

# **Chapter V**

## **Downstream Oil Sector Reforms in India – a Historical Perspective**

Oil Industry in India is moving on a dynamic course since 1991, when the country embarked upon the era of liberalization and economic reform. Oil Sector reform, initiated in 1993, is an integral part of the national reform process. The reform process in the Oil Industry has been swift, multi-pronged and its impact has been of far reaching consequence, for both the micro management of the Industry and macro management of the economy. A peculiar feature of the reform process in Oil Industry is that it has a large and intimate global interface; besides the domestic aspect of liberalization, largely centering on licensing policy, pricing, organizational restructuring and customer focus.

Attempt has been in this Chapter to chronicle and review the reform process undertaken in Indian Oil Industry. This chapter is organized in the following sections. Each section has got sub sections, dealing with strategy, policy and practice with respect to the particular aspect of reform.

1. APM era: its use and abuse
2. Phased deregulation of Oil sector
3. Reform in pricing of petroleum products
4. De-canalization of crude oil import
5. Entry of private players in retailing
6. Merger and acquisition
7. Foreign Investment Policy in Oil Sector

## **Section 5.1: APM Era - its Use and Abuse**

Till 1993, the entire hydrocarbon chain in India was subjected to extensive regulation and controls. Starting from exploration and production, refining, marketing, infrastructure and investment planning, pricing till micro distribution; the whole gamut of activities were centrally planned. The tenets behind this centralized control were: self reliance, import substitution, strategic control, social and distributive justice, promotion of heavy industries and state control of commanding heights of the economy. Ministry of Petroleum and Natural Gas (MOPNG) was at the helm of control and the coordination was carried out through: (a) Oil Coordination Committee (OCC) in the down stream sector and (b) Director General of Hydrocarbon (DGH) in the upstream.

Central feature of the regulated era was its pricing mechanism. Pricing mechanism was a system by which crude oil and petroleum products were priced by an administrative arrangement. The tariff structure and the pricing of products were dictated by considerations of revenue for the government, price stability and repression (conservation) of demand. The pricing policy was predominantly based on considerations like insulating the Indian Oil market from the volatility of International Oil prices and cross subsidization of products to suit the general economic priorities of the economy. The energy security of the country was maintained by an assured supply of products at all places at all times, without recovery of differential transportation cost. Prices were maintained uniform at all refinery points by a price equalization procedure. Besides, a strategic inventory of products for 21 days for emergencies was always maintained.

Under this system, Oil refineries, marketing companies and pipelines were compensated based on the retention price concept and were allowed a return of 12 percent post tax on net worth. The price of indigenous crude oil was also based on a cost plus formula. Public sector oil producing companies were allowed operating costs plus a 15% post tax return on the capital employed.

This system of assured return was working under the following arrangement:

- a) A weighted average of the crude oil price, that is, a pooled price of imported and indigenous crude is applied uniformly by all refineries, whether they are processing imported or indigenous crude. The retention price of products is fixed separately for each refinery, based on the standard throughput, standard product pattern, standard fuel and loss percentage, refining cost and return.
- b) The retention concept is also extended to marketing companies for determining the storage point price of products. The basic price, i.e., ex refinery price is uniform for all Oil companies. The selling price of the products

to the consumer is kept uniform by adopting an average market cost plus margin.

c) The variation between:

- The actual crude oil price and the pooled FOB price,
- The retention price and the ex-refinery price of products, and
- The retention marketing margin and the average marketing margin is balanced through a set of pool accounts controlled by Oil Co-ordination Committee (OCC).

Pool accounts system was the fulcrum on which the pricing mechanism revolved. In other countries, pool accounts are known as 'stabilization fund'. This fund acts like cushion pad against the volatility of oil price in international market and provides stability to domestic market price.

The year 1991-92 was a difficult year for Indian Oil Industry, following the Gulf crisis in 1990-91. Although prices of petroleum products and crude oil in international market had come down after the end of Gulf war in March 1991, the country was facing an extremely difficult balance of payment situation. Due to this difficult balance of payment situation, all imports of crude oil and petroleum products in the first nine months of the financial year 1991-92, except the commitment already made under term contracts, had to be done on credit. At times there was difficulty in getting sufficient number of 'with credit' offers. This problem was further compounded because of reduction in the indigenous crude oil production due to technical reasons which necessitated increased import of crude oil. However, in spite of these serious difficulties, Government managed the availability of petroleum products in the country quite satisfactorily and successfully averted a situation of shortage of petroleum products to the consumers.

A total of 24.1 million tonnes of crude oil and 9.2 million tonnes of products were imported during the year 1991-92 at Rs 12,600 crores. These imports were higher than the import of about 20.7 million tonnes of crude oil and about 8.66 million tonnes of petroleum products valued at Rs 10,779 crores for the year 1990-91. Although in terms of rupees, the cost of import was higher during the year 1991-92 than during the year 1990-91, in terms of dollar, the foreign exchange outgo was about 4,500 million dollars during 1991-91 as compared to 4,632 million dollars during 1990-91. In terms of rupees, the cost of import was higher during 1991-92 mainly on account of the devaluation of rupee that happened in July 1991.

During 1991-92, efforts were also made to diversify the sources of imports so as to ensure security of supplies. For the first time, long term contracts for the import of products were signed with the National Oil Companies of Malaysia and People's Republic of China. Although no term contract could be signed with Kuwait, supplies of crude oil and petroleum products were resumed from Kuwait

during the middle of 1991-92 after the disruption in August 1990 due to the Gulf crisis.

Although international prices of crude oil and petroleum products had come down after the end of the Gulf war in March 1991, the devaluation of rupee in July 1991, made imports costlier. As a result of devaluation of rupee, Government was not left with any option but to increase the prices of petroleum products. Even without devaluation, Oil Pool Account had been incurring deficits during 1989-90 and 1990-91. The deficit was on account of a number of factors like increase in the cost of imports, railway freight increased from time to time not having been passed on to the consumers, under recoveries on account of levy of irrecoverable taxes by several States etc. Consequently, with the devaluation of rupee, it became absolutely necessary to increase the prices of petroleum products. Accordingly, at the time of Budget proposal in July 1991, prices of petrol, LPG (domestic) and ATF for Indian Airlines were increase by 20%. Prices of other petroleum products excluding diesel and kerosene were increased by 10%. However, keeping in view the fact that diesel is used largely in the transport and the agriculture sector, Government decided not to increase the price of diesel. Similarly, keeping in view the fact that major quantity of kerosene is used by poorer sections of the society for their essential needs of lighting and fuel, Government decided to reduce the ex-storage point prices of kerosene for domestic use by 10%.

The pricing of petroleum products was administered and was operated through Oil Industry Pool Account mechanism wherein inflows from collection of surcharges on sale of petroleum products and outflows for meeting the claims for difference between inflows and outflows represented the surplus / deficit position of the Pool Account. The principal objectives of the Pool Account were to:

- a) Maintain stable and uniform prices throughout the country, recognizing the need to import crude for the refineries and finished products to meet the deficit in indigenous production:
- b) Provide subsidy / cross-subsidy on some of the petroleum products.

Oil Pool Accounts were expected to be self balancing over a period of time as there was no budgetary support provided to these by the Government. Due to various factors emerging since 1994-95 onwards, the cumulative outstanding of Oil Companies from the pool account started rising steadily as per details given below (Table 5.1):

**Table: 5.1 - Cumulative Outstanding Claims of the Oil Companies**

Year	Cumulative Outstanding at the end of year (Rs Crores)
1994-95	3,765
1995-96	5,701
1996-97	15,976

Source: Annual Reports of Ministry of Petroleum & Natural Gas, successive issues

The mounting outstanding of the Oil Companies from the Oil Pool Accounts had resulted in Oil Companies experiencing severe liquidity crunch. Government considered various options to contain the deficit and announced a comprehensive package on 1.9.1997.

- The outstanding of the Oil Companies from the Oil Pool Account was taken over by the Government through the issue of Special Government Bonds.
- The ex-storage point price of MS, HSD and LPG were increased as follow:
  - MS – Rs 1.00 / litre
  - HSD – Rs 1.80 / litre
  - LPG – Rs 15 / cylinder (packed domestic)
- The prices of Naphtha, FO & LSHS were revised on the basis of import parity.
- It was also decided that henceforth, the price of HSD would be fixed on principles of import parity normally on a monthly basis. In the medium run, all the petroleum products were priced at import parity, except for Kerosene, the subsidy upon which was recovered by additional realization on Motor Spirit.
- The prices of petroleum products were managed in such a manner that OCC was to generate sufficient surplus for servicing of the Special Government Bond.
- Subsidy on various petroleum products was to be moderated in the long run in such a manner that broadly the amount of subsidy and amount required to serve Government Bonds were to be met by surplus generated by higher level pricing of other petroleum products.

## Section 5.2: Phased Deregulation of Hydrocarbon Sector (downstream)

The process of integrating Indian Oil Industry with world Oil market began in February 1993, when Government of India allowed private parties to import and market Kerosene, LPG and LSHS at market determined price. In order to augment the domestic availability of kerosene and to reduce the scope for its unauthorized diversion from supplies under Public Distribution System (PDS), it was decided to allow private agencies to undertake imports of kerosene and to arrange the sale in the domestic market through their own network at market prices. For that purpose, kerosene sold through PDS was colored blue to distinguish it from that sold in free market.

Similarly, for enhancing the availability of LPG for domestic and non-domestic sectors, it was decided to allow import of LPG by private agencies by setting up their own facilities. LPG bottling plants and marketing outlets for LPG in the private sector was permitted to make available such imported LPG at market prices to needy customers through a separate dealer network. LPG sold through this system would be in different design / capacity of cylinders, valves and pressure regulators.

From February 1993, parallel marketing in LSHS was also allowed to cater to the requirements of power sector to support the industrial development in areas where environmental regulation do not permit the use of high sulfur Furnace Oil.

In line with the Government's liberalized policy on import and export, Import of Lubes was de-canalized with effect from 1<sup>st</sup> April 1992. Further, customs duty on import of LOBS and finished lubricants were reduced to 85% with effect from 1<sup>st</sup> March 1993. As a result, private companies found procurement of base oil through imports more advantageous compared to indigenous base oils.

Effective 1<sup>st</sup> November 1993, the selling price of all lubricating oils was allowed to be fixed by the Oil Companies on commercial considerations. All lubricants and greases were decided to be treated as Free Grade Products by the PSU marketing companies. Commission to dealers on the sale of lubricants was to be fixed by the public sector oil companies themselves.

In line with the national imperative of mobilizing private capital for infrastructure sector, Government in 1992-93 cleared proposals to set up oil refineries in the private sector:

- (i) Reliance Industries for a 9 MMTPA refinery in the West Coast, Gujarat;
- (ii) International Petroleum SA (BVI) of Switzerland for a 5 MMTPA 100% export oriented refinery in Gujarat;

- (iii) Ashok Leyland-Gotco of USA for a 6 MMTPA refinery in Orissa
- (iv) Essar for a 9 MMTPA refinery in the West Coast, Gujarat

Around that time, foreign companies were allowed to invest in equities of refineries.

From November 1997 till April 2002, administrative regulations on pricing, marketing, quantitative and tariff restrictions on import and export of petroleum products including crude oil were pruned and dismantled in a phased manner on a predetermined basis.

