Fuel Price Movement in India – An Introspection

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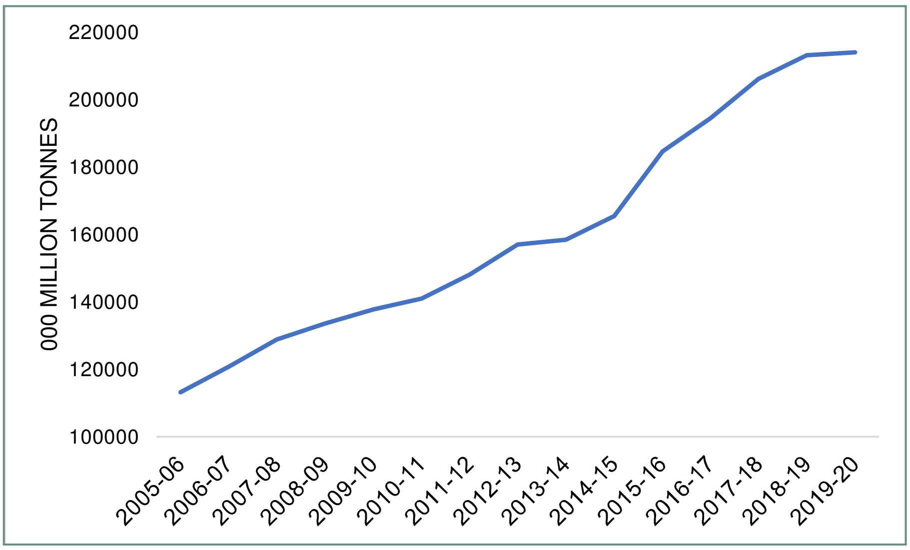
With the uncertainty in international crude oil price situation, to keep the retail selling prices (RSP) of fuel at reasonable level, taxes need to be rationalised. Although the impact of oil price rise on CPI inflation is not substantial, still increase in RSP can lead to pressure on cost of raw materials, intermediate goods and have a cascading impact on price of final products. Hence, the option of reduction of effective excise duty alongwith exerting pressure on the oil exporting countries to increase production of crude oil is necessary to add momentum to developing economies limping back to revival. Diversifying India's crude oil basket to import at competitive rates also needs to be looked at.

India's energy system mainly consists of coal used for power generation, followed by oil and natural gas for transportation and industrial use and biomass, though declining in share, used as cooking fuel. The Covid-19 pandemic of 2020 saw the international crude oil prices fall steeply though it started moving into the recovery phase in 2021 with revival of demand and expected reduction in crude oil production by OPEC countries. With the fuel price hike of 2021 gaining much attention, it is important to understand the fuel price dynamics in India.

Consumption of Petroleum Products

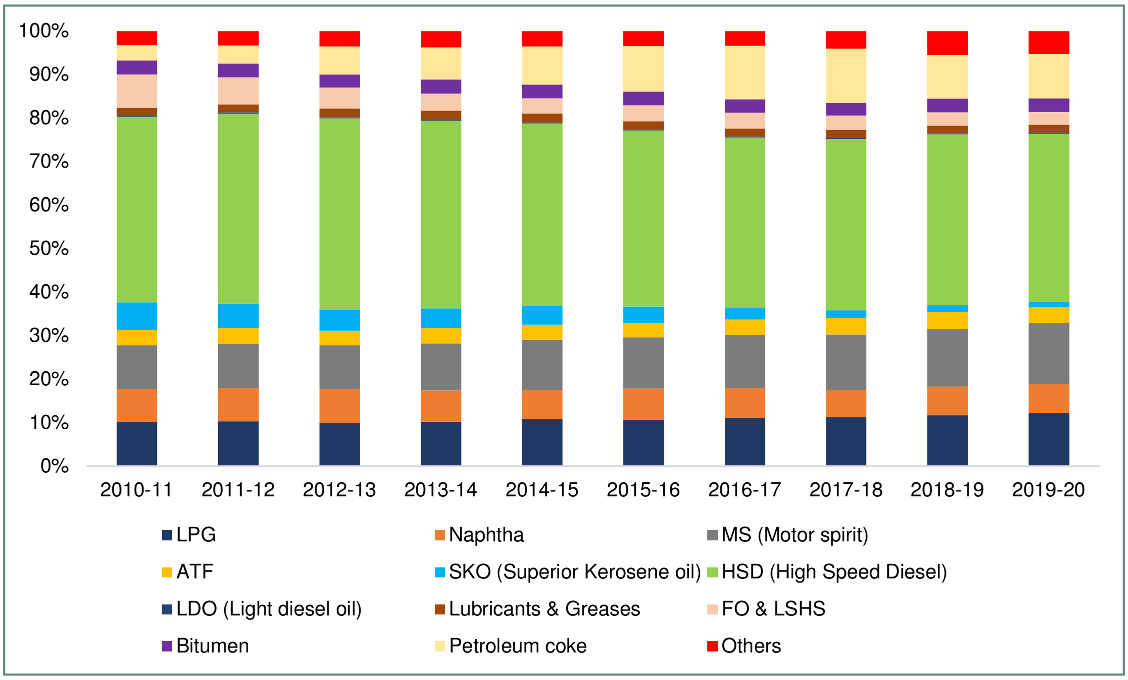
India is the third-largest energy consumer in the world next only to China and United States and the need for energy consumption would continue

