September 16, 2022

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Understanding the economics of fuel taxes

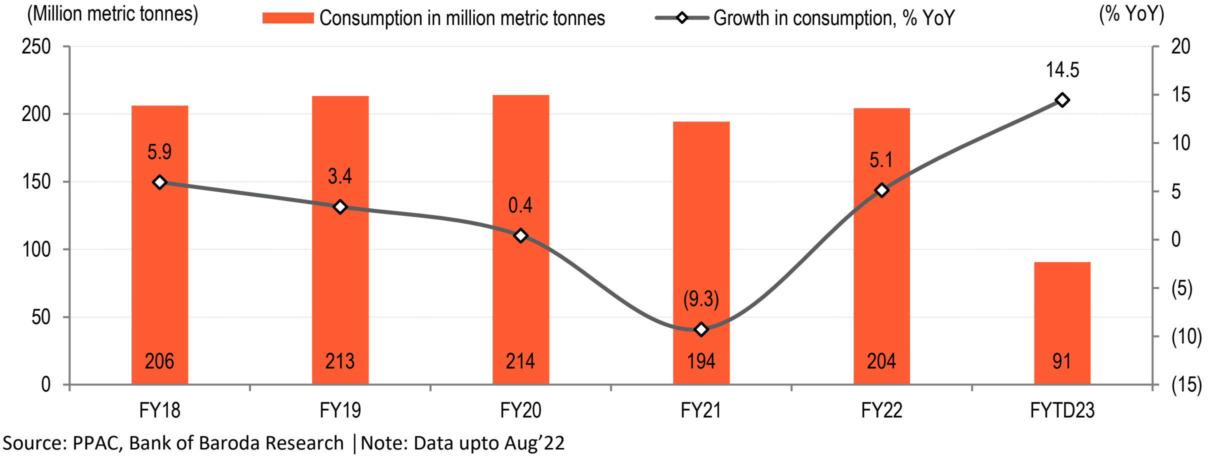
Fuel taxes have been a contentious issue in India especially at a time when inflation has been increasing. The central government has lowered the excise duty on petrol and diesel and nudged states to lower their VAT rates. Some have, though most have let it be, on grounds of their fiscal balances being affected. On the other side there has been an increase in prices of other fuel products like LPG and ATF. Therefore there are some prices which are going up while others are moving down, albeit gradually. At the same time the global price of crude oil has been volatile and presently is around US$ 90/barrel while it tested the US$ 120/bbl level when the Ukraine war was at its peak. There have been pertinent arguments made that when the crude oil price had crashed to low levels during the pandemic the benefit was not transmitted fully to the consumer as taxes were increased. Hence, the economics of fuel taxes is complex.

The foregoing analysis takes an ex-post view on fuel taxes where we look at aggregate consumption of all fuel products and juxtapose the same with the aggregate tax revenue garnered by both the centre and state. This will give an idea on whether as consumers we pay higher effective taxes on fuel products through various cycles of crude oil prices.

Trends in domestic petroleum consumption:

Petroleum consumption in India increased from about 206 metric tonnes (MT) in FY18 to 214 MT in FY20. In terms of YoY growth, petroleum consumption in India has been moderating in the past few years. From 5.9% in FY18, growth in petroleum consumption decelerated to 0.4% in FY20. In FY21, it declined to 194 MT (-9.3%) due to the lockdown restrictions in place during the Covid-19 pandemic. Petroleum consumption rose by 5.1% in FY22 to 204 MT, amidst a pickup in economic activity and increased mobility as the country emerged from the pandemic. However, it still continued to trail the pre-pandemic level by ~5%.

