CHAPTER XII

FREE MARKET PRICING - OPTIONS BEFORE THE GOVERNMENT

As discussed in the earlier chapters, the prices of petroleum products have been fixed giving more weightage to socio-political considerations rather than economic considerations. This obviously led to price distortions which have also been discussed. The previous chapter described the alternative approaches to pricing. In the present chapter, focus will be on the free market pricing system which is being advocated for adoption by the Government.

Even accepting that political expediency prevented the pricing of kerosene and diesel at anywhere near economic costs, it should have been possible for the planners to link their prices with the prices of other essential commodities. In reality, the prices of kerosene and HSD rose at a rate much less than the other essential commodities, in spite of the fact that the prices of their raw material, namely imported and indigenous crude, went up much faster. Table 12.1 gives a comparative study of the price indices of HSD and kerosene in relation to crude oil, MS, other energy sources and all commodities. It can be seen that consequent to the administered pricing policy, the price index of mineral oils remained lower than those of other energy sources, namely coal and electricity. The price index of mineral oil did not keep pace even with the rest of the commodities. In the case of diesel and kerosene, the index remained even lower. It is, however, interesting to note that the price index of
### Table 12.1

**Whole sale average price indices of Petroleum Products, Energy & all commodities in India (1981-82 = 100)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude &amp; N.Gas</th>
<th>MS</th>
<th>SK</th>
<th>HSD</th>
<th>Mineral Oils</th>
<th>Coal</th>
<th>Electricity</th>
<th>All Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-83</td>
<td>103.1</td>
<td>102.4</td>
<td>101.1</td>
<td>103.3</td>
<td>102.8</td>
<td>115.9</td>
<td>111.5</td>
<td>104.9</td>
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<tr>
<td>1983-84</td>
<td>99.6</td>
<td>103.3</td>
<td>108.6</td>
<td>108.7</td>
<td>106.3</td>
<td>128.2</td>
<td>120.5</td>
<td>112.8</td>
</tr>
<tr>
<td>1984-85</td>
<td>103.0</td>
<td>104.5</td>
<td>109.4</td>
<td>108.5</td>
<td>107.1</td>
<td>155.1</td>
<td>124.8</td>
<td>120.1</td>
</tr>
<tr>
<td>1985-86</td>
<td>103.0</td>
<td>120.6</td>
<td>121.8</td>
<td>117.0</td>
<td>120.3</td>
<td>159.1</td>
<td>139.6</td>
<td>125.4</td>
</tr>
<tr>
<td>1986-87</td>
<td>99.3</td>
<td>127.0</td>
<td>129.9</td>
<td>120.2</td>
<td>125.7</td>
<td>174.5</td>
<td>153.5</td>
<td>132.7</td>
</tr>
<tr>
<td>1987-88</td>
<td>93.5</td>
<td>130.6</td>
<td>129.9</td>
<td>122.1</td>
<td>126.3</td>
<td>183.0</td>
<td>166.7</td>
<td>143.5</td>
</tr>
<tr>
<td>1988-89</td>
<td>89.1</td>
<td>145.2</td>
<td>129.9</td>
<td>119.8</td>
<td>129.2</td>
<td>212.3</td>
<td>176.6</td>
<td>154.2</td>
</tr>
<tr>
<td>1989-90</td>
<td>91.8</td>
<td>146.0</td>
<td>129.9</td>
<td>120.0</td>
<td>129.7</td>
<td>231.8</td>
<td>187.7</td>
<td>165.7</td>
</tr>
<tr>
<td>1990-91</td>
<td>99.6</td>
<td>187.3</td>
<td>144.3</td>
<td>155.2</td>
<td>154.7</td>
<td>232.6</td>
<td>200.9</td>
<td>182.7</td>
</tr>
<tr>
<td>1991-92</td>
<td>101.0</td>
<td>238.8</td>
<td>150.8</td>
<td>173.0</td>
<td>179.6</td>
<td>249.9</td>
<td>222.8</td>
<td>207.8</td>
</tr>
<tr>
<td>1992-93</td>
<td>102.7</td>
<td>263.9</td>
<td>146.7</td>
<td>195.9</td>
<td>204.2</td>
<td>301.2</td>
<td>249.0</td>
<td>228.7</td>
</tr>
<tr>
<td>1993-94</td>
<td>120.7</td>
<td>275.9</td>
<td>146.7</td>
<td>216.4</td>
<td>346.4</td>
<td>318.3</td>
<td>247.8</td>
<td></td>
</tr>
<tr>
<td>1994-95</td>
<td>129.1</td>
<td>293.5</td>
<td>146.7</td>
<td>235.2</td>
<td>367.8</td>
<td>349.1</td>
<td>274.7</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Figures for 1994-95 are provisional.

