Research

Fuel Retailing

May 2017

Intensifying competition to reshape the fuel retailing sector

Both PSU OMC & private players to feel margin pinch as competition intensifies; however the margin decline to be relatively lower for PSU OMCs

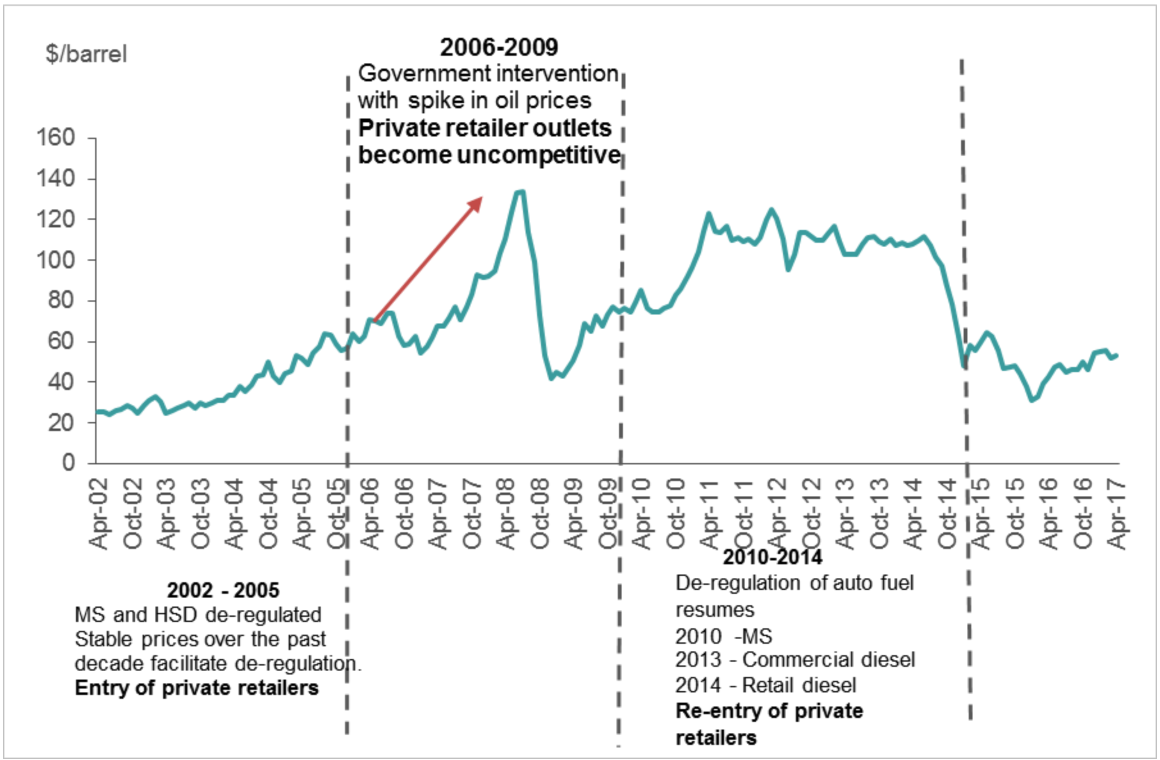
India's fuel retailing landscape is undergoing a structural shift with the re-entry of private players. In fact, private fuel retailers are expected to rapidly corner 12-15% of the market by 2020-21, in terms of retail outlet share, from a mere 1% in 2009-10. The share in volume terms is projected to be higher at 13-16% by 2020-21, with the addition of 6,000-8,000 outlets by private players, from 4-5% in FY16. This will inevitably impact the throughput per outlet. To better compete, existing players are being forced to reinvent their business models. The one divergent trend between private and public players will be the targeted customer base. While private players are expected to target high throughput regions and expand particularly in highways segment, public sector fuel retailers are expected to focus to underpenetrated rural areas, apart from defending their share on highway business.

Margins will experience stress amid this rapidly expansionary phase. For private players, margins are expected to get impacted as they open outlets at greater distances from existing depots/ refineries, thus increasing the cost of logistics. The marketing margins for public sector fuel retailers are expected to decline as well, but to a relatively lower extent as compared to private players, as they will expand in rural areas and adopt dynamic pricing strategies to prevent erosion of profits.

Despite the challenges, the industry is projected to be on a strong footing in the medium term because of growing car and two-wheeler penetration and growth in road freight movement.