Thus effective April 1998, refining sector was taken out of Administered Pricing Mechanism (APM). By implication, retention pricing concept for the refinery output and cost plus formula on refinery input (crude oil) was withdrawn. Refining licensing system was abolished. Crude oil import was made free for private and joint sector refineries.

On the eve of total de-regulation, a restructuring exercise of Oil PSUs was carried out by March 2001. Stand-alone refineries were merged with integrated refining and marketing companies by divesting the Government share holding in these refineries. Thus, Chennai Petroleum Corporation (CPCL) and Bongaigaon Refinery and Petrochemical Ltd (BRPL) were made subsidiary of Indian Oil Corporation (IOCL). Kochi Refineries (KRL) and Numaligarh Refineries (NRL) were made subsidiaries of Bharat Petroleum Corporation (BPCL).

IBP Ltd, the stand-alone marketing PSU was sold out to a strategic partner, namely Indian Oil Corporation, through competitive bidding by Ministry of Disinvestment.

By April 2002, quantitative restrictions on import and export of all products were gradually withdrawn by EXIM notifications from time to time. Crude oil import was de-canalized for PSU refineries. APM was dismantled in phases, as outlined above. Oil companies were free to fix up the selling price of all products. Planning and coordination for bulk coastal supplies and inland distribution of petroleum products were left to the Oil Companies, with broad administrative guidelines. OCC was wound up. With a truncated staff, OCC has been transformed to a Research and Analysis Wing of Ministry of Petroleum & Natural Gas.

There have been gradual reductions of tariffs from the erstwhile peak level of above 50% to the current peak level of 20%. Duty protection available to domestic refineries by means of differential duty structure of input and output has gradually been narrowed down to the current level of 10%.

From April 2002 onwards, Government has allowed nine private companies to market transportation fuels, namely petrol and diesel and aviation fuel. With the

entry of these firms, there has taken place a paradigm shift in the arena of retail selling. Apart from a number of incentives and customer-pulling schemes stalking the market, a cult of brand equity has entered into the domestic marketing.

With pricing of products made free and all stabilization funds being abolished, the maze of cross subsidization that once used to play a magic wand has gone out of scene. Subsidies are still permissible for domestic LPG (33.3%) and on Kerosene (17.5%) with a budgetary administered mechanism.

## **Section 5.3: Reforms on Pricing Front**

Regulation of oil prices was first attempted in India when the Value Stock Accounts (VSA) procedure was agreed between the Government and Burmah Shell in 1948. In 1960s, various committees namely the Damle Committee, 1961, Talukdar Committee, 1965 and the Shantilal Shah Committee, 1969 were appointed by the Government to recommend the pricing modalities for petroleum products in India. These committees recommended prices to be determined on principles of import parity. Ceiling selling prices were recommended for various petroleum products. Subsequently, in 1974, the Government appointed an Oil Prices Committee (OPC) headed by K.S. Krishnaswami. This Committee recommended discontinuation of the import parity basis and a shift over to determination of the prices of major petroleum products on 'cost plus basis', which came to be commonly known as the 'Administered Pricing Mechanism' (APM). The regime recommended by OPC was amended by Oil Cost Review Committee (OCRC) in 1984 headed by J.S. Iyer wherein the basis of compensating return was amended from a flat rate on the capital employed to 12% post tax return on net-worth and weighted cost of borrowings.

### **5.3.1 Administered Pricing Mechanism**

The main features of the Administered Pricing Mechanism were as follows:

- a. National crude oil producing companies namely ONGC and OIL were allowed operating cost plus 15% post tax return on capital employed for indigenous crude oil production. Capital employed represents the sum total of net fixed assets (gross block of fixed assets less depreciation) and normative working capital.
- b. Oil refineries, pipelines and marketing companies were allowed operating cost and return on capital employed. Capital employed was bifurcated into net worth and borrowings. Net worth was taken from the balance sheet as



the sum total of equity capital and free reserves. The balance capital employed was considered as borrowings. On the net worth portion, return at 12% post tax was provided whereas the average actual rate of interest was provided on the borrowings.

- c. Subsidization of consumer prices of certain products like kerosene for public distribution and domestic LPG was provided for by cross subsidization from certain products like petrol, aviation turbine fuel (ATF), etc. and indigenous crude oil.
- d. Uniform prices of each administered petroleum product at all refinery locations by equalizing all costs like cost of crude oil, freight, margins to oil companies.
- e. APM ensured stable prices through the compensating mechanism of pool accounts, so that the domestic market is insulated from the volatility of prices in the international market.

The above objectives were achieved through the operation of the Oil Pool Accounts which were used to adjust the variation in various elements of costs.

### **5.3.2 Sundararajan Committee - 1995**

In November 1994, a Committee of Oil Industry Officials, headed by Mr. U. Sundararajan, then Chairman and Managing Director of Bharat Petroleum Corporation, made an exhaustive study of the Oil Industry and prescribed a reform path. The Committee submitted its report in February 1995, 'Hydrocarbon Perspective: 2010 – Meeting the Challenges'. This was the first serious study on the issue of reform in Oil Industry. Mr. Sundararajan wrote in the preface: 'This group was required to develop a comprehensive long term perspective plan for the hydrocarbon sector to meet the challenges that may emerge by the year 2010. The study group was to recommend the measures to be adopted by the Government for restructuring the hydrocarbon sector (upstream and downstream) and suggest system to ensure free and fair competition in order to protect the consumers' interest in deregulated scenario.'

The Government in 1995 appointed a Strategic Planning Group on Restructuring of Oil Industry ('R' Group) comprising eminent experts from the public and private sectors, distinguished energy experts and academicians to make recommendations to meet the policy objectives and initiatives required for restructuring the oil industry. Taking inputs from Sundararajan Committee Report, the 'R' Group had recommended the gradual phasing out of APM and introduction of free marketing mechanism due to following reasons:

- a. APM cannot generate sufficient financial resources required for investments in the upstream and down stream sectors.

- b. Private capital as well as foreign direct investment would not be forthcoming in view of the inherent regulatory controls imposed by the Government.
- c. APM does not provide strong incentives for investments in technological up-gradations or for cost minimization.
- d. APM has not been completely successful in achieving the primary objective of ensuring a consumer friendly and internationally competitive vibrant petroleum sector capable of global presence to provide energy security to the country.
- e. Since all costs are reimbursed, there is no incentive to make profitable investments. Therefore, cost plus formula breeds inefficiencies.
- f. With the entry of the private sector, the cost plus formula will encourage 'gold plating' of the plant and inflate costs which the consumer would have to bear.
- g. The subsidies and cross subsidies have resulted in wide distortions in the consumer prices and do not reflect 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.

### 5.3.3 'R' Group Recommendation - 1996

Government constituted an Expert Technical Group in June 1996, comprising representatives from various ministries like Finance, Planning Commission, BICP etc. to examine the impact on various sectors at different levels of duty structure etc. in case of dismantling of APM. The report of the Expert Technical Group had dealt with phased movement of Market Determined Pricing Mechanism and rationalization of customs tariff and excise duty rates in respect of dismantling of APM along with its impact on various other sectors.

On September 1, 1997, Government decided to dismantle the APM in a phased manner, based on the recommendations of the Strategic Planning Group on Restructuring of the Oil Industry ('R' Group).

Thereafter Government of India, Ministry of Petroleum and Natural Gas, vide Resolution no. P-20012/29/97-PP dated 21<sup>st</sup> November 1997, notified the details of the phased program for dismantling of APM after taking into account the recommendations of the Expert Technical Group which dealt with phased

movement to Market Determined Pricing Mechanism. The main details of dismantling program of APM were:

- Consumer prices of major petroleum products would move towards import parity. Prices of HSD would be fixed on principles of import parity up to ex-storage point level. Prices of other major products, viz, LPG, ATF, SKO and MS would be moved towards principles of import parity in a phased manner. Pricing of Paraffin-Wax, Bitumen, Naphtha, FO and LSHS would be decontrolled wef. 1.4.1998.
- The system of retention pricing was to be abolished for all refineries and pricing of petroleum products at the refinery gate level would move towards import parity. However, refinery gate prices of controlled products, viz, MS, HSD, SKO, LPG and ATF would be fixed at 'adjusted import parity' prices for the existing refineries during the transition period. All other products would be sold by the refineries at market driven prices.
- Imports and exports of all petroleum products, except crude, NGL, ATF, MS and HSD would be de-canalized during the transition period. However, sourcing and import of crude would be allowed to joint and private sector refineries under actual user licensing policy.
- Cost plus formula was to be withdrawn for indigenous crude oil producers from 1.4.1998.
- Duties of crude and petroleum products would be rationalized in a phased manner.
- The transition period was to be utilized for servicing and amortizing the Oil Bonds proposed to be issued by the Government to the Oil Companies. The price of crude and petroleum products as mentioned above would be fixed by OCC with enhanced autonomous powers.
- Investment in the refining sector would be encouraged by providing reasonable tariff protection and making marketing rights for transportation fuel, viz, MS, HSD and ATF conditional on owning and operating refineries with an investment of at least Rs 2,000 crores or oil exploration and production companies producing at least 3 million tonnes of crude oil annually.
- Cost plus formula for shipping of crude oil was to be withdrawn from 1.4.1998 and the rates would move towards market related rates.
- The subsidy on SKO (PDS) and LPG (Domestic) would be reduced gradually and transferred to the fiscal budget of the Government from

2002 onwards on full deregulation. Freight subsidy on supplies to far flung areas would be met through fiscal budget.

- A regulatory framework would be established to oversee the functioning of and enforcing a competitive framework in the Hydrocarbon Sector.

As a follow up of the aforesaid decision, Government of India, Ministry of Petroleum and Natural Gas, vide Resolution no. P-20018/2/2000-PP dated 30<sup>th</sup> March 2001 decontrolled the pricing of ATF with effect from 1<sup>st</sup> April 2001.

The cost plus approach and a pre-determined margin on net worth formula did not encourage public sector oil producers such as ONGC and GAIL to invest their internal resources on high risk high reward sedimentary basins, including frontier areas, to develop oil and gas reserves from marginal fields or to introduce enhanced oil recovery techniques that would maximize country's hydrocarbon wealth. In order to sustain the accelerated exploration and production efforts essential for future oil security, public sector crude oil producers needed to be freed from Government controlled pricing mechanism so that they could get international prices for their production.

The Government accordingly initiated the phased program for dismantling of Administered Pricing Mechanism from April 1998 with a view to attract investment in the Petroleum Sector to meet the growing demand and to promote competition, efficiency and better customer service.

### 1998-99

During 1998-99, the first year of dismantling APM, the following significant developments did take place, in line with the phased dismantling program outlined above:

- The cost-plus formula for Public Sector Oil Producers was withdrawn from 1.4.1998. They were paid instead a percentage of the weighted average FOB price of actual imports of crude oil for indigenous production. However, a floor price of Rs 1991/MT was fixed.
- In the transition period, producers of crude oil retained a pre-announced increasing share of FOB cost of crude oil, while refineries had to pay the import parity price for crude. The differential accrued to the Oil Pool Account to discharge the Oil Bonds. Indigenous oil producers paid oil cess of Rs 900 / MT and royalty out of their own proceeds as in the past.
- Cost-plus formula for shipping of crude oil was done away with and market determined rates were paid.