**Source:**
Indian P & NG Statistics, 1994-95, quoting Ministry of Industry, Office of the Economic Adviser
crude and natural gas remained almost static. This was due to the policy of not enhancing the price paid to ONGC as already seen in Table 9.1.

There has been pressures from various quarters on the Government to rationalize the pricing system of petroleum products. In the climate of opening up of the economy, the international lending agencies also sought early decisions from an oil pricing review. In 1992, the then Finance Minister, Manmohan Singh admitted to the Parliament that "the structure of relative price in this country is a barrier to the rational use of scarce petroleum products". He singled out the subsidisation of kerosene. While poor people in the villages did not get the fuel intended for them, black marketeers were cornering supplies in their name, reaping an estimated Rs.15 billion a year.

**Recommendations of the Sundararajan Committee**

An Oil Industry Planning Group set up by the Government under the Chairmanship of U. Sundararajan, Chairman and Managing Director, Bharat Petroleum Corporation Ltd. in pursuance of the New Economic Policy submitted its report in 1994. Among other things, the Committee recommended the following measures:

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*Quoted in the *Far Eastern Economic Review*, 18 June 1992, p.69*
Crude producing companies will be free to sell the crude to any party at competitive prices, most likely import parity prices. Out of the total price of Rs.3.169 per ton being paid to ONGC by oil companies, Rs.900 goes to Central Government as cess and Rs.528 to State Government as royalty. These levies will have to remain ad valorem. The usual practice in PSCs is to keep the percentages between 30 and 40, but in the case of ONGC, 45 per cent goes to governments as cess and royalty. Even on import parity basis, this ratio may stand.

There is no excise duty on indigenous crude but on imported crude customs duty is 35 per cent ad valorem. To bring about parity between indigenous and imported crude, this customs duty may be abolished. To protect Government revenue, excise duty/countervailing duty at uniform rate may be levied on crude oil.

Oil producing companies can sell the crude in international markets, but this may be limited to coastal production. The refineries can then choose product mix for maximum value addition and profitability. They would be free to produce value added products like petrochemicals, solvents, lubes. However, this can create shortages of low value products.

It is expected that with complete deregulation, imported finished product will play a significant role in competition to the indigenous product. Hence, international price will play a dominant role in the determination of prices of petroleum products in the country. This will make the prices at port refineries at par with cost of import at such respective ports. Thus in the deregulated scenario the prices at coastal refinery are likely to be on import parity while the prices ex-inland refineries would tend to be import parity plus the refinery freight from the nearest coastal location to the inland refinery.

The Committee considered the following options:

1. As the inland refineries do not actually incur the transportation cost, there is a likelihood of price getting settled at a much lower level.

2. The production at Mathura refinery is only one-third of total demand. Substantial quantities will actually move from coastal refineries and transportation cost will be incurred. Therefore, a more appropriate system would be to compute the element of railway freight from the port on the basis of weighted average quantities (production at refinery and movements from port).
3. The prices at up-country refineries are established by adding an element of transportation by pipeline computed at current levels of investment. It would encourage laying pipeline for transportation which is a much simpler, neater and cheaper mode of transportation. Also energy conservation in transport.

In case of non-refinery ports also, prices are expected to be established at costs of imports at such ports. The actual positioning of the product at non-refinery ports may be done either by direct import or by coastal mode from the nearest port refineries depending upon the relative economics, demand and supply situation and other factors.