Deregulation resulted private companies gaining market share and improved profitability for the sector

History of price deregulation in petroleum products in India

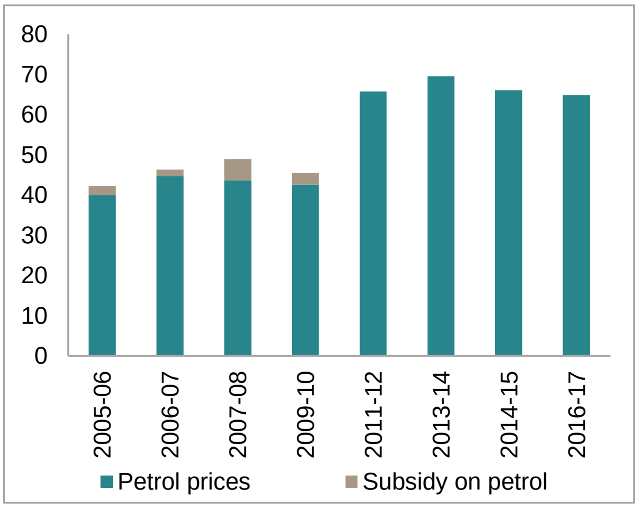


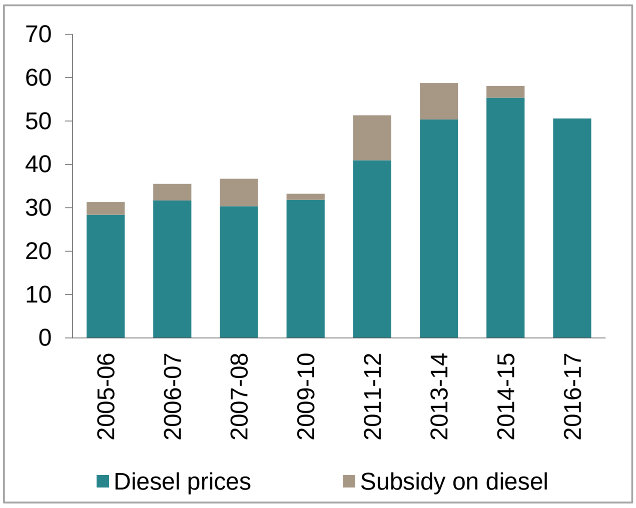
Source: Industry, CRISIL Research

Private retailers, such as Reliance Industries Ltd (RIL), Essar Oil Ltd and Shell, had in fact tripped in their first attempt in fuel retailing in 2002, as the government bought in price control at the pumps post-2005, when crude oil prices shot up significantly. However, not before they were able to rapidly corner 6% of the market, i.e. set up 1,840 outlets of the total 30,700 outlets, by 2003-04.

But with the implementation of price control, their combined market share fell below 1% by 2009-10. While the PSU OMCs were compensated by the government for the losses made on selling fuel at a price lower than the cost, no such largesse was given to private retailers. Consequently, private players were not able to compete with PSU OMCs as the retail fuel prices at their outlets were much higher.

Retail prices of petrol and diesel and subsidy on petrol and diesel



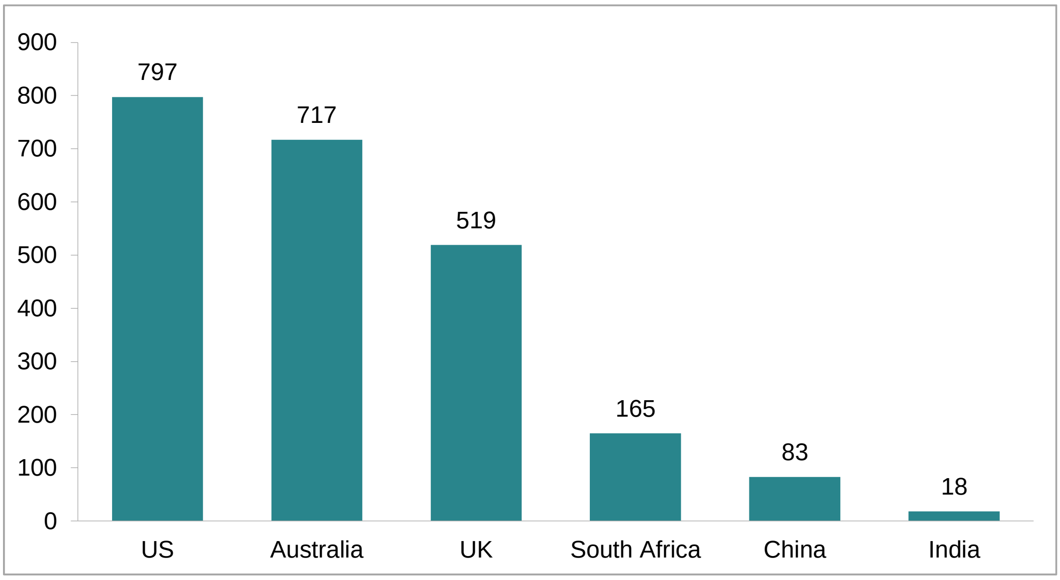


Note: Petrol was deregulated on June 25, 2010 and diesel was deregulated on October 18, 2014. Retail prices are for Delhi.

Source: IOCL, PPAC, CRISIL Research

With the government again deregulating prices at the pump, private players have again entered the fray. In June 2010, the government deregulated petrol prices to reduce the burden of under-recovery. With falling crude oil prices, diesel was also deregulated in October 2014. RIL quickly reopened 1,151 of its 1,400 pumps while Essar Oil had 2,682 active retail outlets, as of December 2016. Shell operated 83 outlets as of December 2016. Together, private players once again accounted for 6% share in outlet terms by 2015-16, despite the pie having grown larger - PSU OMCs had 53,224 outlets. The reason for the enthusiasm from private players lies in the fact that unlike developed countries, such as the US and the UK, where fuel demand has stagnated, Indian fuel demand is accelerating - rising 5-6% CAGR over the past five years - driven by rising vehicle population. Car penetration in India is a lowly 18 cars per 1,000 population, compared with developed countries, where it is above 500.

