

# Chapter VI

## Select Areas of Reforms in Downstream Oil Sector and their Implications

Reforms process in Oil sector has been a long drawn affair. It has been a wide and multi-pronged exercise. Reforms have been carried out all through the value chain: upstream, i.e., exploration and production, midstream, i.e., refining and downstream, i.e., marketing. As Oil sector has very large interface with external sector, reform has also touched such areas as investment in oil equity abroad and foreign exchange management.

Attempt has been made in this chapter to examine and analyze as to what impact oil sector reform has created in other related areas in macro economy. On that basis, we can then take a view, whether the impacts are in alignment with what was desired in the reform process at the national level.

This Chapter is organized in terms of the following sections:

1. Oil sector's contribution to fiscal affairs in the country
2. Oil sector's impact on country's foreign exchange reserve
3. Oil sector's linkage with inflation
4. Oil sector's role in industrial performance

## Section 6.1 - Oil sector's contribution to Fiscal affairs

Petroleum products are attractive base for taxation in all countries. The primary reason for all countries having a fuel tax are two: one, fuel taxes have low cost of tax collection; and second, it is difficult to avoid paying fuel taxes, given the large scale nature of production and distribution of fuels.

All countries have a system of charging tax on petroleum products. However the level of taxes varies depending upon the following seven considerations: (Rietveld, 2005)

One, Oil taxes may be charged to cover the costs of construction and maintenance of transport infrastructure. In this case, the rate of tax would follow the principle of benefit, which says, the users of public services pay in accordance with the degree of benefits they derive.

Second, tax on oil may be just a source of general government expenditure. Thus, in countries with high government expenditures, taxes will also be high. A related consideration is that, where a government has a particular source of income, such as large natural resources, it may refrain from imposing oil tax.

Third is the equity consideration. In low income countries, the rich who have a car will be more affected by oil tax than the poor who will only experience the tax indirectly (for example, via public transport prices). This impact is in accordance with the ability to pay principle, which says that the rich should bear a relatively larger share of the tax burden than the poor. However, in higher income countries, fuel consumption in connection with road use is not a luxury good so that, in higher income countries, a government that follows this principle should look for alternative tax bases such as income tax. However, since governments are usually reluctant to make drastic changes in tax system, oil tax that was once motivated by the ability to pay principle may simply be retained even after its attractive equity effects have vanished in the course of time.

Fourth is the efficiency consideration. Oil is often chosen as a tax base because costs of tax collection are low and fraud is difficult. In addition, oil tax may be attractive when it leads to small distortions in the economy. This depends on the question to what extent oil demand is inelastic. This is done by the rule that taxes should be imposed such that the resulting relative changes in prices will be inversely proportional to the elasticity of demand of various products. If elasticity of demand is close to zero, then in these countries, oil taxes would be higher.

Fifth, in an international context, tax competition may occur. Government may impose low tax levels to attract consumers from other countries.

Sixth, oil may be taxed to correct for negative externalities such as congestion and environmental pollution.

Finally, the levels of oil taxes will depend on the power of interest groups that succeed in reducing tax.

These theoretical considerations would be useful to analyze and understand what should be the tax rate for a country, with its income profile, elasticity and social costs of use of oil.

In India, oil sector plays a significant role in the country's fiscal operation. Apart from the dividend paid by profit making PSUs under the Ministry of Petroleum & Natural Gas (8 PSUs paid above Rs 6,300 crores in 2004-05), two predominant sources of revenue for the Central Government are: (a) Union Excise Duties and (b) Customs duty; both from Oil sector. Besides, every State Government earns Sales Tax and each municipal body earns octroi on petroleum products.

Central government alone earned Rs 56,395 crores (Rs 43,145 from Excise and Rs 13,250 from Customs) in 2004-05 from oil sector by way of Union Excise Duty and Customs Duty. It constitutes 17% of the total tax revenue of Government of India, on annual average basis for last 15 years.

During last 15 years, revenue from Union Excise duties grew at 16% and that from customs duties grew at 12% on annual average basis. One of the underlying bases of this nominal growth is the *ad-valorem* nature of our duties, which has a large degree of buoyancy with respect to volume of petroleum products consumed in the country. Union Excise Duties earned from petroleum sector constitutes 28% of total revenue on account of Union Excise Duties. Revenue earned from Customs Duties from oil sector constitutes 23% of total revenue earned by Government of India under that account.

Upstream Oil Companies pay royalty and oil development cess to the State and Central Governments. On an average for last 15 years, over Rs 5,000 crores per annum is accruing to the state exchequer on this account.

Effective 2002-03, subsidy for LPG and Kerosene has been provided from the Union budget. Further, under recoveries of Oil Companies are also being settled by issuing special bonds. All these directly or indirectly impact the fiscal affairs of the country. This has been elaborated in this Chapter under Section 6.3, Oil Sector's linkage with Inflation.

Summarily, Oil Sector brings about impact on country's fiscal affairs through the following ways:

- Oil Sector provides revenue to Union, State and local level governments. Revenue earning for the Government is a very important function, which supports all activities of the Government, including basic civic facilities and defence services
- Oil Sector takes subsidies from the exchequer, which is an expenditure for the Government
- Oil Sector may require bonds to be issued by the Government, which may result in creating public debt.

Ever since reforms undertaken in the Oil Sector, all these three measures have been altered in varying degrees and they had impact on Country's exchequer. On the whole, Oil Sector is a big revenue earner for the country's exchequer.

There have been instances in last 2 years, when the tariffs on petroleum products and crude oil have been reduced, as detailed below: (also see section 5.3.5, Chapter V)

- e. 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.
- f. 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%.
- g. Effective 1<sup>st</sup> March 2005, the customs and excise duty on PDS kerosene and LPG for domestic use were reduced to zero.
- h. 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).

These reductions in tariff rates have been revenue neutral as can be seen from the Table 6.1 below:

**Table 6.1: Revenue Realization from POL Products**

(Rs Crores)

	1990-91	1995-96	2000-01	2001-02	2002-03	2003-04	2004-05
Union Excise Duties	5,478	7,159	24,663	29,337	35,961	40,151	43,145
Annual Growth (%)	-	6.9	22.1	19.0	22.6	11.7	7.5
Customs Duties	3,701	8,453	11,249	6,767	9,166	10,582	13,250
Annual Growth (%)	-	36.1	- 9.7	- 39.8	35.5	15.4	25.2
Royalty & Cess	4,998	4,685	5,608	6,023	8,936	9,171	10,637
Annual Growth (%)	-	5.8	5.6	7.4	48.4	2.6	16

Source: Indian Petroleum & Natural Gas Statistics, Ministry of Petroleum & Natural Gas, successive issues, latest 2004-05

IMF in its latest country review has made the following observation (IMF 2006):

'Following three years of declining fiscal deficits, a "pause" in deficit reduction was announced for 2005/06. The central government fiscal deficit came in below target in 2004/05 for the second consecutive year, helped by a cyclical rebound in revenue and expenditure compression, but also reflecting greater recourse to off-budget petroleum subsidies.'

