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Impact of Crude oil price hike

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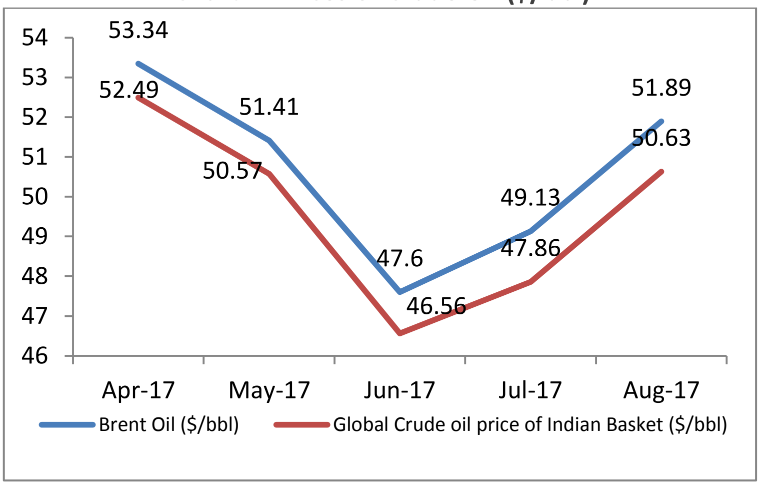
Overview

The price of crude oil has risen in recent times due to various reasons. While one trigger has been the disruption in production caused by the cyclonic activity in the USA, which surprisingly did not affect WTI as much as Brent, OPEC too has been working on its output and hence prices. The EIA has also indicated that the market would continue to tighten due to higher demand which has added to the bullish sentiment.

While it may be reasonably expected that the production would revert to normal once conditions settle down, there has been some debate on the impact of higher crude prices especially on prices of refinery products and whether or not there should be any government intervention to control the same. The issue is important as presently the government is quite firm on attaining its fiscal targets and is unlikely to increase the subsidy level to protect fuel prices. At the same time higher prices will impact inflation which in turn will also put pressure on monetary policy as the RBI remains watchful on inflationary developments. Further, if crude oil prices remain high, there would be a change in the trade dynamics which can affect the trade deficit and finally influence the direction of movement of the rupee which is presently quite strong in the region of Rs 64/$. It is against this background that certain possibilities are explored.

How have crude oil prices move this year?

Chart 1: Prices of Crude Oil ($/bbl)

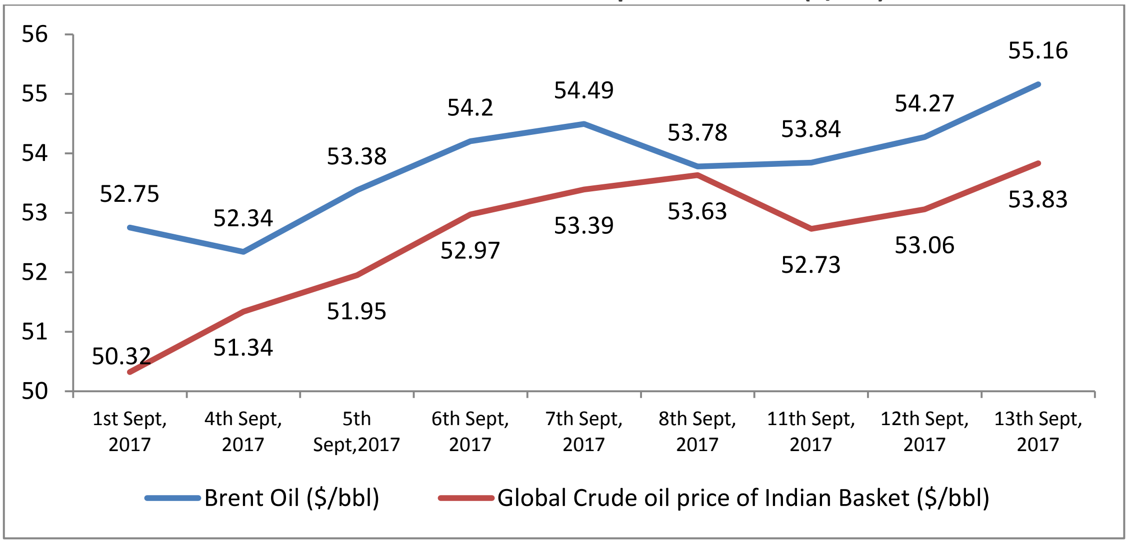


Source: PPAC, Bloomberg

Chart 1 shows that after declining from $ 54.34/bbl in April 2017 to $ 47.6/bbl in June, crude oil price has increased to nearly $ 52/bbl in August. The Indian bakset of crude oil is roughly $ 1 lower than that of Brent.