Car penetration among major countries

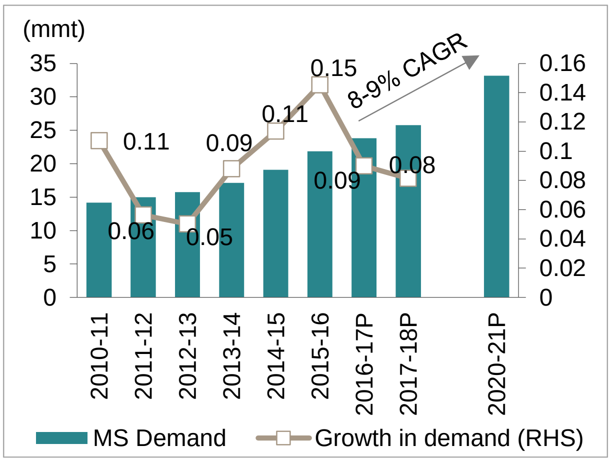


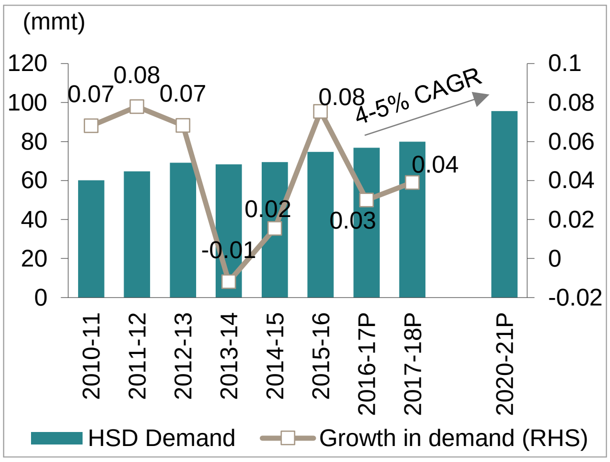
Source: Industry, CRISIL Research

Sharp rise in the sales of passenger vehicles (PV) and two-wheelers is expected to increase petrol demand by ~8-9% CAGR up to 2020-21. PV sales are projected to increase at 10% CAGR over the next five years, on the back of expansion in the addressable market, relatively stable cost of ownership, and rising disposable income. As far as two-wheeler sales are concerned, the segment is expected to grow at 8-9% CAGR in the next five years, mainly driven by rural demand.

Similarly, demand for diesel is expected grow at a CAGR of 4-5% between 2015-16 and 2020-21, as improvement in the macroeconomic scenario is expected to lead to a pick-up in industrial activity, thereby supporting growth in commercial vehicle sales, in turn driving diesel demand.

Trend in petrol and diesel consumption





P: Projected

Source: PPAC, CRISIL Research

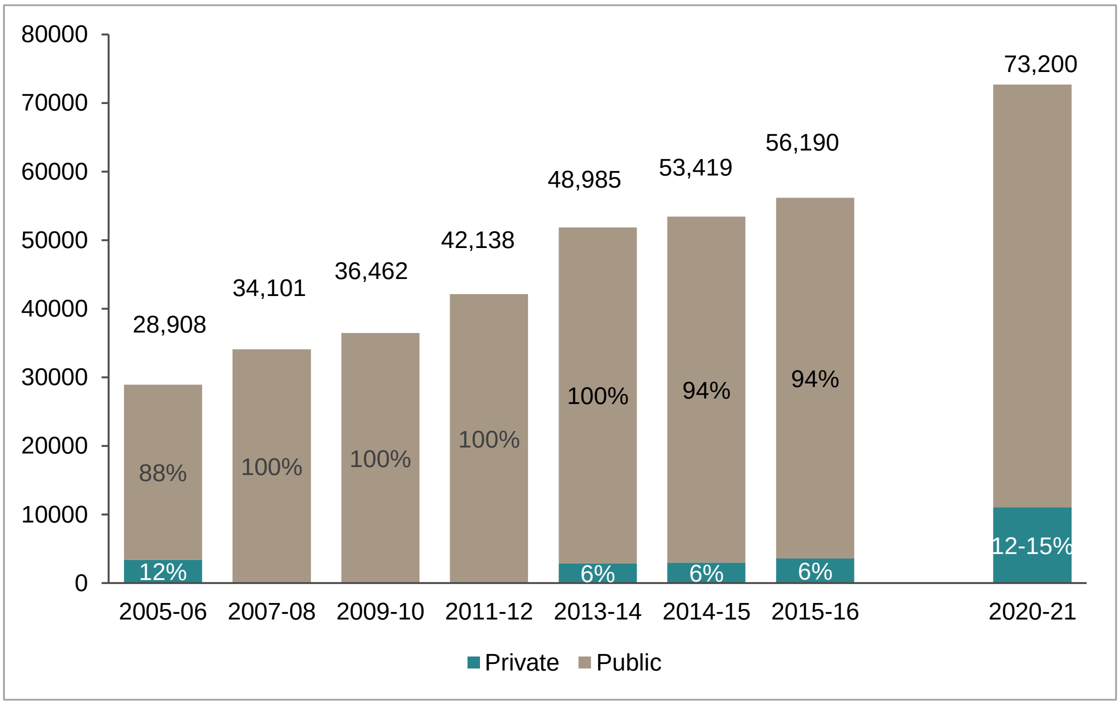
Share of private player to increase driven by faster addition of retail outlets

