A Review of Oil Marketing Companies (OMCS) and Petroleum Dealers' Margins on Petroleum Products[*]

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INTRODUCTION

The pricing of petroleum products is a sensitive issue, especially in the countries such as Pakistan where petroleum products prices are regulated as well as in developing countries with low-income levels. The governments in such countries face a dilemma: on the one hand, the governments want to keep the prices at a reasonable level so that it does not put an undue burden on the users of petroleum products. On the other hand, the governments also do not want to put the downstream petroleum industry at a disadvantage since the petroleum industry is a major source of revenue for the government and brings in a major investment to the country.

In Pakistan, petroleum prices have always been at the centre of discussion. The discussion has intensified with the increase of oil prices in the international market and the depreciation of the exchange rate. Naturally, the scrutiny of margins of the OMCs and the dealers has also intensified. Previously, when oil prices were stable and when domestic petroleum product prices were kept well below the international levels, the margins were not even discussed apart from amongst the direct stakeholders.

Given the importance of the petroleum sector, there should be an objective analysis of the OMCs' and petroleum dealers' margins. Based on facts, and discussions with all stakeholders and experts, this review attempts an analysis of the current margins of the OMCs and petroleum dealers. The purpose of this review is to suggest a way forward for the margins of the OMCs and petroleum dealers, keeping in view past practices, international situation, and analysis based on ground realities.

BACKGROUND AND HISTORICAL OVERVIEW

Pakistan's petroleum industry is regulated, albeit partially, in which the prices are administered by the government. In comparison, in some countries, the petroleum industry is completely deregulated where prices are left to market forces. In such an arrangement, marketing companies and retailers are allowed to earn their margins according to the market conditions and their cost and revenue structures. Hence, margins in these markets

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[*] This study was completed in 2021.

reflect reasonable profitability. Whereas the completely deregulated mechanism is mostly a hallmark of developed countries, the regulated mechanism is usually practiced in developing countries, amongst which Pakistan is one. The objective in the regulated petroleum markets is to keep the prices in check to safeguard the welfare of the consumers, among other things.

The OMCs' and petroleum dealers' margins are set by the government and are revised from time to time. Up till 2009, the margins were fixed in percentage terms (percentage of the selling price). Later, in 2010, the margins were changed from percentage terms to absolute (fixed margin) terms. It was done probably to mitigate the effect of increases in oil prices starting circa 2004. Before that, the combination of margins in percentage terms and a sharp increase in international oil prices meant handsome profits both for OMCs and petroleum dealers. It must be noted that when margins were allowed in percentage terms the downstream petroleum industry, especially at the retail end of the business, witnessed significant improvements in terms of increased investments, which in turn reflected in a better quality of petroleum products and better service at the retail outlets. This indicates that the petroleum industry responded to the gains they made due to higher margins compared to the present.

After the change in the margins from percentage terms to absolute terms, the margins have increased periodically over the years. In 2014, the margins were indexed to inflation using the consumer price index (CPI). However, the CPI-based margin adjustment has been sporadic, and revisions have not been made annually. As can be seen from tables 1 and 2, the margins of both OMCs and dealers, as a percentage of the selling price, have been decreasing over time except during the times when the prices of products decreased. Therefore, fixed margins benefit OMCs and petroleum dealers when the petroleum products' prices decrease and hurt them when the prices increase.

Table 1 below presents the margins of both OMCs and dealers on the motor spirit (MS), whereas Table 2 presents the margins on high-speed diesel (HSD).

Table 1

MS Margin as a Percent of Selling Price

Period	Price Rs/Liter	Retailers Margin (Dealers)		OMC Margin	
		Rs/Liter	% of Selling Price	Rs/Liter	% of Selling Price
01/01/2017	66.27	3.16	4.78%	2.41	3.63%
01/06/2017	72.80	3.16	4.34%	2.41	3.31%
01/01/2018	81.53	3.35	4.10%	2.55	3.12%
01/06/2018	87.70	3.35	3.81%	2.55	2.90%
01/01/2019	90.97	3.47	3.81%	2.64	2.90%
01/06/2019	112.68	3.47	3.07%	2.64	2.34%
01/01/2020	116.60	3.70	3.17%	2.81	2.40%
01/06/2020	74.52	3.70	4.96%	2.81	3.77%
01/01/2021	106.00	3.70	3.49%	2.81	2.65%
01/06/2021	108.56	3.91	3.60%	2.97	2.73%

Table 2

HSD Margin as a Percent of Selling Price

Period	Price[142] Rs/Liter	Retailers Margin (Dealers)		OMC Margin (Distributors)	
		Rs/Liter	% of Selling Price	Rs/Liter	% of Selling Price
01/01/2017	75.22	2.67	3.54%	2.41	3.20%
01/06/2017	81.40	2.67	3.28%	2.41	2.96%
01/01/2018	89.91	2.67	2.96%	2.41	2.68%
01/06/2018	98.76	2.67	2.70%	2.41	2.44%
01/01/2019	106.68	2.93	2.74%	2.64	2.47%
01/06/2019	126.82	2.93	2.31%	2.64	2.08%
01/01/2020	127.26	3.12	2.45%	2.81	2.20%
01/06/2020	101.46	3.12	3.07%	2.81	2.76%
01/01/2021	110.24	3.12	2.83%	2.81	2.54%
01/06/2021	110.76	3.30	2.97%	2.97	2.68%

Source: Oil & Gas Regulatory Authority (OGRA), 2021 and Pakistan State Oil (PSO), 2021

INTERNATIONAL PRACTICES

Nepal

In Nepal, the Cabinet of Ministers holds the ultimate authority of fixing the prices. Upon receiving approval from the Cabinet, the Nepal Oil Corporation (NOC) discloses the wholesale prices, which are ex-depot prices and vary from depot to depot, depending on the transportation cost. Retail pricing is deregulated in Nepal in the sense that it is set by the NOC-appointed dealers. However, since 2004 Nepal has adopted a wholesale pricing system under which NOC is required to announce wholesale prices and the dealers are free to charge the retail price according to their costs and profit margin. Prior to that, Nepalese oil dealers were given a commission (or margin) by the NOC.

Africa

In eight out of twelve African countries of Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal, Botswana, Kenya, Madagascar, Malawi, South Africa, Uganda, and Tanzania, controlled pricing of the petroleum products is still practiced. And only four countries, one of which is Tanzania, have provisions for regular review and adjustment of different parameters, including margins.

South Africa

In South Africa, dealers' margin is updated annually based on the formula devised by the South African Ministry of Minerals and Energy. The retail profit margin is fixed by the Department of Minerals and Energy (DME) and is determined based on the actual costs incurred by the service station operator in selling petrol. In this cost structure, an account is taken of all proportionate driveway-related costs such as rental, interest, labour, overheads, and entrepreneurial compensation. The OMCs' margins are set based on an annual oil industry profitability review based on the Regulatory Accounting System (RAS) methodology.