Dwelling on the impact of higher oil prices, IMF (2006) observed, 'Despite recent price increases, the pass through of international prices remains incomplete. After an increase of about 7 percent in September, domestic gasoline and diesel prices remain around 10 percent below import parity levels (nevertheless, at \$0.96 and \$0.67 per liter respectively, they are relatively high because of taxes). Prices of kerosene and LPG, however, require much larger increase. To limit price increases, the government has also lowered oil taxes and partly replaced ad valorem with specific excises. The average price adjustment required in India to achieve full pass through is similar to that in other countries in Asia.'

IMF (2006) further observes, 'Price controls are imposing quasi fiscal costs. Costs amounted to ¾ percent of GDP in 2004/05 and ½ percent of annual GDP in the first half of 2005/06. The bulk has been borne by state petroleum

companies with explicit budget subsidies only amounting to 0.1 percent of GDP per year. While these subsidies (especially those for kerosene) have shielded some poor households from the impact of higher oil prices, there is substantial leakage of benefits to higher income households (almost 40 percent in the case of kerosene).'

Government of India's way of handling the international oil price hike by means of partial pass through to the consumers has been perceived to be fraught with risks by IMF. IMF (2006) observes, 'Incomplete oil pass-through was adding to budgetary pressure and preventing adjustment of demand to permanent price changes. With high oil prices likely to be permanent, a move to full pass through with adequate compensation mechanism for the poor would serve India well by curbing rising quasi fiscal costs and encouraging improvements in energy efficiency, which would also help preserve India's competitiveness overtime. IMF supported the recommendations of the Government of India's 2004 report on central subsidies to phase out LPG subsidies, which are regressive and to improve the targeting of kerosene subsidies, given large leakage. In the short run, the latter could be achieved by restricting subsidies to below poverty line households under the existing ration card system.'

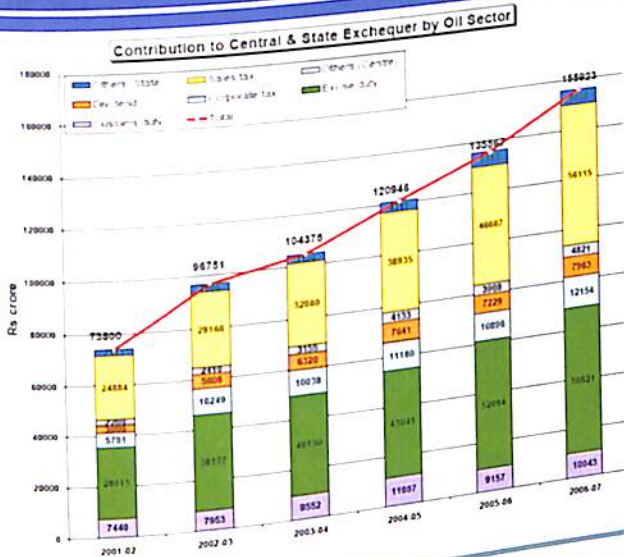
IMF encouraged Indian Government to replace subsidies with targeted support, such as cash transfer to the poor.

IMF has estimated that PSU Oil marketing companies have suffered 0.5 percentage points of GDP in revenue losses due to the lack of pass through in the first half of 2005-06.

Planning Commission (2006) in its draft approach paper to XI Plan summarizes the issue and writes, 'for India, the persistence of high oil prices does pose difficult choices between: (a) passing on the price increase to the consumer, (b) lowering taxes on petroleum products and (c) squeezing the oil companies. Each of these options has some adverse consequences, and the government has resorted to a combination of all three in the past twelve months. In the medium term, the only viable approach is to rationalize taxation on petroleum products and then pass on the bulk of the burden of higher oil prices to consumers with targeted subsidies to protect the interests of the poor.'

# Exhibit - 9

## Oil Sector's Contribution to State



## Section 6.2 - Oil sector's impact on Country's forex reserves

The main objectives in managing a stock of foreign exchange reserves for any developing country, including India, are preserving their long term value in terms of purchasing power over goods and services and minimizing risk and volatility in return. In India, reserves are held for precautionary and transaction motives, to provide confidence to the market, both domestic and external, that foreign obligation can always be met.

India followed a restrictive external sector policy until 1991, mainly designed to conserve limited foreign exchange reserve for essential imports (petroleum goods and food grains), restrict capital mobility and discourage entry of multinationals. The external sector strategy since 1991, though gradualist in approach, has shifted from import substitution to export promotion and has the following key elements: (i) sufficiency of reserves, (ii) stability in the foreign exchange market, and (iii) prudent external debt management.

## Oil Sector Reforms in Downstream Segment

India has been an import dependent country in the oil sector. As such, oil import casts a heavy shadow on country's balance of payment position. India imports crude oil as well as refined petroleum products.

Indigenously produced crude oil is not enough to meet the refining capacity of our country. Deficit crude oil is imported and Indian refinery capacity is always attempted to run up to full capacity. Therefore, crude oil is imported as an intermediate feedstock. The refined petroleum products are also imported to the extent specific products is found to be deficit.

Crude oil production in the country depends upon explored reserves and actual production. In 1990-91, India imported 21 million tonnes (MMT) of crude against 52 MMT of crude oil processed in the refinery. Country was import dependent to the extent of 40% and was self sufficient to the extent of 60%. Over a period of time, import dependence has increased to a level of 75%. In 2004-05, eighteen refineries in India processed 127 MMT of crude, from which 96 MMT was imported. During last 5 years, Rs 80,500 crores is spent in dollar in importing crude oil on annual average basis, highest ever amount was spent in 2004-05, that is Rs 1,16,800 crores, reflecting partly the spiraling rate of crude oil in international market. Table 6.2 below reflects the trend of crude oil import in India from 1990-91 onwards:

**Table 6.2: Import of Crude Oil**

	Unit	1990-91	1995-96	2000-01	2002-03	2003-04	2004-05	2005-06
Quantity	TMT	20699	27342	74097	81989	90434	95861	99409
Value	Rs	6118	11517	65932	76195	83528	117003	171702
Import Cost	Crores						12,205	17,272
	Rs / MT	2,956	4,212	8,898	9,293	9,236		

Source: CMIE, Energy, February, 2007



## Oil Sector Reforms in Downstream Segment

Table 6.3 below reflects the how unit value of imported petroleum products has gone up in recent years, especially from 2000-01 onwards.

**Table 6.3: Imports Unit Value Index Numbers of Petroleum Products**

(1978-79 = 100)

	June	September	December	March
1990-91	229	514	407	332
1991-92	419	446	422	393
1992-93	463	446	416	483
1993-94	463	440	392	391
1994-95	463	440	446	463
1995-96	443	435	571	572
1996-97	462	473	743	628
1997-98	571	664	553	420
1998-99	545	575	385	482
1999-2000	435	475	932	996
2000-01	567	867	932	985
2001-02	1118	1280	760	970
2002-03	1011	1058	1108	1219
2003-04	1018	1151	1196	1250
	1034	1056		

Source: Monthly Abstract of Statistics, Central Statistical Organization, successive issues

The figures in Table 6.3 reflects the high price at which India has been importing crude oil and petroleum products, more so since the commencement of reforms (from the second quarter of 1999-2000 and further from the second quarter of 2002-03). These indices reflect the behavior of imported crude, products and also the value of US dollar. The net result of all these components, in varying degrees, has added to the cost structure of the Indian Oil Industry.

