



## A critical analysis of recent hike in petroleum prices in India

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### Abstract

The prices of crude oil in India has been witnessed a prices rose at a boiling 24% in March 2018 beating a 40-month high and still increasing with no sign of relief in year 2018. As India, imports nearly 80% of it's petroleum products, it will have a cascading effect on Indian economy. Keeping in view of the above facts, the current paper aims at exploring the implications of this hike on India, the possible reasons responsible for the current hike in petroleum prices. The article also aims to provide certain solutions which might help controlling the current spike observed in petroleum product by oil marketing companies (OMCs). The results indicated that the uncontrolled rise in prices, especially of petrol and diesel, is going to affect the Indian economy very badly and theft the saving from the pockets of common people. But unreasonable reduction in prices too has several negative impacts ranging from reduced revenue to negative effect on environment. The results found that the reasons for hike are both inherently national and international nature. Finally, the article recommended certain corrective measurements to arrest the petroleum price within reasonable limits.

**Keywords:** petroleum, petrol, diesel, Indian economy, environment, oil marketing company

### 1. Introduction

Petroleum, specially petrol and diesel, are the major source of energy for transportation sector worldwide. As of now, it account for around 90% of total energy requirement for transporting people and goods. Thus, any rise in petroleum price has a cascading effect on other consumer products due one and another reason. High petrol and diesel prices are once again hit the Indian market <sup>[1]</sup>. There is a huge hue and cry across the every nook and corner of the country and among all economic section of the society. The diesel price has almost equals thee petrol price for the first time in the history. It has created panic situations in both private and public transportation system along with prices of essential daily needs of the common people. The anguish of public is quite visible even in social media and other forums. Because of this hike in petroleum India is particularly at comparatively high risks, as India import it's 80% petroleum demand <sup>[2]</sup>. Moreover, Crude oil accounts for 60% of our imports and this causes the trade imbalance. The ever increasing demand for petroleum product is too of great concern not only economic point of view but also from environmental point of view <sup>[3]</sup>. Government is in nearly found itself in helpless position to put a check on petroleum prices. However, it is worth mentioning here that the current study confined itself to only study of petrol and diesel prices.

At this very outset, the current communication aims at finding out the reasons for the recent rise in petroleum price which is varied from local to international scale. The current study implicitly aims at exploring the consequences of both unreasonable rise and fall in petroleum price and to recommend corrective measurement to keep control on ever increasing price of petroleum products reasonably.

### 2. Material and Methods

In order to achieve the stated objectives data were collected from various web sources, analyzed and discussed under the following subheadings.

#### 2.1 India's Need of Petroleum

India is one of the largest importer petroleum due to fact that, it is world's fourth largest consumer of energy, and lesser reserve/production of petroleum as compared to its requirements. However, India is still a developing economy and very low per capita energy consumption in the world. Thus with growing economy (which is very likely) and with the ever increasing number of private vehicles, consumption of petrol and petroleum product is on rise in India <sup>[2]</sup>.

India was registered a growth of 5% in its energy requirement in year 2011-12 and which is continue to rise since then to meet the increasing demand, government has to import more and more petrol. It is estimated that that the country as a whole has to spend 80-90% of its total import bills on petroleum products. Hence more demand of petrol than supply is a leading factor of its rising price in India <sup>[4]</sup>.

India's overall fuel demand grew at a robust 5.30% to approximately 205 Million Tonne (MT) for the full financial year 2017-2018, as compared to 195 MT recorded in the previous financial year of 2016-2017, according to the latest data published by Oil ministry's statistical arm. The growth in 2017-18 has been as per expectations buoyed by strong growth registered in transportation fuels. The country's petrol consumption for the full financial year 2017-2018 grew 10.14 per cent to 26.17 MT, while diesel consumption grew by 6.63 per cent to 81 MT as compared to the corresponding period a year ago <sup>[5]</sup>.

## 2.2 India's petroleum import trend

India ranks third in oil consumption with 212.7 million tons in 2016 after USA and China [28]. During the calendar year 2015, India imported 195.1 million tons crude oil and 23.3 million tons refined petroleum products and exported 55 million tons refined petroleum products. India has built surplus world class refining capacity using imported crude oil for exporting refined petroleum products. The net imports of crude oil is lesser by one fourth after accounting exports and imports of refined petroleum products [2, 6].