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[142] Maximum Ex-Depot Sale Price

New Brunswick, Canada

In New Brunswick, Canada, the regulation of petroleum products was introduced on July 1, 2006. The regulation is overseen by the New Brunswick Energy & Utilities Board. The regulation covers the marketing margin (the sum of wholesale and retail margins plus delivery costs) of gasoline, diesel, and heating fuel. The maximum retail price for each fuel across New Brunswick is uniform. However, the final selling price may vary because of competition and differences in delivery costs. In New Brunswick, despite the setting of maximum wholesale and retail margins, the Act allows the parties to opt-out of regulation and to apportion the marketing margin between them as they see fit. If any of the stakeholders see the need to revise any of the components of fuel prices, a review of prices, margins, delivery costs or full-service charges may be initiated by a wholesaler or retailer, or by the Board. In making any adjustment to the current margins or costs, the Board must be satisfied that the adjustment is "justified".

Nova Scotia, Canada

In Nova Scotia, Canada, the regulation of fuel prices is overseen by Nova Scotia Utility and Review Board. In Nova Scotia as well the mechanism similar to that used in New Brunswick, Canada, is followed to review existing margins and suggest any changes that are required.

India

In India, the petroleum market is fully deregulated, and prices are determined by the OMCs based on supply and demand conditions.

Turkey

In Turkey, retail sales prices are formed considering the competitive conditions and the free pricing system is in effect since January 1, 2005. According to this system, while the fuel distribution companies in the sector are free to determine the warehouse sales price according to their different price policies, dealers are free to apply the ceiling pump sales prices recommended to them by the distribution companies or to apply their own pump prices according to the competitive conditions of the region in which they operate.

Table 3 below gives the OMCs and petroleum dealers' margin as a percentage of selling prices of MS and HSD in Pakistan and other selected countries. In passing, it is pertinent to mention that not all countries explicitly give the data on margins, especially in the countries where petroleum product prices are regulated. This fact is also acknowledged on a website[143] that has collected information on fuel pricing policies across the world.

The table shows that, as a percentage of the selling price, the margins of OMCs and dealers, both for MS and HSD, are lower compared to other countries included in the analysis. At the same time, however, it must be noted that when the prices of petroleum products, especially MS and HSD were lower (see Tables 1 & 2), the margins, as a percentage of the price, were higher. Therefore, the margins, as a percentage of the price, are linked to changes in petroleum product prices, which are changed based on changes in international oil prices.

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[143] <https://energypedia.info/wiki/International_Fuel_Prices>

Table 3

OMCs' & Dealers' Margins - International Comparison

Country	High-Speed Diesel (HSD)					Motor Gasoline (MS)				
	Price/ Liter	OMC's Margin	% of Price	Dealer's Margin	% of Price	Price	OMC' Margin	% of Price	Dealer's Margin	% of Price
India[144]	89.36	6.17	6.9	2.59	2.9	99.86	4.39	4.4	3.79	3.8
South Africa[145]	1,548.98	77.66	5.01	--	--	1,834	40.5	2.21	221.6	12.08
Canada[146]	1.331	8.3	6.24	8.3	6.24	1.57	8.3	5.29	8.3	5.29
Nova Scotia[147]	1.2745	9.15	7.29	7.4	5.81	1.3835	9.15	6.61	7.4	5.35
Pakistan	142.62	2.97	2.08	3.3	2.31	145.82	2.97	2.04	3.91	2.68
Tanzania[148] [149]	2,243	123	5.48	108	4.81	2,439	123	5.03	108	4.43

Source: Websites of countries' respective energy regulatory authorities.

OIL MARKETING COMPANIES (OMCS) CHALLENGES

Some of the issues that currently affect OMCs' profitability and create bottlenecks in conducting their business smoothly are discussed below.

(a) Turnover Tax

A turnover tax of 0.75 percent is currently applicable to OMCs. This increased from 0.5 percent in 2019. The turnover tax has to be paid even if the company incurs losses, which puts additional pressure on the company's cash flow. In addition, companies treat this differently based on future projections. A few companies treat tax paid as turnover tax as deferred tax (assets in the balance sheet) whereas other as an expense. The turnover tax of the OMCs stood at Rs. 0.45/liter in 2020.

(b) White Oil Pipeline (WOP/MFM) Costs

The WOP is being converted to multiproduct (HSD/MS), which will result in an increase in the deadstock of MS, in addition to the HSD deadstock already in the pipeline. The tariff for WOP/MFM is based on US$ and the line requires a massive investment in terms of deadstock. Due to the depreciation of the rupee and increase in oil prices, the investment of OMCs has increased substantially. Moreover, the stock in WOP/MFM is also not counted towards mandatory stock and OMCs will have to finance this out their margins, which are already thin. The OMCs will also arrange the first fill of the multiproduct pipeline, which will result in additional working capital financing requirements and financing costs.

(c) Demurrage Costs

The petroleum product supply chain of the country is adversely impacted due to port constraints. Although there are 3 oil piers at Kemari, only one pier is available to

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[144] https://www.coverfox.com/petrol-price-in-india/

[145] http://www.energy.gov.za/files/esources/petroleum/petroleum_fuelprices.html

[146] https://www.canadianfuels.ca/our-industry/gasoline-prices/

[147] https://www.canadianfuels.ca/our-industry/gasoline-prices

[148] https://www.ewura.go.tz/wp-content/uploads/2021/11/Cap-Prices-for-Petroleum-Products-wef-3rd-November-2021-English.pdf

[149] https://www.ewura.go.tz/wp-content/uploads/2020/10/Cap-Prices-for-Petroleum-Products-wef-07-October-2020-%E2%80%93-English.pdf

discharge POL cargoes along with other liquid cargoes resulting in excessive demurrage charges by shipping companies along with supply disruptions. In addition to current constraints as mentioned above, after commissioning of WOP, major imports will be through Post Qasim which is not fully equipped for handling the current level of imports. Therefore, it is expected to increase demurrages cost for imports.

The congestion at Karachi ports only results in putting OMCs in a challenging situation to build up stock but also incurs elevated demurrage costs for them. Given forecasted growth in the consumption of petroleum products, this situation will deteriorate unless actions are taken immediately. Due to increasing port congestion, vessels have to wait weeks before discharging.

(d) Foreign Exchange Exposure

Foreign exchange (FX) exposure is created as a result of considering only the actual payment rate of PSO and not all other importing OMCs in the product pricing. FX impacts as a result of the difference of rate used on price calculation date vs the letter of credit (LC) retirement date need to be implemented. A new mechanism to curtail these losses was introduced based on PSO as a benchmark, subject to a 60-day limit. Although these losses have been substantially curtailed, the industry, excluding PSO is still incurring significant FX losses due to different import profiles, i.e., percent of imports and LC duration of the industry vis-à-vis PSO. This required urgent attention to improve the FX outflows of the country as well as saving the country from these losses. Furthermore, the industry is not allowed forward cover to hedge FX losses.

(e) Storage Development Costs

Storage development costs are generally US$ denominated. Therefore, the storage development costs have increased substantially due to the rupee devaluation.