Figure 1: Consumption of Petroleum Products



Source: PPAC, MoP&NG

Figure 2: Share in Consumption of Petroleum Products



Source: PPAC, MoP&NG

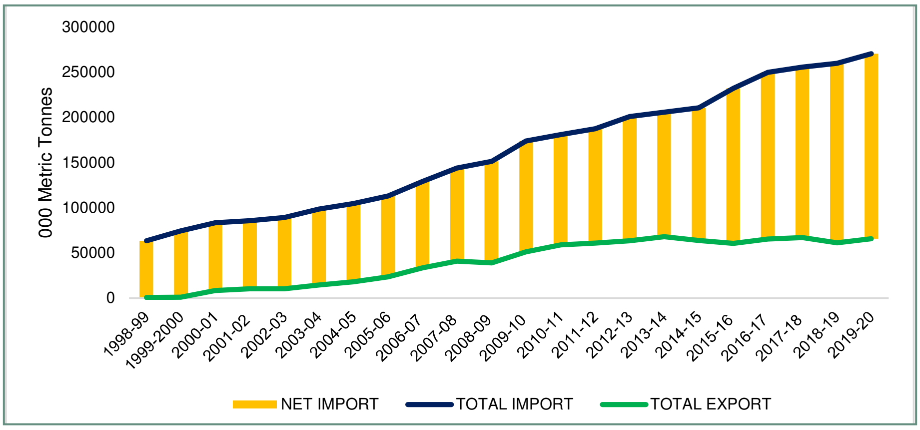
to rise with increasing urbanization and rising incomes. Among the energy products, consumption of petroleum products is rapidly rising in tandem with the economic growth (Figure 1). Moderation can be expected only if the growth of alternate renewable sources of energy develops a momentum over the medium term.

High Speed Diesel (HSD) remains the most-consumed oil product in India, accounting for 39 per cent of petroleum product consumption in 2019. Motor spirit, which accounts for 14 per cent of India's total petroleum product consumption has increased at an accelerated rate over the past few years and has been replacing HSD in the passenger vehicle sector since 2012-13 (Figure 2).

Domestic Production and Dependence on imports

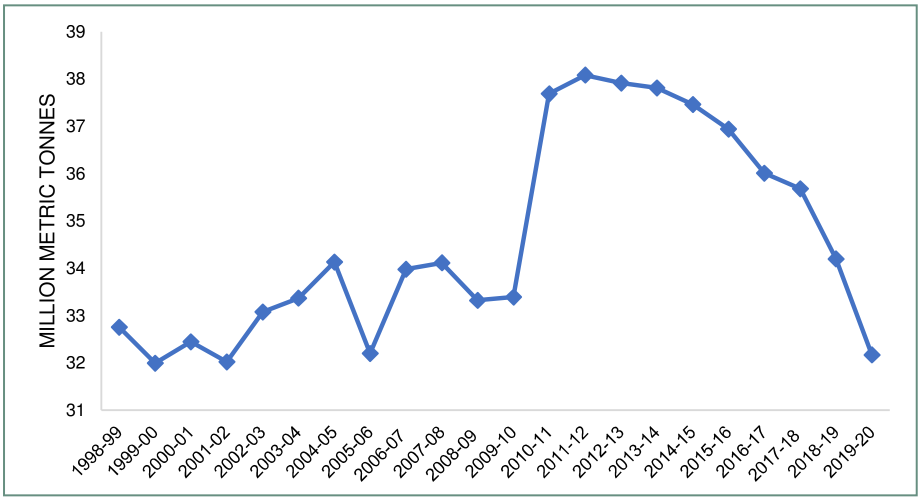
The growing demand for crude oil and products is increasingly being met through higher imports. On average, India imports over 85 per cent of its annual crude oil requirements. Crude oil is imported to meet the domestic demand as well as for export of petroleum products. The domestic production, however, has remained low and in fact declined in recent years (Figure 3 and 4). This trend poses a huge risk for India's energy security.