Looking at the huge future potential in the fuel marketing segment, a number of global players have evinced interest to enter the Indian fuel retail segment. BP has secured a licence to open 3,500 retail stations. Total SA and Saudi Aramco are also exploring opportunities. These players can develop a sizeable customer base, with their aggressive marketing, branding and international quality of services.

Existing private players - RIL, Essar Oil and Shell – have aggressive expansion plans as well. RIL plans to restart all its pumps and expand thereafter; RIL has a licence to operate 5,000 pumps. Also, Essar Oil, which have announced takeover deal with Rosneft, plans to expand its network significantly. The company has a licence to operate 5,000 outlets. Further, Shell has a licence to open 500 outlets.

All in all, private players (existing and upcoming) are expected to add 6,000-8,000 outlets by 2020-21. This will enable them to garner a market share of 12-15% in terms of outlets and 13-16% in terms of volume of fuel sold as they continue to focus on high throughput areas. During the period, we expect PSU OMCs to add ~9,000 retail outlets. The relatively slower pace as compared to private players is because PSU OMCs have already increased their outlets significantly over the last 10-12 years, and if they continue expanding rapidly it will severely impact their average throughput. Hence, their focus has shifted to increasing volume sales, enhancing customer experience and increasing their brand reach.

Share of public and private players in retail outlets in 2020



Source: Industry, CRISIL Research

Throughput per outlet and profitability to come under pressure with intensifying competition

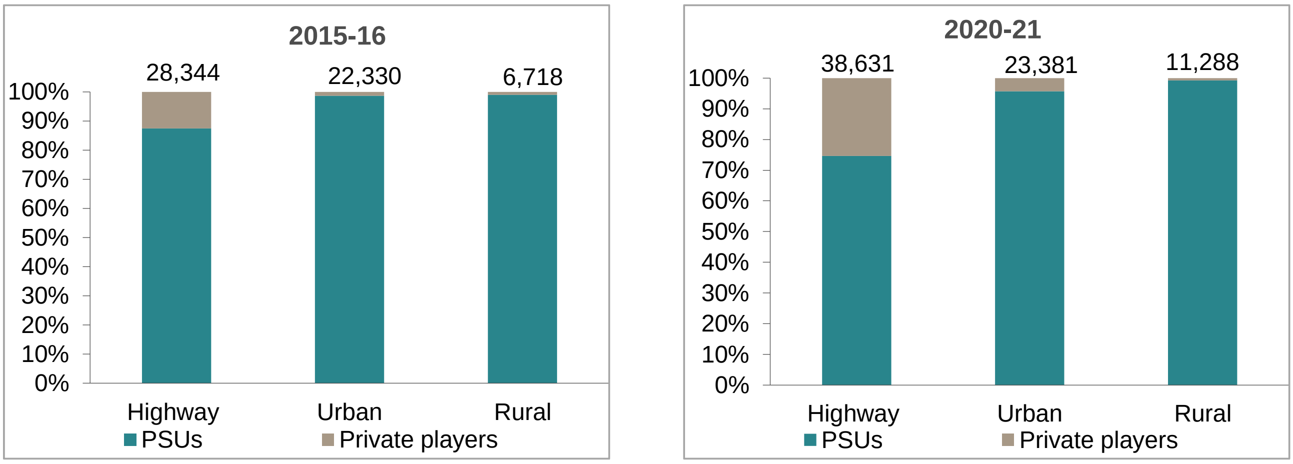
PSU OMCs rapidly expanded their retail network after the entry of private players. The total number of retail outlets grew at a compound annual growth rate (CAGR) of 13% between 2005-06 and 2015-16 to 56,190 outlets, while the total consumption of petrol and diesel rose at 7% CAGR during the same period. As a result of the massive expansion, throughput per outlet for PSU OMCs fell between ~160 kilolitres per month (klpm). While private players had a much higher throughput per outlet of ~220 klpm as bulk of their operations was concentrated on highways, which have high traffic volume, and improved customer facilities, such as introduction of fleet cards and larger number of dispensing units, leading to shorter waiting time.

Compared with global peers, though, the average throughput per retail outlet is much lower at ~160 klpm. The same in US would be 210-220 klpm. This is because, globally, retail outlets have consolidated (Between 1994 and 2015, the number of retail fueling sites in the U.S. fell from 202,800 to 150,000).Higher cost of running petrol pumps as well as newer models of selling fuel has led to the consolidation of pumps in developed countries like the US. So, in India, there are more retail outlets to service the cars compared to that of developed countries such as the US.