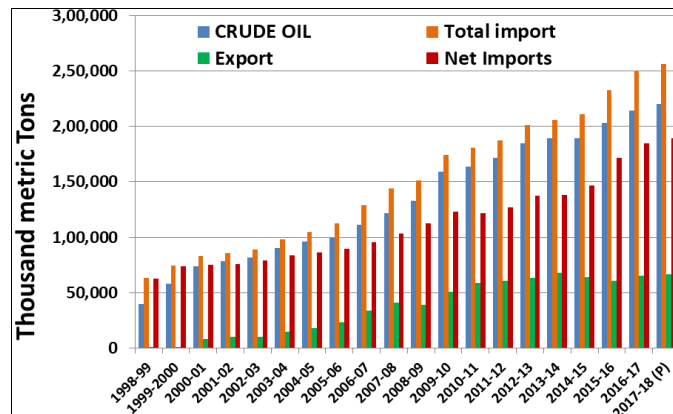


Fig 1: India's petroleum import trend during 1999-2018

Figure 1 shows the total trade of petroleum products in since 1998-99. It is observed that there is a continuous increase in the trade of petroleum products. The import easily outweighs the export by several times and is the major cause of Indian trade deficit. Moreover, India's major petroleum import is in the form crude oil which has been rising steadily over the years. It has happened due to increased domestic demand and to meet those OMCs are importing the crude and make useful products in their refineries.

## 2.3 Determination of Petroleum Price

The Indian Government deregulated the petrol price in 2010 and the diesel price in 2014. It mean that Government provided free hand to oil marketing companies (OMCs) to determine the prices of these fuels based on market considerations. The factors based on which these OMCs set the prices of petrol and diesel are (a) International crude oil prices: Crude oil is a raw material in the production of petrol and diesel, and (b) Currency exchange rates: If rupee depreciates in comparison to dollar, it makes import of crude oil and hence fuel oil is costlier. Earlier the prices were revised fortnightly based on the above factors. But in June 2016, dynamic daily price model was introduced. As per this model, prices began to be revised daily to make it more aligned to the international markets [7].

## 2.4 Trend in Petroleum Prices

Since the government has deregulated the prices of petrol and diesel, both these which move the wheel on Indian road have witness continuous rise in their prices.

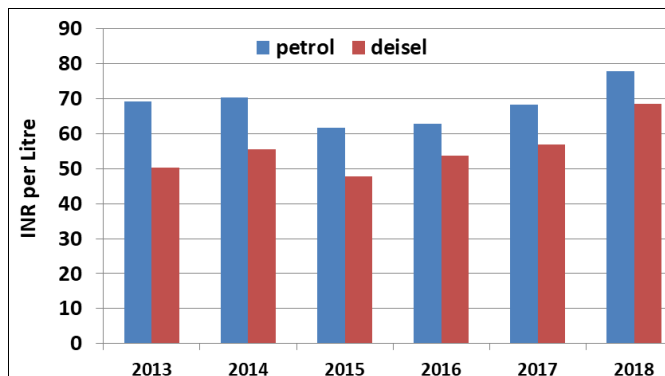


Fig 2: Annual average price of petrol and diesel in Delhi (2013-2018)

Figure 2 shows the annual average prices of petrol and diesel in Indian National capital Delhi during the year 2013 to 2018. The figure shows that the prices were relatively high in 2013 and 2014. After that it has fallen down considerably in 2015 and since then increasing gradually. However the rises in prices are quite in 2018. Another important observation is that the difference in the price of petrol and diesel is also gradually decreasing. It reflects the government policy to demotivate the use of diesel operated vehicle in the NCR region [8, 9]. Similar trends were observed in other of the country, although the magnitudes may vary slightly. During this one year, petrol prices have been moved higher by Rs. 9.44 a litre in Delhi, Rs. 9.5 a litre in Kolkata, Rs. 5.74 a litre in Mumbai and Rs. 9.31 a litre in Chennai. Diesel prices have been increased by Rs. 11.91 a litre, Rs. 12.12 a litre, Rs. 10.57 a litre and Rs. 12.4 a litre in Delhi, Kolkata, Mumbai and Chennai, respectively [10].

