and production of oil from various oil-fields in India.