However, in India, the outlets are concentrated in a few areas with higher vehicle penetration. The other areas (mainly rural areas and certain locations along highways) have relatively less number of petrol pumps. With rising two-wheeler population in rural areas and increasing fuel demand, more petrol pumps will be needed in such areas for easy access of fuel to customers. Hence, there is a need for better dispersion of the fuel retail network.

While PSU OMCs are expected to focus on expanding into rural segment along with expansion of network along the highways, private players are expected to concentrate majorly in the highway segment. As a result, PSU OMCs will continue to dominate the rural segment with 99% of the total outlets in this segment. Private players' share in the highways segment is expected to move up to 25% by 2020-21 from the current 13%.

Outlook on rural-urban-highway mix of outlets between private players and PSU OMCs



Source: PPAC, CRISIL Research

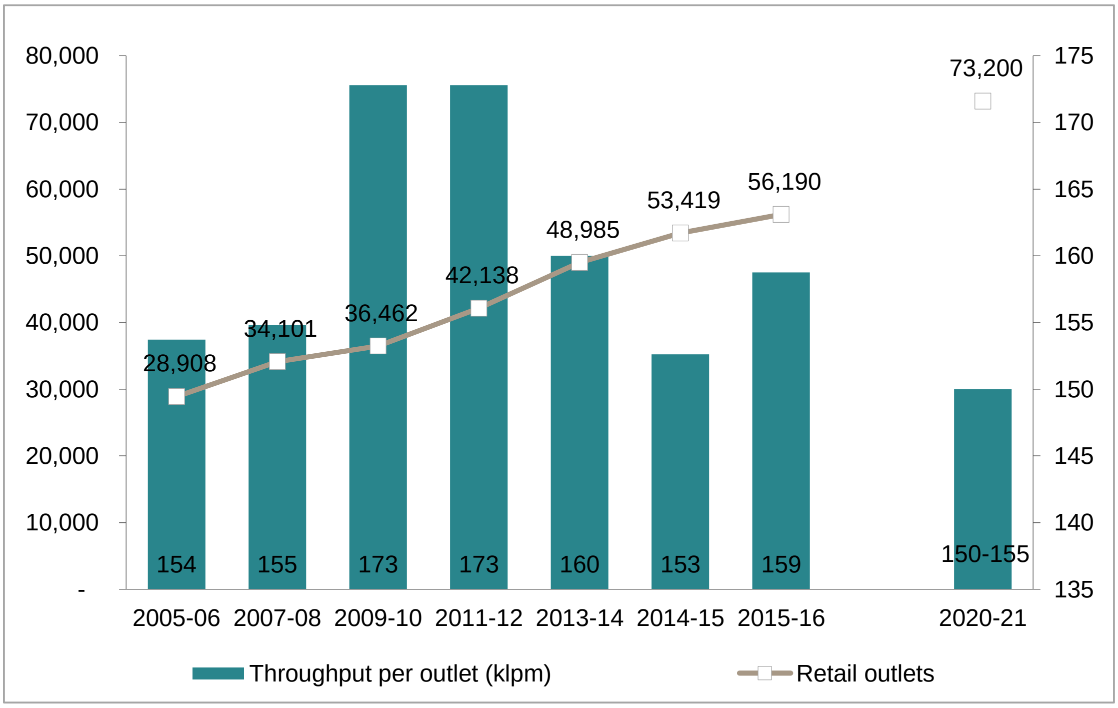
Currently, highways have the highest throughput at ~240 klpm, with private players comprising the dominant pie. However, as private players and PSU OMCs expand their network along highways, the average throughput is expected to drop significantly to ~200 klpm by 2020-21. Further, as the highway segment gets saturated, private players will also have to enter low throughput regions. As a result, the throughput of private players is expected to decline from the current 220 kmpl to less than 200 klpm till 2020-21.

Expansion in rural market to lower throughput of PSU OMCs

With PSU OMCs expected to focus on expanding their network in underpenetrated rural areas, their average throughput is expected to fall. A considerable chunk (~40-50%) of the incremental outlets by PSU OMCs are expected to be in rural areas, where average throughput is significantly low at~90 klpm. Further, throughput along urban areas and highways is also expected to experience stress with a rapid increase in the number of outlets. Hence, we expect average throughput for PSU OMCs to decline to less than 150 klpm in the next 4-5 years from the current 160 klpm.

At the industry level, we expect throughput per outlet to decline to 150-155 klpm with rapid expansion by private players and PSU OMCs.

Trend in throughput per outlet



Source: Industry, CRISIL Research

Dropping throughput to impact dealer returns for new outlets

With falling throughputs, dealer return of investment (RoI) will also decline, thus reducing the incentive to make investments. As a result, in order to attract dealers for a new outlet, players might have to compensate them with higher commission or other means of compensation. A case study has been given below where we have analysed the impact on RoI with falling throughput for a DODO (dealer owned, dealer operated) outlet on highway.