Figure 3: Import-Export of Crude Oil & Petroleum Products



Source: PPAC, MoP&NG

Figure 4: Indigenous Oil Production



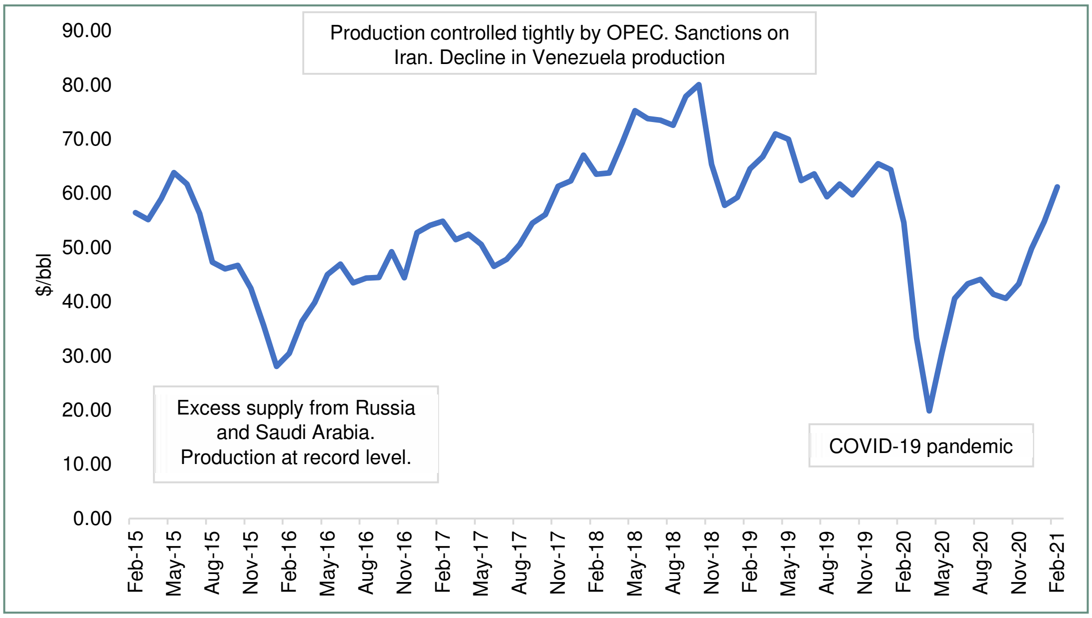
Source: PPAC, MoP&NG

Fuel Price Movement

Volatility observed in the RSP of petrol and diesel can be attributed to two factors viz; international crude oil price and duties/cess levied on sale of petroleum products. India's high as well as growing dependence on imported crude oil to meet domestic demand makes international crude oil price movements a crucial determinant in domestic fuel pricing. The international price is primarily determined by the demand-supply mismatch in the global economy. For instance, during late 2015, excess supply from Russia and Saudi Arabia led to a decline in the price, production was at a record level at that time. During late 2018, production was tightly controlled by OPEC members and decline in Venezuela production led to a spike in prices which reached a high of US$80 per barrel (bbl) in October 2018.

