Impact of Soft Global Crude Oil Prices on Indian Oil & Gas Industry

ICRA-Petrofed Study

2016

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1 EXECUTIVE SUMMARY

Petroleum Federation of India (Petrofed) has mandated ICRA to carry out a comprehensive analysis of the impact of the meltdown of the global oil prices on the Indian Oil and Gas industry. The study is aimed to enable Petrofed members and policy makers to assess the macro and micro level impact of the material fall in oil and gas prices on the Indian economy, oil and gas industry participants and downstream consuming sectors.

Global crude oil prices have declined by ~60% from US$ 112/bbl (Brent) in June 2014 to US$ ~45-50/bbl now (as in May 2016 end) primarily due to the significant increase in supply due to the shale oil boom in the US, demand slowdown in Europe, Japan and China and, the decision of Saudi Arabia to protect market share rather than act as a swing producer of oil. Additionally with the lifting of western sanctions on Iran, the latter has been increasing its crude oil sales aggressively in a bid to capture its lost market share. Accordingly, crude oil prices are expected to remain at moderate levels in the near term because of high supplies, modest global demand and lack of consensus within the Organisation of the Petroleum Exporting Countries (OPEC) to cut production of oil. With the precipitous decline in international crude oil prices, the economics of gas vis-à-vis alternate fuels such as fuel oil have been adversely impacted. Accordingly, prices of gas at various international hubs and spot prices of LNG have also declined leading to the material fall in domestic gas prices. Going forward ICRA research expects the prices of gas at various international hubs to remain muted in the near term, owing to the weak outlook for crude oil prices and accordingly crude derived alternate fuels.

With regard to the impact of the fall in oil prices on the Indian economy, the fall in the average price of the Indian crude oil basket from US$ 105/barrel in FY2014 to US$ 84/barrel in FY2015 and further to US$ 46/barrel in FY2016 had a significant impact on the overall macroeconomic scenario, particularly since India is a large net importer of fuels. While imports came down sharply, the impact on other external balances was less pronounced, on account of a multitude of factors. Moreover, lower prices of crude and mineral oils contributed to a sizeable decline in WPI inflation, whereas the impact on CPI inflation was relatively muted. Whilst the decline in fuel prices has both reduced the fuel subsidy outgo and boosted excise duty collections, the fiscal balances of the Central Government on an absolute basis have not shown a commensurate improvement on account of a variety of other factors - including a rise in food subsidies, interest and pension payments, other revenue expenditure as well as capital expenditure. Sales tax/VAT on petroleum products is a sizeable contributor to the revenues of the State Governments. The volume of inflows from this source depends on the following factors: the domestic price of fuel (which in turn depends on global crude oil prices, exchange rate dynamics, taxes and cesses levied by the GoI and the rate of sales tax/VAT levied by the State Government) and the consumption of such products. After the recent fall in the retail prices of fuels, the pace of growth of sales tax/VAT collections on petroleum products has eased significantly, as such levies are typically on *ad valorem* basis.

About the upstream sector, lower crude oil and gas prices would materially impact profits of upstream producers. However, the impact on Oil and Natural Gas Corporation Limited (ONGC) and Oil India Limited (OIL) has been limited so far as their crude oil realisations were earlier dampened by large under recovery sharing burden. The impact of the decline in international prices of crude oil has been higher on private upstream players who did not have subsidy-sharing burden and overseas ventures of ONGC, OIL and RIL etc. Nevertheless with a decline in the cash-generating ability (due to lower realisations on sale of oil and gas) of their E&P blocks, upstream companies such as ONGC, OIL, Cairn and RIL have recognised an impairment loss (Rs 183.3 billion during FY2016) in their book of accounts.

In August 2015, the GoI announced that it would share an under-recovery of up to Rs. 12/litre on SKO (PDS), and on LPG (domestic) up to Rs. 18/kg under (which translates to Rs. 255.6 per cylinder) and the balance subsidy would be borne by upstream companies. However, there is a lack of clarity on whether the PSU oil companies will bear the entire balance subsidy or whether some of the burden will be passed on to end-consumers in case global crude oil and LPG prices increase significantly from the current levels. As the GoI has capped its subsidy share, any significant rise in crude oil prices could lead to disproportionate increase in the burden on upstream companies, thereby limiting any upside from an increase in crude oil prices. Assuming all the incremental burden over the caps of the GoI would be shared by the PSU upstream companies, ICRA projects the net realisations (post subsidy burden) of upstream companies to vary from US$44/bbl to US$52/bbl (excluding the impact of rise in cess burden) for global crude oil prices of US$45/bbl to US$70/bbl.

