POLICY BRIEF

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Petroleum Product Pricing Reforms in India: Are We on the Right Track?

CONTENTS

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The path to petroleum product pricing reforms in India has been full of undulations. Even though Administered Pricing Mechanism (APM) was dismantled during 1 April 1998 to 31 March 2002, the government continued to regulate the prices of petrol, diesel, Public Distribution System (PDS) kerosene, and domestic LPG, except for over a year, when oil marketing companies (OMCs) revised the consumer prices of petrol and diesel in line with the international prices. In June 2010, petrol pricing was deregulated, but government control continued to an extent. This control of petroleum product prices has not only severely affected the fiscal balance of the economy, but has also adversely impacted the oil companies (both upstream and downstream), eventually affecting the overall development of the sector. In fact, the impact of petroleum product subsidies has compelled the government to announce certain reforms in the past few months.

This Policy Brief recounts the steps recently taken by the government to reform petroleum product pricing, its impact, and the remaining concerns. Since petrol pricing has already been formally deregulated, all discussions here are confined to diesel, PDS kerosene, and domestic LPG. This brief also covers the far reaching implications of the 'Export Parity'- based pricing being contemplated by the Ministry of Finance for diesel and PDS kerosene, and 'Trade Parity Pricing' for domestic LPG for computing under-recoveries.

Key Facts

Petroleum product under-recoveries

The difference between the desired price of a petroleum product for supply to OMCs' dealers/distributors and the government-controlled price of that product is referred to as the gross under-recovery per unit of the product. Gross under-recovery, net of fiscal subsidy, is the net under-recovery (see Figure 1). Currently, the burden of petroleum product under-recoveries (diesel, PDS kerosene, and domestic LPG) is shared by the upstream national oil companies (over 35 per cent), the government[1], and partly by the OMCs (Figure 3). There is, however,

[1] In addition to sharing the burden of under-recoveries, the government also provides a specific subsidy of ₹0.82 per litre of kerosene and ₹22.57 per cylinder of domestic LPG under its 2002 Scheme of Subsidies on Sensitive Products through the National Budget. In 2011–12, the total budgetary outgo on this account was ₹3,000 crore.

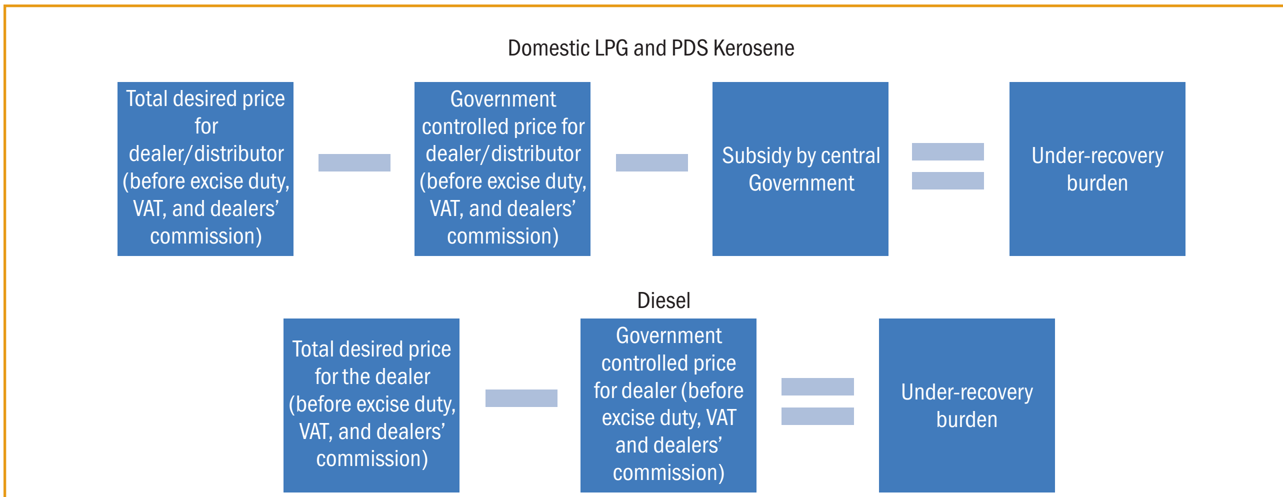

FIGURE 1 Defining Under-Recoveries

BOX 1 Key Facts Under-Recoveries

Total under-recoveries burden of controlled petroleum products nearly doubled from ₹78,190 crore in 2010–11 to ₹138,541 crore in 2011–12.