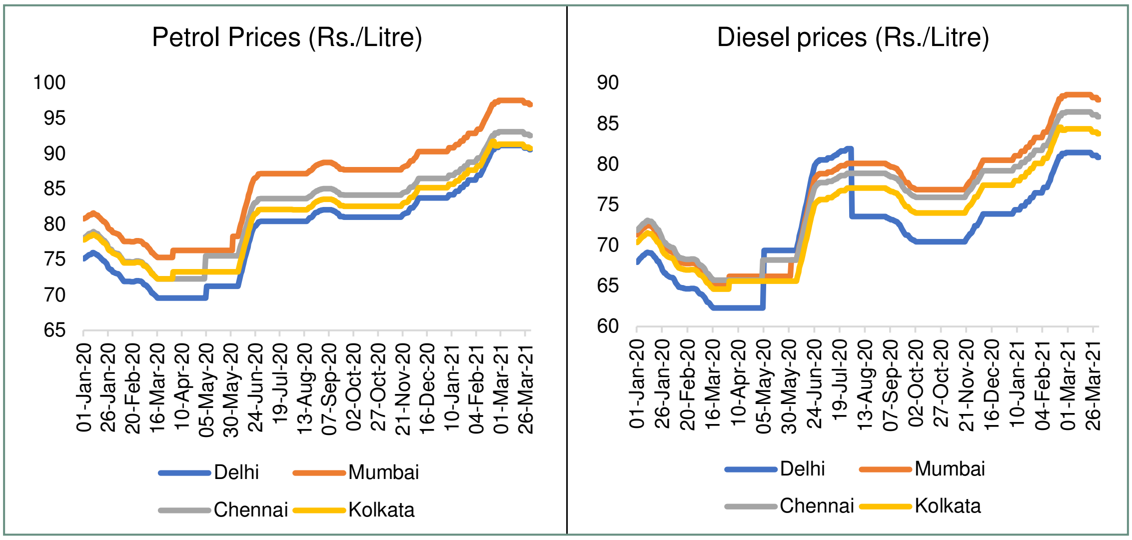
The recent dip in oil prices and the revival since December 2020 is different from the earlier price shocks. This is because price shock in 2020 was mainly demand-driven. International crude oil prices started declining beginning January 2020 when the COVID-19 pandemic related containment measures began to be imposed in almost 187 countries. The prices of Indian crude oil basket crashed from US$64

Figure 5: Price of Crude Oil (Indian basket)



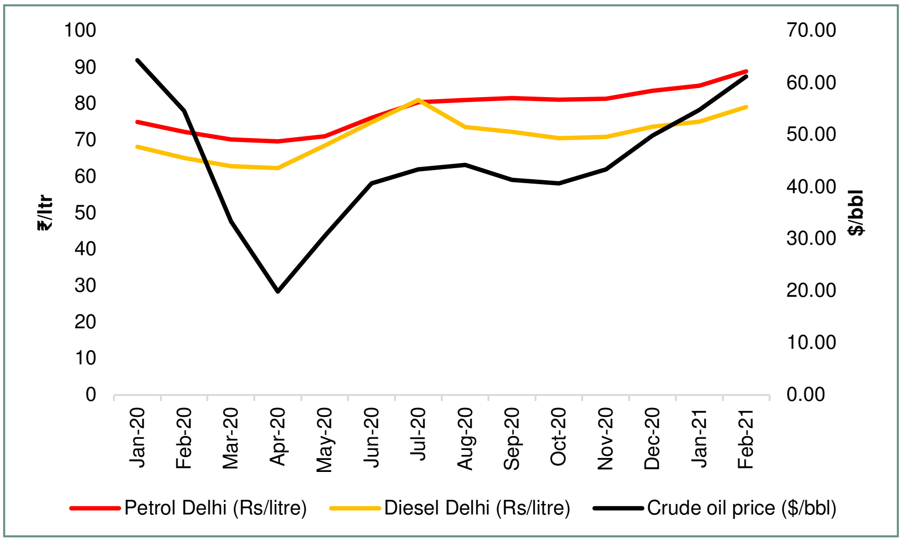
Source: PPAC, MoP&NG

Figure 6: Petrol and Diesel Prices in four Metros



Source: PPAC, MoP&NG

Figure 7: Price of Indian crude oil basket, diesel (Delhi) and petrol (Delhi)