Economics of retail outlet - DODO model

Economics of a fuel retail outlet can vary significantly from one location to another, on account of huge differences in location-specific parameters. For e.g., real estate prices vary for a city outlet, an outlet on a highway or one in a rural area. Even within a city, there are huge variations in real estate prices. Apart from real estate, average sales per outlet as well as investment required for setting up an outlet are location-specific. Due to this, there is not a single set of parameters that hold true for all outlets to determine retail outlet economics. Hence, to best reflect the typical cost economics, CRISIL Research has opted for the DODO (dealer owned, dealer operated) outlet model for a highway outlet.

The PSU OMCs are expected to follow a DODO model for new outlets because of lower investment required. As the DODO model is expected to gain in prominence with intensifying competition, we have worked out a sensitivity of dealer profitability with respect to dealer commissions on retail fuels.

A special case: ROI of typical highway outlet

Sensitivity analysis of dealer ROI with changing throughput and dealer commission

Dealer Commission ↓		Throughput per outlet (KLPM) →					
Petrol (Rs./ltr)	**Diesel(Rs./ltr)**	**170**	**200**	**210**	**240**	**260**	**280**
2.3	**1.5**	8%	9%	10%	10%	10%	11%
2.6	**1.65**	10%	11%	12%	13%	13%	14%
2.8	**1.8**	13%	13%	15%	16%	17%	18%
3.3	**2.1**	17%	19%	20%	22%	23%	25%
3.6	**2.3**	20%	22%	24%	26%	28%	30%

Source: CRISIL Research

The base case, denoted in blue colour, shows dealer commission of Rs 2.6 per litre and Rs 1.65 per litre for petrol and diesel, respectively, for an average throughput of 240 klpm. Hence, the RoI for a dealer at a DODO outlet on a national highway is ~13%.

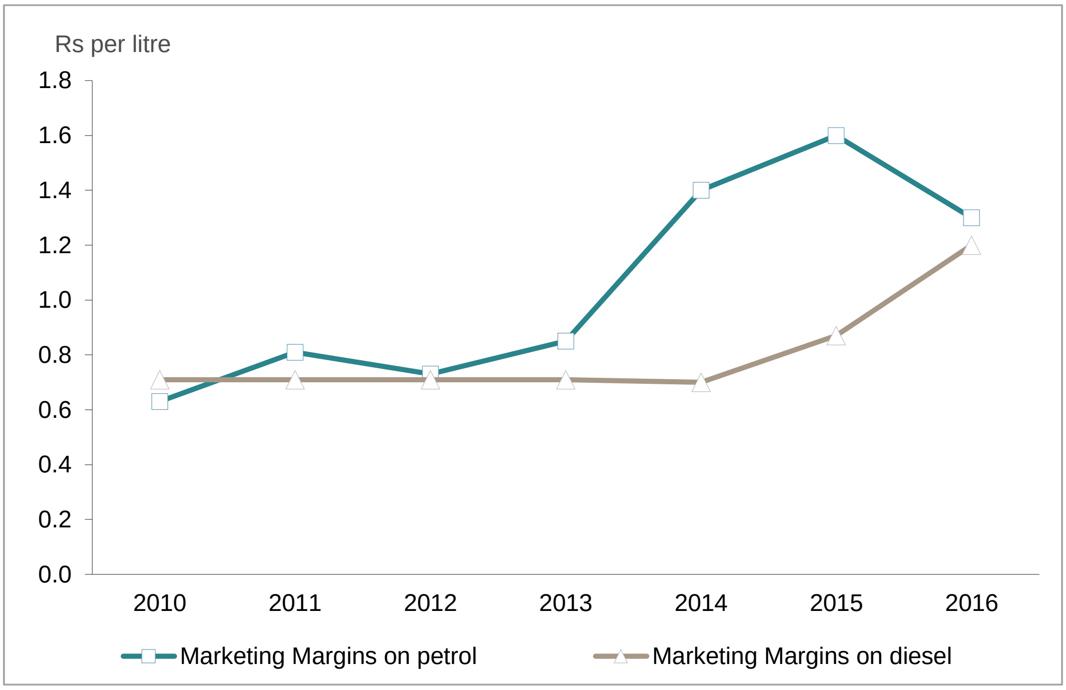
As CRISIL Research expects the throughput of outlets along highways to decline to 190-200 klpm from ~240 klpm currently, dealer RoI is expected to drop to 11%, assuming the same level of dealer commission. Hence, PSU OMCs will have to compensate dealers by increasing their commissions by 20-30 paise per litre on retail fuel to maintain dealer profitability at 13%.

Marketing margins to decline for private companies and PSUs; Dynamic pricing models to partially offset the downfall in profitability

Deregulation led to improvement in margins for PSU OMCs in the last 3 years

As reproduced in the chart below, the marketing margin on petrol, after the deregulation in 2010, has increased to an average of ~Rs 1.3 per litre in 2016, compared with Rs 0.63 per litre in 2010. With the deregulation of diesel in 2014, the marketing margin on diesel, which was fixed at Rs 0.7 per litre, improved to Rs 1.2 per litre in 2016. These figures broadly represent marketing margins earned on retail fuel by PSU OMCs.