Diesel accounted for about 59 per cent of total petroleum under-recoveries during 2011–12, primarily due to its high share (of nearly three-fourth) in the total sales of diesel, PDS, kerosene, and Domestic LPG (Figure 2). Even after diesel price increases, total petroleum under-recoveries for 2012–13 are estimated at nearly ₹161,000 crore, of which diesel accounts for about ₹92,000 crore (57.5 per cent of total under-recoveries).

While LPG supplies to commercial, industrial, and automobile sectors are made at market determined prices, the price of LPG supplied to the domestic sector for cooking purposes in 14.2 kg cylinders, also referred to as domestic LPG, is controlled by the government. Currently, this price is about 56 per cent of its full market/desired price. Domestic LPG accounts for as much as 90 per cent of total LPG sales in the country.

Kerosene is supplied through the Public Distribution System (PDS) at a little over one third of its full market price and its retail sales price is controlled by the government. Its distribution lies in the jurisdiction of the state governments. Nearly 98 per cent of total kerosene sales are through the PDS.

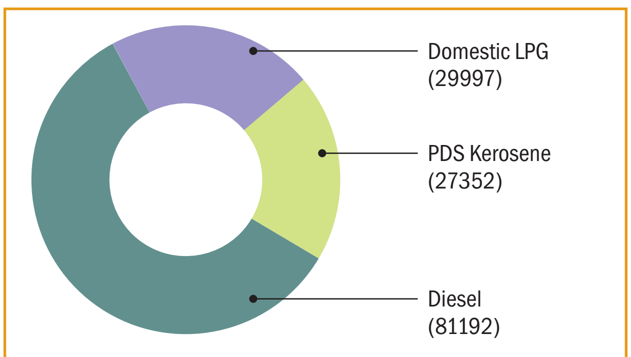

FIGURE 2 Product-Wise Breakup of Under-Recoveries in 2011–12 (In ₹ crore)
Source: Petroleum Planning and Analysis Cell

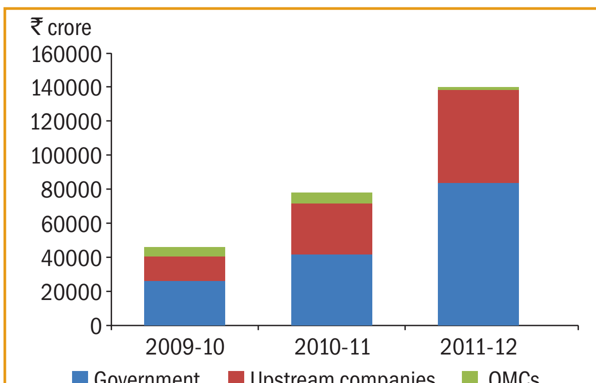

FIGURE 3 Sharing of Under-Recoveries
Source: Standing Committee for 2009–10 and 2010–11, and ONGC for 2011–12

no well-established system to share this burden of under-recoveries.

The huge under-recoveries being incurred on petroleum products are adding to the fiscal deficit of the country, limiting expansion of exploration and development activities of upstream national oil companies, and adversely affecting cash flows, profitability, and capital expenditure of national OMCs.

There is a time lag of about six to eight months in OMCs receiving payment of the government's share of under-recoveries. Hence, OMCs have to borrow additionally to meet their working capital requirements, resulting in additional interest burden.

In 2012–13, OMCs incurred an additional interest burden of about ₹6,000 crore on this account alone. Further, when the prices of deregulated products are not allowed to be changed in accordance with the international market prices, the OMCs bear certain under-recoveries on this account. This was observed for a long period of time in case of petrol price after its deregulation in June 2010.