- Effective 1.4.1998 onwards, Refinery Gate prices of controlled products, viz, MS, HSD, SKO, LPG and ATF were fixed on the principle of import parity. However, existing refineries contributed towards servicing of oil bonds through adjustment during the transition period. Other products of the refineries like Naphtha, FO, LSHS, Wax, Bitumen, etc. were sold by them at market driven prices.
- The ex-storage point prices of only MS, HSD, Kerosene (PDS), LPG (Domestic), ATF and NGL continued to be determined by the Government.
- Private and joint sector refineries were permitted to import crude oil independently (without canalization) for actual use effective 13.7.1998.
- Customs duty on crude oil was reduced from 27% to 22% effective 2.6.1998.
- Furnace oil was de-canalized effective 13.7.1998 under the provisions of the EXIM Policy. Naphtha export was de-canalized effective 22.7.1998.
- Refining sector was been de-licensed with effect from 8.6.1998.
- Freight under-recoveries on HSD (difference between actual railway freight and notional railway freight) to the extent of 20% were passed on in the selling prices effective 9.1.1999.
- The ex-storage point price of LPG packed (domestic) was revised effective 1.2.1999 and thereafter on midnight of 27/28<sup>th</sup> February 1999.

### 2002-03

During 2002-03, the first year after complete dismantling of APM, the following significant developments did take place, in line with the phased dismantling program outlined above:

- Pricing of petroleum products became market determined effective 1<sup>st</sup> April 2002, except those of PDS Kerosene and domestic LPG.
- The subsidy on PDS Kerosene and domestic LPG and freight subsidy for far flung areas on these products were borne by the Consolidated Fund of India from 1<sup>st</sup> April 2002. These subsidies were on a specified flat rate basis, which were to be phased out in the next 3 to 5 years.
- The pricing of indigenous crude oil of ONGC and OIL became market determined with effect from 1<sup>st</sup> April 2002.

- The Oil Pool Accounts was wound up with effect from 1<sup>st</sup> April 2002.
- The Oil Coordination Committee was wound up with effect from 1<sup>st</sup> April 2002. A Cell, by name "Petroleum Planning & Analysis Cell" was created under the Ministry of Petroleum and Natural Gas effective 1<sup>st</sup> April 2002 to assist the Ministry.
- The new entrants, including private sector, were allowed to market transportation fuels namely, motor spirit, high speed diesel and aviation turbine fuel as per the guidelines contained in the Ministry of Petroleum and Natural Gas Resolution No. P-23015/1/2001-Mkt dated 8<sup>th</sup> March 2002

### 5.3.4 Post APM Budgetary Scheme

During APM period, the subsidy for PDS Kerosene and domestic LPG, freight subsidy for far flung areas and compensation to the oil companies for their under-recoveries on account of irrecoverable state taxes were met through an oil pool account mechanism. While dismantling the APM, it was decided by the Government that the aforesaid subsidies / under-recoveries to the oil companies shall be met from the Government budget. Accordingly, appropriate budget provision has been made in the budget of 2002-03 onwards:

**Table: 5.2 – Subsidies on major Petroleum Products**  
(Rs Crores)

	91-	92-	93-	94-	95-96	96-	97-	98-	99-00	00-01	01-02	02-	03-
Kero	92	93	94	95	97	97	98	99	5770	8151	7522	5310	3018
HSD	2364	3304	3773	3740	4190	6540	5820	0	5770	8151	7522	5310	3018
LPG	48	120	575	430	2180	8090	0	0	0	5070	8845	0	0
Naptha	877	1176	1261	1410	1630	2220	1660	2600	4493	6724	5830	3691	2783
Bitumen	661	815	772	850	1200	1520	0	0	0	0	0	0	0
Wax	125	152	126	110	120	200	0	0	0	0	0	0	0
Total	4175	5686	6596	6560	9360	1860	7480	8370	17714	23091	11140	6709	4801

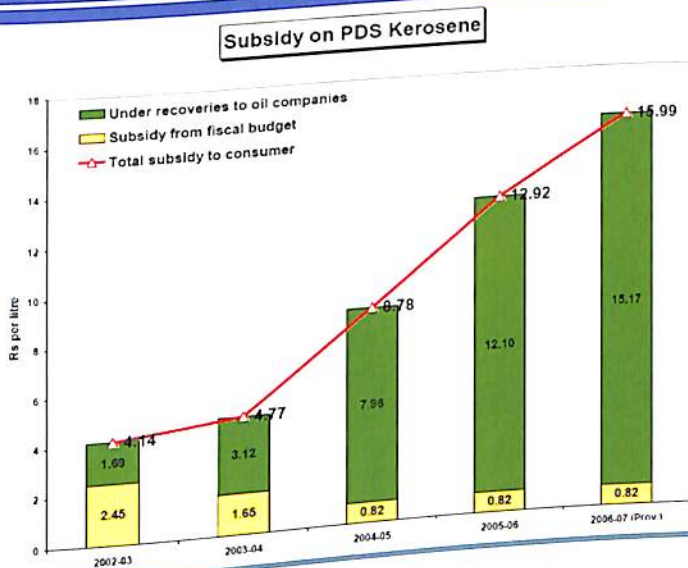
Table 5.2 reveals, there are only two products, namely Kerosene and LPG, which are being subsidized on paper effective 2001-02. Subsidy on account of other products are going as under recoveries and the same are being borne by PSU marketing Oil Companies and partly being shared by upstream companies, as per details given in Table 5.4. It is to be noted that subsidy amount was mounting during 1996-97, 1999-2000 and 2000-2001. During these three years, even diesel was subsidized to the extent of Rs 5,000 to Rs. 8,800 crores each year. Following three schemes were finalized with a view to put in place a mechanism to provide subsidy to the oil companies from the Government budget – the post APM subsidy on PDS Kerosene and domestic LPG, freight subsidy for far flung

areas and compensation in lieu of the under-recoveries met by them on account of irrecoverable taxes:

- PDS Kerosene and domestic LPG Subsidy Scheme, 2002 (Notified in Official Gazette vide No. P-20029/18/2001-PP dated 28.1.2002)
- Freight Subsidy (for far flung areas) Scheme, 2002 (Notified in Official Gazette vide No. P-20029/18/2001-PP dated 28.1.2002)
- The Irrecoverable Taxes Compensation Scheme, 2002 (Notified in Official Gazette vide No. P-20029/18/2001 dated 16.1.2003)

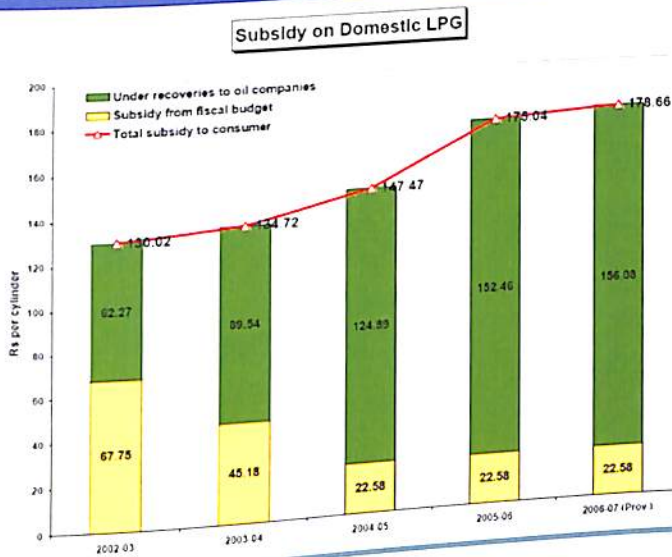
## Exhibit - 7

### Subsidy on PDS Kerosene



## Exhibit - 8

### Subsidy on Domestic LPG



### 5.3.5 Post APM - Policy in Practice

Effective 1<sup>st</sup> April 2002, the APM has been fully dismantled. The Oil Companies made frequent revisions in the selling prices of petrol and diesel during 2002 and 2003, when the international prices were fairly stable. However, the years 2004 and 2005 witnessed sharp and spiraling increase in international prices of crude oil and petroleum products. The impact of such phenomenal price increase in the international market is bound to have major impact on Indian Oil Industry which is heavily dependent on imports for crude procurement. To insulate the end consumers, it was decided that the share of burden should be equitably divided between various stakeholders, i.e., Government, Oil Companies and consumers. Moderate increases in retail prices coupled with customs and excise duty reductions on petrol, diesel, PDS kerosene and domestic LPG have been carried out.



The trend in the international prices of Indian basket of crude oil and sensitive petroleum products for the year 2002-03 to 2005-06 compared with increase in domestic prices is depicted below in Table 5.3:

**Table 5.3: Behaviour of Crude Oil Price and other Products post APM**

Period	Crude Oil *	Petrol	Diesel	Kerosene	LPG
	US \$ / bbl	US \$ / bbl	US \$ / bbl	US \$ / bbl	US \$ / MT
March 2002	23.31	26.43	23.27	23.65	194.00
2002-03	26.66	30.15	28.93	29.33	280.40
2003-04	27.96	35.03	30.48	31.19	278.45
2004-05	39.22	49.01	46.91	49.50	368.52
2005-06 (up to 15/02/06)	55.36	63.83	63.94	69.01	480.09
% increase in international price in 2005-06 over March 2002	137.5%	141.5%	174.8%	191.9%	147.5%
% increase in current retail price (Delhi) over March 2002	-	63.9%	83.5%	0.8%	22.6%

\* Indian Basket Crude: comprises of price of dated Brent and Oman/Dubai average in the ratio of 43:57 up to 2004-05 and 42:58 for 2005-06.

Source : Rangarajan Committee (2006)

With import dependence of domestic refineries being as high as 76% for their crude oil requirement and with the dismantling of APM for petrol and diesel and shift over to import parity pricing in April 2002, the impact of rising international prices should have reflected in the domestic selling price, if market forces were allowed free play (i.e., if PSU Oil companies were allowed freedom to fix selling price of products on commercial basis). That did not happen. Despite the increase in the international prices, the selling prices of petrol and diesel were not revised by the oil marketing companies in line with international prices during January to June 2004. Similarly, the basic prices of domestic LPG and PDS kerosene remained largely unrevised since 2002, despite the steep increase in crude prices.

While passing on the entire impact of the steep increase in the oil prices to the consumers would have resulted in steep increase in the domestic prices, the Government took certain measures in favor of vulnerable sections of the

economy, by ensuring that the burden was shared between Government, the Oil Marketing Companies and the consumer:

- a. The excise duties on petrol were scaled down from 30% to 26%, on diesel from 14% to 11% and on LPG from 16% to 8% effective June 16<sup>th</sup> 2004.
- b. Effective 19<sup>th</sup> August 2004, further reduction in excise duties on refined products was given effect to. The applicable excise duty on petrol was lowered from 26% to 23% and that on diesel brought down from 11% to 8%. This was combined with reduction in the customs duty on petrol and diesel from 20% to 15%. Similarly, excise duty on PDS kerosene was scaled down from 16% to 12% and customs duty on LPG and kerosene from 10% to 5%.
- c. Effective 1<sup>st</sup> March 2005, the customs and excise duty on PDS kerosene and LPG for domestic use were reduced to zero.
- d. Effective 1<sup>st</sup> March 2005, the customs duty on petrol and diesel were reduced from 15% to 10% and that on crude oil brought down from 10% to 5%. The customs duty on aviation turbine fuel (ATF), furnace oil (FO – for general use), low sulfur heavy stocks (LSHS – for general use) and bitumen were reduced from 20% to 10%. Customs duty on Naphtha, FO and LSHS for fertilizer use continued to remain nil. The resultant loss of tax revenue was neutralized by way of increase in excise duties on petrol and diesel. Accordingly, the excise duty on petrol was revised from 23% plus Rs.7.50 per liter to 8% plus Rs. 13 per liter (from Rs 12.07 per liter to Rs 14.59 per liter) and on diesel from 8% plus Rs 1.50 per liter to 8% plus Rs. 3.25 per liter (from Rs. 3.15 per liter to Rs. 4.80 per liter).