With the low oil price scenario upstream companies have undertaken various cost optimisation measures including re-negotiations with existing contractors for lowering the rental/unit rates/services cost. Additionally, private upstream players are scaling down their capital expenditure (capex) programme even though the PSU companies are maintaining their exploration and production programme, though the capex in value terms has reduced, owing to the lower cost of oil field services prevailing.

The demand for oil field services is determined by upstream capital spending, with the latter influenced by prevailing and expected oil and gas prices. In response to decline in crude oil and gas prices, most global E&P companies have cut their budgets related to capex and accordingly drilling activity has shown a slowing trend, leading to a decline in the rates for drilling and other oil field services with day rates for rigs across various categories declining by 30-40% globally.

In the midstream segment, tariffs of natural gas transmission companies are independent of crude oil or natural gas prices and are regulated by PNGRB. In line with low crude oil and *LNG prices*, the growth in LNG imports and thus RLNG transmission volumes is expected to be healthy in the near to medium term, even as domestic gas volumes would increase only over the medium to long-term. With overall moderate growth in gas transmission volumes, there could be moderate positive impact of the same on profits of gas transmission players in FY2017. Further, the players may also benefit from expected increase in tariffs of under-utilised pipelines as per notification of PNGRB in January 2016.

The margins for natural gas marketing got adversely impacted in FY2015 due to lower margins on RLNG and inventory loss on long-term LNG; however, the same recovered in FY2016 with an improvement in margins on spot RLNG due to their lower prices. The outlook on marketing margins on spot LNG is positive for the next one to two years as the prices of spot LNG are expected to be low, making it more affordable. Further, while any recovery in crude oil prices would lead to higher prices of competing fuels, spot LNG may continue to see favourable economics as the increase in spot LNG prices could be lower than those in liquid fuels due to a discount on its prices (relatively lower slope than the past average) due to the oversupplied global market and the declining demand from Japan as they gradually restart their nuclear reactors.

LNG import has been on an increasing trend in India over the last few years as R-LNG consumption replaced a part of domestic gas, which has seen a consistent decline in production levels. In the past, the growth in R-LNG volumes have been moderate due to several factors, including constrained regasification capacity in the country, affordability of R-LNG in various sectors (especially at high LNG prices), etc. The price sensitivity of R-LNG demand against liquid fuels would be critical for RLNG demand, which is expected to grow due to shortage of domestic gas. ICRA believes that if the regasification terminals, as planned, come on stream over the next four to five years, the new entrants would face significant pressure on volumes and margins as they will have to compete with the existing terminals and the brownfield expansion, which are more cost efficient because of lower capital intensity.

The decline in global gas prices has resulted in a decrease in domestic gas prices, leading to higher competitive advantage over liquid automotive fuels, which have not witnesses a material fall in prices due to excise duty hikes. The domestic gas allocation for the entire demand of CNG & PNG(d) and lower domestic gas prices continue to boost demand growth and margins of incumbents in the city gas distribution sector. Going forward, the margins on CNG and PNG(d) are anticipated to be healthy with an upward bias over the medium term. However, the PNG(i) segment continues to face stiff competition from liquid fuels like furnace oil, LSHS and naphtha. Nonetheless, considering the fall in long-term and spot LNG prices, the demand and margins are expected to marginally increase in the near to medium term. ICRA believes that the price economics of spot LNG or long-term RasGas would be favourable against the liquid fuels over the near to medium term, unless crude oil prices again decline significantly from the current level of US$50/bbl (in the beginning of June-2015).