Refinery gate prices for computing under-recoveries

Refinery gate prices for petrol and diesel, that is, the prices at which these are transferred from refineries to OMCs, are determined on trade parity pricing basis, i.e., weighted average of import parity (deemed import) and export parity pricing [Free on Board (FOB) Asian Gulf] in the ratio of 80:20 (see Figure 4). Based on this, final consumer price is built up by adding various costs/duties and taxes/commissions. As on 1 June 2013, the import parity price (IPP) of diesel was ₹42.74/litre whereas the Export Parity Price (EPP) was ₹40.54/litre. The Trade Parity Price (TPP), based on an 80:20 weightage, was ₹42.30/litre.

Similarly, the refinery gate prices for PDS kerosene and domestic LPG are determined on IPP basis. Accordingly, the under-recovery per unit is arrived at for PDS kerosene and domestic LPG.

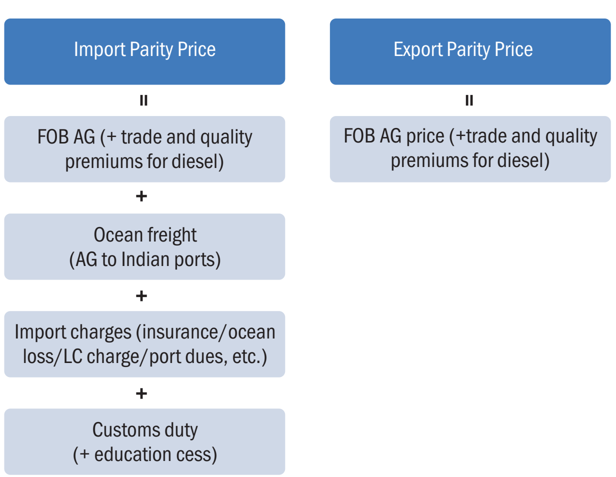

FIGURE 4 Basis for Computing Import and Export Parity Price
Adapted from PPAC's reporting of under-recoveries

Product sources for marketing

National OMCs source products for marketing from their own refineries, private refineries, Oil and Natural Gas Corporation (ONGC), GAIL (India) Limited, and the shortfall from imports.

During 2011–12, imports of diesel, LPG, and kerosene accounted for 32 per cent, 33 per cent, and 7 per cent of their respective consumption.

Policy Failures and Resulting Outcomes: Impact of the Pricing Regime So Far

The pricing regime followed until the recent reform measures has had the following adverse impacts:

Impact on the petroleum sector and competition

The sharing of burden of under-recoveries with upstream oil companies has affected their profits significantly. In 2011–12 and 2012–13 for instance, these companies contributed nearly US$ 56/bbl of crude oil in the form of discounts to refineries of PSU OMCs.[2] The overall profitability of PSU OMCs has also been adversely affected due to the ad hoc pricing regime. Further, since the compensation of under-recoveries is provided only to PSU OMCs, the prevalence of government control over prices of diesel has resulted in a non-level playing field and has, therefore, kept private OMCs away from competing in the market.

Dieselization and changing consumption patterns

Continued control on diesel prices has also incentivized personal car buyers to shift to diesel-based vehicles, thereby encouraging dieselization. Other things being equal, lower prices of diesel have encouraged its consumption, particularly for personal vehicles, resulting in higher levels of pollution.

This skewed pricing of diesel has also led to perverse incentives to replace low-value industrial fuels, such as fuel oil, with diesel, which is a high-value product.

Diversion and adulteration

Due to the large difference between prices of domestic LPG and market-related prices of LPG, there has been a diversion of domestic LPG cylinders to non-domestic uses and black marketing of these

[2] Lok Sabha. 2013. *Subsidy Sharing by Oil Companies*. Unstarred Question Number 5274, Answered on 26 April 2013. Retrieved 21 May 2013, from <http://164.100.47.132/LssNew/psearch/QResult15.aspx?qref=140752>.

cylinders. This has essentially been due to there being no restrictions on the extent of consumption of LPG by domestic consumers until recently, as also due to many domestic consumers having gas connections of more than one oil company in violation of government directions.

As per available reports, due to significant under-pricing of kerosene, nearly 40 per cent of subsidized PDS kerosene is diverted and black marketed for adulterating diesel oil, for other non-domestic uses, as well as to meet the domestic requirements beyond PDS supplies. This also implies that substantial benefits of subsidies are accruing to unintended beneficiaries.

