

Splitting the petrol pie?

Volatility in oil prices raises the question on the redistribution of the revenue to different stakeholders including suppliers, Oil marketing companies (OMCs), Centre and States as prices move in different directions. In simple words, who will bear the burden or enjoy the fruits, in tune with rise/fall in international crude prices. In this short exercise, we have charted out this distribution for certain time periods since Apr'20. The pricing of fuel products in India is still controlled even though the overt subsidy has been phased out. While the consumer has been paying higher prices at most times, after a point there is a tendency to freeze the same. When this happens there is redistribution across the stakeholders.

The oil suppliers are the exogenous factor which pertains to the price at which it is imported. There is no real control over this price though post Ukraine war, India has negotiated with Russia to buy cheaper oil relative to global prices. The OMCs have had to adjust their returns based on how the retail price gets fixed and the two levels of government view their tax rates.

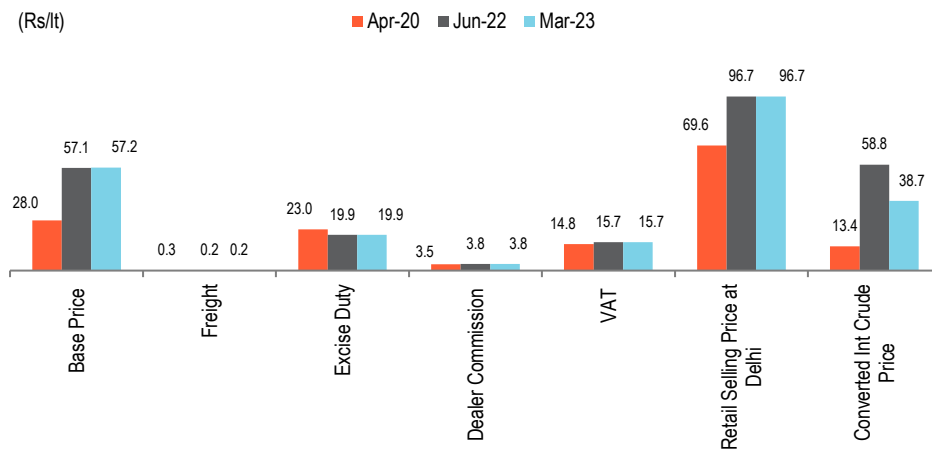
OMCs' share have fallen in times of rising oil prices, whereas in episodes of falling oil prices, they could recoup some of the losses. This is reflected in their financials as well. However, with oil prices on a downtrend of late, we believe, the base price of OMCs is unlikely to change (seen in earlier episodes as well) as OMCs have to recoup their earlier losses.

Components of Petrol and Diesel price build up:

- To arrive at the retail price of petrol, various components are added. This comprises the base price which is a combination of the exogenously determined supplier's price and the component charged by the OMC. To this is added the freight cost, excise duty of the Centre, the dealer commission and state VAT. For the purpose of this exercise, the price in Delhi has been considered.
- The movement in international oil price of crude and the final consumer price of petrol is reflected in the pass through across components.
- In the Figure below, Apr'20 and Jun'22 have been chosen as these time points demarcated the low and high of international oil price in the chosen time period (Apr'20-till date). It can be seen that with increase in international crude prices from Rs 13.4/lit to Rs 58.8/lit, the base price, or the price charged by OMCs rose to Rs 57.1/lit from Rs 28/lit in the same period.
- Other than the volatility in base price of OMCs, other components especially the centre's tax underwent some degree of change. From Rs 23/lit in Apr'20, the excise duty went down to Rs 19.9/lit, to protect consumers from rising oil prices. States' tax on the other hand went up to Rs 15.7 in Jun'22 from Rs 14.8/lit in Apr'20.

- With oil prices significantly coming down lately, the buildup components have remained unchanged and the base price charged by OMCs has been retained at the same level. The pricing of petrol and diesel is on the basis of 15-day rolling average of international price.