To take care of variations of temporary nature in international prices due to special circumstances, such shocks may be absorbed by the oil companies. For this purpose, a contingency/reserve fund may be established by each oil company.

The marketing companies would establish their selling prices at refinery points based on the refinery transfer price payable and adding on the marketing margins which would cover their marketing costs and ensure a certain return on investment. Even at non-refinery ports, the element of marketing margins will be added to the import parity cost. Statutory duties will be added at applicable rates. In case of delivered supplies, transportation costs will be added.

The companies will decide dealer commission for retail sellers taking into account market considerations.

At present OCC coordinates standard pattern of production and movement of products from refinery to upcountry locations. In the emerging scenario of free pricing, there may be a tendency for a refinery to optimise product mix/profit and ignore the demand/supply balance in the country. A coordination system may be set up in the oil industry to review and monitor the demand/availability situation with a view to optimise production.

Petroleum product movement from refinery ports to non-refinery ports by coastal tankers may be undertaken on industry basis for greater economy.

The product-wise production at each refinery may not match with the demand in its economic supplying area. The extra costs of product movement between economic supply areas of various refineries may not be recovered from consumers.
The price of MS in international market works out quite low compared to the existing levels in India. The present level of selling prices for MS may be maintained by suitable adjustments in the tariff structure. Similarly, suitable adjustments in tariff structure would be required to generate funds to meet the subsidies on SKO/LPG. The subsidy may be paid by Government to oil companies.

The oil industry may establish prices of FO/Naphtha on uniform basis for all class of customers depending on market forces.

Crude oil is taxed @35 per cent while refined products attract 30 per cent. This duty structure:

- renders new investments in the highly capital intensive refining sector unattractive.
- refineries will have to bear the burden of costlier input while the refined products will not be competitive in relation to imports.
- the existing refineries which are badly in need of internal resources to upgrade the facilities will not be able to generate.

The Committee estimated the total subsidies on various products at about Rs.8500 crore for the fiscal year 1994-95 as per the product-wise details given below:

<table>
<thead>
<tr>
<th>Product</th>
<th>Subsidy (Rs/Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSD</td>
<td>2205</td>
</tr>
<tr>
<td>SKO</td>
<td>4101</td>
</tr>
<tr>
<td>LPG (Packed)</td>
<td>1199</td>
</tr>
<tr>
<td>NAPHTHA</td>
<td>539</td>
</tr>
<tr>
<td>FO</td>
<td>170</td>
</tr>
<tr>
<td>LSHS</td>
<td>126</td>
</tr>
<tr>
<td>BITUMEN (Packed)</td>
<td>127</td>
</tr>
<tr>
<td>WAXES</td>
<td>20</td>
</tr>
</tbody>
</table>
The Committee recommended total withdrawal of subsidies. However, it was conceded that it may not be possible to withdraw total subsidy in one shot. A more prudent approach may be to withdraw it in a phased manner and over a period of 2-3 years.

The Committee also recommended the abolition of OCC and the pool accounts and replacement of SPM by industry coordination. To take care of areas where costs of selling are very high, the Government can direct companies to sell a percentage of the production to such areas. Such percentages should be tradeable between companies at mutually agreed prices. Or, the Government may direct the companies to subsidise transportation costs etc in these areas and under-recoveries compensated by the Government from its funds. Or, the under-recoveries may be met through price stabilisation fund to which contributions may be received from all companies.

A Price Stabilization Fund was suggested to prevent effects of rapid fluctuations in prices of crude and products in international market.

**Recommendations of the R-Group**

On 18 January 1995, the Government set up a Strategic Planning Group on Restructuring of Oil Industry (R-Group) under the Chairmanship of Vijay L. Kelkar, Secretary, Ministry of Petroleum and Natural Gas to review the strategic
Restructuring plan prepared by the Sundararajan Committee and to "make final recommendations (to the Government) to meet the policy objectives and initiatives required for restructuring the Oil Industry so as to meet the basic strategic objectives of developing a financially sound and Internationally competitive hydrocarbon sector."