BOX 2 Reform Initiatives at Last

- The government has finally bitten the bullet on diesel pricing and has allowed OMCs to increase the consumer prices by small amounts from time to time.
- The government directed OMCs to supply diesel to bulk consumers at full market price to save an estimated ₹12,907 crore in annual subsidy outgo.
- To limit the subsidy outgo on domestic LPG, a cap of six cylinders per household per annum was introduced. In the light of protests, this was later increased to nine for the full year commencing 1 April 2013.
- The government has also decided to target the domestic LPG and PDS kerosene subsidies better. This will be started by first providing subsidies to all consumers through direct benefits transfer (DBT) programme and will eventually be limited to deserving households only.
- To meet the objective of providing DBT, the list of domestic LPG consumers of different oil companies have been merged to identify duplicate connections and to have a unified database and accordingly, action has been taken to have such duplicate connections surrendered. In addition, domestic consumers having Piped Natural Gas (PNG) connections have been mandated to surrender their LPG connections.
- For computing under-recoveries, the Ministry of Finance is contemplating Export Parity Price (FOB AG) for diesel and kerosene, and a combination of EPP (60 per cent) and IPP (40 per cent) for domestic LPG.

Tariff protection to domestic refineries

Higher customs duty is imposed on petroleum products as compared to crude oil, the raw material, to provide tariff protection to domestic refineries. Two factors are currently resulting in the lowering of tariff protection to domestic refineries:

- Use of trade parity to arrive at refinery gate prices for petrol and diesel instead of IPP, and
- Provision of nil customs duty to arrive at refinery gate prices for domestic LPG, PDS kerosene, and naphtha/furnace oil for the fertilizer sector.

For computing under-recoveries, the actual cost of imports of diesel, domestic LPG, and PDS kerosene, to the extent that their domestic availability is short, is not recognized. Instead, it is computed based on the principle laid down for calculating refinery gate prices. During 2012–13, OMCs incurred a loss of over ₹800 crore in importing these products, of which about ₹700 crore was accounted for by LPG imports alone.

Impact of the Recent Petroleum Pricing Reform Initiatives

On the petroleum sector

As permitted by the government, OMCs have been increasing the prices of diesel from time to time. With this positive move and decrease in international prices, the present under-recovery in diesel has reduced from over ₹9/litre to about ₹5/litre in the last five months.

This is likely to have a positive impact on the overall competition in the retail marketing segment. As per available news reports, private companies, such as Essar Oil, RIL, and Shell are already planning to open petrol pumps in the country.[3] As of now, these companies sell only petrol from a limited number of their petrol pumps.

The government's decision to make bulk supplies of diesel at market-related prices has had mixed impacts. On the positive side, this move is expected to increase the level of competition in bulk diesel sales as the market is now open to direct sales by private oil companies as well.

On the negative side, the policy of dual pricing

[3] HT Correspondent.2013. 'Fuel price-war looms, and you may be winner'. 10 May 2013. *Hindustan Times*. Retrieved 21 May 2012, from <http://www.hindustantimes.com/business-news/WorldEconomy/Fuel-price-war-looms-and-you-may-be-winner/Article1-1058220.aspx>.

has led to a decline in bulk sales and shift of bulk diesel purchasers to retail purchases.[4] About 50 per cent of bulk sales have since shifted to retail outlets. Essentially, Railways and Defence have not been able to shift supplies to retail outlets. Both these sectors are, in any case, provided budgetary support by the government, resulting in merely shifting from under-recoveries on diesel to budgetary support, both to be eventually met by the Central Government. To limit the shift in bulk diesel sales, the government has directed OMCs to ensure that a customer is not supplied more than the specified quantity in barrels. However, this is impractical to enforce in practice.

On the economy

One of the major reasons for not effecting any increase in diesel prices has been the likely impact on overall inflation levels. A study by the New Delhi-based Integrated Research for Action and Development (IRADe) has found that an increase in diesel prices is likely to have only short-term inflationary impacts. In fact, in the long-term, the impact of inaction could be much higher due to the overall increase in the fiscal deficit, which is driven by subsidies.[5]

Since the recent increases in diesel prices have taken place in a situation of moderate inflation, the impact on overall inflation has been limited.