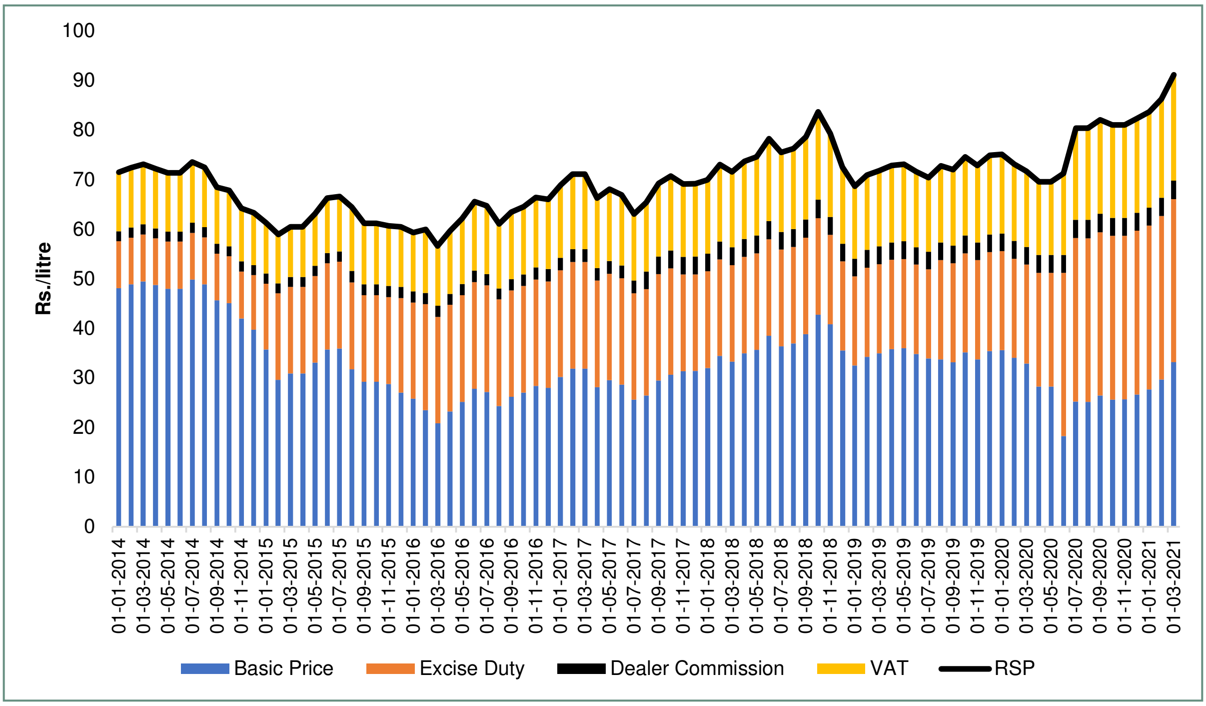


Source: PPAC, MoP&NG

per barrel in early 2020 to US$20 per barrel in April 2020 because of lockdown, industry shutdown and travel restrictions that resulted in lower crude oil demand. During the unlock phase, prices started showing an upward trend. The roll out of the COVID-19 vaccine also added optimism, further boosting the oil demand. (Figure 5).

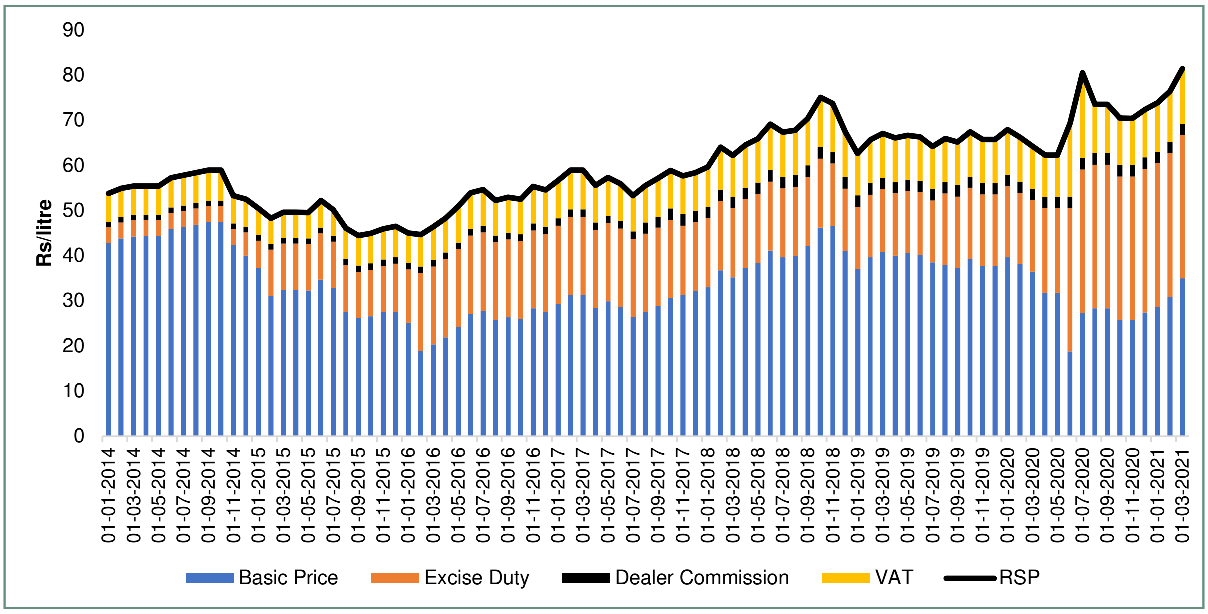
RSP of petrol and diesel declined from January 2020 to end March 2020 in line with movement of Indian basket of crude oil prices. However, an increase is witnessed after March till June 2020 due to the successive revision in prices by oil companies (Figure 6). The reason for upward revision in RSP was mainly due to the enhanced excise duty on petrol and diesel imposed during March-May 2020 to make up for the revenue loss due to the COVID-19 lockdown. A gradual increase was again witnessed from December 2020 (Figure 7-9). In the Union Budget 2021, consequent to imposition of the Agriculture Infrastructure and Development Cess (AIDC), the basic excise duty and special additional excise duty on petrol and diesel was reduced, so that the overall impact on RSP remains the same. But the price of crude oil (Indian basket) increased to US$61.22 per bbl in February 2021 from US$49.84 per bbl in December 2020.