Greater flexibility to Oil Marketing Companies to allow for autonomous adjustments in prices of petrol and diesel were sought to be provided. Effective 1<sup>st</sup> August 2004, a revised methodology, allowing oil companies limited freedom to revise the prices of petrol and diesel within a reasonable price band was put in place. The concept of price band was based on the principles of rolling average prices of these products in the international markets. Accordingly, Oil Companies were permitted to carry out automatic adjustments in prices within a band of +/- 10% of the mean of rolling average of C&F prices of last 12 months and last quarter. In case of breach of this band, the Oil Marketing Companies were to approach the Ministry of Finance through Ministry of Petroleum & Natural Gas to modulate the excise duty rates so that the spiraling prices prevailing in the international markets do not cause undue hardship to the consumers. However, consequent to further rise in the international prices the price band approach was given up.

As the rising international prices were not entirely passed on to the customers (by not revising the retail selling price proportionately), the Oil Marketing Companies suffered un-recovered cost. A large share of this loss was passed on to upstream companies, namely ONGC, OIL and GAIL.

Then there was this sharing by upstream companies, approximately to the extent of 1/3<sup>rd</sup> of the loss. During 2003-04, ONGC shared Rs 2,690 crores while GAIL had chipped in Rs 427 crores. During 2003-04 and 2004-05, all the PSU marketing companies received the contribution from upstream companies in the following way: (Table 5.4)

**Table 5.4: – Un-recovered cost incurred by down stream Marketing Companies shared by Upstream companies**

				Rs Crores
Discount received from ONGC, GAIL and OIL and for purchase of Crude Oil, LPG and SKO as a part of their share of subsidy under-recovery on LPG (Domestic) and SKO (PDS)				Oil Bond issued by Government
		2005-06		
	2003-04	2004-05		
IOC	1853.42	3292.74	6440.00	13563.02
HPC	694.57	1278.34	3221.59	2344.86
BPC	582.40	1201.86	3581.89	2163.12

- a. Effective 16<sup>th</sup> June 2004, the OMCs were allowed a moderate increase in prices of petrol by Rs 2/- per liter, diesel by Re 1 per liter and LPG by Rs 20 per cylinder. This was coupled with reduction in excise duties.
- b. Effective 1<sup>st</sup> August 2004, the retail price of petrol was increased by Rs 1.10 per liter and for diesel by Rs 1.42 per liter.
- c. Effective 5<sup>th</sup> November 2004, the price of domestic LPG was increased by Rs 20 per cylinder; the price of petrol was increased by Rs 2.19 per liter while the price of diesel was increased by 2.12 per liter.
- d. Effective 21<sup>st</sup> June 2005, the price of petrol was increased by Rs 2.50 per liter while the price of diesel was increased by Rs 2 per liter.
- e. Effective 7<sup>th</sup> September 2005, prices of petrol and diesel were increased, by Rs 3 per liter and Rs 2 per liter at Delhi.
- f. The selling price of kerosene has remained untouched since 2002.

### 5.3.6 Rangarajan Committee - 2006

In the background of the above, when Oil pricing issue assumed a crisis and Government was under multi-pronged pressure, a high powered committee was set up under the chairmanship of Dr. C. Rangarajan, an eminent economist, currently Chairman of Economic Advisory Council to Prime Minister. Rangarajan Committee submitted its report in February 2006, with the following recommendations:

- Adopting the trade parity principle for pricing of petrol and diesel, based on a weighted average of the import parity and the export parity prices in the ratio of 80:20. This principle of trade parity will apply for the refinery gate price as well as for determining the retail price.
- Terminating the principle of freight equalization for calculating the price of petrol and diesel at different locations.
- The government should keep themselves at arms length from the actual price setting of petrol and diesel, and allow the oil marketing companies the flexibility to fix the actual retail price, subject to the indicative trade parity price ceiling.
- Reduce the customs duty on petrol and diesel to 7.5 percent.
- The Committee has mentioned that an upward adjustment in the prices of petrol and diesel to the extent of Rs. 0.31 liter and Rs. 1.2 per liter (Mumbai retail price), respectively, is warranted if its recommendations are accepted. Else, the price increase required would be Rs. 0.51 per liter on petrol and Rs 2.68 per liter on diesel (Mumbai price). It has further stated that if the government were to decide not to increase the prices of these products, then it should bear the burden caused by their increasing international prices.
- Excise levies on petrol and diesel to be made specific.
- Subsidized kerosene to be restricted to below poverty line families.
- Adjust the price of domestic LPG by Rs 75 per cylinder and then progressively increase it further in line with the international price.
- Government to determine the quantum of subsidy to be borne by upstream companies (ONGC / OIL) upfront and collect it by suitably adjusting the rate of cess.

### 5.3.7 The latest on the pricing of Petroleum products (6<sup>th</sup> June 2006)

Planning Commission (2006) in its draft approach paper to XI Plan writes, 'the current method of determining prices for petroleum products on the basis of import parity needs reconsideration. India is deficient in crude oil but has developed surplus capacity in production. Product price entitlement should therefore be based on export parity pricing, which would be much lower than import parity.'

On 6<sup>th</sup> June 2006, Government decided to raise the price of Petrol and Diesel by Rs 4 and Rs 2 per litre (plus local taxes) respectively. Politically it was a crucial decision on petroleum products pricing as part of its efforts to tackle a "stressful situation" of under-recoveries faced by PSU Oil Companies due to surging international crude prices. The previous price revision was made in September 2005. While leaving kerosene sold under public distribution system (PDS) and domestic liquefied petroleum gas (LPG) untouched, Government decided on a integrated package involving a price increase in petrol and diesel, issuance of bonds worth Rs 28,000 crore, Customs duty reduction from 10 per cent to 7.5 per cent on petrol and diesel, restricting PDS kerosene supply to below poverty line families, and moving to a trade parity pricing mechanism for petrol and diesel.

The PSU Oil marketing companies are estimated to incur under-recoveries of Rs 73,500 crore in the fiscal 2006-07. The impact of Customs duty reduction and shift from import parity to trade parity would be Rs 6,500 crore (Rs 4,100 crore for Customs duty and Rs 2,400 crore for the latter). The price increases will have an impact of Rs 9,300 crore on the under-recoveries. Apart from discounts of Rs 2,500-3,000 crore from standalone refiners such as Reliance Industries, the Government is expecting Rs 24,000 crore of subsidy sharing by upstream companies such as ONGC, Oil India, and GAIL. Rs 28,000-crore bonds are likely to be issued by the Finance Ministry in four equal installments (Rs 7,000 crore at the end of each quarter in the fiscal 2006-07).

Government now has given oil marketing companies (OMCs) the flexibility to hike petrol and diesel prices if international crude oil prices rise above \$73 a barrel. In the event global crude prices rise further, OMCs would have the freedom to raise fuel prices autonomously.

As per Oil industry's calculation, to match the rise in global crude oil prices, the required hike in petrol prices was Rs 10 a liter and for diesel Rs 11 a liter, based on import parity pricing. However, based on trade parity, the required hike is lower at Rs 8.75 a liter for petrol and Rs 10 a liter for diesel.

### 5.3.8 Pricing of Value Added Products

PSU Oil Companies have developed some products with add on features for which they are charging a premium. These are known as branded fuels, like 'Speed' of BPCL, 'Extra' of IOC and 'Club HP' of HPCL. These products have got innovative features and market related price. There is no government control on pricing of these products. Each PSU Oil Companies have developed some product range with its own brand and marketing strategy. These are there in the range of auto fuels, lubricants and some package products like petrocards, fleet cards etc. These products have been tested in Indian Oil market and their success has proved that Indian market has matured for product and price discrimination. There is a niche segment of Indian customer in Oil Industry who has a preference for quality and preparedness for price.

Pricing of these products are purely commercial decisions of the respective Oil Companies. These products and their pricing methods have set in motion a free competitive pricing environment in the Indian Oil market, which clearly is an outcome of reform process.

## Section 5.4: De-canalization of Crude Oil Import

About 70% of India's Crude Oil requirement is imported. It is the single largest item in India's import basket, costing the exchequer Rs 117 thousand crores for 96 million tones of Crude oil (FY 05).

**Table 5.5: Crude Oil Import – Volume and Value**

		2001-02	2002-03	2003-04	2004-05
<b>Quantity</b>	Thousand tones	78706	81989	90434	95857
<b>Value</b>	Rs Crores	60397	76195	83528	116806
<b>Indian Basket Crude</b>	US \$ / Bbl in March	23.31	26.66	27.96	39.22
<b>Foreign exchange rate</b>	Rs / US \$	48.74	47.64	45.08	43.69

The Indian basket of Crude has become \$ 55.36 up to mid February 2006. There is therefore a consistent rise in the price of Crude in terms of dollar, besides increase in the quantity of crude imported for processing in 18 Indian refineries. The depreciation of dollar in terms of Indian rupee, as seen above in the Table 5.5, also had led to rise in the value of crude oil import.

Prior to April 1998, Crude Oil was in the restricted list for the purpose of import and Indian Oil Corporation was the canalizing agency for import of Crude Oil for all the refineries in the Country. The entire gamut of Crude Oil sourcing for all the refineries was being undertaken by Oil Co-ordination Committee (OCC) and Indian Oil Corporation was the nodal agency to carry out the physical and contractual part of Crude Oil import. There was a great deal of merit in that system. All the refineries were considered to be Industry facilities from the supply chain management point of view. Therefore, product slate of refineries, Crude Oil processing plan, availability and allocation of indigenous Crude Oil, everything, was done by a single agency, that was OCC. There was an administered pricing mechanism and pool account to take care of costing part.

As an integral part of liberalization process in Oil Industry, the above process was reformed in the following phases:

- Effective April 1998, refineries in private and joint sector, namely RIL and MRPL, were allowed to import Crude Oil on their own. It may be noted that both were grass root new refineries, came in to operation around 1999.
- From then onwards, retention pricing concept for the refinery output was withdrawn. The cost plus formula hitherto applicable on crude price (which is input cost for the refineries) was also withdrawn. By implication, the pricing of products till refinery gate (Refinery Transfer Price – RTP) was made free. RTP of refined petroleum products were fixed on import parity basis. It was called import parity price (IPP).
- Import of Crude Oil was made free with effect from 1<sup>st</sup> April 2001. However, PSU refineries were allowed to import crude independently, effective April 2002. Each Oil Company, namely, IOC, BPC & HPC started importing crude for their respective refineries. Effective that time (1<sup>st</sup> April 2002), pricing of petroleum products were made free, that is APM was abolished. Exceptions were made for LPG domestic, SKO PDS. However, it is a different subject that Oil Companies did not get enough freedom to revise the product prices in line with IPP.