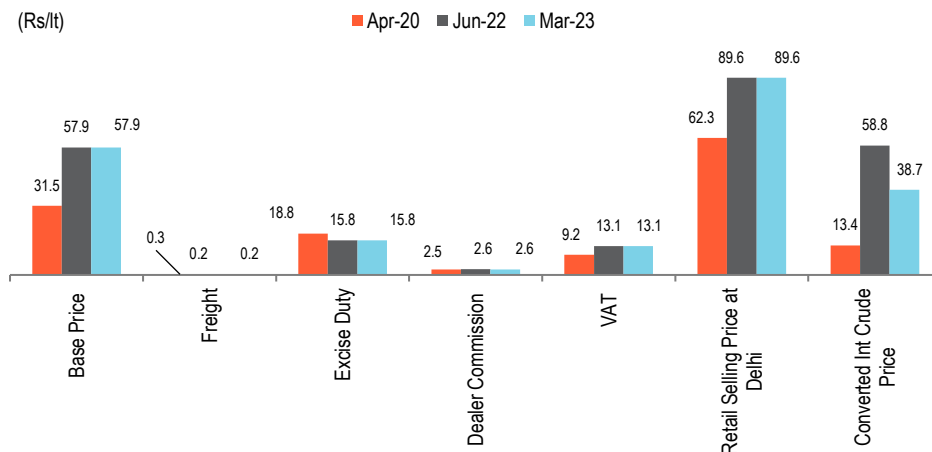
Fig: 1: Price Buildup of Petrol



Source: IOCL, Bloomberg, Bank of Baroda Research, Note: International crude price is converted from US\$/bbl to Rs/lit taking spot exchange rate and crude price. Build up prices are as on date.

- The trend in buildup of diesel prices is also similar, except that here the VAT component have risen significantly from Rs 9.2/lit in Apr'20 to Rs 13.1/lit in Jun'22.

Fig: 2: Price Buildup of Diesel



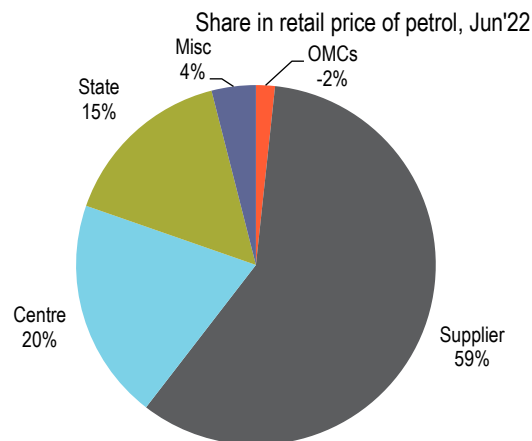
Source: IOCL, Bloomberg, Bank of Baroda Research, Note: International crude price is converted from US\$/bbl to Rs/lit taking spot exchange rate and crude price. Build up prices are as on date.

Who would benefit with volatility in international oil prices?

In this exercise, we have considered different time points, where oil prices exhibited maximum change and tried to see the impact in terms of share of different stake holders in the petrol pie. A similar result holds for diesel as well, with no anomaly in trend between the two.

- For the period May'20 to Dec'20, when international oil prices went up from US\$ 32/bbl to US\$ 50/bbl, the share of OMC's in the retail price of petrol have only increased from 3.5% to 4.9%. Centre's share on the other hand, has gone down from 46.3% to 39.7%. Notably, this is not because of excise duty cuts, but on account of increase in retail price, which has expanded the denominator. States' share in the retail price have remained stable at 23.1%. VAT has increased in absolute terms by Rs 2.7/lt in the same period. Miscellaneous share has risen to 4.9% from 5.4%, due to increase in both freight and dealer commission.
- Between Dec'20 to Jun'21, when international oil prices went up from US\$ 50/bbl to US\$ 72/bbl, OMCs share fell to 3.5% from 4.9%. Centre's share continued to go down from 39.7% to 34.4%. States' share was retained at 23.1%, due to Rs 2.9/lt increase in VAT. Miscellaneous component was more or less in line at 4.3% in Jun'21 against 4.9% seen in Dec'20. Oil suppliers' share rose to 34.7% from 27.5%.
- For the period Jun'21 to Mar'22, when international oil price increased from US\$ 73/bbl to US\$ 98/bbl, share of OMCs in retail price continued falling to 1% from 3.5%. Oil suppliers' share went up from 34.7% to 49.3%. Centre's share again fell to 29.2% from 34.4%, on account of Rs 5/lt cut in excise duty. States' share fell to 16.2% from 23.1%, due to Rs 6.6/lt cut in VAT. Notably this is the only period in our analysis where States VAT cut was observed.
- Between Mar'22 to Jun'22, when international oil price reached its high of US\$ 119.8/bbl in our period of analysis, OMC's share in retail price went down to -1.8% from 1%. The negative share is on account of higher converted international crude price (taking into account the spot exchange rate and spot international crude price as on date) compared to the base price charged by OMCs. Oil suppliers' share increased to 60.8% in Jun'22 from 49.3% in Mar'22. Centre's share went down to 20.6% from 29.2%, following Rs 8/lt cut on excise duty in petrol. States' share was retained at 16.2%, with 21paise increase in VAT during the same period.