On dieselization and changing consumption patterns

There has been a decline in the sales of passenger vehicles in the past few months. More specifically, a decline in the sales of utility vehicles has also been reported. Additionally, many automobile manufacturers are reported to be reviewing their production plans.

Going forward, while the narrowing differential between diesel and petrol prices will certainly reduce the purchase of diesel-based vehicles where the usage of vehicles is low, in cases where the usage is high, diesel-based vehicles will still be attractive even at the fully deregulated prices of diesel. This is because even after complete deregulation, the price of diesel will be nearly 85 per cent of the petrol prices due to lower excise duty and tax rates for diesel. Besides, diesel vehicles are more fuel efficient.

On adulteration

Currently, adulteration of diesel with kerosene takes place primarily due to under-pricing of kerosene and its movement through the value chain at subsidized rates. As the plan of DBT is implemented, the incidence of adulteration is likely to reduce substantially. This is because the product will be sold at its market determined prices and the subsidies will be transferred directly to the accounts of the intended beneficiaries.

On refineries: Why the use of EPP is not a good idea

The recommendation of the Ministry of Finance to use EPP for calculating the under-recoveries for diesel and PDS kerosene, and a combination of EPP and IPP in the ratio of 60:40 for domestic LPG is driven by a single point agenda—to reduce the government's burden of under-recoveries, irrespective of other considerations. EPP is logical in case of crude oil exporting countries, but not in India, where refineries process about 75 to 80 per cent imported crude oil. The cost of imported crude oil includes its FOB price, charges at load port, insurance, ocean freight, ocean loss, LC charges, wharfage, other handling charges at the receiving port, and transportation to inland refineries. As against this, EPP is only FOB price at Arab Gulf without all other cost elements.

This recommendation of the Ministry of Finance, if implemented, will adversely affect PSU refineries in particular, and the refining sector in general due to the following reasons:

- To start with, PSU refineries were set up near domestic sources of crude oil, i.e., in Assam and Gujarat, to process the crude oil found there. Availability of the crude oil and the market demand decided the capacities of these refineries.
- Later on, based on imported/Bombay High crude, PSU refineries were set up in inland locations near the petroleum product markets because of logistical advantage.
- PSU refineries were essentially designed, both in terms of their capacities and product patterns, to economically meet the internal demand around them, rather than to develop capabilities to effect exports.

[4] PPAC.2013. *Industry Performance Review Report*. Petroleum Planning and Analysis Cell. Retrieved 21 May 2013, from <http://ppac.org.in/writereaddata/Report_IPR.pdf>.

[5] IRADe.2012. *Taming Diesel Subsidy to Curtail Inflation and Foster Economic Growth*. New Delhi: Integrated Research for Action and Development.

- Despite best efforts, the production patterns of these refineries resulted in some products being in excess of the market requirements, such as naphtha, and some short of demand, such as LPG, diesel, and kerosene, thus involving both exports and imports of petroleum products.
- PSU refineries were also set up in different states on the considerations of socio-economic development of different regions. Even today, the states, which do not have a refinery, make a pitch for the same.
- The above considerations resulted in PSUs setting up a number of inland refineries of small capacities. Even after successive expansions to meet the growing demand of petroleum products, capacities of PSU refineries range from as low as 0.65 million metric tonnes per annum (MMTPA) to 15 MMTPA.
- Unlike PSU refineries, fully private refineries were set up at port locations and their capacities and product patterns were determined by their promoters, such that they could be globally competitive and export products, as required. These refineries also received sizeable incentives from the concerned state governments to make them financially attractive.
- Under the circumstances, PSU refineries, for historical reasons, cannot survive by supplying controlled products on the basis proposed by the Ministry of Finance, i.e., diesel and kerosene on EPP basis, and domestic LPG on TPP basis. As per news reports, Indian Oil Corporation (IOC) alone will lose revenues of about ₹6,000 crore per annum if the pricing system proposed by the Ministry of Finance is implemented. Further, the Paradip refinery of IOC, which is currently in an advanced stage of completion, will become financially unviable if the proposed pricing system is implemented.

The rapid growth of refining capacity in the country after de-licensing, particularly during the Tenth and Eleventh Five-Year Plan periods is leading to India's emergence as a refining hub. This prospect will be shattered if the recommended pricing system is implemented.