(f) Real-Time Stock Monitoring—Digitisation

After the supply crisis of June 2020, MEPD initiated the digitisation project intending to provide real-time information of products throughout the supply chain – from import/refinery to consumer. This project will bring better visibility and reliability of stock levels of different products on a real-time basis, resulting in efficient planning and avoiding any incident like June 2020. However, it is a capital-intensive project and cannot be undertaken by the OMCs with current thin margins.

(g) Cost Increases Beyond Inflation

There are several costs, such as salaries, administration, storage, retail development, and lease rentals of sites that have escalated beyond inflation. In the absence of an adequate increase in margins, these cost escalations have put immense pressure on the OMC margins.

(h) Fixed Margins in Rupees

The fixed margin regime may have been suitable in a low oil price–low PKR/US rate environment. However, it is not feasible for the industry in the current environment.

Currently, the OMC margin is fixed in rupee terms at Rs. 2.97/liter, which is approximately 2 percent of the retail price. It is nowhere close to a market-compatible return. On the other hand, in 2006, when the oil price was US$ 62.94/bbl and the USD/PKR parity was Rs. 60.15, and the petrol price was Rs. 56.29 per liter, the OMC margin was implemented in percentage terms at 3.5 percent at approximately Rs. 2/liter.

Table 4 below shows the OMCs' profitability, before and after taxation, in per liter terms. It can be seen from the table that the profitability has gone down from 2018 to 2020. In 2020, the OMCs' profitability has turned negative. It must be noted that the last year presented extraordinary challenges not only to the downstream petroleum sector but also to the global and Pakistani economy.

Table 4

OMCs: Profitability (Per Liter)

	2018	2019	2020
Profit Before Taxation	1.34	1.03	-0.29
Profit after Taxation	0.76	0.62	-0.36

Source: Authors' calculations.

OMCS—MARGIN CALCULATIONS

In a study on petroleum margins in Tanzania, Ernst & Young (2013) have used the accounting approach to calculating margins. According to Ernst & Young (2013), the revenue required by a regulated entity is determined by two essential cost components: operating and marketing (O&M) expenses and capital component. On this basis, Ernst & Young (2013) have used the accounting approach. This approach concludes that the revenue requirements to be built in the margin calculations include an operating plus a capital component as follows:

O&M cost + depreciation + markup over costs/desired return on investment/entrepreneurial compensation

For this, the same level of regulated return for all OMCs is assumed. This is essentially what the current formula tries to achieve by capping the level of margins for both the wholesale and retail parts of the supply chain. Based on Ernst & Young (2013), the components considered in calculating the margins for dealers include operating expenditures, return on investment, working capital required, and evaporation losses.

We consider 2020's figures for *operating and marketing expenditures, and other costs* which includes costs on handling petroleum products and losses due to temperature.

In Pakistan, OMCs are required to maintain the stock of around 20 days as per the rules of the business in the petroleum sector. OMCs finance and keep the stock to remain operational in the market. We assumed, as in the case of return on investment, that the working capital required to maintain the required stock is financed by debt. The cost of working capital for mandatory 20 days stock has been calculated using the following formula.

$$Working\ Capital\ Cost = \frac{(Mandatory\ Stock\ Holding\ Days)(Cost\ per\ Unit)(Commercial\ Lending\ Rate)}{365}$$

The cost per unit in the numerator of the above formula is taken as the ex-refinery price, while the commercial borrowing rate is again assumed as 10 percent. Given the ex-refinery prices as of November 05, 2021, the above formula yields the following working capital costs:

- Motor Spirit: Rs. 0.79/liter
- HSD: Rs. 0.78/liter

For *depreciation/asset replacement cost, the* average depreciation expenditure during the period 2018-2020 period is taken.

The last component to calculate margins is a *markup over costs*. We assume that the OMCs would want to earn markup over their costs. The reasonable markup is assumed to be 25 percent. We assume that the lending rate currently is 10 percent, and the OMCs would want to earn a 15 percent profit over the commercial lending rate. Based on these assumptions, the desired markup over costs amounts to Rs. 0.79/liter.

The calculated OMC margin on MS and HSD is reported in Table 5 below.

Table 5

OMCs' Estimated Margin

	MS (Rs/Liter)	HSD (Rs/liter)
Calculated Margin	3.96	3.96
Calculated Margin (% of price)	2.85	2.91

Source: Authors' calculations.

It must be noted that in calculating the margin as a percent of the price, we considered the prices of MS and HSD excluding OMCs' and dealers' margins because the margin percentage (of price) should not be calculated by including the OMCs' and dealers' margins.

PETROLEUM DEALERS' ISSUES AND CONCERNS

The analysis in this section is based on two types of petrol pumps operating in Pakistan, namely, Company-Owned, Company-Operated (COCO), and Company-Owned, Dealer-Operated (CODO). Petroleum dealers are faced with the following issues and concerns that affect their ability to run the business in the current environment.

(a) High Human Resources and Operating Expenditures

Petroleum dealers' main expenditures on running a petrol pump are on human resources. Due to high inflation and policies, such as the minimum wage laws, the HR expenditures, as well as other operating expenditures, have skyrocketed. In such a situation it is difficult for petroleum dealers to keep operating on thin margins.

(b) Delay in Margin Revision

The last margin revision was in April 2021 and the next revision was due in June 2021. However, the margins have not been revised. Inflation has increased considerably since April 2021, which is bleeding their working capital.

(e) Electricity Costs

Similarly, electricity costs have soared, acting as a further drain on the petroleum dealers' finances.

(f) Evaporation Losses

Petroleum products, especially MS, are volatile products. MS evaporates due to fluctuations in temperature. The product is also lost due to decantation and handling. All these losses – temperature, decantation, and handling – are known as evaporation losses. Evaporation losses are directly linked to the product price because it is estimated at 0.5% of the product, and as the price of MS increases, evaporation losses increase proportionately, which is yet another drain on petroleum dealers' working capital.

(g) Withholding Tax (WHT)

Petroleum dealers' margins are subjected to 12 percent WHT, which is deducted by OMCs. According to Section 156A (Petroleum Products) of the Income Tax Ordinance:

(i) Every person selling petroleum products to a petrol pump operator shall deduct tax from the amount of commission or discount allowed to the operator at the rate specified in Division VIA of Part III of the First Schedule.

(ii) The tax deducted under sub-section (1) shall be a final tax on the income arising from the sale of petroleum products to which sub-section (1) applies.

Since this tax is treated as final income tax, it cannot be reclaimed or refunded.

(h) Local Administration Requirements

The petroleum dealers are not required to have security guards on their sites as per regulations. However, local administrations have imposed the Shop Security Act, according to which the petroleum dealers are required to have security guards on the premises for 24 hours. Similarly, the petroleum dealers are required to maintain clean toilets not only for customers but also for other people who do not even purchase fuel or other products at the petrol stations. Again, this is a regulation that affects their finances.