Independent import of crude oil by each PSU Oil company effective April 2002 is a landmark development in the history of crude oil import in India. Coupled with abolition of APM and pool account (dismantling of OCC), the crude oil import activity became a commercial activity, at the core of which was economics of crude oil for specific refinery for which crude oil was imported and was scheduled to be processed during a particular month. Each Oil company evaluated the type of crude oils for a particular refinery with respect to the market price of crude oil and products, worked out the gross refinery margin (GRM) and decided to import that crude which gives the best GRM. It was no more allocation by OCC for a cluster of refineries having similar configuration or located in geographical vicinity

like East Coast or West Coast. This resulted in some significant happenings, as listed below:

- A particular type or grades of crude is imported for a specific refinery to be processed during specific period. Therefore, each cargo of crude imported has an estimated GRM and actual GRM.
- As a corollary to above, the types of crude, the sources of crude and suppliers were diversified, in search of the best GRM. Table 5.6 below presents the types, quantity and sources of crude imported by 3 PSU Oil Companies during 2005-06.
- Each refinery undertook optimization exercises in terms of shipping, scheduling of cargo, cargo size to avail freight economics, timeliness of import and shipping to save on demurrage and inventory carrying cost.
- Each Company conducted their commercial transactions and decision making process with the Crude supplying Company so that it is recognized as a favored buyer and is given the best terms of purchase by suppliers. It was recognized that the crude oil buying process can have inbuilt cost and if buying process is conducted in line with market behavior, then perhaps market can give a better terms in terms of premium / discount, payment and credit terms, shipping terms etc.
- Crude oil market for India became competitive. Sellers offered flexible and favorable terms.
- Oil companies ventured to undertake risk management practices. It was realized by the Oil Companies and regulatory bodies like RBI, Exchanges and Ministries of Government like Petroleum, Commerce, Finance and Surface Transport that Oil price is volatile and there is inherent risk in the business, which can be mitigated by following risk management practices. Each Oil company formulated their internal system and structures for undertaking risk management practices and put in place policy and manpower to undertake hedging and trading.

In the first year of Crude Oil import de-canalization, that is 2002-03, India imported 82 million tones of Crude oil, out of which 55 million tones came from West Asia (that is 67%) and 27 million tones came from other regions. India ranked first among countries importing crude oil from Saudi Arabia in 2002-03. Saudi Arabia topped the list, among countries exporting crude oil to India with 18.816 million tones. Nigeria, with 11.579 million tones came second followed by the United Arab Emirates (UAE) and Iran with 9.002 and 7.424 million tones, respectively. In subsequent years, the concentration of crude from few import sources has got reduced and the sources have been well diversified, as the data



of imported crude (type and sources) of BPCL & HPCL is presented for last two years, i.e., 2004-05 and 2005-06.

- BPCL for their two coastal refineries, Mumbai and Kochi, imported 13.1 MMT and 11.9 MMT of crude oil during 2004-05 and 2005-06, respectively. Their imported crude oil basket consisted of crude from Saudi Arabia, Kuwait, UAE, Yemen, Dubai, Malaysia and Brunei.
- HPCL for their two refineries, one at Mumbai and the other at Vizag, imported 9.9 MMT and 11.0 MMT crude oil during 2004-05 and 2005-06, respectively. Their imported crude oil basket consisted of crude from Saudi Arabia, Iraq, Malaysia, Yemen, Thailand, Kuwait, Oman, Nigeria, Dubai and UAE.

**Table 5.6: Indian Crude Imports – 2005-06**

AREA	COUNTRY	QUANTITY IN MMT					
		IOC+ CPCL	BPCL+ KRL	HPCL	MRPL	RIL	TOTAL
				1.65	0.36	1.15	7.66
Middle East	U.A.E.	2.50	2.00	---	6.10	6.0	12.60
	IRAN	0.43	0.07	1.36	--	1.60	11.36
	IRAQ	8.40	--	--	--	1.53	10.26
	KUWAIT	6.55	2.18	--	--	6.10	6.10
	NEUTRAL	--	--	0.50	--	--	0.50
	OMAN	--	--	--	--	0.10	0.10
	QATAR	--	--	2.30	2.15	9.60	21.10
	SAUDI	4.50	2.55	1.12	--	--	3.62
	YEMEN	1.45	1.05	--	--	--	0.30
			0.20	--	--	--	4.60
Asia Pacific	BRUNEI	0.10	0.20	1.35	--	--	0.34
	MALAYSIA	2.25	1.00	0.25	--	--	--
	THAILAND	0.09	--	--	--	1.25	2.02
			0.13	--	--	0.20	0.20
Africa	ANGOLA	0.64	0.13	--	--	2.0	2.07
	CAMEROON	--	--	0.07	--	0.84	0.84
	EGYPT	--	--	--	--	0.27	0.27
	EQ. GUINEA	--	--	--	--	--	1.50
	GABON	--	1.50	--	--	--	19.91
	LIBYA	--	0.40	1.51	--	--	0.30
	NIGERIA	18.00	--	--	0.30	--	--
			--	--	--	0.13	
			0.13	--	--	--	0.16
Others	SYRIA	--	0.16	--	--	1.20	1.20
	AZERIBAIJAN	--	--	--	--	--	--
	MEXICO	--	--	--	--	--	--
				10.11	8.91	31.84	107.14
Total		44.91	11.37	10.11	8.91	31.84	107.14

In 2005-06, India imported 107 mmt of Crude oil from 23 countries. IOC, being the largest importer imported 45 mmt from 11 countries, Reliance, the second largest importer, imported 32 mmt from 13 countries, BPCL, the third largest importer, imported 11 mmt from 12 countries and HPCL imported 10 mmt from 9 countries. The country as a whole imported 68% of imported oil from Middle East, 25% from Africa and 5% from Asia Pacific.

Currently, the PSU oil companies, for about 90% of their annual processing requirement, enter into annual term contract with oil exporting National Oil Companies (NOC) at Official Selling Price (OSP). The balance quantity is imported from the spot market through tendering process. PSU Oil companies, specifically BPC & HPC have earned experience of direct import for last 4 years and IOC has experience for last so many years. The current practice of import does not lend enough flexibility in terms of quantity and price to secure the best option for the refineries to maximize their GRM. Therefore Oil Companies are now demanding with Petroleum Ministry for more flexibility and authority in deciding their import. Some of the anticipated changes in the policy are:

- Oil Companies are given freedom to have term contract with equity holders. Currently it is restricted only to NOCs with OSP.
- Oil Companies are given permission to trade their cargo en route from the loading location to discharge destination. This would enable Oil Companies to capture the benefit, if any, arising out of price movement.

De-canalization of crude oil import had a great impact on shipping. While on the one side, the economies of scale in shipping was lost, on the other side, each oil company wanted to be effective in ship chartering, suiting to their cargo size, number of cargoes and port facilities at both loading and unloading points. In the process, the oil companies have got freedom to charter their vessels independent of Transchart, the centralized chartering wing of Ministry of Surface Transport.

Flagship refiner Indian Oil, which brings in nearly 70% of the over 100 million tonnes of crude that is imported, has been enjoying the freedom since the last one year. This freedom is part of the Arjun Sengupta Committee report on oil sector reforms and is perceived to enhance the responsibility and accountability of the oil companies. Ever since Indian Oil got the freedom to charter tankers directly from the international market, the company is estimated to have saved Rs 60 crore between June 2005 and May 2006 on its shipping expense. It gained an additional Rs 10 crore during the last one year by levying 'address commission' on both Indian and foreign vessels. A comparison between the money paid by Indian Oil for its vessel charters and Transchart rates during the same period show savings of \$16 million for VLCCs (very large crude carriers) plying from West Africa to India. For the same kind of vessel coming from the

Gulf, the saving is \$0.25 million. Overall, the Indian Oil fixtures were 10.41% better than the market average, while Transchart fared only 1.31% better.

Other two state major refiners, namely BPCL & HPCL also have recently been given freedom to charter ships required for lifting crude.

## **Section 5.5: Entry of Private Players in Retailing**

Retailing is the last leg in the hydrocarbon value chain and in a protected environment, as was the case in India till recently, was considered to be the exclusive domain of PSU Oil Companies, namely IOCL, BPCL, HPCL and IBPL. Retailing has many facets which has earned a distinct feature for itself. Some significant features of petrol retailing are:

- It has customer interface, which makes it a marketing job along with its associated features like service, product positioning, pricing, quality specification as per use etc. It is said that retailing is the face of Oil Company.
- It is that part of hydrocarbon value chain which fetches the ultimate value build up. Therefore, every player in the oil business tends to have aspiration to capture that value. It is argued that investment in upper parts of value stream draws economic justification in terms of realization from retailing. Multinational Oil Companies were vying with each other to enter into Indian market, which is the fastest growing market in the world after China.

Opening up the retail sector to private players in Indian oil market drew its justification from the following factors:

- It was felt imperative to attract private investment into the oil sector with a view to put up the infrastructure required for handling the volume as per projected demand. A study estimated that Rs 1,50,000 crores investment would be called for during IX and X Plan period in both upstream and down stream sectors. There was no way that the PSU Oil Companies on their own or the Government of India from their budget would be able to mobilize the resources required for the Oil Sector, in addition to financing the large import bill. Private investment always would look for payback, which was possible only through opening up the retail sector to them.

- Second reason for opening up the sector to the private players was to inject air of competition into the sector. There was near unanimity that the PSUs in the Oil Sector are behaving like major oligopolies. Over the years, PSUs in the Oil Sector are behaving like major oligopolies. Over the years, PSU Oil Companies have developed huge stake holders, like employees, political masters, business partners, who for a while forgot that these companies were in business of making money for the nation and serving customers. The Companies were carrying a complex set of socio-political objectives which was shadowing their commercial objectives. Ultimately, the customer started finding itself at the receiving end. The only possible option to bring about reform in these areas was to inject the private players into the field and let the players compete amongst themselves and set the operating parameters right, in their own interest of survival. It was therefore expected that competitive forces of the market would bring the benefits to the customers.

Government of India, Ministry of Petroleum & Natural Gas brought out comprehensive policy documents vide Resolution No. P-20012/29/97-PP dated 21<sup>st</sup> November 1997 and No. 20018/2/2000-PP dated 30<sup>th</sup> March 2001. These notifications laid out a road map for the complete deregulation of the Oil Sector in the country, which included the entry of private players along with issues of pricing. Details of the components of the road map are given below:

- I. Consumer price of Motor Spirit (MS) and High Speed Diesel (HSD) will be market determined with effect from 1<sup>st</sup> April 2002. Consequently the pricing of petroleum products, except for PDS kerosene and domestic LPG will be market determined with effect from 1<sup>st</sup> April 2002.
- II. The subsidies on PDS kerosene and domestic LPG will be borne by the Consolidated Fund of India from 1<sup>st</sup> April 2002. These subsidies will be on a specified flat rate basis, which will be phased out in the next 3 to 5 years. (PDS Kerosene and domestic LPG Subsidy Scheme, 2002, notified in Gazette vide No. P-20029/18/2001-PP dated 28.1.2002)
- III. Freight subsidy will continue to be provided for supplies of PDS kerosene and domestic LPG to far flung areas. The freight subsidy will be borne by the Consolidated Fund of India with effect from 1<sup>st</sup> April 2002. (Freight subsidy for far flung areas Scheme, 2002, notified in Gazette vide No. P-20029/18/2001-PP dated 28.1.2002)
- IV. Compensation to the Oil Companies on account of irrecoverable state taxes shall be met from the Consolidated Fund of India as per Irrecoverable Taxes Compensation Scheme, 2002, notified in Gazette vide No. P-20029/18/2001 dated 16.1.2003.