Fig: 3: Oil suppliers' share highest in times of rising oil prices

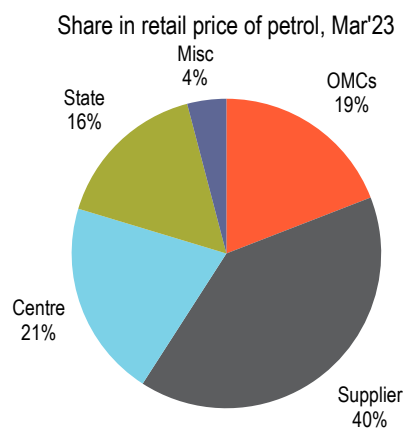


Source: IOCL, Bloomberg, Bank of Baroda Research, Jun'22 is chosen as oil prices reached a high in our period of analysis post Apr'20

- Between Jun'22-Mar'23, when international oil price came down to US\$ 74/bbl and currently hovering around US\$ 71/bbl, OMCs share in retail prices, went up to 19.1% in Mar'23 from

-1.8% in Jun'22. Oil suppliers' share on the other hand went down to 40% from 60.8% in Jun'22. Centre's and States' share have remained unchanged at 20.6% and 16.2% respectively.

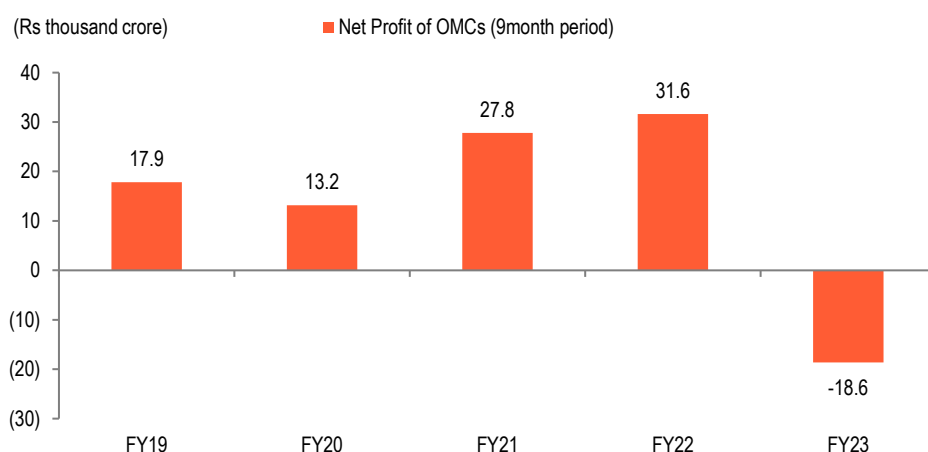
Fig: 4: With falling oil price, OMCs share has increased



Source: IOCL, Bloomberg, Bank of Baroda Research

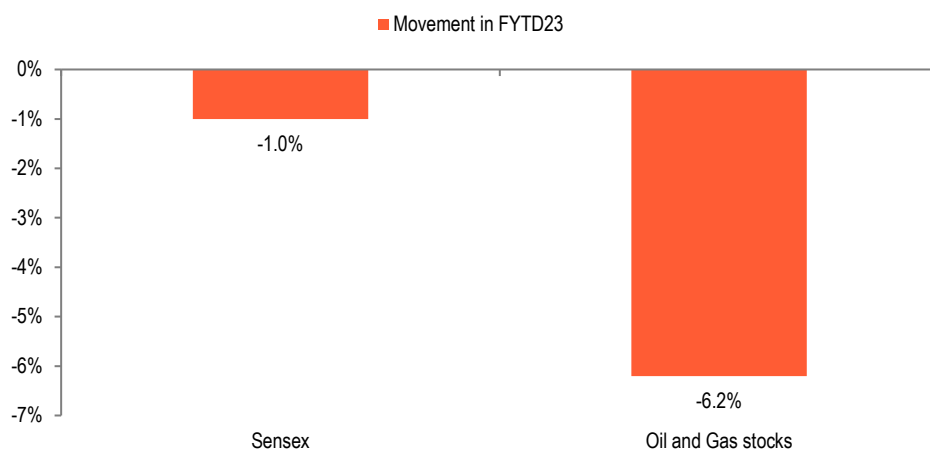
In the period of analysis, international oil prices have been on an upward path, barring few periods. Thus the highest share was procured by the oil suppliers. The OMCs have had to make constant adjustments to their returns as the final retail price has been fixed ostensibly in an attempt to control inflation when the price of crude went up. For the 9month ending FY23, net profit of OMCs have fallen sharply, this is also reflected in their weaker performance in the bourses, where shares of oil and gas stocks have fallen.