(i) Land Prices and Lease Agreements

When petroleum dealers enter into an agreement with OMCs for setting up a petrol pump, both the parties agree on a rent. However, according to the petroleum dealers, the agreed-upon rent is very nominal and is not commensurate with the market-based rents. Moreover, the lease agreements are often of long duration, normally starting at 10 years and the petroleum dealers cannot break the lease. If the petroleum dealers put the land on which petrol pumps are situated to other uses they can probably earn a higher return. Therefore, such agreements impose an opportunity cost on the petroleum dealers.

PETROLEUM DEALERS—REVENUE AND COST CENTERS

Revenue Centers

Although the petroleum dealers' main source of revenue is the sale of MS and HSD, they also earn revenues from other sources, which include:

- Tuck shop
- Car wash
- Tyre and oil shop

Cost Centers

As far as petroleum dealers' costs are concerned, these can be broken down as follows:

- HR expenses
- Power and electricity
- Generator
- Transport and travel
- Office and supplies expense
- Purchase expenses
- Repair and maintenance
- Franchise fee
- Others

Besides, withholding tax and evaporation losses on MS are also among dealers' major expenses. As per the information collected, petroleum dealers' main expense is human resources. The other significant component of the dealers' expenses is the electricity expense. The petroleum dealers' operating expenses are reported to have increased by 28 percent from 2018 to 2021, because of the rise in inflation and other factors.

PETROLEUM DEALERS—MARGIN CALCULATIONS

We have followed Ernst & Young (2013) to calculate the dealers' margins. According to Ernst & Young (2013), the revenue required by a regulated entity is determined by two essential cost components: operating and marketing (O&M) expenses and capital component. However, we have modified the approach based on the characteristics of the retail end of the petroleum market in Pakistan. In the modified approach, the following components are included to calculate petroleum dealers' margins.

- O&M cost
- Working capital for stock
- Entrepreneurial compensation
- Evaporation losses.

As assumed by Erns & Young (2013), the same level of regulated return is assumed. This is essentially what the current formula tries to achieve by capping the level of margins for the retail part of the supply chain.

In the *O&M expenditures* of petroleum dealers, we incorporated non-adjustable WHT. In working out the working capital required to maintain fuel stock to run the business smoothly, we have assumed that petroleum dealers have to maintain fuel stock for 5 days, as assumed by Ernst & Young (2013). We further assume that 60 percent of the working capital requirement is financed through borrowing while the remaining is financed through equity. It is assumed that the petroleum dealers borrow 60 percent of the working capital

requirement at a 10 percent interest rate. To calculate the financing cost per liter, we divided this markup by annual sale volume.

The next component to calculate petroleum dealers' margins is *entrepreneurial compensation*. The reasonable compensation is assumed to be 15 percent. We have assumed that the return on equity that is employed for stock financing should also be 10 percent. We have assumed that entrepreneurial compensation should be given as a markup over costs.

The *evaporation losses* of petroleum dealers on MS is based on the MS price prevailing on November 05, 2021. According to international practices, petroleum dealers are allowed to factor in 0.50 percent evaporation losses on MS, since MS is a volatile commodity. The evaporation losses are directly linked to the price of MS, which increases as the price of MS increases and vice versa.

The calculations of the dealers' margins on MS and HSD are reported in Table 6. The margin on MS is higher than HSD due to the evaporation losses of petroleum dealers on MS.

Table 6

Petroleum Dealers—Margin Calculations

Cost Component	MS (Rs/Liter)	HSD (Rs/liter)
Calculated Margin	4.76	3.90
Calculated Margin (% of price*)	3.43%	2.86%

* The prices used excludes OMCs' and Dealers' margins. The calculations are based on the petroleum product sale prices as of 5th November 2021, and dealers' costs in 2021.

According to the estimation, the estimated margins translate to 3.43 percent of the price of MS and Rs. 2.86 percent of the price of HSD. To calculate margins as a percentage of the selling price, we excluded OMCs' and dealers' margins from the prices of these products.

WAY FORWARD

Above analysis shows that there are reasonable grounds for an upward revision in the current margins of both OMCs and petroleum dealers. Such an observation is based on several facts and realities. To begin with, the margins have increased only marginally over the years which is not sufficient to consider the rising cost of doing business, inflation, rising salaries, and volatile—mostly upward—international oil prices. The cost of doing business has also increased significantly over the years due to various factors, the most important of which are rising wages and increased utility costs. Although the petroleum prices and general price level, as well as wages, move in a spiral because petroleum products, especially HSD, are fundamental factors behind prices, which leads to an increase in employees' compensation, this does not mean that petroleum prices should not be rationalised.

Another concern of the OMCs and dealers was to include various taxes which are levied on their business in calculating margins. Specifically, the OMCs demanded that turnover tax and petroleum dealers demanded that WHT be included in their respective margins. As discussed above, the taxes should not form the basis for calculating margins

as these are independent of petroleum product prices. However, as far as turnover tax is concerned, it is a burden on the OMCs for the following reasons. To mitigate this added burden on the OMCs, while it is not recommended to make turnover tax a part of the margin, one option could be to levy the turnover tax on gross profits rather than on total turnover. Another option could be to reduce the rate of turnover tax from its present level of 0.75 percent.

It is recommended, therefore, that there should be a reasonable mechanism for formulating OMCs and dealers' margins.

Margin Revision Mechanism

(a) First-Best Solution—Deregulation

Deregulation is the removal of entry barriers to private participation in all aspects of the oil market. In the case of Pakistan, there is some degree of deregulation in the downstream petroleum market as there is the relative ease of entry in the sector. Even though the prices of petroleum products[150] are deregulated to a degree, there is still government control on the pricing of MS and HSD. Currently, the prices are calculated based on a government-approved formula. The prices are calculated based on the import parity pricing principle. The current prices mechanism allows domestic prices to move in line with the movement in international oil prices. However, the marketing and retail margins are fixed by the government. Therefore, there is government control on the pricing of MS and HSD in Pakistan. The deregulation of petroleum products in the context of Pakistan means that the government does not set the OMCs' and dealers' margins; rather the margins are left to be determined by the supply-demand forces.

Box 1: Herfindahl-Hirschman Index (HHI)

The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in a market and then summing the resulting numbers. It can range from close to zero to 10,000. If the index value is close to zero, it means that the market is perfectly competitive. On the other hand, if its value is closer to or equal to 10,000, it means that there is only one firm in the market, which implies a monopoly in the market. The index is commonly used to gauge the market conditions for potential deregulation of the market as well as merger issues.

The index is calculated as:

$$HHI = s_1^2 + s_2^2 + s_3^2 + \cdots s_n^2,$$

where s_n is the percentage market share of firm n (expressed as a whole number).

According to the U.S. Department of Justice, the following rule is applied to gauge the extent of market concentration:

- HHI <1,500: Competitive market
- HHI = 1,500 – 2,500: Moderately concentrated market
- HHI ≥ 2,500: Highly concentrated market

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[150]HOBC prices are fully deregulated since 2011.