Appropriate budget provision for all the three aforesaid subsidies / under recoveries was made in the budget 2002-03.

- V. The price of indigenous crude oil of Oil and Natural Gas Corporation Ltd and Oil India Ltd will be market determined with effect from 1<sup>st</sup> April 2002.
- VI. The oil pool accounts will be wound up with effect from 1<sup>st</sup> April 2002. The cumulative outstanding of the oil companies against the pool account will be liquidated in the following manner:
- The Government will issue bonds to the extent of 80% of the amount equivalent to the provisional amount of the settled outstanding of the oil companies up to 31<sup>st</sup> March 2002.
  - The pending claims relating to the APM period, including the updation of cost and margins for the fiscal year 2001-02, will be finalized as expeditiously as possible. The C&AG (Comptroller and Auditor General of India) will be requested to do a special audit of the oil pool accounts. The whole of the balance amount due to the oil companies will be liquidated by issuing bonds for the remaining amount after the audit.
  - The contingent liabilities under the pending litigations, pertaining to the APM period, will be settled from the Government budget as and when such litigations are finally decided.
- VII. The Oil Coordination Committee wound up with effect from 1<sup>st</sup> April 2002.
- VIII. A cell, by the name 'Petroleum Planning and Analysis Cell' was created under the Ministry of Petroleum and Natural Gas, effective 1<sup>st</sup> April 2002 to assist the Ministry. The expenditure on this cell is to be borne by the Oil Industry Development Board.
- IX. During APM, only the public sector oil PSUs namely IOC, BPC, HPC and IBP had the rights for marketing the transportation fuels, namely, motor spirit, high speed diesel and aviation turbine fuel. The Government vide resolution of the Ministry of Petroleum and Natural Gas No. P-23015/1/2001-Mkt. dated 8<sup>th</sup> March 2002, decided to grant authorization to market transportation fuels to the new entrants including the private sector as per the guidelines contained therein. As per these guidelines, apart from asking the aspirants for marketing rights to make the threshold investment in the eligible activities in the hydrocarbon sector, with a view to ensure level playing field and supply of products to the remote locations, the guidelines *inter alia* contain provisions to impose conditions in public interest such as servicing the remote areas and low service areas as may be declared by the Government from time to time. Four new companies, viz, RIL, Essar, ONGC and NRL have been granted authorization to market transportation fuels.

- X. Regulatory mechanism will be set up to oversee the functioning of the downstream petroleum sector.

The retail sector in Indian Oil market is highly price sensitive. The only segment, where, reform has assumed full form is the lubricants market. Lubricant market is one of the earliest to be liberalized for PSU marketing companies. Private players like Castrol and Mobil were already active and dominant in that market. This segment is also one amongst those few segments to attract foreign interest. If reform has been a thriving success in this segment, then the reason for this is to be found in free pricing and high margin.

The experience of lubricant segment has not been seen in other segments like auto fuels like Petrol and Diesel and cooking fuels like LPG and Kerosene, though the reform intended that to happen. The same reason in reverse would perhaps explain the failure of reform in auto and cooking fuels sector. Auto and cooking fuels segments have not been freed from the price control of the Government and margins are thin to attract private and foreign interest.

## **Section 5.6: Merger & Acquisition** **(Opening up and diversification of domain)**

Oil Industry in India underwent a structural transformation by the following processes:

1. Entry of overseas firms mostly through joint venture route
2. Entry of Private sector to a PSU domain, through joint venture route
3. Attempt by some of the PSU Oil firms to adopt forward and backward integration
4. Attempt to privatize PSU firms by means of disinvestment or selling to strategic partners
5. Merger and cross holding amongst PSU firms

### **i. Entry of overseas firms mostly through joint venture route**

During 1994-95, IOC entered into a joint venture with Mobil International Petroleum Inc., USA for blending and marketing of Mobil brand lubricants. The authorized and paid up capital of the JVC was Rs 50 crores and Rs 20 crores respectively, which was shared by the joint venture partners in the ratio of 50:50. In addition to blending lubricants in the existing blending plants in IOC at Mumbai, Chennai and Kolkata, the joint venture company was also to put up a

blending plant of 150 thousand tonnes capacity at Asaoti in Haryana at an estimated cost of Rs 47 crores, using state of art technology.

BPCL entered into a joint venture agreement with Shell Overseas Investment BV, Netherlands in 1996-97 and Bharat Shell Limited (BSL) was formed for marketing Shell branded lubricants in India. A state-of-art blending plant was set up at Taloja near Mumbai at a cost of Rs 80 crores. BSL also entered into the field of parallel marketing of bulk LPG to industrial customers and launched 'Shell Gas' for domestic customers.

Other such joint ventures approved by the Government during 1995-96 were:

- BP Caltex Venture
- Balmer Lawrie, IOC and Nyco Joint Venture
- Balmer Lawrie Fuchs Joint Venture

Some of the above joint ventures were also intended to take up other activities like development of infrastructure for import of LPG and other petroleum products.

During 1995-96, Government also cleared another joint venture proposal between HPC and COLAS of France for manufacturing of bitumen emulsions.

In pursuance to the Government's policy to promote foreign investment and to avail of the foreign technology for up-gradation and diversification of the activities of the Corporation, a joint venture between IOC, IBP and Oil Tanking GmbH of Germany was formed in 1996-97, with equity participation in the ratio of 25:25:50 for setting up oil terminaling facilities for handling of petroleum products including import / export, receipt, storage, dispatch etc.

All these joint ventures did not really take off in terms of actual business. But some of them did get into business and even that limited fructification brought about a remarkable change in the Indian oil market. Most important consequence of these foreign joint venture companies is that they came with new products, marketing strategies, manpower, technology, which together gave Indian partner a new vibration, dynamism and competitive spirit. Secondly, the Indian partner (PSU Oil Companies) got into a different management culture (*sanskritisation* and decision making. A cross fertilization of management culture came to the in sociological parlance) took place. A threat of competition came to the consciousness of all players in the market. For some downstream business partners, there were new opportunities of collaboration in the air. The fact that so many approvals were granted by the Government, it gave a signal of opening up from the shackles of license permit raj.

Looking from the view of multinational oil companies operating across the globe, increasing deregulation world over has provided both threats and opportunities for the MNCs. For the major integrated companies, it offered market access that was previously denied. However, in order to achieve this they have often had to embark on strategic alliances or joint ventures to navigate the barriers that might still linger on. The MNCs often take financial risks by entering a regulated market at low cost hoping to benefit from future deregulation.

## ii. Entry of Private sector to PSU domain, through joint venture

Private capital was eyeing on domestic refining and marketing of Oil Industry as a means of investment with assured return. For Government, Joint Venture Company was a means of inviting capital and technology without forsaking the management control and decision making right. This was one means by which PSU Oil companies were meant to remain competitive by enhancing operational efficiency.

Mangalore Refinery and Petrochemical Ltd (MRPL), first joint venture company in India, was formed in 1987 jointly by Hindustan Petroleum Corporation Ltd and Indian Rayon and Industries Ltd (IRIL) and its associate companies (A.V. Birla Group).

In fact Ministry of Petroleum and Natural Gas made a mention of MRPL as a joint venture refinery in its Annual Report of 1985-86. The relevant paragraph reads: "Government is exploring the possibility of setting up two grass root refineries at Karnal and Mangalore in the joint sector". Further, the Annual Report of 1986-87 reads, "It has also been decided that a detailed project report should be prepared for 3 MTPA petrochemical refinery at Mangalore, jointly Hindustan Petroleum Corporation Ltd and M/S Indian Rayon Corporation".

The project was commissioned in March 1996 with an actual capacity of 3.69 MTPA. Subsequently, the expansion project of MRPL, enhancing the capacity to 9.69 MTPA, was commissioned in April 2001. With the approval of the Government, ONGC had acquired the entire stake of Aditya Birla Group in MRPL for Rs 59.43 crore on 3<sup>rd</sup> March 2003 and had also infused additional Rs 600 crores on 28<sup>th</sup> March 2003 as part of the approved debt restructuring plan. With this, ONGC had acquired 51% stake in equity of MRPL. Thus, MRPL became Government Company within the meaning of Section 617 of the Companies Act, 1956 and also a subsidiary of ONGC. After successful execution of the debt restructuring plan including conversion of the debt into equity in MRPL and its subsequent transfer to ONGC, ONGC's holding in MRPL has increased to 71.63% in July 2003. MRPL processed 12.54 million tones of crude during 2006-



07 and achieved a turnover of Rs 32,377 crores with a net profit of Rs 525 crores. MRPL has been conferred the 'Mini Ratna' (Category 1) company status by Government of India.

Government approved a proposal from BPCL to form a joint venture company with M/S Gujarat Gas Company Ltd to develop Port and Inland Terminals along with associated infrastructure facilities for the purpose of receipt, storage and dispatch of LPG and other petroleum products and leasing these facilities on commercially negotiated terms.

GAIL (India) Limited is no longer just a gas transmission and marketing company. In the last few years, the company has fast transformed itself to an integrated gas major operating in global markets. The company has recently signed an umbrella pact with Reliance Industries to transport gas from the latter's Krishna Godavari basin fields to different markets in the country. RIL and GAIL will also join hands for submitting joint bids for oil and gas exploration blocks, to be auctioned under the seventh round of the New Exploration and Licensing Policy (NELP-VII). GAIL has signed a similar MOU with Oil and Natural Gas Corp (ONGC) for joint harnessing of gas found by ONGC in the Mahanadi basin, off Orissa coast, and KG basin, off Andhra coast. The MOU between GAIL and RIL also envisages transporting the gas found by RIL below the coal seams (coal bed methane) in Madhya Pradesh to customers. GAIL's business portfolio includes 5,800 km of Natural Gas high pressure trunk pipeline with a capacity to carry 130 MMSCMD of natural gas across the country and seven LPG Gas Processing Units producing 1.2 MMTPA of LPG and other liquid hydrocarbons. It has north India's only gas based integrated Petrochemical complex at Pata with a capacity of producing 3,10,000 TPA of Polymers. GAIL has successfully implemented Joint venture companies in Delhi, Mumbai, Hyderabad, Kanpur, Agra, Lucknow, Bhopal, and Pune, for supplying Piped Natural Gas (PNG) to households and commercial users, and Compressed Natural Gas (CNG) to the transport sector. GAIL also has a wholly-owned subsidiary company GAIL Global (Singapore) Pte Ltd in Singapore. The company aims to further expand its core business of Natural Gas Transmission & Marketing, to capture larger share of the growing market. The company plans to move upstream to secure gas supplies for the core transmission business. Additionally, investments in petro-chemicals and city gas distribution are being planned to enhance margins and increase sources of revenue. Further, the company is exploring and investing in international opportunities with a strategic rationale of gaining international presence.