With high and increasing level of consumption of petroleum products, India conventionally has been an importer of petroleum products. Historically, refining capacity has lagged behind the demand and therefore import of petroleum products has been a perennial feature in India. In 1990-91, India imported 8.7 million tonnes of product at Rs 4,659 crores. Import of petroleum products continued at an increasing rate and reached a level of 23.8 MMT in 1998-99 at a value of Rs 12,276 crores. From that year onwards, import of refined petroleum products have declined and in 2004-05, it was only 8.9 MMT at Rs 14,950 crores. In fact, from 1998-99 onwards, India started exporting petroleum products.

In the pre-1998-99 period, middle distillates constituted the predominant part of import, close to 80 to 90%. In the post 1998-99 periods, light distillates, namely LPG and Naphtha constitute the predominant part of import, which is 50 to 60% of total imported products.

Import of POL products in value terms constitute 29% of total imports undertaken by the country, in terms of annual average value for last 5 years. During the same period, 34% of country's export realization has been spent in importing POL products. With POL exports gaining momentum since 2000-01, 5% of country's export realization comes from POL sources.

India's crude oil import bill jumped over 24 per cent to 48.1 billion dollars in 2006-07 on back of rise in international prices. The country imported 110.85 million tonnes of crude oil in 2006-07, which is 11.5 per cent up from 99.4 million tonnes bought in 2005-06. In terms of rupee, crude oil imports cost Rs 219,991 crore in FY'07 against Rs 171,702 crore in the previous year. Oil product imports at 16.96 million tonnes for 8.89 billion dollars (Rs 40,389 crore) in 2006-07 were up 45.2 per cent over 11.67 million tonnes of products worth 5.86 billion dollars (Rs 25,575 crore) imported last year. Total imports (crude plus products) in 2006-07 were worth 56.99 billion dollars (Rs 260,380 crore) against 44.64 billion dollar (Rs 197,278 crore) worth of imports last year. Export of petroleum products in the year was up 50 per cent to 32.39 million tonnes worth 17.64 billion dollars (Rs 80,172 crore). Last year 21.5 million tonnes of products were exported for 10.54 billion dollars (Rs 46,785 crore).

India's fuel demand grew 5.9 per cent to 119.84 million tonnes in 2006-07. During 2006-07, 11.64 million tonnes of diesel was exported for 6.59 billion dollars (Rs 30,044.6 crore), 8.3 million tonnes of naphtha for 4.68 billion dollars (Rs 21,204 crore), 3.69 million tonnes of petrol for 2.31 billion dollars (Rs 10,538 crore) and 3.66 million tonnes of Aviation Turbine Fuel (ATF) for 2.26 billion dollars (Rs 10,297 crore). Major petroleum products imported included 1.96 million tonnes of LPG for 1.09 billion dollars (Rs 4,946 crore). Net oil import bill (total imports minimum exports) stood at 39.34 billion dollars (Rs 180,208 crore) in 2006-07 against 34.09 billion dollars (Rs 150,493 crore) in the previous year.

Experts hold the view that India would become an oil exporter of around 1.5 million barrels a day (b/d) by 2010, which could rise to 1.65 million b/d by 2012, as India is planning to add nearly 1.8 million b/d of refining capacity between 2007 and 2017. As India's oil product demand is projected to grow by only 635,000 b/d in the same period, which is significantly lower than the new capacity, India could export some 1.5 million b/d by 2010 and 1.65 million b/d in 2012. India would become Asia's largest product exporter in refined products, surpassing Singapore.

IMF in its latest country review (IMF 2006) has made the following observation:

'After several years of current account surpluses and growing reserves, the investment recovery and consumption boom have pushed the external current account into deficit. In 2004/05, the trade deficit widened to over 5½ percent of GDP and the current account reverted into deficit for the first time in three years, notwithstanding high growth in services income. While export growth continues to be strong, a large increase in both oil and non-oil imports caused the trade deficit to widen further this year, and contribute to a sharp deterioration in the current account deficit. IMF projects it to reach 3 percent of GDP in 2005/06.

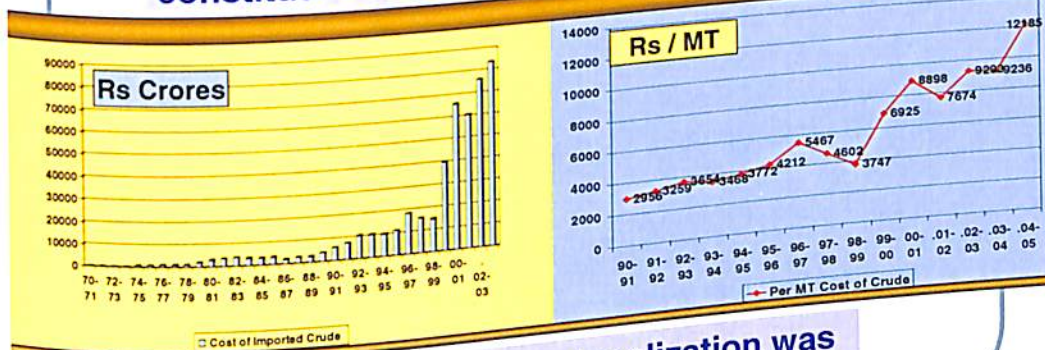
The balance of payments position remains comfortable with strong capital inflows helping finance the growing current account deficit. In 2004/05, close to half of all capital inflows were debt creating, as Indian corporate took advantage of favorable global interest rates, an appreciating rupee, and the liberalization of restrictions on external commercial borrowings to borrow abroad. While portfolio flows have continued to gain importance, FDI inflows remained weak. So far this fiscal year, capital inflows have remained strong and reserves have only fallen modestly as a result of the redemption of the India Millennium Deposits. While more reliance on debt and portfolio inflows has increased India's susceptibility to changes in investor sentiment, ample reserves and remaining capital controls limit risks of potential reversals.'

As India's Oil Industry gets integrated with the global Oil Industry, developments in external sector, especially on pricing front, gets imported into the country, which is a real factor for the management of country's balance of payment. Commenting on 'Capital Account Liberalization and Capital Control' at Central Bank Governors' symposium convened by Bank of England in London on June 25, 2004, Dr. Y.V. Reddy, Governor Reserve Bank of India observed, 'Capital account liberalization is a process and it has to be managed keeping in view elasticities in the economy and vulnerabilities or potential for shocks. These include fiscal, financial, external and even real sector – say oil prices and monsoon conditions for India.' Similar view was raised by Dr. Reddy in annual meeting of Bank for International settlement, Zurich on June 27, 2004, when he observed, 'I would like to highlight three aspects of financial stability. First, we keep in mind our vulnerability to real sector shocks which would affect financial stability. The major sources of such shocks in India are very sharp rise in oil prices and extraordinary monsoon failures.'

## Exhibit - 10

### Cost of Imported Crude

Import of POL products in value terms constitute 29% of total imports



34% of country's export realization was spent in importing POL products

### Global Imbalance

The high crude oil price has not only contributed to an adverse balance of payment position in India, it has also partly contributed to trigger a global imbalance. The current global imbalance is reflected in large mismatches in the current account positions in some countries and its mirror image in the form of domestic saving investment mismatch. For instance, the US current account deficit was 6.4 percent of GDP in 2005 and stood at US \$ 805 billion. While the current account surplus of Japan and emerging Asia accounted for about 60 percent of the current account deficit of the US.