The government control over petroleum prices is driven by the idea that oil is a sensitive commodity and that its pricing cannot be left to market forces. The objective of the current regulated oil pricing mechanism perhaps is to provide affordable petroleum products (i.e., MS and HSD) so that price hikes do not result in cost-push inflation from pass-through effects of oil price hikes. However, there are considerable benefits to be had from the deregulation of oil prices. Firstly, it will encourage greater private investment in the oil industry, supporting growth and job creation. Secondly, the government will be able to focus on the formulation of oil sector policies and ensure that they are implemented. Thirdly, consumers will benefit from better service, higher quality products, and competitively set prices.

Several developing countries have adopted deregulation policies for developing a liberalised market while ensuring an adequate supply of products. Two relatively recent examples are the Philippines (see Box 2) and India (see Box 3). Both have now deregulated the oil market and moved to market-based prices for petroleum products. The deregulation of the downstream (i.e., marketing and retailing) petroleum sector is inevitable as government involvement in price-setting creates distortions. On the other hand, the deregulation of the petroleum products pricing can guarantee reasonable returns on investments. Getting a reasonable return on investment is the *raison d'être* for private enterprises. An obvious advantage of deregulation is increased competition, which results in increased efficiency, lower prices, lower production costs, and increased supplies (Oshilim & Oritsematosan, 2015). The regulation of the petroleum products pricing, on the other hand, also results in low investment opportunities in the sector, smuggling of petroleum products, compromises on quality, and sometimes the scarcity of petroleum products.

The advantage of market-based pricing is the complete depoliticisation of oil pricing. However, this requires adequate competition in the oil market and proper administrative and regulatory capacities to monitor the performance of the oil companies and prevent cartelisation. Pakistan has a fair degree of competition in the downstream petroleum sector. Under a liberalised regime, the role of the government is to ensure that fuel markets are competitive and there is free entry and exit from the sector.

As discussed previously, one of the prerequisites for market deregulation is that the market is sufficiently competitive. One of the most common measures to gauge the market concentration is the Herfindahl-Hirschman Index (HHI) (see Box 1). For the case of Pakistan, the HHI for the last five years, from FY2016 to FY2020, is given in Table 7 below.

Table 7

Herfindahl-Hirschman Index (HHI): Pakistan Oil Marketing

| Year	2015-16	2016-17	2017-18	2018-19	2019-20
HHI	2,559.21	2,290.75	2,252.46	1,981.71	2,241.83
HHI (Excluding PSO)	1,625.55	1,510.18	1,629.36	1,440.98	1,413.52

Source: Authors' calculations based on OCAC data.

According to the HHI in Table 7, the market for oil products marketing has become moderately concentrated in 2019-20 from being highly concentrated in 2015-16 (see Box

1 for details on the interpretation of the HHI values). However, Table 7 also shows that – despite increasing in 2019-20 from the previous year – the market concentration in the downstream petroleum sector is on a downward trend. The downward trend in the downstream petroleum market concentration – in other words, an increase in the competition in the downstream petroleum market – is indeed an indication that the market can cope with the price deregulation.

If the HHI is calculated excluding PSO's share, the market becomes competitive in 2019-20 from moderately concentrated in 2015-16. The HHI without PSO from 2015-16 to 2019-20 is presented in Figure 2 below. In the figure, the horizontal black line at 1,500 shows the threshold. If the value of HHI is below this threshold, the market, according to the HHI, is competitive, whereas, above the line, the market starts to become concentrated. We can see from the figure that if we exclude PSO's share, the market in the last two years, i.e., 2018-19 and 2019-20, has become competitive. The values of the HHI excluding PSO are given in Table 8 below.

Fig. 1. Herfindahl-Hirschman Index Without PSO
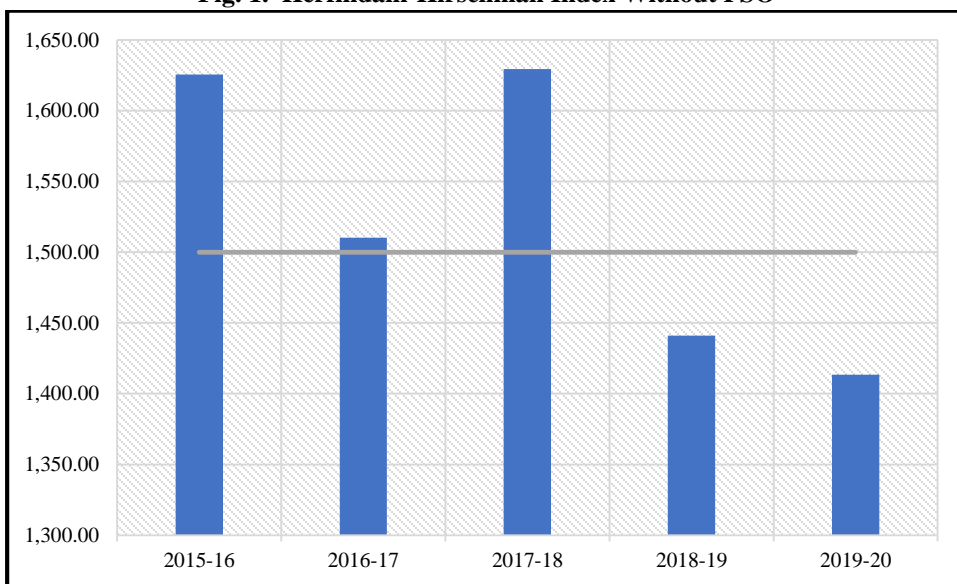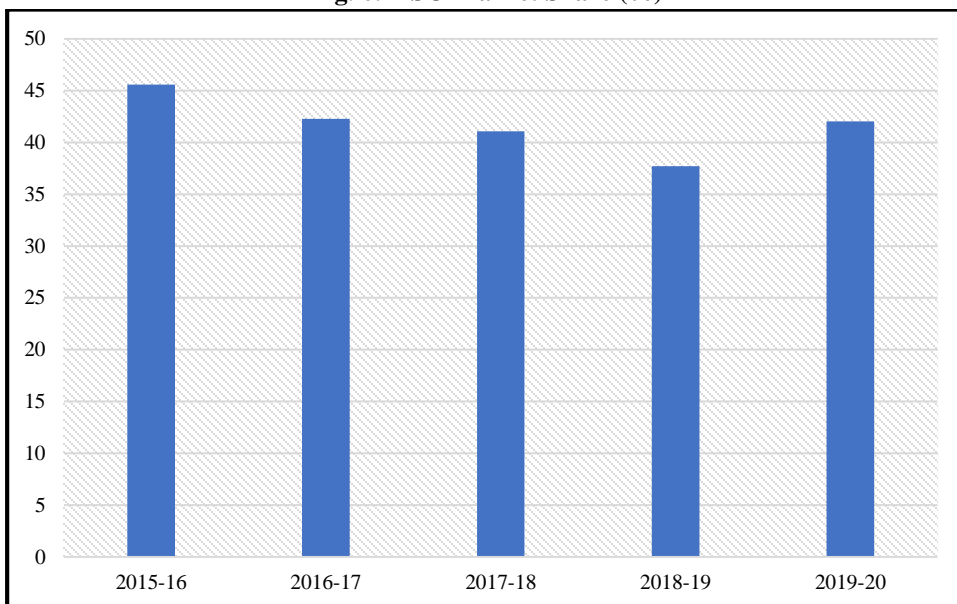

Source: Authors' calculations based on OCAC data.