In September, it was noticed that the price has increased by between $ 2.50-3/bbl (Chart 2) which has led to higher domestic prices of fuel products.

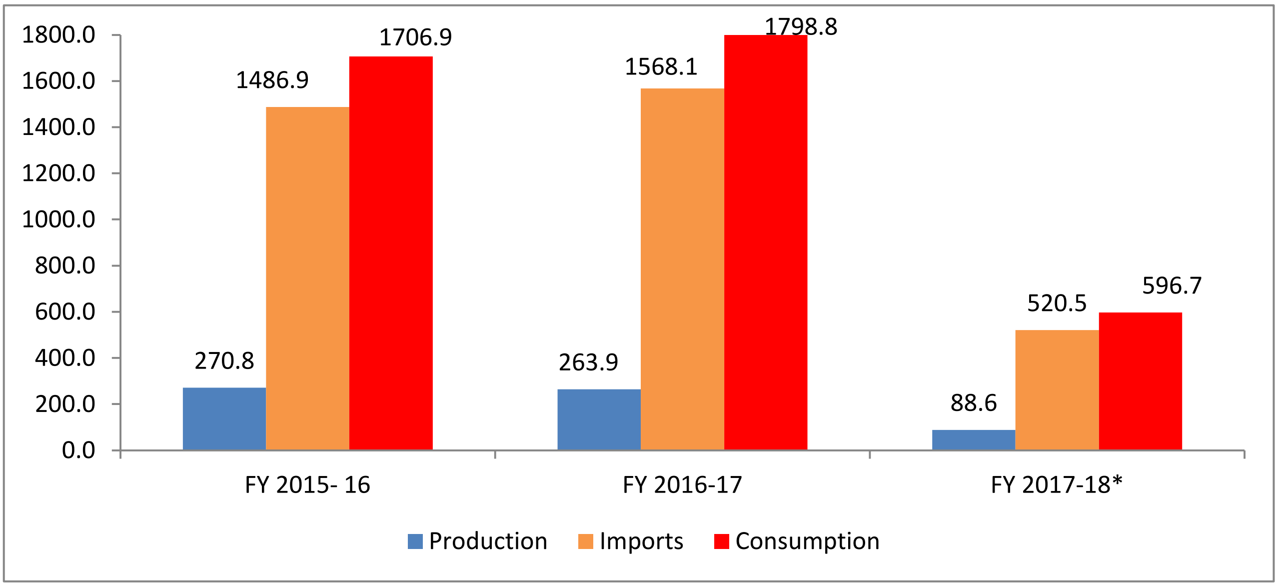
Chart 2: Prices of Crude Oil in September 2017 ($/bbl)



Source: Press Information Bureau, Bloomberg

How much oil does India deal with?

Chart 3: Production Import and Consumption trends of Crude Oil (in terms of million bbls)



*FY 2017-18 data is till July 2017

Source: PPAC and CMIE

In FY17 consumption of oil was about 1800 mn barrels of which India produces 15% domestically. Exploration is carried by ONGC and Oil India through the nomination regime and the remaining by private/JV companies through the Product Sharing Contract (PSC) regime. The balance 85% is imported from Saudi Arabia, Iran, Iraq, Nigeria, Venezuela, UAE, Angola, Kuwait, Malaysia, Angola, Mexico, Qatar and Brunei. Consumption of crude oil is referred to how much crude oil is used in the refining process. International price of crude would tend to affect the domestic price too.