Figure 1: Petroleum consumption in India improving



Source: PPAC, Bank of Baroda Research | Note: Data upto Aug'22

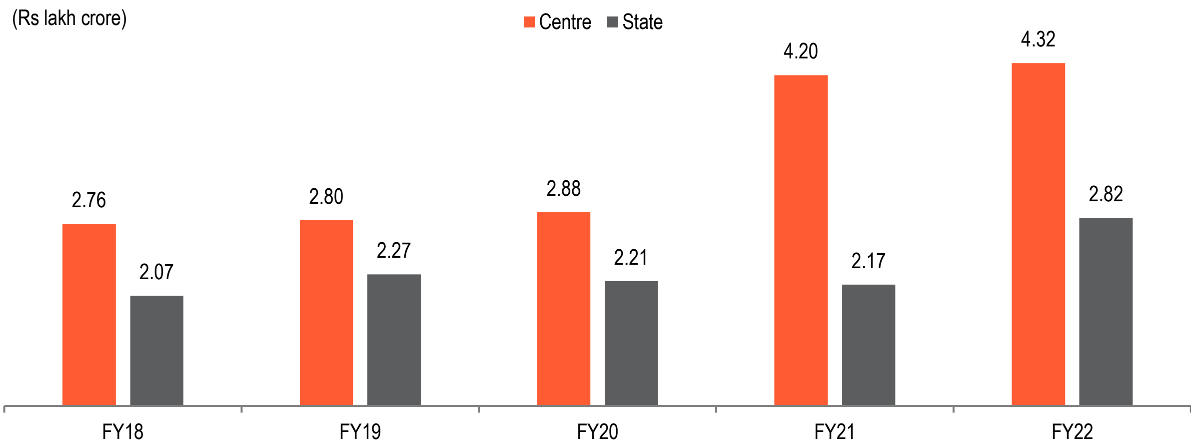
With a more broad-based pickup in economic activity this year, petroleum consumption has registered an impressive growth of 14.5% (till Aug'22). But, when compared with the pre-pandemic level, it is marginally higher at 0.2%. Going forward, with the continued momentum in economic activity, demand for petroleum is likely to see a further uptick and is likely to exceed the pre-pandemic levels.

Fiscal implications:

Taxes on petroleum products are an important source of revenue for both the Central and State governments. Figure 2 shows the trends in revenue generated through sale of petroleum products (excluding dividends etc.) by both the Central and state governments over the last five years. The Centre has seen a steady increase in receipts on account of taxes/duties on petroleum products from Rs 2.76 lakh crore in FY18 to Rs 2.88 lakh crore in FY20. Due to lower international prices of petroleum products, the Central government hiked excise duty on petrol and diesel by Rs 13/litre and Rs 16/litre in FY21. As a result, contribution of the petroleum sector to the Central exchequer rose sharply to Rs 4.2 lakh crore in FY21. In Nov'21, the central government announced a cut in excise duty on petrol and diesel by Rs 5/litre and Rs 10/litre respectively. Despite this, revenue collections on account of petroleum sector improved to Rs 4.32 lakh crore.

On the other hand, contribution of the petroleum sector to the state governments has remained almost steady in the last 5 years. In fact, it declined in FY20 as well as FY21. Thereafter, there was some recovery in tax collections on petroleum products to Rs 2.82 lakh crores. It must be noted that several states announced a cut in VAT on petrol and diesel in FY22, following a similar reduction announced by the Centre.

Figure 2: Petroleum products: contribution to Central and State exchequer

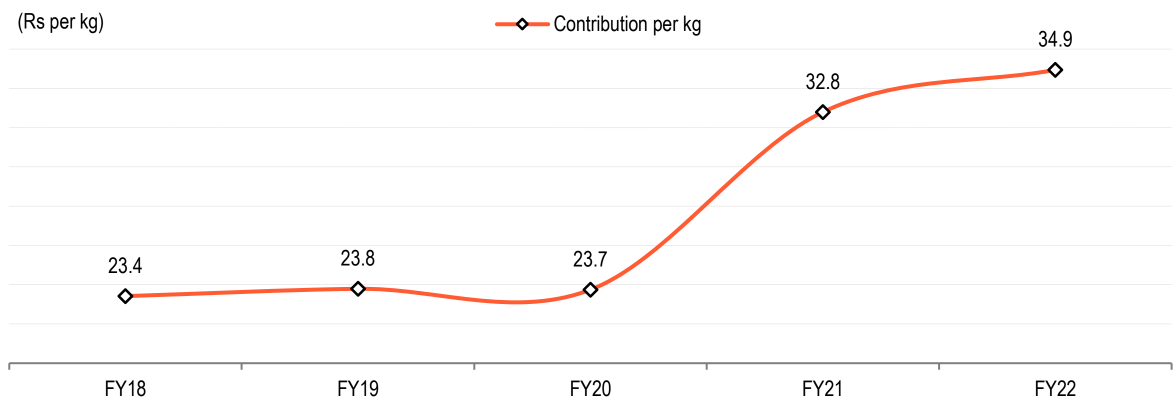


Source: PPAC, Bank of Baroda Research

Overall, government revenues (Centre + State) through sale of petroleum products have increased by 8.1% on a CAGR basis in the last five years.