In Pakistan, the top three[151] companies had a market share of 69.25 percent in 2015-16, which has come down to 63.18 percent in 2019-20. In fact, the share of the top three OMCs had dropped to 60.15 percent in 2018-19. The major share of the market, however, is that of Pakistan State Oil (PSO), which has hovered around 40 percent during the past five years (Figure 2). If we exclude PSO, the share of the top three companies was 31.37 percent in 2015-16, as shown in Table 8. In 2019-20, the share of the top three companies, excluding PSO, is 30.38 percent. The shares of the top three, five, and ten OMCs are also given in Table 8.

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[151] While the top position is constantly held by the Pakistan State Oil, different OMCs have occupied second and third positions over the years.

Fig. 6. PSO Market Share (%)

Source: Authors' calculations based on OCAC data.

Table 8

Share of Top OMCs (%)—Excluding PSO

Share/Years	2015-16	2016-17	2017-18	2018-19	2019-20
Top Three	31.37	33.51	35.49	32.48	30.38
Top Five	45.60	46.46	49.38	50.36	46.49
Top Ten	53.60	57.39	58.63	61.61	56.92

Source: Authors' calculation based on OCAC data.

The increase in the competition in the downstream petroleum market in Pakistan is also evident from the rising number of OMCs during the last two decades. In the early 2000s, the number of OMCs operating in Pakistan was five. In 2020, the number increased to 66 licensed OMCs. Out of these 66 licensed OMCs, 34 licensed companies actively participate in the market. In comparison, in the Philippines and India, the two countries that have deregulated their oil markets in the 2000s, there are 28 and 7 OMCs, respectively. In the Philippines, there were 16 OMCs in 2010, and the top three oil marketing companies had a market share of 77.2 percent. The top three's share went down to 53.44 percent in 2020. This has all happened after the deregulation in the petroleum sector of the Philippines was adopted in the early 2000s.

Box 3.

Price leadership occurs when a leading firm in a given industry can exert enough influence in the sector that it can effectively determine the price of goods or services for the entire market. This type of firm is sometimes referred to as the price leader.

Currently, 9,432 retail outlets (petrol pumps) are operating in Pakistan, of which PSO operates more than one-third outlets (approximately 3,500). Therefore, PSO's market share is the highest both in terms of sale volume and the number of retail outlets. PSO's retail outlets are spread all over Pakistan, which makes it easier for the public sector OMC to influence prices in diverse geographical areas.

Pakistan's market situation is opportune for deregulation because the OMC with the highest share in the market is PSO is a state-owned enterprise (SOE). The other OMCs have significantly lower shares. For example, Total PARCO was the second-largest OMC in 2019-20, with less than 12 percent share in the market. In fact, during the last five years, from 2015-16 to 2019-20, no OMC has had a share greater than 15 percent. Moreover, during this period, the second position was occupied by three different OMCs, namely, Shell Pakistan (2015-16 and 2016-17), HASCOL (2017-18), and Total PARCO (2018-19 and 2019-20). This shows that if we exclude PSO, the petroleum marketing market in Pakistan is competitive.

Based on the analysis presented above on the structure of the petroleum products market, i.e., MS and HSD, we propose that the process of deregulating the petroleum products, i.e., MS and HSD, margins should be initiated. A major reason, other than the political considerations, for the continued regulation of the prices of MS and HSD, is that leaving the prices to the market forces could lead to collusive behaviour among the OMCs. According to economic theory, collusion in a market could lead to a significant increase in prices. Since petroleum products are sensitive commodities, an increase in the prices of petroleum products results in inflation.

However, it must be noted that collusion is hard to sustain when barriers to entry are low. Even though economies of scale are significant in the petroleum sector, the market concentration in the downstream petroleum sector is on a downward trend as the number of OMCs is increasing in Pakistan, which makes sustaining collusive agreements difficult due to the threat of competition from entrants. Besides, collusive agreement, explicit or implicit, for higher prices is unworkable without the involvement of PSO, which has the largest market share and is present throughout Pakistan. Therefore, given that it is in the government's interest to prevent excessive profit margins in the petroleum sector, PSO will never participate in collusion of any kind out of fear of political backlash. This makes collusion even more unlikely without the largest market player.

Therefore, based on the HHI in the OMC market of Pakistan, market concentration levels are low and can even be classified as competitive after 2018 when one excludes PSO. In game theory, a firm is considered a 'dominant firm' if its market share is at least 40 percent. In Pakistan's case, PSO's average market share during 2015-2020 has indeed been around 40 percent. Therefore, in Pakistan's downstream petroleum market PSO is the dominant firm. The other firms form a 'competitive fringe' (e.g., TOTAL, Shell, etc.). The

fringe firms are small to influence the price and act as price takers. Therefore, the fringe firms will follow the price set by PSO but will adjust output so that their marginal cost equals the price set by the leader.

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Box 4. The Instability of Collusions

According to game theory, collusion is hard to sustain since often the collusive set of strategies, which will be pricing decisions by OMCs, do not constitute a Nash equilibrium. Since the product can be considered homogeneous in this industry, individual OMC's unilateral deviations in the form of price undercutting will be profitable to attract larger market shares. These unilateral incentives to deviate constitute a classic prisoner's dilemma problem due to which the OMC's will not be able to sustain the Pareto optimal equilibrium of higher prices for all OMC's. Thus, the inherent instability of collusion in the petroleum marketing and retailing industry implies that deregulation is unlikely to create anti-competitive pricing.

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Even if one considers the repeated interaction scenario between OMCs, which allows the possibility of punishments for the undercutting firms, collusive agreements are unlikely to sustain themselves in this industry. The competitive fringe can punish other firms in this fringe by reducing prices for longer periods if anyone OMC defects by not maintaining high prices. However, these punishments will be ineffective toward PSO since the government will ensure that it charges a low price with low/moderate profit margins already. Thus, PSO cannot be incentivised to charge high collusive prices with the threat of punishment through low prices, and the fringe will lose significant market share to PSO if they form a cartel with high prices among themselves.

Moreover, economic theory also tells us that in an oligopolistic market in which the firms can interact, there is a possibility of one stable 'focal price.' This focal price is sustained because firms fear that further undercutting will hurt their profitability, and if they increase prices, the competitors will not follow suit. This focal price is likely to be close to marginal costs without excessive profit margins since that is what creates the fear of undercutting. We believe that PSO can help establish such a focal price through its price leadership even in a dynamic oligopoly setting. Since the government no longer fixes prices, deregulation will provide stronger incentives for cost-cutting and improved productivity since the competitive fringe can successfully undercut PSO's focal price when they reduce their costs. This competitive dynamic will also make PSO more productive since it will lose market share and leadership status if the costs of Shell, Total, etc., are lower than those of PSO.