Marketing margins on petrol and diesel have improved



Source: Industry, CRISIL Research

In contrast, private refiners command higher marketing margins (Rs 2.0-2.5 per litre). This is majorly attributed to significantly lower marketing costs that private players incur on account of sales being concentrated close to location with existing infrastructure.

The cost incurred by players for marketing fuels has three components: (i) transportation cost, (ii) depot/storage cost, and (iii) dealer commission. Out of the three components, dealer commission is relatively similar for private and public players. However, PSU OMCs incur significant cost (Rs 1.0-1.5 per litre) in transporting fuel from their depots or storage areas to their outlets. On the other hand, retail outlets of private players are concentrated in locations close to their refineries, thus minimising their logistic cost. Further, private players do not have depots for storing fuel. Fuel directly comes from the refineries. In contrast, PSU OMCs maintain depots in different locations to store fuel and cater to the requirements of pumps in a specific region. This results in additional expenses for PSU OMCs who have to maintain the depots as well. For private players this also translates into savings in overall marketing cost, and contributes to higher marketing margins.

Price build-up of petrol for PSU OMCs and private players

Rs per litre	PSU	Private player
Price charged to marketing arm	25.42	25.00
Marketing cost	1.56	0.80
Marketing margins	1.17	~2.2
Prices charged to dealers	28.15	28.00
Excise	21.48	21.48
Dealer commission	2.56	2.56
Total before VAT	52.19	52.09
VAT	14.10	14.05
Final price	66.29	66.14

Notes:

1. *Prices are indicative as of April 1, 2017.*
2. *Marketing cost and marketing margin are estimated.*
3. *Marketing cost for PSU OMCs include ~Rs 0.95/ltr inland freight charges and Rs 0.6/ltr on storage cost.*

Source: CRISIL Research

Additionally, a typical PSU refiner sells fuel to the marketing arm at RTP (refinery transfer price). Private players, however, are able to transfer the fuel to their marketing arm at a price that is slightly lower than the RTP on account of lower cost of processing fuel, owing to large, complex refineries and economies of scale.

Private players to experience stress on margins with intensifying competition and expansion into newer areas

With intensifying competition due to entry of new players as well as expansion of the network by existing players, we expect private players to incur higher logistics and storage cost which will result in reduction of profitability. Currently, private players operate in proximity to their refineries, which results in lower logistics cost. Further, they do not incur storage cost to maintain depots to store fuel. However, going forward, as these players expand their scale of operation, they will need to expand to locations at significant distances from their refineries. This will increase their logistics cost. As a result, the marketing margin of private players is expected to decline from Rs 2.0-2.5 per litre.

Also, these players will have to incur significant capital expenditure in opening their own network of storage infrastructure to extend their reach to distant areas. Though the players have complete freedom to pass on the logistics cost, but competition will restrict players from doing so except in cases where competition is limited. As a result, as these players expand their scale of operations, an increase in marketing cost is expected to reduce marketing margins.

New entrants to source fuel for their outlets at higher cost

As most new players who are planning to enter the market do not have their own refineries in India, sourcing of fuel is a challenge for them. These players can either import fuel from their refineries, or source it locally by entering into purchase agreements with the existing players. However, getting fuel from the existing players would be difficult as they would need to feed their own outlets as they expand their network. In such a scenario, these new players would have to depend on imports to cater to their fuel requirements, which would increase their procurement cost, thereby impacting marketing margins.

While private players' profitability is expected to marginally decline, they will still be willing to endure the loss in profitability as gaining market share will be their priority in the initial phase of expansion. These private players have strong balance sheets and high cash flows, which they can leverage on to operate at lower profits initially and gain a strong foothold in the market.

PSU margins to be under stress, as competition in the highway segment to impact profitability; higher contribution from low margin rural areas to impact profitability

As competition is expected to intensify with the entry of the private players, PSU OMCs are expected to face significant competition in the highway segment. Consequently, the PSU OMCs, in order to retain their market share, would also have to offer similar reduction in prices, therefore putting pressure on marketing margins.

PSU OMCs are focusing of expanding into rural areas. Rural areas currently make lower marketing margins as compared to highway and urban segments due to higher cost of servicing these locations and lower volumes. Due to low volumes, these areas have limited competition from private players. Hence, PSU OMCs will have the flexibility to charge relatively higher prices in rural areas as compared to highways, where they face stiff competition from their private counterparts. Further, PSU OMCs are also tapping into non-fuel initiatives in these areas, adopting practices like making the retail outlet a one-stop solution for villagers, providing additional services such as e-commerce solutions, banking facilities, etc. All these factors are expected to improve rural margins marginally, but rural business will continue to make lower profits as compared to the highway and urban segments. Consequently, the increasing presence of PSUs in these low margin areas is expected to put pressure on their overall marketing margins.