## 3. Results

In the previous sections, the need of petroleum, India's trade on petroleum and deregulation petroleum prices were discussed which threw some deeper insights in finding the reasons of recent hike in petroleum prices in the year 2018. The observed spikes seems to be increased further. There are several reasons of national and international concern which can be attributed to this recent increased in petroleum prices. Some of the important reasons are summarized below:

- Increased on board pricing: The worry over crude oil prices stems from India's energy needs being primarily met through imports, with the country importing 214 million tonnes of crude oil in 2016-17. It is price that any oil producing company (ONGC, Reliance) charge or any oil marketing company (IOC, HP, BPCL) pay for the crude oil from the company. It is the base price which is about to touch 90 USD per barrel [11].
- Increased freight prices: Since most of the Indian demand of petroleum is fulfilled through import from Gulf nation and elsewhere. This import needs transportation through some ships/vessels freight for which certain amount is paid as freight price. It may cost somewhere around 5 to 6 Rupees per litres.
- Import & Excise Duty: Once the ship/vessels reach port,

it has to pay insurance, port due, custom dues and so on. All these operational cost is also gradually increasing and it may cost up to another 20 -25 rupees per litre. Excise duty on petro products account for 50-55% of the total excise collection by the Centre.

- **Refining Cost:** The oil marketing companies used to import crude oil which is a mixture various petroleum products which cannot be used as such. It has to be put into fractional distillation oil refineries to segregate the various products such as petrol, diesel, kerosene etc. This refining cost has also been increasing gradually which is certainly contributing the rise of price though not significantly.
- **Value Added Tax (VAT):** State and central government also imposes certain taxes on petroleum products as source of their revenue. The share of state differs from state to state. It will be up to 28% and would cost Rupee's 15 added with the pollution cess [12].

Even though the basic price is very less because of the heavy taxes by both central government and state government the price of this product has gone very high. The reason for this is the high taxes on these fuels, rather than the international crude oil prices. The excise duty by the central government value added tax (VAT) charged by state government is high in comparison to original prices of petrol and diesel. The massive increase in the central excise duty and VAT constitute considerable amount of Government revenue [13, 14]. The table 1, for instance, shows how taxes changed on petrol and diesel in Delhi during 2014 and March, 2018.

**Table 1:** Break up price comparison of petrol and diesel between 2018 – 2018

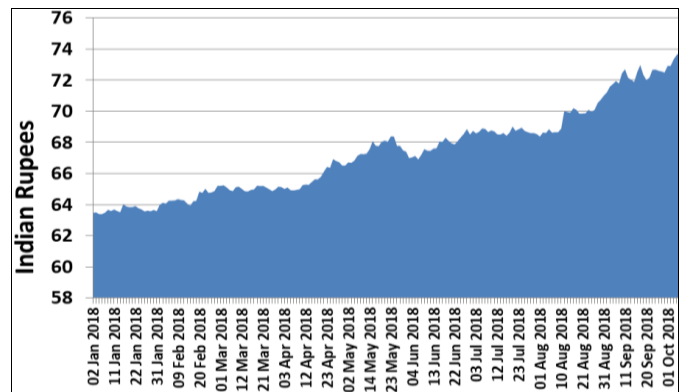
Description	2014		March, 2018	
	Petrol	Diesel	Petrol*	Diesel*
Price before taxes and dealer comm.	47.12	44.98	33.78	35.64
Central taxes	10.39	4.5	19.48	15.33
State taxes	1.9	6.61	3.58	2.51
Dealer comm.	2	1.19	15.35	9.25
Retail selling price	71.41	57.28	72.19	62.73

Table 1 makes for a very interesting reading. It dissects the price of petrol and diesel in Delhi as on March 19, 2018. Let's first look at petrol pricing. The price charged to dealers was Rs 33.78. The retail selling price was Rs 72.19. Basically, the state government and central government collect more than 100% taxes on the dealer price of petrol in Delhi. In case of diesel, this works out to 70%. The thing is this was not always the case. It also reveal that how the government has increased it taxes on petrol and diesel.