The downstream sector in the country has benefited from the fall in crude oil prices, among other reasons, providing a push to the demand of petroleum products. India's petroleum products' demand increased to 183.5 MMT in FY2016 from 165.5 MMT in FY2015 registering a growth of 10.9% (YoY), the highest level since 2000. This kind of demand growth was the highest in the last two decades and was on a much larger base, primarily driven by economic recovery and acceleration in demand on the back of lower crude oil prices. The impact of lower crude oil prices is reflected by the fact that demand of products like naphtha and FO, with overall decline in consumption by 2.3% pa and 7.9% pa during FY2005-FY2015, reported an increase of 20.9% (YoY) and 11.9% (YoY) during FY2016. The marketers have been able to improve the marketing margins on most of petroleum products due to lower crude oil prices and robust domestic demand growth.

With the sharp fall in crude oil prices during H2 FY2015, high inventory losses made a significant impact on GRMs, which were at extremely low levels in FY2015 for most of the refineries. In FY2016, the lower prices of crude oil and petroleum products led to an increase in global demand of petroleum products and liquid fuels replaced a part of the consumption of other competing fuels like LNG. The improved demand, along with limited supply addition, led to an improved supply-demand balance for the global refining industry, which got reflected in higher crack spreads for almost entire product slate of the refineries. Driven by healthy global crack spreads, most of the domestic refineries reported materially high GRMs in FY2016, the highest level in the last five years for most of the companies. The medium term outlook for GRMs is healthy and in line with healthy demand levels and expectation of demand growth exceeding supply addition globally. Low crude oil prices could continue to support the demand growth despite modest global economic prospects. In India, the demand growth would be healthy in line with improving economic activity. Overall, despite certain moderation from high levels reported in FY2016, the crack spreads of most of petroleum products are expected to be healthy leading to high GRMs in the near to medium term. Besides, any recovery in crude oil prices may also lead to inventory gains for the refiners.

The GURs of OMCs declined by 64% (YoY) to ~Rs. 274 billion (including cash reimbursement under DBTL) in FY2016 from Rs. 763 billion in FY2015 in line with lower Indian Basket crude prices at US$46/bbl in FY2016 against US$84/bbl in FY2015. ICRA projects GURs of OMCs to increase to ~Rs. 355 billion for FY2017 (estimated at average Indian basket crude oil price of US$50/bbl and INR/US$ of 68.5 for FY2017). The borrowings and interest burden of OMCs could increase with higher GURs, driven by a recovery in crude oil prices.

Most Indian industrial segment users have benefited from the decline in crude prices in terms of reduction in their raw material and/or energy costs. The same has translated to a significant improvement in their EBITDA margins in FY2016. The benefit from lower input prices has allowed industries facing significant demand side/competitive pressures (like aviation, shipping) to earn higher margins on their operations, thereby providing significant relief to their cash flows. In certain industries like Paints and Adhesives, due to the presence of few strong organised players, the companies have retained the benefits of lower input costs and earned significantly high margins. Overall, the transmission of benefits from lower costs has been different across sectors, nevertheless, lower price and higher disposable income have resulted in higher demand growth for Indian industries.

Retail consumers have not benefitted to the extent possible in terms of retail price of auto-fuels – MS and HSD as the Central and State Governments have retained a significant proportion of the reduction in costs by way of higher excise duty and VAT respectively. In case of the regulated prices of SKO and LPG, while the prices have remained unchanged, the overall subsidy burden to the government has reduced significantly. Thus, overall, higher revenue collections and lower subsidy payouts would indirectly benefit consumers in the longer run through increased GoI spending on infrastructure, if the oil prices remain at the current level.

About the impact on lenders, banks' loan book towards the Petroleum, Coal Products and Nuclear Fuels sector registered a decline of 19% from Rs 635 billion as on March 2014 to Rs 512 billion as on March 2016