Tax structure

Table 1 provides an illustration of the duty structure on petrol and diesel as of July 2017. The central taxes on these products range from Rs 21.5-Rs 22.7/ltr for petrol and 17.3-19.7/ltr for diesel. Additionally there are state taxes which vary for petrol from 20% in Mizoram to 48% in Maharashtra (Mumbai). In case of diesel it varies between 12% in Mizoram and 38% in Madhya Pradesh. While the central taxes are on the basis of per litre (specific) , state taxes are ad-valorem and would tend to increase the final retail price when the base crude oil price changes.

Table1: Duty Structure of Crude Oil and Petro Products

	Customs duty		Excise duty			
	Basic	Additional (CVD)	Additional	Basic Cenvat Duty	Special Additional	Additional
Crude Petroleum						
Petrol	2.50%	Rs.8.48/ltr. + Rs.7.00/ltr SAD	Rs.6.00/ltr.	Rs.8.48/ltr	Rs.7.00/ltr	Rs.6.00/ltr.
Petrol (branded)	2.50%	Rs.9.66/ltr. + Rs.7.00/ltr SAD	Rs.6.00/ltr.	Rs.9.66/ltr	Rs.7.00/ltr	Rs.6.00/ltr.
High Speed Diesel	2.50%	Rs.10.33/ltr.+ Rs 1.00 per litre	Rs.6.00/ltr.	Rs.10.33/ltr.	Rs 1.00/ltr	Rs.6.00/ltr.
High Speed Diesel (branded)	2.50%	Rs.12.69/ltr.+ Rs 1.00 per litre	Rs.6.00/ltr.	Rs.12.69/Ltr	Rs 1.00/ltr	Rs.6.00/ltr.

Source: PPAC

How does this enter the price finally?

Price build-up for petrol in Delhi: Rs /litre

Trade parity landed cost	***27.61***
Marketing, freight, margin	2.80
Price to dealers	***30.41***
Excise	21.48
Dealer commission	3.57
VAT in Delhi at 27%	14.97
Final Price	**70.43**

Source: IOC

Inflationary impact

Crude oil and its products have a weight of 10.4% in the WPI. Of this crude oil and natural gas have a weight of 2.4% and mineral oils around 8%. With the exception of LPG and kerosene (with combined weight of 0.83%), the rest would be driven by market forces.

Therefore, any increase in the price of crude oil would tend to impact the WPI inflation number commensurately. With the state duties/taxes being ad-valorem, the final impact would be higher than the change in crude oil prices. Intuitively, 10% increase in crude oil prices would lead to around 0.5% increase in the WPI. As seen above, taxes account for around half the price of petrol and hence an increase in cost of crude oil would impact the final price by around 5%. A weight of 10% in the WPI translates to around 0.5% in inflation assuming this to be a thumb rule. This would hold with the assumption of the rupee exchange rate remaining unchanged. The rupee has strengthened of late which has buffered against in the increase in the dollar price of crude.

Crude oil and refinery prices also have a linkage with the prices of other products which would get impacted by the higher resulting cost of power, fuel, transport etc. – which will be the indirect impact.

In terms of the CPI, fuel related items have a weight of nearly 2.7-2.8% directly while the indirect impact would be on how public and hired transport costs behave (which have a weight of almost 2%). Hence, if there is a full pass-through of cost, 10% increase in crude oil prices would lead to an increase in CPI by 0.15-0.2 % directly and another 0.1% indirectly if transport fares also increase (which however does not happen as bus fares and taxi charges are revised only periodically).