The emergence of large current account surpluses among the oil exporting countries is an important recent development. The current account surplus of the oil exporting countries increased from 6.2 percent of their GDP in 2001 to 19.1 percent in 2005. Less than third of the combined current account surplus of the oil exporting countries has been reflected in their foreign exchange reserves which rose by US \$ 90 billion in 2005. To the extent that higher net savings by oil exporters have driven down global interest rates and that these lower rates have boosted demand in economies with market based financial systems, such as the United States, the oil price shock may also have had an additional negative effect on the US external position.

The fact remains that the rising oil prices would result in further widening of global current account imbalances as, the current account balance of the US is projected to deteriorate further in 2006. Other industrialized economies are projected to run a combined surplus led mainly by Japan and Germany. The aggregate current account surplus of the major oil exporting countries is expected to increase further in the near term.

In this regard, it may be noted that India's oil import bill amounted to 2.9 percent of GDP in 2001-02, but the bill climbed to 5.5 percent of GDP in 2005-06, though in volume terms the increase has been marginalized.

### Foreign Direct Investment

Foreign Direct Investment (FDI) flow, as per economic theory, is foreign savings supplementing domestic savings, which would help augment investment that in turn would push up growth, given the productivity of investment. However, productivity of investment would get a boost either simultaneously or with a short lag, when FDI provides technological improvements along with financial flows.

Portfolio flows by definition are not the same as FDI. Portfolio flows could also raise the saving rate in case the additional expenditure incurred in the stock markets by foreign investors translate, in the next round of societal expenditures, into a marginal propensity to consume that is less than unity. It is however not easy to quantify the savings that may be generated from the increase in gross national expenditures triggered by portfolio flows.

More importantly, portfolio flows provide liquidity to capital markets and raise expectations of growth in trading volumes. The flows create additional financial resources. There is a presumption that in the case of flows in the primary issues market, the recipient corporations would be enabled to use the additional resources efficiently. This presumption is based on the argument that the flows reduce the cost of capital. Where the flows are in the secondary market, the additional resources tend to increase the stock prices.

Foreign direct investment (FDI) is an important source of foreign exchange. Indian Oil sector (both upstream and downstream) unfortunately is not a good destination for FDI. However, India on account of strong growth prospect and policy liberalization is recognized to be a good destination for FDI. World Investment Report, 2005 makes a mention that 'on the policy front liberalization is continuing and has intensified in key developing economies such as China and India'. The Report also mentions that 'India has also been opening up important industries, such as telecommunications, construction and real estate to FDI.' Looking at prospects for FDI, the Report observes, 'flows to India should continue to increase, especially in steel, telecommunications, infrastructure and finance.'

The economic reform in general and liberalization of FDI policy in particular have affected the magnitude and pattern of FDI inflows received by India. During the 1990s, they showed a marked increase until 1997, when they peaked at \$ 3.6 billion. However, after stagnating for a few subsequent years at around \$ 2.5 billion, they rose again to a level of about \$ 3.4 billion and to \$ 4.3 billion in 2003. The magnitude of FDI inflows received by India would appear too small, especially if compared with inflows received by other countries in the region such as China (\$ 50 billion in recent years).

In an analysis of role of liberalization in explaining the rising inflows of FDI till 1997, it is found that only a part of the increase in FDI inflows could be attributed to liberalization and a part of the rise was explained in terms of a sharp expansion in the global scale of FDI outflows during the 1990s. (Kumar, 2005)

**Table 6.4: Industrial Distribution of India's Inward FDI Stock (1989 – 1997)** (Rs Million)

Sr. No	Industry Group	End March				1997	
		1980		1990		Value	Percent
		Value	Percent	Value	Percent		
1	Plantations	385	4.13	2560	9.46	4310	1.18
2	Mining	78	0.84	80	0.30	410	0.11
3	Petroleum	368	3.94	30	0.11	3330	0.91
4	Manufacturing	8116	86.97	22980	84.95	175230	48.00
5	Services	320	3.43	890	3.29	54650	14.97
6	Others	65	0.70	510	1.89	127170	34.83
	Total	9332	100	27050	100	365100	100

Source: (Kumar, 2005)

The sectoral composition of FDI in India has undergone significant change in 1990s, as presented in Table 6.4. The share of petroleum has fallen markedly from 3.9 percent in 1980 to 0.1 percent in 1990. However, it has picked up to 0.9 percent in 1997 (that is the year for which latest data is available).

The bulk of FDI inflows in the pre-liberalization era were directed to manufacturing sector. It accounted for 87 percent share in 1980 that declined marginally to 85 percent in 1990. Liberalization of FDI brought in bulk of flows to services sector. Power generation among other infrastructure sectors (included in Others) have also attracted substantial FDI during 1990s.

Shell, for example, is an important FDI investor in India, having committed firm investment of more than \$ 750 m to India, including a \$ 600 m port and India's first private sector LNG terminal at Hazira. Shell has been allowed to set up 2,000 retail outlets for marketing auto fuels. Despite being a major investor, the Company does not find it easy to get into real business. Major hurdles for them are: a) gas prices are still regulated for PSU companies; b) access to pipeline,

controlled by GAIL is not certain; c) prices of auto fuels are still not revised in line with international price.

## Section 6.3 - Oil sector's linkage with Inflation

Indian monetary authority keeps a close watch on the movement of prices in oil sector, global oil prices as well as domestic oil prices. One of the key objectives and indicators of monetary policy is to maintain a stable price level in the domestic market. Instability in price level in a developing country like India would invariably lead to inflation. Inflationary pressure in the economy is antidote to development. It hits the poor hardest as their purchasing power gets eroded with increase in price level. Further, study has shown that inflation leads to 'inflation uncertainty' and thereby having a negative output effect in India. This strengthens the case for the Central Bank to focus on price stability as one of the prime objectives of monetary policy. (Thornton, 2006)

With the progress of deregulation that is sweeping across the sectors in the economy, the money market, capital market and financial market are getting increasingly integrated with global market. Oil prices in the international market have a great influence on prices of other commodities as is evident in the following passages taken from the Reserve Bank of India's commentary on macro-economic policy.

'Headline Inflation, which had edged up sharply during September 2005 on account of international crude oil prices reaching record highs in August 2005, eased marginally during the fourth quarter of 2005 in tandem with some moderation in crude oil prices. Notwithstanding the recent easing, headline inflation remains at elevated levels – above the targets in case of many central banks. The impact of higher oil prices on economic activity and inflation expectations seems to have been largely contained, reflecting a variety of factors such as increased competition due to globalization, fall in intensity of oil usage in advanced economies, continuous pre-emptive monetary tightening through measured increases in policy rates and, in case of many emerging economies, less-than-complete pass-through. Nonetheless, as a significant part of the increase in international crude oil prices is increasingly viewed as somewhat permanent, the outlook for inflation remains uncertain in view of possible second round effects.'

In India, headline inflation (measured by year on year changes in the wholesale price index) and inflation expectations remained well-contained during 2005-06, despite continued dominance of supply-side factors. As on end March 2006, it was 4% as compared with 5.1% a year ago. Fiscal and monetary measures undertaken since mid-2004 to reduce the impact of imported price pressures on

domestic inflation and to stabilize inflationary expectations have been successful in containing inflation towards the desired trajectory during the financial year.