The Group felt that,

Restructuring of and reforms in the hydrocarbons industry are imperative not merely due to factors external to the industry and the challenges provided by growth of the Indian economy. A major compulsion arises from the growing technology gap in Indian organizations vis-a-vis state-of-the-art technologies in other parts of the world. Reforms must not only build on the endogenous capacity created in India through decades of innovative efforts, but also create conditions by which the best technologies available elsewhere are acquired and adapted for our own use in optimal fashion.\(^2\)

While admitting that the Administrative Pricing Mechanism (APM) had worked satisfactorily until recently and helped the public sector oil companies to grow under a protected environment, the R-Group felt that the APM had become a serious handicap in securing oil supplies for the future. According to the Group, the main drawbacks of the APM are:

- APM cannot generate sufficient financial resources required for investments in the upstream and the downstream sectors.
- Private capital as well as foreign direct investment would not be forthcoming in view of the inherent regulatory controls imposed by the government.

\(^2\) \textit{R-Group Report}, para 7.0
• APM does not provide strong incentives for investments in technological upgradations or for cost minimization.

• APM has not been completely successful in achieving the primary objective of ensuring a consumer-friendly and internationally competitive vibrant petroleum sector capable of a global presence to provide energy security to the country.

• The subsidies and cross-subsidies have resulted in wide distortions in the consumer prices and do not reflect the economic cost of petroleum products, which are not being passed on to consumers automatically. This in turn has led to inefficient use of precious fuels and large-scale misuse of highly subsidized products.

• Perverse duty structure gives a negative rate of protection to refineries.

• The continued mounting deficit in the oil industry pool account has become unsustainable, resulting in non-viability of PSEs if the accumulated outstandings are not settled quickly. This will only lead to further domestic supply bottlenecks, increased import dependency, likely increased import prices and insecure supply, and wrong investment signals to prospective investments in upstream and downstream segments of our energy sector, thus triggering a major balance-of-payments crisis.

• APM does not encourage optimal exploration, development, and exploitation of the hydrocarbon reserves in the country.

• Indigenous producers prices for crude is too low to attract risk capital essential for augmenting domestic production and reserve of crude and natural gas.

• Royalty and cess levels are unrealistically high which should be brought down.

Thus the R-Group concluded that in order to achieve the primary objective of securing oil supplies to meet the future growing demand, it would be absolutely necessary to move towards a market-driven price mechanism and to free the petroleum sector from APM.

*Ibid.*, para 39.11
Total deregulation of the oil industry, as envisaged earlier by the Sundararajan Committee, would entail the following:

- Indigenous crude prices need to be deregulated. The oil producers would have full freedom to fix crude prices on the basis of opportunity costs. Private sector oil producers have already been allowed international prices under production sharing contracts. This is to be extended to public sector oil companies also. Simultaneously, the cost-plus formula of indigenous crude pricing would have to be withdrawn.

- The cost-plus formula would be withdrawn from the refining sector. Refineries would be allowed to fix the refinery gate price of petroleum products, which would compete with imported products in the domestic market as well as in the international market for export.

- Distribution channels and marketing sector would have to be freed from government controls. Consumer prices would be determined by competitive market forces. The protection of market shares under the SPE mechanism for public sector oil companies would be withdrawn.

- In a free market, cross-subsidies may remain out of commercial consideration based on demand elasticity but not out of other social considerations. The subsidies would automatically disappear once the administered price structure is dismantled and domestic prices of kerosene, LPG and other subsidised products would be market determined.

- EXIM policy and duty structure are critically important for the domestic market to operate in a competitive manner and maintain a supply-demand balance. Therefore, import and export of all other petroleum products would have to be freed. The duty structure would require rationalization involving lowering of duties on crude, lube base stocks, chemicals and additives, and capital goods to a modest level."