In view of the above, it would be unfair to the oil industry to introduce EPP without regard for logic, equity considerations, and the financial burden.

Moving Forward: Some Key Suggestions for Further Reform

So are we on the right track? What more is needed?

- The government's permission to OMCs to increase consumer prices of diesel by small amounts from time to time, which has resulted in reducing under-recoveries to a great extent, needs to be taken to its logical conclusion of deregulating diesel prices. If it becomes necessary, the government may reduce excise duty temporarily to achieve this. De-regulating diesel prices will result in bringing down the total under-recoveries to less than half of those experienced for the three controlled products taken together.
- Further, the share of under-recovery burden borne by the upstream national oil companies and GAIL (India) should be reduced in proportion to the reduction in total under-recoveries resulting from reform measures undertaken by the government.
- The government should find ways and means to **expedite the implementation of DBT** to PDS kerosene and domestic LPG consumers. Thereafter, the scheme should be limited to only those consumers needing government support.
- **A well laid-out basis for sharing under-recoveries as against the current ad-hoc mechanism needs to be formalized.** There is a lack of transparency in the existing mechanism for sharing the burden between the government and PSU oil companies. It is also not clear as to how the cost of DBT for PDS kerosene and domestic LPG consumers will be met. As long as the system of burden sharing exists, it is important to put in place a transparent and predictable system so that the liabilities of each of the burden sharing entities can be determined with certainty.
- **Payment of interest on any outstanding amounts of under-recoveries**. As mentioned earlier, there have been considerable delays in payment of under-recoveries by the government to the OMCs. In case of any delays in the release of payments, interests commensurate with the existing borrowing rates need to be paid to the OMCs to avoid additional burden on them on this account.
- **Ensuring financial health of the refining sector.** Since the dismantling of the Administered Pricing

Mechanism, the refining sector has mostly stayed free of government control. This has resulted in healthy growth of the sector in India. Refineries absorbed the adverse impact of introduction of trade parity prices for diesel and petrol. However, it will not be possible for refineries to bear the adverse impact of implementation of the export parity pricing mechanism, which will essentially affect PSU refineries, and many of these are likely to suffer huge losses and go into the red. Further, as global oil markets are extremely volatile, the gross refining margins are subject to volatility. Hence, for the health of the refining sector, there is no case for the introduction of export parity pricing mechanism as is being currently recommended by the Ministry of Finance. The following suggestions are made in this regard:

- Logically, refinery gate prices for petrol and diesel should be based on import parity. However, if the trade parity pricing system is to be used, having already introduced it, this needs to be reviewed and reworked based on the proportion of exports to the production of petrol and diesel separately and not taken together. Further, the production from wholly export-oriented refineries should be excluded while making these calculations. Currently, this proportion for petrol is around 17 per cent and for diesel around 6 per cent, as against 20 per cent adopted in the old workings. This proportion should be reviewed on an annual basis.
- The price at which diesel is procured from private refiners, after accounting for Central Sales Tax (CST) and transportation charges, is marginally lower than EPP. To the extent OMCs make any 'over-recovery' in purchasing controlled products from private refineries, the same should be netted from their under-recoveries. Once diesel pricing is deregulated, like petrol, it should be kept fully out of government control.
- As regards purchase of kerosene and LPG by OMCs from ONGC/GAIL, the prices for these may be determined jointly by ONGC/GAIL, the government and OMCs, and to the extent it results in any 'over-recoveries' for OMCs, the same may be netted out from the under-recoveries suffered by the OMCs.
- The actual cost of imports of controlled products should be permitted to the OMCs. This should not be linked to the refinery gate prices.

KEY ABBREVIATIONS

AG	Arab Gulf
APM	Administered Pricing Mechanism
CPI	Consumer Price index
EPP	Export Parity Price
FOB	Free on Board
IOC	Indian Oil Corporation
IPP	Import Parity Price
LPG	Liquefied Petroleum Gas
OMC	Oil Marketing Company
ONGC	Oil and Natural Gas Corporation
PDS	Public Distribution System
PSU	Public Sector Undertaking
RIL	Reliance Industries Limited
TPP	Trade Parity Price
WPI	Wholesale Price Index

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