Inflation initially increased during 2005-06 to an intra-year high of 6% on April 23, 2005 reflecting increases in prices of fruits and vegetables, iron and steel and select petroleum products such as furnace oil and naphtha. Subsequently, with the base effect coming into play and the revival of the monsoon, inflation began to ease reaching an intra-year low of 3.3% on August 27, 2005. Inflation again edged up during the third quarter of 2005-06, but remained below 5%, under the impact of the hike in petrol and diesel prices in early September 2005 as also a rise in vegetable and cotton prices. Petroleum products alone contributed about 41% of headline inflation.

Domestic petroleum products prices have lagged the increase in international crude oil prices, with the burden being shared by the oil companies and the Central Government. It needs to be stressed that the pass-through of higher international oil prices has been restricted mainly to petrol and diesel. Domestic prices of LPG and kerosene have remained unchanged during the year. As compared with an increase of about 87% (from US \$ 31.9 a barrel to US \$ 59.6 a barrel) in international crude oil prices (the Indian basket) between March 2004 and March 2006, domestic petroleum product prices in the WPI basket have increased by about 31% over the same period (petrol by 28.4% and diesel by 40.1%).

**Table 6.5: Wholesale Price Inflation in India (Year on Year)** (Percent)

Commodity	Weight	March 26, 2005		March 25, 2006		March 31, 2007	
		Inflation	WC	Inflation	WC	Inflation	WC
All Commodities	100	5.1	100	4	100	5.7	100
1. Primary Articles	22.0	1.3	5.5	5.3	28.5	10.7	40.4
Food articles	15.4	3.0	8.9	6.3	23.8	8.3	22.3
i. Rice	2.4	2.9	1.3	2.5	1.4	5.7	2.1
ii. Wheat	1.4	- 1.1	- 0.3	12.3	4.2	7.6	1.9
iii. Pulses	0.6	- 2.6	- 0.3	26.4	3.6	12.0	1.4
iv. Vegetables	1.5	11.9	2.3	14.1	3.7	1.4	0.3
v. Fruits	1.5	11.5	4.1	- 3.0	- 1.5	5.5	1.7
vi. Milk	4.4	- 1.7	- 1.5	1.9	2.0	8.4	6.0
vii. Eggs, Fish & Meat	2.2	7.3	3.1	13.5	7.6	11.1	4.6
Non-Food Articles	6.1	- 6.9	- 8.8	- 1.5	- 2.2	16.6	15.5



i. Raw Cotton	1.4	- 23.8	- 6.5	- 0.6	- 0.1	21.4	3.6
ii. Oil Seeds	2.7	- 6.5	- 3.4	- 7.6	- 4.5	30.6	11.0
iii. Sugarcane	1.3	- 0.7	- 0.2	0.7	0.3	1.1	0.3
<b>Minerals</b>	0.5	68.0	5.3	43.4	7.0	17.0	2.6
i. Iron Ore	0.2	119.1	5.2	59.7	7.0		
<b>2. Fuel, Power, Light &amp; Lubricants</b>	<b>14.2</b>	<b>10.5</b>	<b>42.7</b>	<b>8.9</b>	<b>49.1</b>	<b>1.0</b>	<b>4.1</b>
i. Mineral Oils	7.0	16.0	34.9	13.2	40.8	0.5	1.2
ii. Electricity	5.5	0.8	1.2	4.5	8.4	2.3	2.9
iii. Coal Mining	1.8	17.1	6.4	0.0	0.0	0.0	0.0
<b>3. Manufactured Products</b>	<b>63.8</b>	<b>4.6</b>	<b>52.0</b>	<b>1.5</b>	<b>22.1</b>	<b>5.8</b>	<b>55.9</b>
i. Food Products	11.5	0.4	0.9	2.4	6.3	6.4	11.3
Of which: Sugar	3.6	19.7	10.3	7.3	5.6	- 12.7	- 6.9
Edible Oils	2.8	- 8.4	- 4.0	- 2.4	- 1.3	14.7	5.1
Oil Cakes	1.4	- 17.4	- 6.4	- 9.7	- 3.6	NA	NA
ii. Cotton Textiles	4.2	- 12.7	- 10.4	0.8	0.7	- 1.0	- 0.6
iii. Man Made Fibre	4.4	0.6	0.3	- 4.9	- 2.7	3.7	1.3
iv. Chemicals and Chemical Product	11.9	3.9	9.1	1.8	5.4	2.9	5.8
Of which: Fertilizers	3.7	3.3	2.2	0.2	0.1	1.8	1.0
v. Basic Metals	8.3	17.1	28.4	- 2.9	- 6.8	11.0	17.6
Of which: Iron & Steel	3.6	21.3	17.0	- 7.5	- 9.0	7.5	5.8
vi. Non metallic mineral products	2.5	11.4	4.7	8.5	4.8	9.0	3.7
Of which: Cement	1.7	10.2	2.9	13.0	4.9	11.6	3.3
vii. Machinery and	8.4	7.1	8.6	3.3	5.4	8.0	8.8

machine tools							
viii.	4.3	6.2	4.3	1.1	1.0	2.1	1.2
Transport Equipment and Parts							
Memo							
Food Items (Composite)	26.9	1.9	9.8	4.7	30.1	7.5	33.6
WPI Excluding Food	73.1	6.3	90.2	3.7	69.9	5.1	66.4
WPI Excluding Fuel	85.8	3.7	57.3	2.6	50.9	7.1	95.9

WC – Weighted Contribution

Source: Reserve Bank of India Monthly Bulletin, latest, May 2007

During fiscal 2006-07, when primary articles and manufactured products drove the inflation up, prices of fuel products group was a soothing factor to overall inflation stance. The price index of fuel, power and lubricant group was up just by 1.5 percent for the week ended March 10, 2007, whereas inflation related to primary articles and manufactured products soared to 12 percent and 6.5 percent, respectively. Falling international prices of crude oil offered a space to government to cut the domestic prices of petrol and diesel prices in November 2006 and February 2007 in order to ease inflationary pressure.

But the current revival in crude oil prices and the possibility of it remaining at such elevated levels could be a cause of concern. Crude oil touched \$ 75 (WTI) to 77 (Brent) per barrel on July 17, 2007, the highest in 2007. The resurgence in crude oil prices was largely due to increasing tension on Iran's nuclear program causing a worry on possible disruption in oil supplies. The prices are expected to gain further momentum, as the demand factors are also set to get activated. Summer driving season in the US is about to begin and the augmentation of the US crude stockpiles will increase the demand.

High crude oil prices will not have a direct impact on domestic inflation numbers, as the domestic prices of petroleum products (auto and cooking fuels) are controlled in India. But the cascading effect of spiraling oil prices bears a large risk for Indian economy. It may put pressure on the current account position through the burgeoning trade deficit. (Examined in Section 6.2) On the industry front, it may further add to cost pressures amidst elevated metal prices, increasing raw material costs and rising interest rates, leaving little leeway for cooling manufactured product prices.

One method of examining Oil prices' contribution to inflation is to see its impact through WPI and relate it with the contribution from other energy sources. The current series of WPI with base 1993-94 was introduced with effect from April 2000. In that series, petroleum products carry weight 6.99, higher than other energy items like coal (1.753) and power (5.484). If prices of petroleum products rise say by Re 1, WPI will rise by 7 paise or by 0.07%. In the current series, there are 10 petroleum products included whose total weight is 6.99.