### iii. PSU Oil firms to adopt Forward and backward integration

Vertical integration along the hydrocarbon value chain, coupled with horizontal expansion, is the chosen growth paradigm for all global oil and gas majors.

Over the past fifteen years, the drive by multinational oil companies (MNCs) to improve short term profitability has resulted in exhaustive cost cutting to the extent that growth has been curtailed. Growth is now on the agenda again for most MNCs and they have all started to examine new ways of adding values.

Industrial economic theory suggests that focused companies should outperform unfocused ones unless there are transaction costs or threats of ex-post opportunism to justify the vertical chain. It also argues that justification for vertical integration diminishes in more mature industries, such as oil industry.

In the sense of definition, vertical integration defines either backward or forward integration into adjacent activities in the value system. Backward integration refers to development into activities that are concerned with inputs into the companies' current business. In the oil business, production of oil and gas are important inputs into a refining company's business. The acquisition of oil and gas producing assets by a refiner would therefore be defined as a related diversification through backward integration. Forward integration refers to development into activities that are concerned with a company's output. Therefore a refining company would be said to be diversifying through forward integration if it were to acquire a marketing company for disposing its products. Vertical integration can aim at full operational integration where it only builds all parts of the value chain or partial operational integration where it only builds positions in selected stages of the industry's total value chain.

In the global market, MNCs often cite a number of advantages to vertical operational integration to justify their existing structure. These advantages include the control of supplies, the control of markets, access to information, cost savings, spread of risk, building on core competencies and technology and resource utilization. The control of supplies might be justified in order to ensure a security of continuous supply of crude to refineries or product to market outlets, which in turn will lead to a more efficient operation. The drive by MNCs to increase their marketing outlets may have been due to a need to gain guaranteed distribution, which in turn could lead to a steadier and more efficient planning of output.

Vertical integration increases a company's ability to gain access to information across the full value chain making it easier to assess both internal and external

opportunities. A fully integrated chain might also give rise to greater opportunities for cost saving and may enable a company to optimize capacity in all areas of its operation.

Since oil and gas industry globally historically has been driven towards operational vertical integration, it has been argued that this is the most appropriate business model. However, the imperfections of the market, a degree of monopoly and legal arrangements surrounding the production of crude have historically led to a degree of profitability that might not necessarily have equated with the most efficient use of resources in the value chain. Over the past fifteen years, the erosion of the value imperfections in the global market as a result of fully developed oil and product market, increasing regulation and the erosion of upstream margins have all put pressure on profitability.

Development of a mature crude oil market by the late 1990s reduced the need for MNCs to be involved in all parts of the energy chain. As a result, there has been no pressure in the oil chain for companies to strive to be balanced. Increasing liquidity in the crude and product markets has meant that the benefits of being vertically integrated have been eroded. Internal transfer prices based upon market prices have shifted the industry towards a greater focus on costs within each part of the value chain, as it is no longer possible to artificially boost profitability by controlling the price. The growth of the futures market has also enabled companies to hedge against extremely volatile prices in order to protect cash flows.

Within the oil industry in the world, integration and size tend to be closely associated and a common belief exists that there is a correlation between vertical integration, size and performance. If this were to be the case, then we would expect to find an industry populated only by fully integrated very large companies. In fact what we find is an industry showing a large dispersion in the segments in which the companies operate.

In India, the largest downstream PSU Oil Company, Indian Oil Corporation, is metamorphosing from a public sector company with dominance in downstream in India to a vertically integrated, transnational energy behemoth through venturing into exploration and production (E&P), petrochemicals and gas. IOC is strengthening its existing marketing ventures and simultaneously scouting for new opportunities in marketing and export of petroleum products in foreign markets.

IOC is undergoing vertical integration through E&P initiatives to have its own equity oil, so as to safeguard its business interest against the highly volatile oil market and to achieve greater stability of revenues and profits thereby protecting stakeholders interest.

IOC in consortium with ONGC was awarded two exploration blocks. In the second round of NELP, IOC was awarded eight blocks in consortium with ONGC / OIL / GAIL / GSPCL. In the third round of NELP, IOC was awarded one onshore block. Under CBM-I, IOC has been awarded two blocks.

IOC along with ONGC Videsh and Oil India was awarded Farshi Exploration Block in Iran.

IOC is working for two major projects, namely production of 120 TMTPA LAB at Gujarat Refinery and integrated PX / PTA (paraxylene / purified terephthalic acid) at Panipat refinery (with capacities of 553 TMTPA of PTA and 362 TMT PA of intermediate PX).

IOC has examined the techno-economic viability for setting up a naphtha cracker complex along with downstream polymers. Feasibility is also being examined for revamping FCC units of Mathura, Panipat and Koyali refineries and setting up a polypropylene unit.

A consortium of Indian Oil Corp. (IOC) and Oil India Ltd (OIL) is bidding for developed oil blocks in Nigeria in partnership with Edo State, one of the 36 states in the oil-rich country. The bid is part of IOC's effort to ensure a supply for its refineries and become an integrated player, one that does everything from exploration and production of oil, to refining it and retailing fuel. The public-sector duo are looking at blocks that should be ready to produce around two lakh barrels per day and have a proven reserve of one billion barrels of oil. It is expected that being present in the oil and gas exploration and production sector will help IOC cushion itself against volatility in crude prices. Countries in Africa and the Commonwealth of Independent States have become IOC's key focus areas. This is because oil-rich West Asian countries only offer service contracts and not production-sharing ones preferred by IOC.

To take forward its interest in prospecting for oil and gas, Bharat Petroleum (BPCL) has recently formed an upstream subsidiary Bharat Petro Resources (BPR) with an authorized capital of Rs 1,000 crores. BPR was incorporated in October 2006 as a wholly owned subsidiary of BPCL. BPR has committed to spend Rs 600 crores in four blocks in India and two abroad.

BPCL joins a consortium led by Australian firm Encore Oil and UK Company Norwest for a consideration of about Rs 55 crores to pick up 25% participating interest in two blocks in Southern gas basin of the North Sea.

BPCL also recently took up a 20% stake in the Australian northwest shelf in the Timor Sea. It is now part of a consortium operated by Coogee (30.8%), Norwest (24.1%), Bounty Oil (12.8%) and Adelphi Oil (18.4%). Drilling is likely to begin in both the blocks in 2007.

The efforts put in over the years have resulted in BPCL having participating interest in 14 blocks. Of this, 9 blocks are situated within India and the others are located in the North Sea in UK, Oman, Australia and Timor.

#### iv. **Privatize PSU firms by disinvestment or selling to strategic partners**

As a step towards privatization of the PSU Oil Companies in the liberalized economic environment, the equity base of the PSU Oil companies was broadened by increasing the authorized capital. During 1995-96, PSU Oil Companies made bonus and right issues to the existing shareholders. Most of the Companies also issued shares to their employees. With the increasing participation in the share of Oil Companies by members of public and other financial institutions, the management of the companies is intended to be made more flexible and responsive to the market indicators.

With the gradual increase in authorized share capital and fresh issue of equity to the public, the Government holding of shares in Oil Companies gradually reduced. Oil Companies were expected to raise additional necessary resources from the primary capital market to meet the requirement of funds for capital investment for growth. Share of PSU Oil Companies began to be traded in the stock exchanges in 1995-96.

In 2000-01, Government decided to retain 26% equity in IBP by divesting 33.6% of its holding to a strategic investor through international competitive bidding.

Equity capital of 14 PSU Oil companies as end March 2005 and their government holding is presented in Table 5.7 below:

**Table 5.7: Equity capital of Public Sector Undertaking under the Ministry of Petroleum & Natural Gas as on 31<sup>st</sup> March 2005**

(Rs Crores)

Sr. No.	Company	Authorized Capital	Paid up Equity Capital	% Govt. Holding as on 31.03.2005
1	Indian Oil Corporation	2500	1168.01	82.03
2	Bharat Petroleum Corporation	300	300	66.20
3	Hindustan Petroleum Corporation	350	339	51.01
4	Oil & Natural Gas Corporation	15000	1425.93	74.15
5	Oil India Ltd	250	214	98.13
6	GAIL (India) Ltd	1000	845.65	57.35
7	Kochi Refineries Ltd	150	137.87	0
8	Bongaigaon Refineries & Petrochemicals Ltd	200	199.82	0
9	Engineers India Ltd	100	56.16	90.39
10	Chennai Petroleum Corporation Ltd	400	149	0
11	IBP Co. Ltd	100	22.15	0
12	Biecco Lawrie Ltd	50	42	57
13	Balmer Lawrie Ltd	30	16.29	61.80
14	Numaligarh Refinery Ltd	1000	735.63	0
15	MRPL	2000	1762	0
16	OVL + Nile Ganga BV	500	300	0

Source: Indian Petroleum & Natural Gas Statistics, 2004-05

Disinvestment in Oil Industry assumed a high political tone, due to which there was not much of progress on this account.

Disinvestment of PSU Oil Companies hit a roadblock in later part of 2003, when the Supreme Court restrained the Union Government from proceeding with the privatization of HPCL & BPCL, holding that disinvestment in them could not be done without prior Parliament approval. A bench comprising justices S. Rajendra Babu and G.P. Mathur said, 'we allow these petitions restraining the Central Government from proceeding with disinvestment resulting in HPCL & BPCL ceasing to be Government companies without appropriately amending the statutes concerned suitably.' The petitions were filed by the Centre for Public Interest Litigation and Oil Sector Officers Association. The Court was not against

the policy of disinvestment. The question before it was whether disinvestment in these two oil majors could be made without parliamentary approval as they were governed by specific statutes – ESSO (Acquisition of Undertaking in India) Act, 1974 and the Burmah Shell (Acquisition of Undertaking in India) Act, 1976. The Court pointed out that in the preamble of the two Acts acquiring the assets of the foreign companies, it was stated that the acquisition was done to ensure that the ownership and control of petroleum products, distributed and marketed in India by the said companies, were vested in the state and thereby so distributed as best to subserve the common good. 'Here what is required to be seen is not which assets can be transferred or not, but whether the undertaking can change its character from the Government Company to an ordinary company without Parliamentary clearance in the light of the statute of acquisition.'

## V. Merger and cross holding amongst PSU firms

In some parts of the world oil business, the volume of sales needed to realize the full economies of scale and to benefit from the full curve of experience is sizeable. In the refining and marketing business experience over the past twenty years has shown that the chances of achieving a decent return to shareholders can only be achieved by operating across the boundaries of a single country market. Hence the drive to horizontal integration of the refining and marketing business, which is aimed at increasing market share and lowering distribution costs, mainly at regional level.

Most importantly, the dominance on a regional basis of a refining and marketing operation enables companies to achieve an efficient scale of operation in production, distribution and marketing, and at the same time spread overhead costs over a greater volume of unit sales.

During 200-01, Government of India decided on the integration of stand alone refineries in public sector. Kochi Refinery Ltd (KRL) and Numaligarh Refinery Ltd (NRL) would be made subsidiaries of Bharat Petroleum Corporation Ltd (BPCL). Bongaigaon Refinery and Petrochemicals Ltd (BRPL) and Chennai Petroleum Corporation Ltd (CPCL) would become subsidiaries of Indian Oil Corporation Ltd (IOCL). This arrangement will strengthen the stand alone refineries to face the challenges of deregulation and enhance the supply of petroleum products to IOCL & BPCL in the Southern and North Eastern regions.