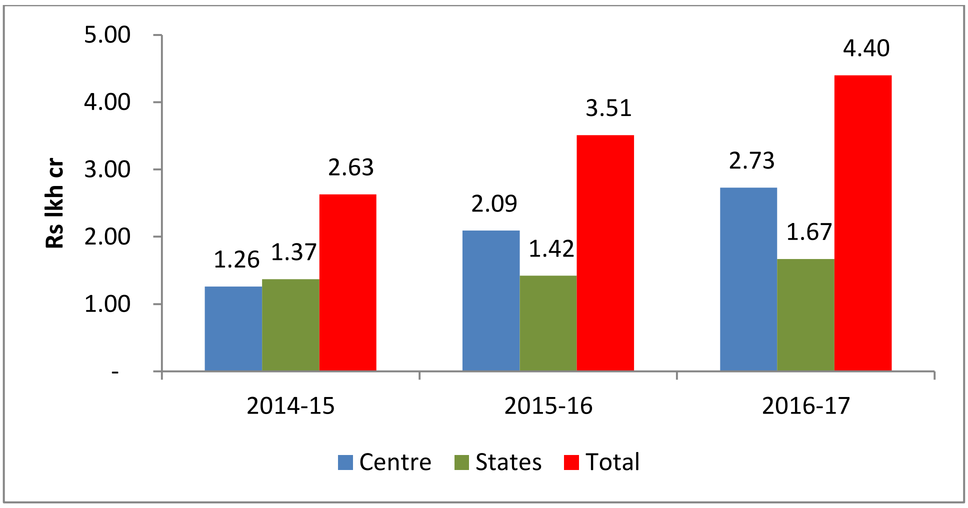
While the present increase in prices may be considered to be transient in nature, a sustained increase in prices of crude oil without subsidy support from the government could increase both WPI and CPI.

Government balances

The government is impacted by crude oil prices in two ways. First, the government (both centre and states) earns substantial revenue from petro-products through taxation. As they have been kept out of GST, as seen earlier, states are also able to levy variable taxes as a result of which prices vary across states. Second, the government also provides a subsidy for fuel products in order to buffer against prices.

Chart 4 below provides information on the tax revenue earned by the government in the last 3 years. As can be seen, Rs 4.4 lkh crore is generated by the government through various taxes and levies with the centre accounting for 62% of the total in 2016-17. For the centre, in 2016-17, 89% of the total came from excise duties and the balance from crude oil cess and customs. Union Excise collections on oil products were Rs 2.42 lkh crore out of the total of Rs 3.87 lkh crore collections under this heading of the central government. Quite clearly this group of products is very important for the government for raising revenue. Presently it appears that the government would rather not lower the tax rates as it would impact revenue collections.

Chart 4: Tax collections on Petro-products (Rs lkh cr)



Source: Ministry of Petroleum

The petroleum Subsidy in FY16 was Rs. 30,000 crore. The revised estimates for FY17 are Rs. 27,532 crore and the budget estimates are Rs. 25,000 crore. The subsidy on this count was as high as Rs 97,000 cr in FY13. Effort has been made to lower this number by restricting the products that are to be subsidized as well as target them more effectively. Table 2 shows how these numbers have moved in the last 3 years.

Table 2 Petroleum subsidy provided by the government (in Rs. crore)

Expenditure on major items	FY16 (A)	FY17(RE)	FY18(BE)
Petroleum Subsidy	29,999	27,532	25,000

Source: CMIE

Foreign trade

Total imports of petro products were valued at $ 87 bn in FY17 out of a total bill of $ 383 bn, which is 23%. This has come down from a high of 37% in FY14 when imports of crude oil were $ 164 bn in a total of $ 449 bn. India has also been a large exporter of refinery products. Exports of petro products in FY17 were $ 31.6 bn in a total of $ 276 bn, which is a share of just 11%. This may be contrasted with a share of 20% in FY14 when exports of petro products were $ 63.3 bn.

Given the negative balance on Petro account, higher prices of crude oil will increase the trade deficit and put pressure on the rupee.

The equation: What happens when the price of oil goes up by $ 5/barrel?

1. At the macro level, with imports of 1,568 mn barrels of crude oil in FY17, a dollar increase in prices on a permanent basis would increase the bill by roughly Rs 10,000 cr on an annual basis (156.8*64) assuming no change in exchange rate. Hence, 10% increase in price would amount to roughly $ 5/bbl which will involve Rs 50,000 cr of funding from the government through enhanced subsidy in case prices were to remain neutral with the government fully absorbing the price shock. Alternatively it has to be absorbed by the consumers in proportion to what is passed on.

2. The same would translate to an increase in the import bill of around $ 8 bn which is roughly 9% of the actual import bill (in FY17) and can potentially affect the rupee rate.

3. In terms of inflation, 10% increase in price of crude oil would mean that the on WPI could go up to 0.5% depending on the quantum of pass-through by the government and oil companies. In case of CPI it could be up to 0.15-0.2%.