The previous series with base 1981-82 was in use from July 1989 to April 2000. In that series, crude oil was an item in the group 'Primary Article / Mineral' with weight 4.274. In the new series, this item has been removed and the weight has been spread over the products. In the previous series, besides crude, petroleum products carried weight, 6.666 and were in the group 'Fuel, Power, Light and Lubricant'.

**Table 6.6: Movement of WPI vis-a-vis Petroleum Products and other Energy Items**

WPI : Base 1993-94 = 100, end month April of corresponding year  
Inflation: In percentage year on year basis

Year	Petroleum Products		All Commodities		Coal		Power	
	WPI	Inflation	WPI	Inflation	WPI	Inflation	WPI	Inflation
1999	144.2	-	142.7	-	143.6	-	166.3	-
2000	204.6	41.9	151.6	6.2	156.3	8.8	191.4	15.1
2001	239.6	17.1	160.0	5.5	184.6	18.1	213.4	11.5
2002	242.6	1.3	162.8	1.8	181.1	- 1.9	230.5	8
2003	275.1	13.4	173.7	6.7	181.1	0	245.8	6.6
2004	287.8	4.6	181.2	4.3	197.8	9.2	252.8	2.8
2005	338.6	17.7	192.1	6.0	231.6	17.1	254.8	0.8

Source: RBI Monthly Bulletin, successive issues

In the aftermath of reform in April 1998 and April 2002, when Indian Oil Industry was attempted to be integrated with world oil market by adopting import parity pricing method, there is a clear evidence that the volatility in international oil market got transmitted to domestic oil market. The index of Petroleum products wildly oscillated between 41.9 percent in 1999-2000 to 1.3 percent in 2001-02. However, that volatility in oil products was managed by the monetary and fiscal policy measures, as explained above. The headline inflation was very much in control in all the years, the maximum being 6.7 percent. Prices of other energy sources like coal and power were also well maintained, except 2000-01, in which there was a high upward movement to the extent of 18.1 percent and 11.5 percent, respectively.

This has been the experience of almost all Asian countries, as observed by IMF, in World Economic Outlook, 2006. 'Headline CPI inflation has risen over the past year in most countries, largely due to higher energy prices, although core inflation has also picked up sharply in Indonesia, Philippines and to a lesser extent in Thailand. Asset prices have continued to rise strongly, with equity markets posting record highs and property prices continuing to surge. Against this background, many central banks have moved to raise interest rates, although real rates remain low and short term interest rate differentials have generally moved in favor of the U.S. dollar over the past year, one factor behind the moderation of non FDI capital inflows into the region. Looking forward, monetary policy may need to be tightened further in countries where inflationary pressures have yet to retreat (India, Malaysia and Thailand). On fiscal policy, the favorable outlook provides an opportunity for countries with high public debt (particularly India, Indonesia, Pakistan and the Philippines) to take steps to put their public finances on a sustainable medium term footing.'

This has happened despite the fact that import parity pricing method has not been truly and completely followed. Domestic selling prices of petroleum products have not been revised time to time in line with import parity. International price has not been completely passed on to the consumer. Oil companies have not been allowed complete freedom to revise the prices of auto fuels (petrol and diesel) and kitchen fuels (kerosene and LPG).

This has resulted in huge under recovery by the marketing Oil Companies. The Management of Oil Companies, policy makers in the Planning Commission, Petroleum Ministry, Finance Ministry and RBI, all were aware of this. On the face of it, the first impact of non-revision of prices of petroleum products was absorbed by Oil Companies. But there were incidence and consequences getting built up at so many other fronts; namely:

- Inflationary expectation was getting built up in the economy. Various economic agents in the economy like, producers, consumers, traders, retailers and investors were expecting a price hike. Media was keeping the likelihood of price hike alive in the mind of all sections of public. Inflationary expectation fuels inflation in other sectors of the economy, which was handled through monetary and credit mechanisms.
- It had fiscal affects, in more than one ways. First, there were attempts to reduce and adjust the taxation structure to give relief to the Oil Companies and the oil consumers. To that extent, government exchequer was deprived of its revenue. Secondly, bonds of various maturity periods were issued at different times to finance the under-recoveries of oil companies. Bonds are public debt and add to the interest burden. These bonds can have impact in the money market, if these are used as collateral to borrow money from banks. These bonds will be repaid at the time of maturity by

the Government, who will earn tax revenue to repay the carry forward liability of the past.

- Having pushed to heavy borrowing for working capital, Oil Companies created a pressure in the money and financial market. Depending upon liquidity in the money market and RBI's credit control stance, money and credit market was impacted.
- Capital market including institutional investors, foreign as well as domestic, watched every step of government and depending upon policy stance, reacted intensely, leading to volatility of market price of equity of PSU Oil Companies.

It will be interesting to see prices of which petroleum products rose during last 10 years, by seeing their price indices with 1993-94 = 100. (Table 6.7)

**Table 6.7: Wholesale Price Indices of Selected Petroleum Products**

(1993-94 = 100)

Products	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05
<b>LPG</b>	150.0	162.0	176.1	248.2	266.6	284.0	285.5	315.2
Variation	18.6	12	14.1	72.1	18.4	17.4	1.5	10.4
Order	H2	H6	H5	H1	H3	H4	H8	H7
<b>Petrol</b>	144.5	148.1	148.1	154.2	158.1	163.4	178.7	203.5
Variation	13.4	3.6	0	6.1	3.9	5.3	15.3	13.9
Order	H3	H7	H8	H4	H6	H5	H1	H2
<b>Diesel</b>	145.2	148.7	176.4	228.8	252.3	273.5	300.4	360.2
Variation	24.3	3.5	27.7	52.4	23.5	21.2	26.9	19.9
Order	H4	H8	H2	H1	H5	H6	H3	H7
<b>LD Oil</b>	141.8	143.4	168.2	232.2	243.8	233.0	284.6	366.3
Variation	8.1	1.6	24.8	64.0	11.6	-10.8	51.6	28.7
Order	H5	H6	H4	H1	H4	H7	H2	H3
<b>Kerosene</b>	101.1	100.9	101.9	270.2	304.0	359.7	359.2	357.9
Variation	0.3	-0.2	1.0	168.3	33.8	55.7	-0.5	-0.4
Order	H5	H6	H4	H1	H3	H2	H8	H7
<b>FO</b>	118.3	108.6	131.2	203.5	187.5	179.7	227.2	266.0
Variation	-2.0	-9.7	22.6	72.3	-16.0	-7.8	47.5	17.1
Order	H5	H7	H3	H1	H8	H6	H2	H4
<b>ATF</b>	109.6	109.6	109.6	144.2	152.1	135.7	149.3	174.1
Variation	2.5	0	0	34.6	7.9	-16.4	13.6	16.6
Order	H5			H1	H4	H6	H3	H2
<b>Lubes</b>	123.9	130.0	134.9	142.6	147.6	154.7	163.8	188.2
Variation	4.9	6.1	4.9	7.7	5.0	7.1	9.1	14.9
Order	H7	H5	H7	H3	H6	H4	H2	H1
<b>Naphtha</b>	144.8	146.1	191.0	294.7	265.6	256.5	315.6	429.8
Variation	25.0	13.0	44.9	103.7	-29.1	-9.1	59.1	36.2
Order	H5	H6	H3	H1	H8	H7	H2	H4
<b>Bitumen</b>	145.1	145.6	156.7	203.5	214.2	207.6	251.2	267.8
Variation	18.5	0.5	11.1	46.8	10.7	-6.6	43.6	6.6
Order	H3	H7	H4	H1	H5	H8	H2	H6
<b>All Commodities</b>	132.8	140.7	145.3	155.7	161.3	166.8	175.9	187.2
Variation	5.6	7.9	4.6	10.4	5.6	5.5	9.1	6.4
Order	H5	H3	H7	H1	H5	H6	H2	H4