*Ibid., paras 40.3 to 40.7*
Taking into consideration the socio-economic impact and the time lags inherent in increasing the supplies and reallocating resources, and to make the process of reform sustainable, the R-Group suggested that the reforms be implemented in three phases. The first phase to be implemented during 1996-98 would comprise of rationalization of tariff structure, withdrawal of the concept of retention margin for refineries, deregulation of natural gas pricing to make it market determined, decanalization of furnace oil and bitumen, partial deregulation of the marketing sector including freedom to appoint dealers / distributors and removal of subsidy on HSD and reduction of subsidy on SKO, LPG and input for fertilizers. In the second phase, i.e. during 1998-2000, the reforms would be the pricing of indigenous crude oil on the basis of average f.o.b. price of comparable imported crudes, rationalization of royalty and cess, further deregulation of the marketing sector and further reduction of subsidy of SKO, LPG and input for fertilizers. The remaining steps, namely, decanalization of ATF, HSD and MS and total deregulation of upstream and downstream sub-sectors would be implemented in the third phase of 2000-2002.

The R-Group urged the Government to make a policy pronouncement that a decision had been taken to dismantle the APM and to move towards a market-determined pricing and distribution policy along with the time-table of the various elements of change. A Tariff reforms committee would also have to be set up. The tariff structure should be so designed that it provides a modest level of protection, not exceeding 25 per cent, for the domestic refining activities. The tariff rates once
approved by the Government should be bound as per the WTO protocol in order to provide a suitable and predictable investment environment.

During the transition period, it is inevitable that the Government should continuously monitor the reform process so that midstream course correction can be made if necessary. The Group felt that the OCC can take over this role for the downstream sector and the Director General, Hydrocarbons can do this job in the upstream sector. It should not be difficult for the Government to effectively intervene in times of need since the public sector companies will continue to play a major role for many more years.

The findings of these two expert Committees leave no doubt in our mind that the APM cannot continue any longer without creating cascading problems for the economy. The oil import bill during 1996-97 is estimated at $9.6 billion as the average prices of crude and oil products has been on the rise in the global market. The Oil Industry Pool which was created to take care of the fluctuations in the oil market has been in deficit for several years. The Oil Pool deficit is expected to touch Rs. 15,500 crores by 31 March 1997. Even at the time of presenting the Union budget of 1997-98, this issue has not been given due attention. An examination of the genesis of this deficit will be useful to understand its immediate and long-term implications.

As explained in Chapter 7, the Oil Industry Pool was created, *inter alia*, to balance the economies of refiners using indigenous and imported crude. Since
imported crude has been costlier than indigenous crude, the refineries processing imported crude had to be compensated from the oil pool. Till 1989, this balancing act went on smoothly as the pool account was in surplus. But from 1989-90 onwards, the pool started depleting. The Government, instead of paying the refineries, appropriated large sums from the pool account into the Public Accounts Deposit to bridge the fiscal deficit. The marketing companies were also not compensated for the deficit on account of subsidies on kerosene, diesel, LPG, naphtha for fertilizer production and other products. The Oil Pool owes the Indian Oil Corporation alone Rs. 9,500 crores.

Sixty per cent of the LPG requirement of the country is met through imports. But against the imported cost of Rs.16,417 per mmt, the APM cost works out to only Rs.6,902. Translated to the real life situation, this would mean a subsidy of Rs.135 per cylinder (14.2 kg). This is in spite of the fact that major users of LPG belong to the middle and upper income group which can afford a higher price.

The failure of APM and the mounting Oil Pool deficit point to the need for fixing economic prices for the products. In spite of the crude oil prices touching $25 a barrel during November 1996 and the Oil Pool deficit threatening to paralyse the oil companies, the Government was avoiding a price hike of oil products. In the absence of a price hike, the Government will have no option but to resort to internal borrowings to finance the oil pool deficit. The resulting inflation could be even more unbearable than what is caused by a price hike. Using a simulation model developed at the Indira Gandhi Institute of Development Research, Mumbai, Kirit S Parikh and
Gangadhar Darbha of the Institute estimated that while an increase in oil prices to the tune of 30 per cent would lead to a 2 percentage point increase in the overall inflation in the short and medium run, coming down to 1.2 per cent after 3 years, internal borrowings would lead to an inflation rate of 1.6 per cent even in the first year and a very high rate of inflation in the medium and long run. The Index of Industrial Growth, which would fall after a price hike by about 1.3 per cent in the first six quarters, would recover thereafter. On the other hand, in the absence of a price hike, the industrial growth would be lower in the medium and long run. The authors explain this result in the following terms:

...an increase in Government borrowing from the banking system and hence in money supply would increase the aggregate demand, which, given the excess capacities in industrial sector, would lead to an increase in output in the short run. Since it would take at least 3-4 quarters for the 'multiplier effects' generated by a demand shock to manifest in a general increase in demand for all commodities, the overall price level will not increase significantly in the short run. However, as a continued increase in borrowing by government 'crowds out' credit to commercial sector and as the general price level starts increasing in response to excessive monetisation, industrial growth slows down, with 'deficit financing' having a significant effect only on prices and not on output in the long run.  

This conclusion is no different from what was suggested several years back by the authors of the Sixth Five Year Plan that deviations from proper pricing would not reduce the cost of the economy. (Foot note 76).

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The options before the Government are limited. So long as the industry is controlled by the public sector, the Government can influence decisions on investments and costs, but with the entry of the private sector, the cost-plus formula will encourage 'gold plating' of refineries and inflate costs which the consumer will have to bear. Thus market forces and external pressures are bound to make it inescapable for the Government to disband the APM and let some kind of a free market price mechanism to operate. Such a step need not, however, free the prices from the control of the Government. A Tariff Commission with regulatory powers can maintain the prices at reasonable levels and ensure the social equity objective also to some extent. Incentives will also have to be provided to investors to enable them to compete with the older firms. Rationalization of customs duty on imported crude and products will also be necessary to make the refining sector viable in the long run. Vertical integration of upstream and downstream segments will also be necessary to make refining attractive for new investors.

One of the advantages of the APM is that it has in-built procedures to ensure availability of products in the remote areas of the country, where a marketing company would not normally like to operate. In the free market situation also, the regulatory body will have to make it mandatory for marketing companies to commit a certain share of their trade for such areas.
Outline of a Recommended Pricing Policy

- Crude prices should be brought at par with international prices and the public sector exploration companies should devote their surpluses for further development of the oil fields and for evolving exploration techniques suited for Indian offshore and onshore. The present practice of charging fixed rates of royalty and cess should be replaced by ad valorem duties to provide incentives to producers for cost reduction.

- Natural gas should be priced at par with the price of the equivalent crude oil in terms of calorific value, taking into account transportation costs.

- All the refining companies including privately owned ones may be allowed to import crude oil and natural gas directly at negotiated prices in order to take advantage of price fluctuations in the international market. They should also be free to export their products in excess of any contractual obligations.

- Customs duty on imported crude and products should be rationalized to make crude import no less remunerative than product import, so that the refining sector will remain viable in the long run.

- In the present economic scenario, there is a strong case for free market pricing. The Administered Pricing Mechanism (APM) needs to be replaced by a Market
Determined Pricing Mechanism (MDPM) with selective Government intervention.

- The present retention pricing which is biased in favour of inefficient refineries should be replaced by pricing products ex-refinery at levels determined by international prices.

- Any rational approach towards pricing policy should eschew subsidies as they have a tendency to distort price signals. Such distortions lead to uneconomic consumption and are anti-conservationist. Price subsidies for kerosene, HSD and LPG, if considered inevitable from social equity point of view, should be substituted by direct subsidies and subsidies on equipment.

- It may not be possible to introduce all these measures in the immediate future; particularly the deregulation of products such as kerosene and diesel may pose formidable problems. Therefore, it is desirable that deregulation is effected in phases, starting with the pricing of products which are not of mass consumption, such as fuel oil, LSHS and naphtha, and marketing of these products.

- Even if exploration, refining and marketing are deregulated, the major share in each of these operations will continue to be with the oil PSEs, which will enable the Government to retain strategic control on the entire petroleum industry. This strength should be utilized to direct the course of deregulation.
• Even after the marketing companies are freed from the clutches of APM, they should be subject to strategic control by a regulatory body to ensure availability of oil products in the remote areas of the country.

• A price monitoring system should be set up at the Ministry level with industry participation to prevent monopolistic practices and to ensure supply in every region.