Allowance of Independent Petrol Pumps

In Pakistan, there are two types of fuel retail outlets operating. These two arrangements are COCO and CODO. In COCO-type retail outlets, as the name implies, the OMCs own and operate the petrol pump, whereas, in CODO-type arrangements, the land is usually owned by the dealer, but the OMC invests, and the dealer operates the petrol pump. The dealer pays the OMC a franchise fee. The CODO-type arrangement binds the OMC and the dealer in a long-term contract; the dealer cannot buy the fuels from any other OMC.

There is also a third type of arrangement in developed countries and some developing countries: independent or dealer-owned, dealer-operated (DODO) fuel retail outlets. In such type of an arrangement, the dealer negotiates and buys fuel from any OMC.

In case of the adoption of price deregulation, the regulator must allow DODO sites because it will foster competition. The OMCs will offer the dealers fuels at lower prices to compete with other OMCs to sell higher volumes. As a result, consumer prices will be lower compared to COCO or CODO sites. This, in turn, will also compel COCO and CODO sites to sell fuels at lower prices.

It is often argued that since markets have not worked in Pakistan, a sensitive commodity like fuel should not be left to the whims of the market. However, the reason for the inefficient working of the markets in Pakistan is that the state often meddles with the markets. A classic example is that of the sugar market. Furthermore, bowing under the influence of pressure groups, who seek undue advantages from the state (through SROs, for example), also leads to market failures, i.e., inefficient outcomes. Therefore, for the smooth functioning of the markets, the role of the regulator is crucial.

Box 5: Oil Pricing Reforms in the Philippines: The Role of the Regulator

Philippines historically pursued a fixed price regime for petroleum products. The Energy Regulatory Board (ERB) fixed these prices. A budgetary allocation was provided to the Oil Price Stabilisation Fund (OPSF) that automatically absorbed any cost increase in international oil prices not reflected in the selling price set by ERB. In 1998 the government decided to deregulate the oil industry through the Downstream Oil Industry Deregulation Act of 1998 (Government of Philippines, 2005; IMF 2013). The deregulation was done in two phases. In phase 1, oil importation was liberalised, and an automatic pricing mechanism was established. In phase 2, full deregulation was implemented whereby all controls over oil pricing were removed, the foreign exchange cover was taken away and the OPSF was abolished. Philippines now has a fully deregulated oil market with market-based prices. Prudential regulations are in place to prevent abuse including predatory pricing and cartelisation (IMF, 2013).

Consistent with the regime of deregulation, the Oil Deregulation Law (ODL) did not prescribe a specific formula. The market is expected to set the prices. Notwithstanding deregulation however, players in the industry must adhere to the fundamental principle of fair prices as provided under the ODL. It is reported that Philippines has benefitted from deregulation, as prices of oil products would be higher if the industry was not deregulated.

The deregulation move allows new entry into the market, which is key to having a competitive market, which not only brings in more competitive prices, but also better-quality products and much improved service levels. After deregulation, it is now estimated that there are as many as 80 service providers (PIDS, 2000; Oil Deregulation, 2016). Deregulation has been taken to a point where even ordinary citizens can set up their own retail stations. Safety and skills issues have been addressed through the Oil Deregulation Law (ODL).

The Philippines deregulation law prohibits cartelisation and predatory pricing on the part of oil companies and dealers. The law defines cartelisation as "any agreement, combination or concerted action by refiners, importers and/or dealers, or their representatives, to fix prices, restrict outputs or divide markets, either by products or by areas, or allocate markets, either by products or by areas, in restraint of trade or free competition, including any contractual stipulation which prescribes pricing levels and profit margins." On the other hand, predatory pricing is defined as "selling or offering to sell any oil product at a price below the seller's or offeror's average variable cost for the purpose of destroying competition, eliminating a competitor or discouraging a potential competitor from entering the market." However, pricing below average variable cost in order to match the lower price of the competitor, and not for the purpose of destroying competition, is not considered predatory pricing under the law.

The DOE Secretary can investigate any unreasonable increase in the prices of oil products. The ordinary consumer can report any violation of the law to the Joint DOE-DOJ (Department of Justice) Task Force. If the DOE-DOJ Task Force finds that there is indeed a violation of the law, it can order the violator to take proper actions to ensure full compliance with the law.

Philippines, while deregulating the sector, had also declared incentive measures for new investment in refining, storage, marketing, and distribution of petroleum products. The industry has been given the same incentives granted to the Board of Investment (BOI)-registered enterprises engaged in a preferred area of investments pursuant to Executive Order No. 226, otherwise known as the "Omnibus Investments Code of 1987".

The Role of the Regulator

It must be noted that price deregulation does not imply the absence of government regulations. Even when petroleum prices are deregulated, the government will have a crucial role to play relating to monopoly control, safety standards, protection of consumer interests, and taxation. Indeed, prudential regulations are critical to ensure a healthy, competitive market that also protects public interests, such as safety and quality. In fact, if and when the petroleum market is deregulated, OGRA will have to play an even more active role. To keep prices from increasing unduly, we propose that OGRA collect information on prices of every OMC from different geographical locations and post the prices on its website. Since the ex-refinery prices are calculated using import parity formula, based on Platts Oilgram prices, and taxes and levies are known by all the stakeholders, including consumers, collusion and unjust price increase would be easy to detect. If there is any evidence of collusion or other uncompetitive practices, OGRA could act accordingly.

Box 6: Fuel Pricing Reforms in India: Piecemeal Deregulation

The Indian oil market deregulation started in bits and pieces during the 1990s. India sequentially liberalised private investors in oil exploration, production, and importation but the government retained control over pricing policy. As a result, the private participation and competition was limited. Prices were set through the Administrative Pricing Mechanism (APM) that involved a complex pricing formula with cross-subsidisation. In 1997, the government decided to dismantle the APM in a phased manner over a 5-year period. In practice, political economy considerations hampered full implementation and the government retained its control over oil prices even after dismantling the APM. Faced with mounting cost of oil subsidies, balance of payments problem, and low investments, the government took a fresh resolution to go back on the reform track. In 2010 the government deregulated the petrol prices. It also allowed a steady adjustment to diesel prices to bring it in line with international prices. In October 2014 the Indian government fully deregulated diesel prices in India (Kojima, 2016).

With this 2014 pricing reform and previous reforms that removed the entry restrictions for domestic and foreign private investors in oil, India has now established a fully deregulated oil market (except for kerosene). Both public and private enterprises are now competing in the oil sector. Indeed, the largest refining capacity in India is privately owned by the Reliance Group, located in Jamnagar, Gujarat. The refinery has the capacity of refining 1.24 million barrels a day.

Cost-plus compensation did not provide adequate incentive for cost reduction leading to inefficiencies.

