Fossil Fuel Subsidies in India: The Case for Rationalizing Petroleum Product Prices*

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TERI

* This presentation is a summary of a larger policy paper being prepared by the Centre for Research on Energy Security, The Energy and Resources Institute
Introduction

• Petroleum accounts for almost 35% of the world primary energy consumption.
  ▫ In India – it accounts for 32% of the total primary energy consumption (BP, 2010)

• Crude oil import dependence is 80% and is projected to rise to 91% by 2030.

• Given the dependence on imports, international oil prices affect the oil import bill

• Increase in the prices of oil in the recent months

• This affects economic indicators – current account, GDP and inflation rate
Indian Petroleum Sector - A Snapshot

- Consumption in 2009-10
  - 193 MMT of crude
  - 138 MMT of petroleum products
- Largest consumed products: HSD (41%), LPG (10%), MS (9%)
- Imports
  - 159 MMT of crude
  - 15 MMT of products
- India is a net product exporting country
  - 51 MMT of products were exported in 2009-10
- Value of imports
  - Rs. 420 thousand crores (30.5% of the total imports)
- Origin of imports
  - Middle East (67%)
  - Africa (20%)
Indian Petroleum Sector - A Snapshot

- This sector is one of the largest contributors to the exchequer (11% of the central government receipts in 2009-10)
Indian Petroleum Industry

**Exploration**
- Major Players
  - ONGC, OIL RIL, EOL
- From nominated blocks to NELP
- Increased foreign participation in the sector post NELP

**Refining**
- Major Players
  - IOCL, BPCL, HPCL, RIL
- Massive increase in refining capacity in recent times
- Installed capacity – 185 MT
- Supply > Domestic Demand

**Marketing**
- Major Players
  - IOCL, BPCL, HPCL, RIL (Exports)
- Government control over pricing of major products
Evolution of Pricing

1960s
- Import Parity Pricing

1976 onwards
- Following the oil-shock of 1973-74
- Cost-plus pricing
- Largely Administered Pricing
- Absence of competition and lack of capacity addition

2002
- Partial abandonment of APM
- Four year long phased dismantling of the mechanism (1997-2002)
- Prices of all products other than LPG and PDS Kerosene would be market determined
Evolution of Pricing (2)

**2004**
- Increase in International prices of crude oil
- Price-band mechanism
- Increasing prices – abandonment of price-bands

**2005-06**
- Appointment of the Rangarajan Committee. Suggestions:
  - Trade Parity Pricing for all products at both levels
  - Limiting subsidies to the BPL households
  - Restructuring the duties
  - Only refinery prices brought to TPP levels

**2006-08**
- Introduction of the subsidy burden sharing formula – Upstream companies, government, OMCs
- Increase in prices by 2008 – unsustainable under-recoveries
- Appointment of Chaturvedi committee
<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
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| 2008 | • Slump in prices  
      • Decline in under-recovery burden |
| 2010 | • Kirit Parikh committee report  
      • June – removal of control from petrol prices  
      • October- November – increase in crude oil prices |
| 2011 | • Government decision to not increase the prices any further  
      • No changes in diesel, kerosene and LPG prices  
      • Increasing under-recoveries for oil companies |
Most products prices are market determined.

Four *sensitive* products – petrol, diesel, PDS kerosene and domestic LPG – not determined in the market.

These products constitute 66% of the total domestic product demand in the country.

Since June 2010, oil marketing companies determine the prices of petrol.

Diesel prices are controlled by the government (but no fiscal subsidy is provided on diesel).
Current Pricing Regime (2)

- Fiscal subsidy is provided on PDS kerosene and domestic LPG
- This subsidy is only a small percentage of the actual loss on the sale of the product (5% in case of kerosene and 11% in case of LPG in 2009-10)
- The government share in subsidy was to be reduced by one-third each year beginning 2002-03
- Since 2004-05 the subsidy level are constant:
  - 82 paise/litre for PDS kerosene
  - Rs. 22.58/cylinder for Domestic LPG