To understand this better, we have calculated the how much the government (Centre + State) earns from per/kg consumption of petroleum products. Our analysis shows that this amount has been increasing over the last five years despite the changes to the excise duty rates on petroleum products. In fact, from just Rs 23.4/kg in FY18, the government in FY22 earned Rs 34.9 per kilogram of petroleum products sold. This is notwithstanding the fact that the government announced a cut in excise duty on petrol and diesel in FY22. What stands out is that the average tax on petroleum products was relatively stable in the period leading to FY20. Subsequently with consumption coming down in FY21, there was an increase in the average tax rate. However, with consumption reverting to normal or coming close to it in FY22, the average tax rate was increased further. In percentage terms, the increase in FY21 was 38% higher than FY20 which increased further 6.4% in FY22.

<u>Figure 3: Average tax per/kg of petroleum products sold</u>



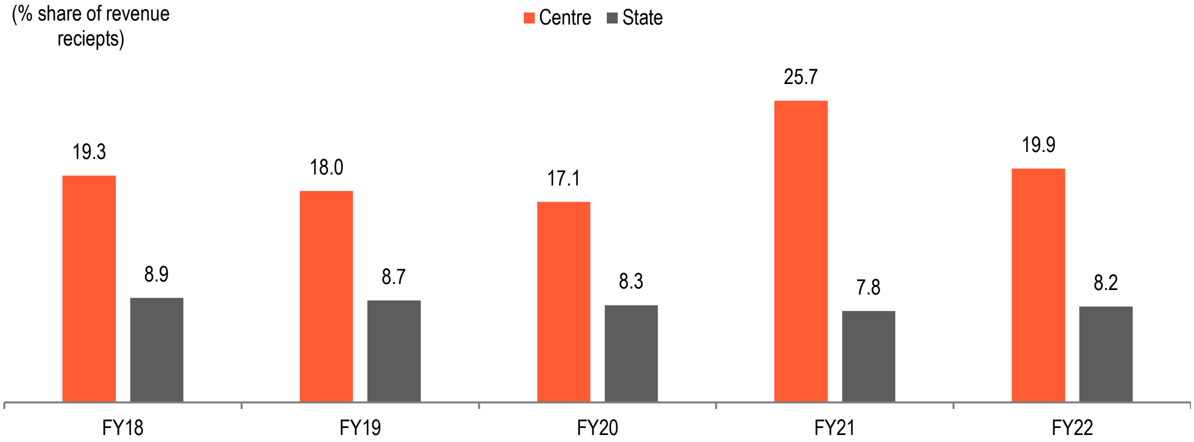
Source: PPAC, Bank of Baroda Research

Such a tendency can be better understood by linking the same with the importance of tax revenue in revenue receipts of the government. Figure 4 shows, revenue collected as taxes and duties on petroleum products as a percentage share of revenue receipts of both the Central and State governments during the last 5 years.

It can be seen that the petroleum products account for a far greater share of Central government's revenue receipts. Furthermore, its share in Central government's revenue receipts surged sharply to 25.7% in FY21 from 19.3% in FY18, on account of a hike in excise duties. Interestingly this was at a time when consumption had declined due to the lockdowns. The government was able to steady revenue collection by increasing the taxes on fuel products. This explains the anomaly of retail prices not coming down commensurately with trends witnessed in global crude oil prices. The government has raised taxes to take advantage of this trend of falling crude prices.

Thereafter, the share declined to 19.9%, which was the share in FY18. For states, the share declined gradually but continuously between FY18 to FY21 from 8.9% to a low of 7.8%. However, in FY22 the share increased to 8.2%. It must be pointed out that as state taxes are levied ad valorem, any reduction in excise duty by the centre would automatically lower the revenue earned by states with rates remaining unchanged.

Figure 4: Contribution of petroleum products as a share of revenue receipts



Source: CEIC, RBI, Bank of Baroda Research | Note: Data for states for FY22 is based on Budget Estimates as provided by RBI

Concluding remarks:

- Petroleum consumption in India is showing a steady recovery from the pandemic in recent months. Increased mobility and pickup in economic activity have contributed to this trend.
- There were a number of changes in the tax rates on petroleum products between FY20 to FY22, amidst volatility in global oil prices due to the Covid-19 pandemic as well as the Russia-Ukraine war. T
  - The Central government announced a cut in excise duty on petrol and diesel in May'22, amidst a surge in global oil prices and an uptick in domestic inflation. Following this, several states also announced a cut in VAT on sale of petrol and diesel. Even so, taxes (Centre and State) account for about ~40% and ~35% of the retail selling price (RSP) of petrol and diesel in Delhi (1 Sep 2022).
- More interestingly, the governments are now earning more per kilogram of petroleum products sold than they did 5 years back. This suggests that despite lower tax rates/duties, the burden on consumers has increased.
- Taxes on petroleum products are a major source of finance for both the Centre and State governments. Our analysis also shows that the contribution of petroleum products to both the Centre and State governments has increased in the last 5 years.

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