In order to shift to Market Determined Pricing Mechanism (MDPM) the Government decided to resort to soft landing approach through careful phasing-in in line with the recommendation of the Expert Technical Group and did not de-regulate the prices of crude and petroleum products at one go (as suggested by the Sundararajan Committee). The reason for resorting to soft-landing approach was attributed to higher adjustment cost that would have arisen due to large increases in relative prices of subsidised petroleum products for one-time shift to MDPM. In other words, the phase-in period could be visualised as a period of gradual reconciliation of apparent short-term conflicts that would have arisen among the interests of three groups of economic agents: the consumers or end-users of petroleum products, the oil producers and refiners and the government itself.

Benefits of Deregulation

Under a deregulated environment, the industry players would have to compete against each other for customers, and consequently, returns on their investments. The threat of new entrants and loss of market share would also provide an incentive for better service and quality of petroleum products. Additionally, with the deregulation of the industry backed by prudential regulations, suppliers will try and avoid malpractices, such as violating environmental laws, and providing adulterated fuel products, not only because of the presence of regulators but also owing to competition. A supplier that is found guilty of violating the regulations and safety standards would not only face legal penalties but also get a bad name and lose customers.

Deregulating the Inland Freight Equalisation Margin (IFEM)

In the case of Pakistan, the government is regulating the petroleum industry at three different stages. At the first stage, the Government regulation of IFEM could be sighted. The second and third stages consist of the OMCs' and dealers' margins. Therefore, deregulation does not only imply the complete elimination of the regulation, but it might also be partial.

Now consider the first case, that is, the deregulation of the IFEM. Three petroleum products HSD, MS, and Kerosene Oil capture the major share of the market in Pakistan. However, the market share of the other products like Furnace oil and JP-1, 4, and 8 is quite low. OGRA presently regulates the selling price of MS, high octane blending component (HOBC), Kerosene Oil, Light Diesel Oil, and JP-1, 4, and 8. The HSD is partially deregulated i.e., it is regulated to the extent of ex-refinery price. Similarly, furnace oil is completely deregulated.

The ex-depot sale price is regulated based on the following components.

(1) Ex-refinery Price
(2) Inland Freight Equalisation Margin (IFEM)/ Primary Transportation Charges
(3) OMCs Margins
(4) Dealer's Margin
(5) Petroleum Development Levy

The landed cost of the imported petrol is generally higher than the ex-refinery prices of locally produced petrol. As the market is regulated, therefore, the OMCs are required to sell it at the fixed price based on the local ex-refinery price regardless of the landed cost of the imported shipments. To tackle the difference between the landed cost of the imported petrol and local refinery, in 1966 the concept of Inland Freight Equalisation Margin (IFEM) was introduced. It represents the cost of transportation of fuel from the source to the depots, also known as the Primary Transportation cost.

Primary transportation cost is the cost incurred by the individual OMC when petroleum products are transported from the refinery and ports to depots across the country. Every month the total estimated cost incurred by the OMCs is pooled and weighted-average on the projected country-wide movement of the products by each OMC and a per-liter rate is arrived at, which is built up and recovered through the retail price for each product from the first day of the following month. Besides this primary transportation cost, the secondary transportation cost is also present. This is incurred during the transportation of the product to the retail outlet, which is borne by the owner of the retail outlet.

The objective of introducing the IFEM in Pakistan was to keep the prices at an equalised level across the county. This sort of equalisation of margin is unique and no other country follows such an arrangement. The basic logic of the IFEM, which is the equalisation of prices across the country, is not justified on any grounds since the consumer who is located near the source should not bear the transportation cost for those who are located far away. Moreover, even in the case of other commodities, such a mechanism is not practiced. Due to this IFEM mechanism, the system is prone to different malpractices such as dumping, virtual depots, and back freighting, as described in the Bhagwandas Report.

The IFEM seems the first place from where to initialise the deregulation of the petroleum industry in Pakistan. This would serve as a litmus test for the overall deregulation of the petroleum industry in Pakistan. As there is no other example present in the world of such a mechanism, therefore, it can be safely argued that equalisation of oil prices across the country is not based on any coherent logic, empirical evidence, or economic theory. Moreover, if we do away with IFEM, it would increase the price by only a few *paisas* per liter or a maximum of a couple of rupees in far-flung areas. Our suggestion of deregulation is based on the belief in efficiency and removing the incentive for malpractices. By deregulating the IFEM, the competition among the OMCs would be high in terms of using efficient methods of transportation as well as malpractices, such as dumping, could be tackled.

(a) Inflation-Indexation Approach

An alternative approach to adjust OMCs' and dealers' margins periodically could be based on inflation indexation. The components of OMCs' and dealers' costs that are affected by inflation are approximately 50 percent of total costs. Based on these numbers, the margins can be revised, periodically, on the following basis.

For this approach, it is assumed that 50 percent of the dealers' costs are affected by inflation, whereas the other 50 percent are affected by other factors such as interest rates, etc. Therefore, it is suggested that 50 percent of the margin is linked to CPI and increase the margin annually based on CPI. The other 50 percent component of the margins should be revised every two years based on an analysis of the data obtained from the petroleum dealers and OMCs.

(b) Margins as a Percentage of MS and HSD Prices

Yet another way to revise the MS and HSD margins is to set them as a percentage of petroleum products prices excluding the margins. In Pakistan, till November 2010, OMCs and dealers were allowed margins as a percentage of the selling price, excluding GST and PDL. An advantage of this approach is that it is an automatic mechanism for adjusting the petroleum products margins. However, one issue with this mechanism is that margins would skyrocket if the petroleum products prices increased drastically, while margins would be squeezed if there is a precipitous fall in prices. To tackle this problem, caps and floor could be set so that margins neither increase too high nor decrease too low.

Other Issues—Possible Solutions

(a) Turnover Tax

The turnover tax should either be applied to the OMC margin instead of the price of the fuel or reduced to 0.25 percent to ensure that the same reflects the underlying profitability of the industry.

b) Storage Development and Demurrage

To avoid disruption in the import supply chain of petroleum products in the country, it is proposed to consider the development of infrastructure and operations of third-party jetties or buoys. Demurrage claims due to port constraints and limited unloading capacity should be included in the actual landed cost calculations.

(c) Foreign Exchange Losses

FX impact should be based on the average of previous fortnight exchange rates announced by the State Bank of Pakistan instead of a notional one based on PSO's cargoes and the actual import incidentals. The Economic Coordination Committees (ECC) has approved to reflect the impact of the actual exchange rate in the pricing calculations and put in place a mechanism for recovery of FX losses since 2018. However, no progress has been made so far in the mechanism implementation/modalities of the recoveries. The decision should be implemented. If FX forward cover is implemented, it would not only provide certainty to the industry but will also help reduce FX rate volatility. In an age of volatile oil prices and FX rates, hedging has become a crucial part of business for most successful companies. The principal goal of hedging is to prevent the price and FX risk. OMCs should, therefore, be allowed to hedge their oil imports and FX exposure.

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Part IV

EFFICIENCY AND CLEAN ENERGY

Sustainable and Secure Energy Supplies for the Future