Indian Oil Corporation (IOC) is the country's flagship oil company with net sales of Rs 1,87,224 crores. The company is fast transforming itself from being an oil refiner and marketer of oil products to that of a major, diversified, transnational integrated energy company and has set its sight to reach US\$ 60 billion revenues by the year 2011-12. While consolidating in the core areas of refining and marketing, IOC is pursuing a string of strategic initiatives across the hydrocarbon

value chain for forward integration into petrochemicals and backwards into exploration & production of oil and diversification into natural gas business, besides globalization of downstream operations. Indian Oil and its subsidiaries account for 47% petroleum products market share among the public sector oil companies, 43.5% national refining capacity and 74% petroleum products pipeline capacity. In petrochemicals, Indian Oil is currently implementing a master plan envisaging Rs 30,000 crore investments by the year 2011 -12. As part of this, a world scale Linear Alkyl Benzene plant at Gujarat Refinery and an integrated Paraxylene /Purified Terephthalic Acid plant at Panipat are already in operation, while a Naphtha Cracker with downstream polymer units is coming up at Panipat. In exploration & production (E&P), Indian Oil has bagged nine blocks in the first three rounds of bids under NELP (New Exploration Licensing Policy) in India, in consortium with other companies. Overseas ventures include two gas blocks in Sirte Basin of Libya, the Farsi Exploration Block in Iran and onshore farm-in arrangements in Gabon. The Corporation is also exploring opportunities to acquire a suitable medium-sized E&P company to quickly consolidate its upstream portfolio. IOC has also proposed partnering Petropars; a subsidiary of National Iranian Oil Company, in jointly developing gas blocks in the North Pars fields of Iran. To emerge as a transnational energy major, Indian Oil has set up subsidiaries in Sri Lanka, Mauritius and UAE and is scouting new opportunities in energy markets in Asia and Africa.

## 5.7 Foreign Investment Policy in Oil Sector

Government of India announced significant policy initiatives to attract foreign investment in downstream oil sector as enumerated below:

- Refining industry has been de-licensed.
- Investment in refining sector is open to joint sector (public private partnership) as well as to the private sector for new refineries. FDI participation up to 26% is permitted, with 26% to be held by public sector undertaking and balance 48% to be held by the public. In case of private Indian company, FDI is permitted up to 100%.
- For petroleum products and pipeline sector, FDI is permitted up to 100% through automatic route.
- FDI up to 100% is permitted for natural gas / LNG pipeline with prior Government approval.
- Marketing of transportation fuel (viz. MS, HSD, ATF) can be permitted to a company investing or proposing to invest at least Rs 2,000 crore in exploration, refining, pipeline or terminals in the oil and gas sector in India.
- FDI is permitted up to 100% on automatic route in infrastructure related to marketing and marketing of petroleum products
- FDI up to 100% is permitted for purpose of market study and formulation and for investment / financing



- For actual trading and marketing, minimum 26% Indian equity is required over 5 year

As per latest development taken place in April 2007, foreign oil companies engaged in trading and marketing of petroleum products have been recommended (by Ministry of Petroleum and Natural Gas to Foreign Investment Promotion Board) to be exempted from divesting 26% equity stake in favor of public within five years of operation.

On 21<sup>st</sup> June 2007, Union Cabinet decided to allow Mittal Energy Investment to invest 49% of equity amounting to Rs 3,506 crores in HPCL's green field refinery at Bhatinda. While Mittal group and HPCL will hold an equal stake in the 9 million tonne refinery, balance 2% equity stake would be picked up by domestic financial institutions. State Bank of India has assessed Rs 18,919 crores as cost of the refinery, which is expected to be commissioned by September 2010. This is a special approval as existing regulation restrict foreign shareholding at 26% in a public sector refinery.

## Summary

To summarize, Oil sector reform has come a long way since 1993. In the process, the dominant change that has taken place is that the sector has opened up to private investment and to external world. In the process, the rules of game now center on pricing and marketing, two prime movers of competition. It has, however, not been a smooth ride on a paved path. It has been a roller coaster ride, interspersed with political brakes and international oil price shocks. It is significant that the reform process has not been rolled back in Oil Industry. Oil Industry has kept the nation's attention fixed on it all along.

Oil Industry in India has miles to go. The reform process has been so deep rooted and wide spread that now it has come to be irreversible. During last 13 years of the reform history, political parties with diverse ideology have come to power, yet the reform process has not been completely derailed. The reform is sustained by the logic which is endogenous to Industry and it also has push effect which is emanating from the economic reform process. In both cases, the reform is being propelled up. Since, Oil sector is a significant sector and the reform is broad based, its motion may be slow, but so far it has been steady and supportive of the spirit of economic reform. The impact of the reform in Oil Sector on the macro economy fronts will be examined in Chapter VI. How far reform in Oil Sector is in line with the economic reform at national level will be examined in Chapter VII and the road map for the reform to continue will be drawn in Chapter VIII.

## Recap: Chapter V

### Oil Sector (Downstream) Reforms: Milestones

Month / Year	Policy level Developments in Deregulation	Linkage / Type of deregulation / Impact
April 1992	Lube import was decanalized	<ul style="list-style-type: none"> <li>• EXIM Policy</li> </ul>
February 1993	Private parties were allowed to import and market Kerosen, LPG & LSHH at market determined price	<ul style="list-style-type: none"> <li>• Dual pricing</li> <li>• Entry of private players</li> <li>• Parallel marketing of regulated products</li> <li>• Linked to availability of products for industries</li> <li>• LSHS availability of power sector with sulfur restriction</li> </ul>
March 1993	Customs duty on LOBS and finished lubricants were reduced	<ul style="list-style-type: none"> <li>• Encouraged indigenous lube blending by private players</li> <li>• Competition in lubricant market</li> </ul>
November 1993	Lubricant pricing was made free for PSU Oil companies	<ul style="list-style-type: none"> <li>• Price Competition</li> <li>• Level playing field</li> <li>• Low cost input to industries</li> </ul>
1992-93	Private Refinery proposals were approved	<ul style="list-style-type: none"> <li>• Augmentation in refining capacities</li> <li>• Capital investment in Oil Sector</li> </ul>
November 1994	Sundararajan Committee was set up	<ul style="list-style-type: none"> <li>• Intellectual and analytical work on deregulation started</li> </ul>
February 1995	Sundararajan Committee submitted report	<ul style="list-style-type: none"> <li>• The seed of policy formulation towards deregulation was sown followed by public debate on the subject</li> </ul>
June 1996	Strategic Planning Group on Restructuring (R-Group) was constituted	<ul style="list-style-type: none"> <li>• Implementation strategy of Sundararajan Committee recommendation was attempted to workout</li> </ul>
November 1997	Government notified the phased deregulation program	<ul style="list-style-type: none"> <li>• Major policy announcement in deregulation of pricing during the transition from November 1997 till April 1998 and April 2002 began, details in Section 5.3.3</li> </ul>
November 1997 to April	Administrative regulations on pricing, marketing, quantitative and tariff restrictions on import and export of petroleum products including crude oil were pruned and dismantled in a phased manner	

A Study of its Compatibility with National Economic Reforms

2002,	<i>on a predetermined basis</i>	
April 1998	<i>Refining sector was taken out of APM</i>	<ul style="list-style-type: none"> <li>• <i>Retention pricing concept for the refinery output and cost plus formula on refinery input (crude oil) was withdrawn.</i></li> <li>• <i>Crude oil import was made free for private and joint sector refineries.</i></li> </ul>
April 1998	<i>Refinery Gate prices of controlled products, viz, MS, HSD, SKO, LPG and ATF were fixed on the principle of import parity. Other products of the refineries like Naphtha, FO, LSHS, Wax, Bitumen, etc. were sold by them at market driven prices.</i>	<ul style="list-style-type: none"> <li>• <i>Move towards freeing refineries from the controlled price (APM) regime</i></li> <li>• <i>Facilitated marketing of products by private refineries at import parity price</i></li> </ul>
April 1998	<i>Prices of Paraffin wax, Bitumen, Naphtha, FO &amp; LSHS decontrolled</i>	<ul style="list-style-type: none"> <li>• <i>Competitive market</i></li> <li>• <i>Low input cost for industries</i></li> </ul>
June 1998	<i>Refining licensing was abolished</i>	<ul style="list-style-type: none"> <li>• <i>Private investment in refineries was encouraged</i></li> <li>• <i>Existing refineries undertook capacity expansion without amending license</i></li> </ul>
July 1998	<i>Crude oil import was de-canalized for private and joint sector refineries</i>	<ul style="list-style-type: none"> <li>• <i>Private and joint sector refineries were kept outside APM</i></li> </ul>
July 1998	<i>Furnace Oil import was de-canalized</i>	<ul style="list-style-type: none"> <li>• <i>FO availability improved</i></li> <li>• <i>Private importers came in</i></li> </ul>
July 1998	<i>Naphtha export was de-canalized</i>	<ul style="list-style-type: none"> <li>• <i>Refineries with surplus Naphtha undertook export directly, sometimes led to better value realization</i></li> </ul>
March 2001	<i>PSU Oil companies were restructured</i>	<ul style="list-style-type: none"> <li>• <i>Ground was prepared for the PSU Oil Companies to face deregulation</i></li> <li>• <i>Standalone refineries were merged with integrated marketing companies</i></li> <li>• <i>Government shareholding in standalone refineries were divested</i></li> <li>• <i>IBP was sold out</i></li> </ul>

April 2001	ATF price was decontrolled	<ul style="list-style-type: none"> <li>• Competitive market</li> </ul>
April 2002	Non tariff barriers and quantitative restrictions on import and export of all petroleum products were withdrawn by EXIM notifications from time to time	<ul style="list-style-type: none"> <li>• Liberalization on external sector</li> <li>• Free import and export encouraged</li> <li>• Encouraged price competition</li> <li>• Improved product availability</li> </ul>
April 2002	APM was withdrawn  Pool accounts closed	<ul style="list-style-type: none"> <li>• PSU Oil Companies were allowed to fix up the selling price of all products, except LPG (domestic), Kerosene (PDS)</li> <li>• Subsidies for LPG (33.3%) and Kerosene (17.5%) were charged to Consolidated Fund of India (General Budget)</li> </ul>
April 2002	Pricing of indigenous crude became market determined	<ul style="list-style-type: none"> <li>• PSU Refineries had to bear the market price for their input</li> </ul>
April 2002	OCC dismantled	<ul style="list-style-type: none"> <li>• Logistics planning was left to PSU Oil Companies</li> </ul>
April 2002	9 private companies were permitted to market transportation fuels	<ul style="list-style-type: none"> <li>• Competition in the market place</li> <li>• Better service standards</li> <li>• Up-gradation in marketing infrastructure</li> </ul>
June 2004	The excise duties on petrol were scaled down from 30% to 26%, on diesel from 14% to 11% and on LPG from 16% to 8%	<ul style="list-style-type: none"> <li>• Tariff adjustment to neutralize the impact of increased crude oil price</li> <li>• Part of the process not to pass on the impact of increased crude oil price to customer</li> </ul>
August 2004	further reduction in excise duties on refined products was given effect to	
March 2005	customs and excise duty on PDS kerosene and LPG for domestic use were reduced to zero	