Figure 8: Breakup of Petrol RSP in Delhi



Source: PPAC, MoP&NG

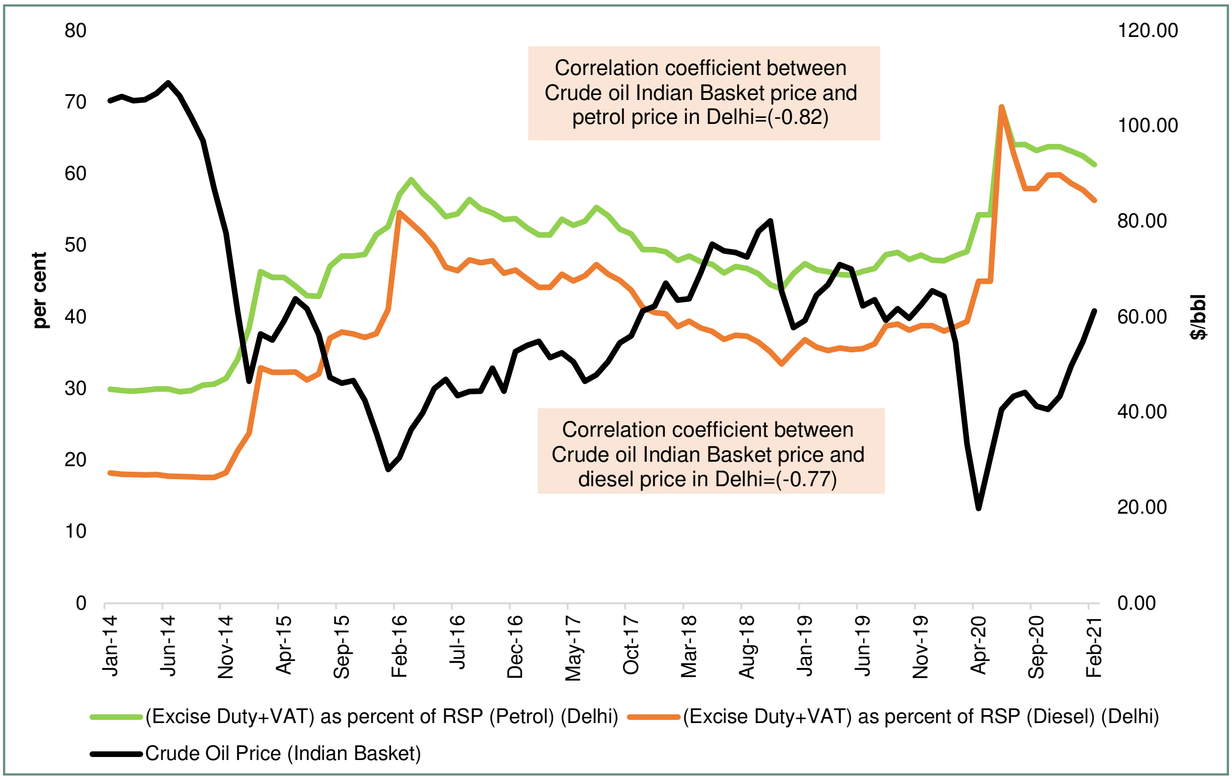
Figure 9: Breakup of Diesel RSP in Delhi