- **Dealers Commission:** The petrol pump owner who sells petrol and diesel to end users also needs Last would be the various taxes applied by the state and centre and the dealer's commission.
- **International Geopolitics:** The prevailing geopolitics for economic interest from world power is another reason for hike in petroleum prices. For example, President Trump recently announced fresh sanctions on Iran (a major oil producing and exporting nation) with the aim of curtailing the country's nuclear ambitions. In the short term, however, the announcement of the sanctions has driven up

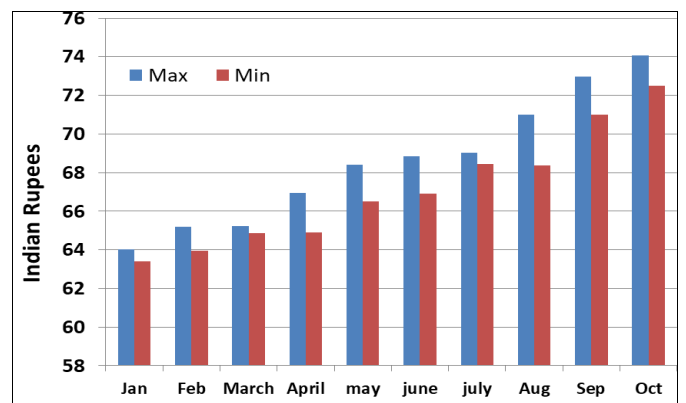
the price of oil over fears that they would negatively impact the country's oil exports. The US has also imposed further sanctions upon Venezuela following the country's re-election of the hard-line socialist Nicolas Maduro. Because of these sanctions India will not able to import low cost oil which will further increase the price in near future.

- **Reduced production:** The petroleum production by OPEC countries has been reduced to revamp the reduced crude oil prices during 2016 and 2017 in the international market. Decline in global inventories, largely caused by the production cuts by the Organisation of Petroleum Exporting Countries (OPEC) members and also by geopolitical tensions in West Asia.
- **Weakening of Rupee:** Since the beginning of 2018, Indian national currency has been witnessing a great fall against UD dollar. It is one of the primary reasons for the recent hike in fuel prices. The US dollar is the exchange currency for petroleum product from most of the OPEC country except, Iran, Russia.



**Fig 3:** US Dollar exchange rate in 2018

Figure 3 indicate a very rapid increase in exchange rate of US dollar in comparison to Indian Rupee during January, 2018 to 1<sup>st</sup> week of October, 2018. It is also very like to increase in the coming months.



**Fig 4:** Monthly Minimum and maximum exchange rate of US dollar in 2018

Figure 4 reveals the monthly maximum and minimum dollar exchange rate for the year 2018. It depicts similar observation that the both maximum and minimum exchange rate of dollar

has been increasing gradually one month to another in the year 2018. Both these observations are not a good indicator for Indian economy, at least in terms of petroleum trade of India.

- *Demand and Supply Scenario:* In the recent years, India's energy consumption has been increasing at one of the fastest rates in the world due to population growth and economic development. Primary commercial energy demand grew at the rate of six per cent between 1981 and 2001 (Planning Commission). India ranks fifth in the world in terms of primary energy consumption, accounting for about 3.5% of the world commercial energy demand in the year 2003. Despite the overall increase in energy demand, per capita energy consumption in India is still very low compared to other developing countries <sup>[15]</sup>.

#### 4. Discussion

India is a growing economy with huge population in the middle income group. The purchasing power of this group has been increasing continuously. This has been propelling the economy which needs huge amount of energy (electricity and petroleum). Increasing consumption of petroleum oil further burdens the Indian foreign reserve and also affects the environment including climate change.