Source: Indian Petroleum & Natural Gas Statistics, Various issues

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Table 6.7 above has taken price indices of 10 products for 8 years. 'All Commodities' index also has been taken during the same period. There are 4 years of 1<sup>st</sup> stage of removal of APM (colored yellow) and 3 years post APM (colored blue). The variation in the index of each product represent price rise for that product. The three highest rise of each product has been plotted (H1, H2, H3 colored) and the total of the ranking for each year has been taken to see the correlation amongst the price variables.

It is striking to observe from the above Table 6.7 that 2000-01 is the year, where variation in the indices of 'all commodities' is the highest and in the same year 8 out of 10 petroleum products also had the highest variation. Thus, there appears to be a great correlation in the movement of prices of 'all commodities' and those of petroleum products.

2003-04 happens to be the year, out of 8 years of price indices available, when 'all commodities' recorded second highest growth and in the same year 5 out of 10 petroleum products recorded the second highest growth and 1 product recorded the highest growth. This also substantiates that there is a great correlation in the movement of prices of 'all commodities' and those of petroleum products.

2001-02 is the 3<sup>rd</sup> year after the 1<sup>st</sup> phase of reform and 2003-04 is the 2<sup>nd</sup> year after the complete reform was undertaken in 2002-03. It can easily be concluded that dismantling of APM and adopting import parity price (partially) has played a significant role in contribution to domestic inflation.

RBI has made an observation, 'with no government intervention, each US dollar increase in crude oil price raises WPI inflation by 30 basis points, half of which is due to the direct effect and the other half to the indirect effect.' (Rakshit, 2005)

IMF in its latest country review (IMF 2006) has made the following observation:

"While inflation remains low, underlying pressures from buoyant domestic demand and higher international energy prices remain strong. Steps taken by the RBI to tighten liquidity in 2004/05, including raising reserve requirements and policy interest rates, and incomplete pass-through of higher oil prices helped keep WPI inflation low. With headline inflation hovering around 4½ percent year on year, the RBI raised overnight repo rates again in October 2005 and January of 2006, by a cumulative 50 basis points, citing concerns about the rapid pace of aggregate demand and monetary growth and high oil prices. Although inflation has remained contained, underlying pressures point to upside risks. In particular, domestic demand remains strong, as evidenced by a widening current account deficit and rapid credit growth'.

IMF (2006) has lauded the performance of India's first 3 years in X Plan and has appreciated the way reform measures are being undertaken. IMF observes, 'India's economic performance continues to be impressive. For the third year running, growing openness and rising consumer and investor confidence are helping sustain rapid growth, buoying foreign investor interest. Real per capita incomes have risen by over 50 percent over the past decade, igniting consumer expenditure and firms are investing in new capacity to tap growing internal and external markets. India's growth spurt has been accompanied by a marked opening to the regional and global economy. Import and export growth (including services) exceeded 33 percent per year in 2003-04, and the share of exports to Asia in India's total exports rose to about one third, up from less than one fourth in 2000.'

IMF (2006) also had a word of caution with regard to India's way of handling the high international oil prices. IMF observes, 'Thus far, the impact of high oil prices on growth has been limited. In addition to the incomplete pass-through of international prices, other factors have contributed to this: the rapid growth in exports of refined petroleum products; robust growth of other exports, as global demand has remained strong; the strong underlying productivity growth of India's economy – which allows for a smoother reallocation of resources in the face of a shock; and a supportive monetary policy, made possible by well anchored inflationary expectations.'

## Exhibit - 11

### Monetary Policy Concern for Oil Sector

Headline inflation, which edged up sharply during Sept. '05 on account of international crude oil prices reaching record highs in Aug '05, eased marginally during the fourth quarter of '05 in tandem with some moderation in crude oil prices.

Impact of higher oil prices on economic activity and inflation expectations have been contained, reflecting a variety of factors like:

- a) increased competition due to globalization,
- b) fall in intensity of oil usage in advanced economies,
- c) continuous pre-emptive monetary tightening &
- d) less than complete pass through



## Section 6.4 - Oil sector's role in Industrial performance

There are 14 central public sector undertakings in Oil Sector. Details of the enterprise along with their year of incorporation and their current level of profit and dividend are listed below: (Table 6.8)

**Table 6.8: Central Public Sector Undertaking under Ministry of Petroleum & Natural Gas**

Sr. No	Name	Year of incorporation	(Profit and Dividend of 2004-05 in Rs Crores)	
			Profit 2004-05	Dividend 2004-05
1	Oil & Natural Gas Corporation	1956	12983.05	5703.74
2	Kochi Refineries Ltd	1963	842.12	77.55
3	Indian Oil Blending Ltd	1963	- 4.88	1693.62
4	Indian Oil Corporation Ltd	1964	4891.38	105.00
5	ONGC Videsh Ltd	1965	402.98	178.71
6	Chennai Petroleum Corp. Ltd	1965	596.97	22.15
7	IBP Co. Ltd	1971	58.87	239.78
8	Bongaigaon Refinery & Petrochemical Ltd	1974	478.29	375.00
9	Bharat Petroleum Corp. Ltd	1976	965.80	509.00
10	Hindustan Petroleum Corp Ltd	1976	1277.33	342.41
11	Oil India Ltd	1981	1061.68	676.52
12	GAIL (India) Ltd	1984	1953.91	175.26
13	Mangalore Refinery & Petrochemical Ltd	1988	879.76	125.06
14	Numaligarh Refinery Ltd	1993	409.15	

Source: Public Enterprise Survey - 2004-05, Government of India, Department of Public Enterprise-Vol 2

A sound investment strategy along with technological and logistics planning has been the hallmark of Oil Industry in India. Till 2004-05, Government of India invested Rs 1,27,031 crores in capital assets in 14 central public sector oil companies in the country. These companies are professionally managed and have consistently earned profit. They have earned more profit after the reform process undertaken in 1990-91. During last 15 years, the gross profit (before interest and tax) has grown at annual average rate of 18%. During 1998-99 to 2002-03, the gross profit grew at annual average of rate of 26%. From 2003-04

onwards, growth in profit slowed down to 5%, primarily due to pricing issue as explained in pricing chapter.

These companies have shown a profit to capital invested ratio at 26%, average of 15 years. The return on capital has improved to 27.7% on annual average after 1998-99. Capital invested on cumulative basis has grown at an annual average rate of 16% during last 15 years. This kind of massive investment in oil sector through 14 central public sector enterprises has paid off handsomely at 26%.