Source: PPAC, MoP&NG

Governments have always used taxes for stabilising oil prices. When international crude oil prices are low, government increases the taxes and when international crude oil price rises, government reduces the taxes. Government ensures prices remain steady and uncertainty is reduced. The correlation between international crude oil price and fuel prices turns out to be very strong. The correlation coefficient for petrol is (-0.82) and for diesel (-0.77) (Figure 10). The impact of petrol and diesel price rise on inflation is limited. Our analysis suggests that Rs. 1 per litre increase in RSP of petrol increases CPI inflation by 0.05 per cent and WPI inflation by 0.18 per cent.

Figure 10: Relation between international crude oil price (Indian basket), taxes as per cent of RSP of petrol in Delhi, taxes as per cent of RSP of diesel in Delhi



Source: PPAC, MoP&NG

Hence, it is observed that the current price rise in petrol and diesel is attributed to a combination of international and domestic factors. When the crude oil (Indian basket) prices witnessed a decline on account of the lockdown in 2020, it gave the government the opportunity of raising the excise duties/VAT, which helped in meeting the immediate revenue needs of the government, as well as in stabilising the RSP of petrol and diesel within a narrow band. However, rise in international price since December 2020 has put additional pressure on the RSP.

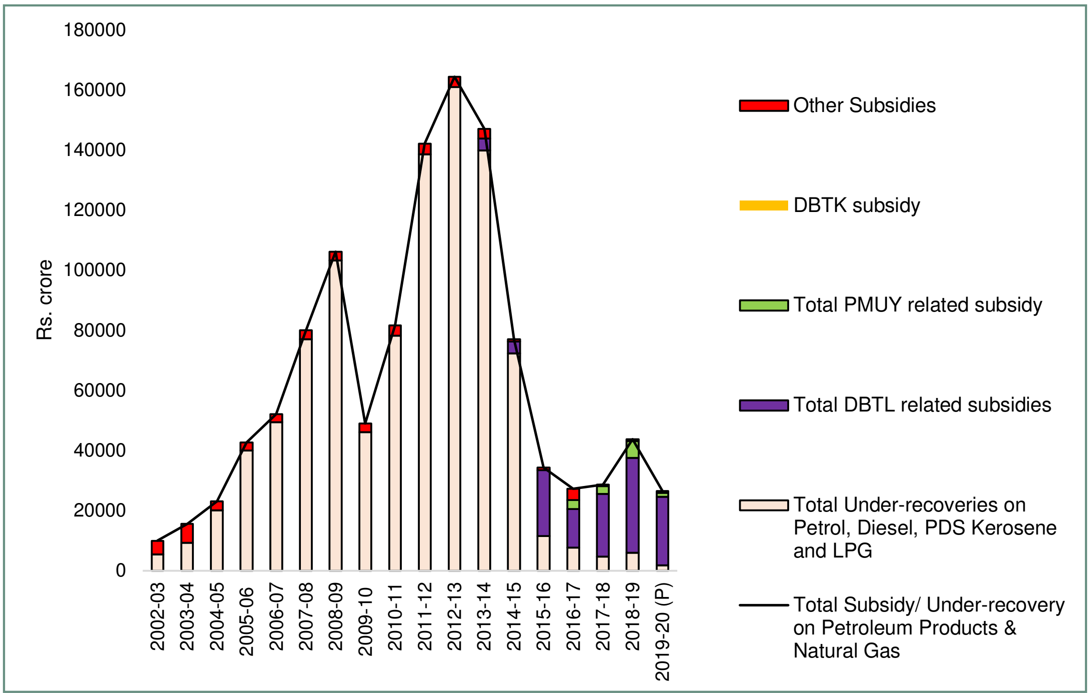
Government intervention in petroleum pricing

Petrol prices began to be deregulated in 2010 and diesel prices in 2014. Since then, volatility in international crude oil price subjects the consumers to large fluctuations in prices. Government has used the excise duty and VAT as an effective tool to stabilise the RSP of petrol and diesel and also reduce instability introduced due to price uncertainty. This approach has helped government in reducing under-recovery over the years as well as ensuring substantial contribution of petroleum products to tax revenue.