##### 4.1 Implication of rise of price

The consequences of a rise in petroleum prices are likely to have several effects which are as follows:

- One of the major implications of a price rise will be to swell the import bill and trade deficit against India's interest. Agencies such as Crisil Research expect crude oil prices to settle at about \$70 a barrel during the calendar year of 2018, representing a 27% increase over last year's level. As a consequence, India's oil import bill is expected to balloon by about 26% to Rs 6.5 lakh crore in FY19 <sup>[16]</sup>.
- A decrease in economic growth rate by a decline in industrial production, increased price of various commodities and services. Increased expenditure on oil imports may dramatically reduce opportunities in other developmental projects, causing a reduced gross domestic product (GDP).
- A sharp spike in the price of oil will also increase the inflation rate with rising prices of essential commodities. This will put pressure on central and state governments to cut taxes on petrol and diesel, which in turn adversely affects government revenue. Thus, the government would have fewer opportunities to provide benefits and/or subsidies to consumers on other products <sup>[17]</sup>.
- Oil accounts for 60% of our imports and this causes a trade imbalance. If duties on oil are to be reduced, then by the simple logic of economics, consumption will go up, increasing oil imports.
- The income of the Indian government is highly oil-revenue dependent and hence taxes cannot be reduced. The case is similar for the state revenue which is largely dependent on the tax imposed on oil and alcohol.

##### 4.2 Implication of reduced oil price

There are certain reasons which do not allow the Indian government much room to allow a reduction in the prices of petroleum products which are summarized below:

- The primary reason is to reduce consumption. India

already suffers a lot from environmental problems with its major cities already among the most polluted in the world.

- Heavy pollution leads to climate change too, which has subsequently had several cascading effects on the environment, economy and human health.
- The Indian government is of the view that tax collected on petroleum is being spent on infrastructure and other social welfare schemes i.e. subsidy on kerosene, LPG given by government. In 2017-2018, the total petroleum subsidy bill for the central government was expected to be at Rs 24,660 crore. For 2018-2019, it has been projected to be at Rs 24,933 crore.
- The India Government has also argued that keeping prices high reduces consumption and hence lowers the impact.
- It has been observed that the government has a policy to cut down subsidies in a deregulated price regime.
- There will be a decrease in inflation if retail fuel prices are lower and hence common people will have more disposable income in their hands. This will help revive consumer sentiment and increase sales across companies across sectors.

#### 4.3 Some recommendations

As discussed in the previous sections, many reasons are not in complete control to capsize the spiking petroleum prices. However, there are certain possible measures that can be implemented to reduce the price. Some of these are summarized below.

- India has been seeking reasonable rates as its energy demand grows. New Delhi is also reworking its import strategy by stepping up the share of short-term contracts whenever the market is favourable and exploring long-term supply deals at discounted prices. The new energy architecture also involves acquiring hydrocarbon assets abroad and diversifying India's supply sources from geographies such as the US and adding renewable energy sources to its energy mix to tackle possible price shocks.
- If crude price hikes are not allowed to be largely passed on to consumers, the marketing margins of OMCs will decline.
- Petrol and diesel may also be brought into the GST act. The simplest way to lower retail fuel prices is to bring petroleum products under the ambit of the goods and services tax (GST), which is expected to lead to rationalization in pricing.
- Dependency on petroleum has to be decreased through awareness.
- Increase focus on alternate fuel (renewable fuel). In the automobile sector, use of battery-operated vehicles, solar vehicles, fuel cell (hydrogen) have to be promoted and encouraged through government policy.
- There is a long-term need to restrain fossil consumption and promote the use of energy-efficient resources alongside renewable technologies.
- The government can reduce VAT on these products. In order to compensate the revenue loss due to reduced VAT and excise, the government can reform GST on other products.

#### 5. Conclusion

Petrol and diesel are important energy sources which fuel



economic growth of the country. However, unprecedented growth in prices petroleum product has the potential to derail the growth of the nation. The recent spike in petroleum prices is a very serious issue which has caused due many national and international reasons. The very fact is that the Indian government imposes heavier taxes on petroleum product as source of easy revenue. It will be interesting to see how the international prices shape up over the next 12 months and how our government responds. It is high time the government should take recommended measurements to control the prices of petroleum and to and should be taken to provide some relief to common people. In order to keep the national interest high government should think of strategic oil reserve in different part of the country and also to reduce its dependency on petroleum oil.

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