Daily price revision & dynamic pricing to provide greater pricing flexibility, offsetting the decline of margins

An important practice that fuel retailers are adopting is daily pricing of petrol and diesel. While the players have currently introduced it as a pilot in five cities, it will gradually be expanded to cover the entire country. As of now, PSU OMCs have been revising prices on a fortnightly basis, which prevents them from capturing daily movement in global crude oil prices. With daily pricing, players will have higher flexibility to revise prices and optimize working capital requirements. Currently, with fortnightly revisions, customers buy more petrol and diesel few days before a revision if a price rise is anticipated. Similarly, if prices are anticipated to fall, customers shift some part their consumption to the next period of revision. With daily revision in prices, this shift of consumption will not take place, stabilizing monthly sales, and therefore inventory and working capital requirements. This will lead to improvement in efficiency of operations and optimization of overall costs, helping players with better margins.

Dynamic pricing, i.e. charge different prices in retail outlets in the same area based on traffic volume and time of the day, is another strategy that players are expected to adopt. Dynamic pricing can enable players to tap the differences in demand based on location and different times of the day, thereby enabling them to make higher margins. The above strategies can help recovering a certain portion of the lost margins as a result of rising competition.

Strategies directed towards newer revenue models & enhancing customer experience to determine success of players

With newer revenue and pricing models, players are expected to be able to better compete in the retail fuel market amid rising competition. One key focus area will be revenue models with emphasis on non-fuel retail. In countries like US and UK, gas stations are opened along with chain retail stores and supermarkets. As of now, such a model has not been applied in India as margins in selling petrol and diesel are significantly low compared to margins made by the retail business, which make it unattractive for the supermarket kind of structures. However, some private players like RIL, which already has a strong presence in the non-fuel retail business through its chain of retail stores (operates ~3,553 stores across the country) such as Reliance Fresh, Reliance Trends, etc, can adopt this model..

Further, strategies focusing on enhancing customer satisfaction are being adopted by PSU OMCs. For example, BPCL plans to provide commercial vehicle financing and working capital loans to fleet operators, in particular, by entering into strategic partnerships with banks and financial services companies. In rural areas, they have tied up with e-commerce platforms like Shopclues, etc, providing delivery of online goods bought at the petrol pump, which is far easier to locate. In urban areas, a regular outlet of BPCL has a throughput of 170-180 klpm. In contrast, a “Pure for sure” BPCL outlet in the same area has throughput as high as 250 klpm because it offers additional facilities and loyalty programmers to customers. Such differentiating initiatives are rapidly being taken up by PSU OMCs to combat with the upcoming competition.

In conclusion, despite stress on profitability, the market potential of the fuel retail segment in India is expected to be robust, with increasing car penetration, healthy economic growth to support commercial vehicle demand. The ability of players to enhance throughputs by selecting attractive locations for setting of pumps and optimizing costs by use of technology and providing additional services will determine success over the longer term.

About CRISIL Limited

CRISIL is a global, agile and innovative analytics company driven by its mission of making markets function better. We are India's foremost provider of ratings, data, research, analytics and solutions. A strong track record of growth, culture of innovation and global footprint sets us apart. We have delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers.

We are majority owned by S&P Global Inc., a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

About CRISIL Research

CRISIL Research is India's largest independent integrated research house. We provide insights, opinion and analysis on the Indian economy, industry, capital markets and companies. We also conduct training programs to financial sector professionals on a wide array of technical issues. We are India's most credible provider of economy and industry research. Our industry research covers 86 sectors and is known for its rich insights and perspectives. Our analysis is supported by inputs from our network of more than 5,000 primary sources, including industry experts, industry associations and trade channels. We play a key role in India's fixed income markets. We are the largest provider of valuation of fixed income securities to the mutual fund, insurance and banking industries in the country. We are also the sole provider of debt and hybrid indices to India's mutual fund and life insurance industries. We pioneered independent equity research in India, and are today the country's largest independent equity research house. Our defining trait is the ability to convert information and data into expert judgments and forecasts with complete objectivity. We leverage our deep understanding of the macro-economy and our extensive sector coverage to provide unique insights on micro-macro and cross-sectoral linkages. Our talent pool comprises economists, sector experts, company analysts and information management specialists.

CRISIL Privacy Notice

CRISIL respects your privacy. We use your contact information, such as your name, address, and email id, to fulfil your request and service your account and to provide you with additional information from CRISIL and other parts of S&P Global Inc. and its subsidiaries (collectively, the “Company”) you may find of interest.

For further information, or to let us know your preferences with respect to receiving marketing materials, please visit www.crisil.com/privacy. You can view the Company's Customer Privacy at https://www.spglobal.com/privacy

Last updated: April 2016

Argentina | China | Hong Kong | **India** | Poland | Singapore | UK | USA

CRISIL Limited: CRISIL House, Central Avenue, Hiranandani Business Park, Powai, Mumbai – 400076. India

Phone: + 91 22 3342 3000 | Fax: + 91 22 3342 3001 | www.crisil.com

/company/crisil @CRISILLimited /CRISILLimited /user/CRISILLimited