Changing pattern of Under Recovery on Petroleum Products

Under recovery is a term used to denote the notional losses that oil companies incur due to the difference between the subsidized price at which the oil marketing companies sell certain products and the price which they should have received for meeting their cost of production. With the deregulation of petrol and diesel, the under recovery on petrol and diesel has been eliminated and under recovery on PDS kerosene has also reduced over the years. A substantial portion of under recovery now comes from DBTL (Direct Benefit Transfer for LPG) related subsidies (Figure 11).

Figure 11: Under-recovery on Petroleum Products & Natural Gas



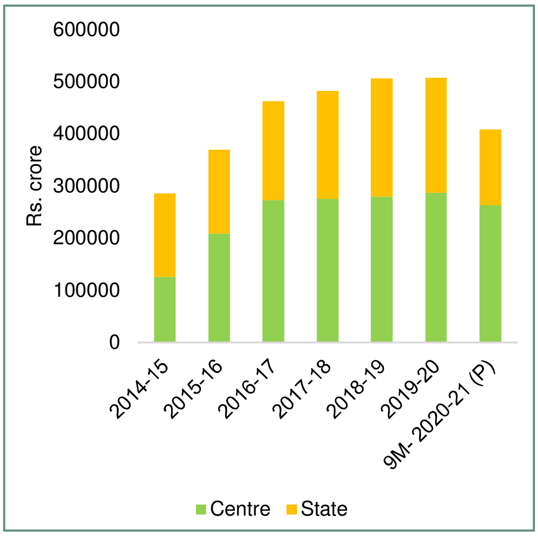
Source: PPAC, MoP&NG

Contribution of Tax/ Duties on Crude oil & Petroleum products to Central and State exchequer

The contribution of tax and duties on crude oil and petroleum products has gone up over the years. The ratio of tax/ duties on crude oil and petroleum products to central exchequer as a per cent of gross tax revenue has ranged between 13.5 per cent to 16 per cent since 2015-16. (Figure 12a and 12b)

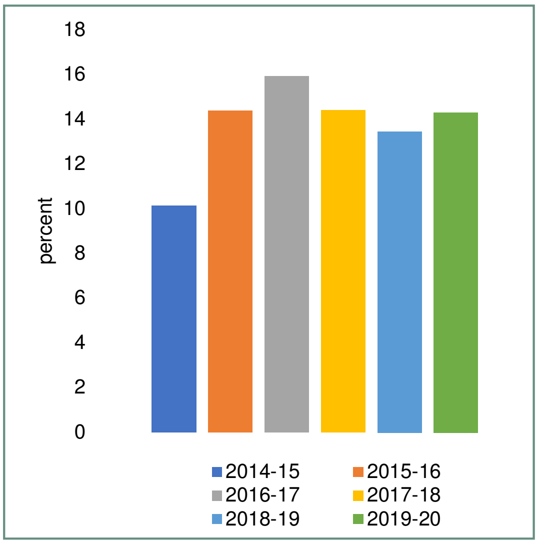
To sum up, the current oil price shock is led by a dip in demand and excess crude oil supply due to the COVID-19 pandemic. It enabled oil importing countries like India to improve upon its fiscal position by saving on the import bill and enhancing

Figure 12a: Contribution of Tax/ Duties on Crude oil & Petroleum products to Central and State exchequer



Source: PPAC, MoP&NG

Figure 12b: Ratio of Tax/ Duties on Crude oil and Petroleum products to central exchequer as a per cent of GTR



taxes/ duties on petrol and diesel. This strategy helped governments at Centre and States to make up for the loss in revenue on account of complete lockdown and limited economic activity during 2020. Additional revenue helped finance contingent revenue expenditure of the government, when other sources of revenue dried up. However, with global demand picking up due to revival of economies from the crisis and the dictated cut in crude oil production by OPEC, the international prices of crude oil is expected to show a spike in the short term. Union Budget 2021 had reduced the excise duty on petrol and diesel, however imposition of AIDC cess left the overall cost burden on retail consumers unchanged. With the international price situation remaining uncertain, to contain the price rise in RSP, taxes/duties need to be rationalised. Although the impact of crude oil price rise on CPI inflation is not substantial, still an increase in RSP can lead to cost push inflation in terms of pressure on cost of raw materials, intermediate goods etc. Hence, the option of reduction of effective excise duty alongwith exerting pressure on the oil exporting countries to increase production of crude oil is necessary to add momentum to developing economies limping back on to the revival path. India also needs to diversify its crude oil basket to be able to import at competitive rates.

The views expressed are personal