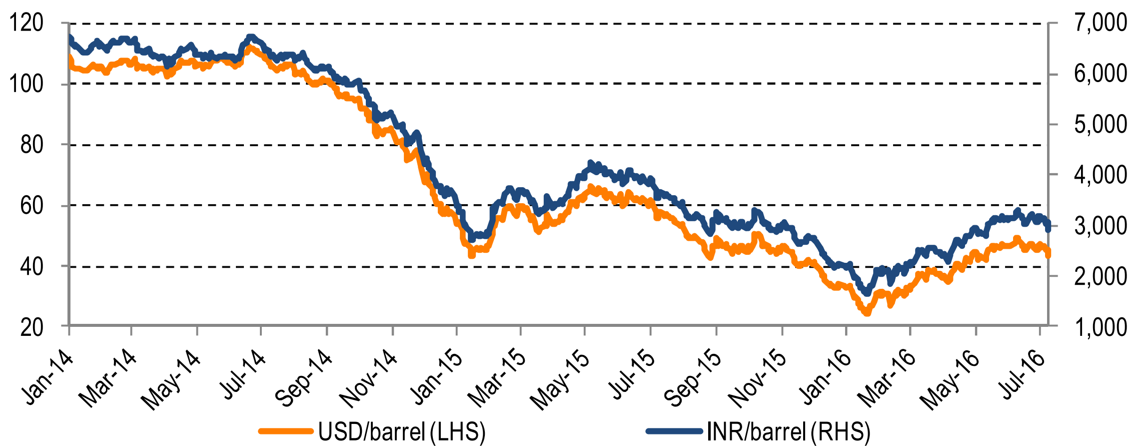
as against banks' total loan book annual growth of around 8% during the same period. The decline was on account of the meltdown in oil prices which lowered the working capital requirement of oil marketing companies (OMCs) considerably. The debt market issuances for major oil companies have also dried up and the proportion of issuances by these companies has remained below 0.5% (of total issuances during the quarter) for four out of the last five quarters (Q4 FY2015 to Q4 FY2016). In ICRA's estimate, most of the banks' exposure to the sector was towards OMCs. Nonetheless, despite the significant volatility in oil prices, vulnerability of the banks' exposure to the sector remain low as credit the profile of OMCs remain strong (rated at highest level) on the back of majority sovereign ownership, strong financial flexibility and their dominant and strategically important position in the Indian energy sector.

Overall, the fall in crude oil prices has been negative for the upstream sector, especially the private sector companies whereas PSU upstream companies were relatively less impacted due to fall in the subsidy burden. Post adverse impact of inventory loss in FY2015, the downstream segment entities benefited materially from the fall in crude oil prices as is reflected in their performance in FY2016. The impact on midstream companies was moderately positive due to higher demand and margins on spot LNG due to lower prices of the same.

2 IMPACT ON MACRO-ECONOMIC INDICATORS

Lower crude oil prices impact Indian macroeconomic fundamentals: Changes in global prices of crude and mineral oils as well as trends in domestic consumption of such items impact various aspects of Indian macroeconomic fundamentals, with India being a price taker in the crude oil market. The fall in the average price of the Indian crude oil basket from US$ 105/barrel in FY2014 to US$ 84/barrel in FY2015 and further to US$ 46/barrel in FY2016 had a significant impact on the oil import bill, since India is a large net importer of fuels. However, the impact on other external balances was less pronounced, on account of a multitude of factors. Moreover, lower prices of crude and mineral oils contributed to a sizeable decline in WPI inflation, whereas the impact on the CPI inflation was relatively muted.

Chart 1: Movement in Price of Crude Oil (Indian Basket) per Barrel



Source: PPAC, GoI; ICRA research

Lower crude oil prices squeeze oil imports and exports: The fall in crude oil prices had a significant impact on curtailing India's oil and overall merchandise imports, with fuels forming a large part of the Indian imports basket.

Indian crude oil imports moderated from U$ 165 billion in FY2014 to US$ 139 billion in FY2015 (16% YoY decline) and further to US$ 83 billion in FY2016 (40% YoY decline). However, merchandise imports eased only marginally from U$ 451 billion in FY2014 to US$ 448 billion in FY2015, as non-oil imports rose by a sizable 8% from US$ 286 billion to US$ 309 billion in the same years (led by gold, agricultural commodities particularly vegetable oils, electronic goods and iron and steel). Subsequently, merchandise imports recorded a sharp decline to US$ 380 billion in FY2016, with the aforesaid fall in oil as well as a 4% contraction in non-oil imports. The latter was led by coal, minerals and metals, including iron and steel, reflecting a combination of lower prices (on a YoY basis); high domestic production and inventories; and measures taken by the GoI such as the Minimum Import Price and safeguard duties on various steel products. While oil imports accounted for 82% of the decline in merchandise imports in FY2016, coal, minerals and metals including iron and steel accounted for 14% of the same. In contrast, imports of agricultural commodities (boosted by high imports of pulses) and electronic goods recorded a rise in