Fig: 5: Net Profit of OMCs have been adversely affected



Source: Ace Equity, Bloomberg, Bank of Baroda Research, Note: OMCs included are BPCL, IOCL and HPCL

Fig: 6: Oil and gas stocks underperformed Sensex on the bourses



Source: Bloomberg, Bank of Baroda Research

Conclusion:

It's often a matter of conjecture on how the oil burden is distributed when prices move up or down. This is so as the supplier's price is fixed exogenously and there is little control over this element. While taxes are decided at the centre and state levels, their responses have been measured and calibrated. The centre has lowered the excise duty rate twice, while different states have followed varied tax structures depending on the fiscal space that is available. Needless to say, the onus of adjustment is on either the OMC or retail customer on an ongoing basis. However, once it was decided to peg the retail price, the onus has shifted to the OMC. Hence while the retail consumer may say that with global crude oil price coming down, there has been no change in the final price paid, the OMCs would justify their gain on grounds of having absorbed the higher cost earlier when the price of crude increased.

In our period of analysis, post Apr'20, oil prices were on an uptrend (barring 9 out of 35 months in our study). Clearly, OMCs have lost share due to their inability to tinker the base price when international crude price was increasing. This is on account of a decision being taken to fix the final retail price in a bid to control inflation. States share have remained more or less stable with hardly any reduction in VAT rates except during the period Jun'21 to Mar'22. Centre has tried to reduce the burden to consumers with cut in excise duty, in times of rising oil prices.

Even in the past, when oil prices were hovering around US\$ 75-80/bbl, the share of OMCs in retail price of petrol ranged between 6-12%. Currently at US\$ 75/bbl, the share of OMC is at 19.1%. We believe, this is unlikely to change, instead some increase in share of OMCs might be visible with fall in oil prices in the near term, to recoup the earlier losses.

Appendix:

Table 1: Share of stakeholders in petrol pie

	OMCs	Oil Supplier	Centre	State	Misc (Freight+Dealers Comm)	International Crude Price, US\$/bbl
May-20	3.5%	21.7%	46.3%	23.1%	5.4%	32.5
Jun-20	1.6%	25.5%	44.6%	23.1%	5.3%	39.6
Jul-20	5.5%	25.5%	41.0%	23.1%	4.9%	43.4
Aug-20	4.7%	26.2%	41.0%	23.1%	5.0%	44.8
Sep-20	7.1%	24.6%	40.3%	23.1%	5.0%	43.9
Oct-20	6.8%	24.4%	40.7%	23.1%	5.0%	42.9
Nov-20	5.9%	25.4%	40.7%	23.1%	4.9%	43.8
Dec-20	4.9%	27.5%	39.7%	23.1%	4.9%	49.3
Jan-21	3.3%	29.9%	38.9%	23.1%	4.8%	55.1
Feb-21	3.7%	31.3%	37.5%	23.1%	4.6%	59.9
Mar-21	2.3%	34.2%	36.1%	23.1%	4.4%	68.4
Apr-21	2.7%	33.5%	36.4%	23.1%	4.4%	65.8
May-21	1.9%	34.6%	36.0%	23.1%	4.4%	68.7
Jun-21	3.5%	34.7%	34.4%	23.1%	4.3%	72.3
Jul-21	4.9%	35.0%	32.8%	23.1%	4.2%	74.7
Aug-21	8.6%	31.9%	32.3%	23.1%	4.1%	69.5
Sep-21	6.1%	34.4%	32.3%	23.1%	4.1%	75.7
Oct-21	2.4%	38.7%	31.7%	23.1%	4.0%	84.9
Nov-21	7.7%	36.8%	28.5%	23.1%	3.9%	83.6
Dec-21	12.6%	37.6%	29.2%	16.2%	4.3%	75.0
Jan-22	8.2%	42.1%	29.2%	16.2%	4.2%	86.1
Feb-22	3.4%	46.9%	29.2%	16.2%	4.2%	94.8
Mar-22	1.0%	49.3%	29.2%	16.2%	4.2%	98.0
Apr-22	-0.2%	52.6%	27.4%	16.2%	4.0%	111.7
May-22	1.1%	55.1%	23.6%	16.2%	4.0%	114.2
Jun-22	-1.8%	60.8%	20.6%	16.2%	4.1%	119.8
Jul-22	6.5%	52.5%	20.6%	16.2%	4.1%	101.2
Aug-22	11.3%	47.8%	20.6%	16.2%	4.1%	92.3
Sep-22	11.7%	47.4%	20.6%	16.2%	4.1%	91.4
Oct-22	10.0%	49.1%	20.6%	16.2%	4.1%	91.6
Nov-22	10.0%	49.1%	20.6%	16.2%	4.1%	92.9
Dec-22	16.5%	42.6%	20.6%	16.2%	4.1%	79.0
Jan-23	14.3%	44.8%	20.6%	16.2%	4.1%	84.5
Feb-23	13.3%	45.8%	20.6%	16.2%	4.1%	85.1
Mar-23	19.1%	40.0%	20.6%	16.2%	4.1%	74.7

Source: IOCL, Bloomberg, Bank of Baroda Research, Note: Share as % of retail price of diesel, International Crude price in accordance with the date of petrol and diesel price revision

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