PSU Oil company's shares have been disinvested partially by the Government, as detailed in Chapter V, section 5.6.4. These companies share are now widely held by public, including their employees and financial institutions and are being actively traded in stock exchanges. Downstream PSU Oil companies have performed well in the bourses. The shares of downstream PSU Oil companies have been considered as blue chips by the investors. In terms of returns to owners, all the PSU marketing oil companies have paid handsome to their investors. As the Table 6.9 below shows, the return from the four PSU marketing oil companies for last five years are far higher than the overall oil sector shares and also compares well with private and joint sector oil companies like RIL & MRPL. Ahluwalia (2005, c) observes, 'the overall generation of resources from industrial sector is well below the level assumed in the Plan. If the resources contributed by the oil sector are excluded, the performance of the other public sector organizations appears in a much poorer light'.

**Table 6.9: Return of Shares of Downstream Oil Companies** (Percentage)

	2000-01	2001-02	2003-04	2004-05	2005-06
<b>PSU Oil Companies</b>					
IIOC			237.1	- 7.07	36.54
BPC			128.94	- 22.87	22.72
HPC	- 7.58	30.67	82.01	- 35.93	8.65
CPCL	141.13	78.49	407.1	65.18	2.61
CRL	46.98	94.75	471.16	- 17.70	13.66
BRPL	6.19	23.04	490.28	32.72	- 22.25
MRPL	270.84	26.08			
RIL	- 13.55	15.00			
<b>Private &amp; Joint Sector Oil Companies</b>					
RIL			565.24	- 13.11	- 8.73
Castrol	- 51.84	- 12.58	97.05	2.69	127.73
COSPI *	- 17.99	- 47.06	12.49	3.12	36.95
<b>Overall Price Index of Marketing Oil Companies' Shares</b>					
CMIE Overall Share Price Index	- 24.50	- 14.51	142.13	- 5.97	69.68
Source: Capital Market, CMIE, successive issues, latest June 2006	- 1	0.36			

In terms of market capitalization, despite having only a minority percentage of share being available to public (majority is still held by the Government), IOC, HPC and BPC have captured on average 28%, 12% and 11% of the total market capitalization of about 15 downstream oil companies during last five years. This compares well even with Reliance, which has a market capitalization share of 31% amongst the downstream oil companies. (Table 6.10)

**Table 6.10: Market Capitalization of Shares of Downstream Oil Companies**

	(Rs Crores)				
	2000-01	2001-02	2003-04	2004-05	2005-06
<b>PSU Oil Companies</b>					
IOC			57945	51159	68259
BPC	12751	15562	14378	10605	12759
HPC	5746	9856	17209	10328	10853
CPCL	5450	9859	2158	3436	3284
CRL	447	499	2867	2157	2403
BRPL	648	771	1550	1807	1312
	140	161			
<b>Private &amp; Joint Sector Oil Companies</b>					
MRPL			9562	8309	7441
RIL	632	552	75132	76093	110833
Castrol	21546	13446	2424	2336	3090
	2855	2300			
<b>Overall Price Index of Marketing Oil Companies' Shares</b>					
COSPI *			183658	166962	221538
	50367	53170			

\* CMIE Overall Share Price Index

Source: Capital Market, CMIE, successive issues, latest June 2006

BPC & HPC shares are as frequently traded as those of RIL and their liquidity is much more than the liquidity of overall share of downstream oil companies as the data for last five years in the Table 6.11 below shows.

**Table 6.11: Liquidity of Shares of Downstream Oil Companies (Times)**

	2000-01	2001-02	2003-04	2004-05	2005-06
<b>PSU Oil Companies</b>					
IOC	0.01	0.01	0.20	0.17	0.06
BPC	0.15	0.20	1.06	0.95	0.38
HPC	0.27	0.26	1.98	1.67	0.50
CPCL	0.09	0.07	0.77	1.09	0.46
CRL	0.12	0.06	1.11	0.87	0.38
BRPL	0.14	0.08	NA	1.93	1.36
<b>Private &amp; Joint Sector Oil Companies</b>					
MRPL	0.01	0.02	0.35	0.32	0.23
RIL	0.20	0.27	1.37	1.58	1.49
Castrol	0.13	0.35	0.24	0.15	0.23
<b>Overall Price Index of Marketing Oil Companies' Shares</b>					
COSPI *	0.29	0.30	0.97	1.02	0.85

\* CMIE Overall Share Price Index

Source: Capital Market, CMIE, successive issues, latest June 2006

## Summary

To summarize, Oil Industry has integral linkages with other sectors of the economy at a macro level. As such the reform process in Oil industry impact critically on those sectors, namely, fiscal, external sector, general price level and industrial sector. The impacts of Oil Industry on the macro economy primarily get manifested either in fiscal deficit, or balance of payment deficit or in inflation. It is important that the dynamism and transmission mechanism of these impacts are understood and Oil Sector reforms are properly guided.

The analysis in this chapter brings out that, the domestic prices of petroleum products have been managed in a balanced way, in the face of unprecedented rise in the crude oil prices in international market. On the face of it, as discussed in Chapter V, Section 5.3, the pricing of petroleum products have not followed any orthodox or liberal kind of principle. It has been a cautious and pragmatic step, taken with due care, keeping in mind the general price level in the economy

on the one hand and fiscal effect on the other. The linkages with fiscal and monetary aspect and the oil prices have been analyzed and their impact has been brought out in this chapter.

Knowing the underlying equations, the policy makers have chartered a path which appears to have a more or less neutral stance on the general price level on the one hand and fiscal affairs on the other. All the options to manage the oil price as discussed in Section 5.3 and their impact on fiscal affairs (Section 6.1) and on inflation (Section 6.3) lead to a conclusion that a fine balance has been made and the debilitating adverse impact of price rise in the international market has been smoothened and diffused in the domestic economy. It was never an easy exercise. Choices were hard, both on administrative and political points of view.

The impact of internal liberalization of Indian Oil Industry on productivity, industrial performance and better management has been in line with the spirit of economic reforms. The credit for this part of performance goes to the managers of Indian Oil Industry, the professionals, the technocrats, who have steered the Industry clear of the turmoil of reforms, without losing sight of the central objective of serving the economy and serving the customer. The internal organizational dynamics have been managed so well that neither the economy nor the customer has got to know any shock at any time, arising out of the transition and transformation that the Industry was passing through during last 15 years. The managers of PSU marketing Oil Companies have played the role of transformational leaders and carried the torch of economic reforms in the true spirit of national leaders.

## Exhibit - 12

A sound investment strategy with technological and logistics planning is the hallmark of oil industry

- Government of India invested Rs 1,27,031 crores in capital assets in 14 CPSU Oil Companies till 2004-05
- These have earned more profits post reforms undertaken in 1990-91

- During last 15 years, PBIT has grown at 18% PA.
- During 1998-99 to 2002-03, profit grew at 26% PA.
- From 2003-04 onwards, profit growth slowed down to 5%, primarily due to pricing issues.

Profit to capital investment ratio 26% average of 15 years  
This has risen to 27.7% after 1998-99

In the next Chapter (Chapter VII), we will examine these issues in much more detail. We will examine the congruence and conflict, whatever it may be, between the reform process in oil sector and that in national economy. In the last Chapter (Chapter VIII), we will attempt to charter an ideal path of reform for Oil Industry which can form a blue print for XI Five Year Plan.