Subsidy sharing on PDS Kerosene

Subsidy sharing on Domestic LPG

Source: PPAC
Effective Subsidies*

• Gauging the fiscal subsidies is not sufficient – these constitute less than 10% of the actual under-recoveries

• Actual level of subsidy = Difference between the refinery gate price and the retail selling price

• Subsidy shared by
  ▫ Upstream oil companies – selling crude at discounted rates
  ▫ Downstream oil companies
  ▫ Government

* IEA 2010
Effective Subsidies - Impact

The costs of selling petroleum products below market prices affect:

- Government
  - Direct fiscal subsidy
  - Impact of oil bonds – interest burden and future redemption costs

- Economy
  - Consumption of petroleum products
  - Penetration of clean fuels
  - Malpractices – leakage of subsidy

- Oil Industry
  - Impact on the financial performance of oil companies
  - Impact on investments
  - Effect on competition – level of private sector participation
Impact of Subsidies

• Intention behind having subsidies (desired impact)
• Actual Impact
  ▫ On the economy (macro and micro)
    • Budgetary implications
    • Exploitation and over-use of fuels
    • Adulteration
    • Absence of trickle down to the poor
  ▫ On the oil industry
    • Poor fundamentals of the OMCs
    • Lack of private sector participation
Impact on Government

- Under-recoveries not paid for via budgetary allocation
- Not much direct impact on the budget deficit

Sharing of Under-recoveries by direct government subsidy

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<td>2662</td>
<td>2524</td>
<td>2641</td>
<td>2688</td>
<td>2770</td>
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</table>

| Total Under-recovery | 40000 | 49387 | 77123 | 103292 | 46051 |

Source: PPAC
Impact on Government (2)

- Increase in the use of oil bonds by the government
- Characteristics of the bonds:
  - Partially tradable
  - Interest rate – 6 to 8%
  - Typically 5-7 years of maturity
  - Do not have SLR status
- Future costs imposed on the government
- Rising interest payments due for the government
- Push towards further rounds of debt issuance to meet the rising under-recoveries
- Under-recoveries increasingly eating into the revenues earned by the government from the sector

Absorption of Under-recoveries

Revenue from the petroleum sector and Under-recoveries
Impact on the Economy

- Falling sovereign ratings. S&P rated India:
  - BBB minus - long term
  - A-3 - short term
- This adversely affects the capacity to raise funds in international finance markets
- High future costs of financing the subsidies via oil bonds
- Unsustainable increase in demand of petroleum products
- Lack of penetration of clean fuels
  - Only 9% of the rural households use LPG for cooking
  - 85% households still depend on firewood and dung cake
  - Only 4% increase in households using LPG in rural areas
  - Penetration in urban areas is higher at 62%
  - Kerosene is primarily used for lighting in rural areas (39%)
Impact on the Economy (2)

- Use of firewood – averse health impact (Indoor Air Pollution), waste of time in collecting the resource
- Leakages in the subsidy mechanism
- Diversion of PDS kerosene:
  - 35% PDS kerosene gets diverted*
  - This negates the investment made by refiners in improving the quality of diesel
- Price differential across borders - smuggling of kerosene to neighboring countries

* Source: Report of the Expert Committee headed by Kirit Parikh
Impact on the Industry

• Pricing of products below market prices impact the oil industry across the entire value-chain

• Upstream companies – sell crude oil to refineries at discounted rates (Rs. 32,000 crore paid to downstream in 2008-09)

• Refiners and OMCs are integrated companies and indirect subsidization of product prices affects their financial position
Impact on the Industry - OMCs

• Profit levels
  ▫ The net profit (after tax) has declined for all three PSUs
  ▫ Not severely affected as the companies have other sources of income – dividend, refinery incomes

• Cash flows
  ▫ Falling net cash flows

• Working capital financing
  ▫ Oil bonds have long term maturity
  ▫ Cannot be sold in the market since these are only partially tradable and non-SLR
  ▫ Companies take loans to finance the short term working capital needs
Impact on the Industry - OMCs (2)

- **Rising interest costs**
  - Rising borrowings
  - Rising interest payments

- **Investments**
  - Despite the burden of subsidies and declining financial position investments have not been curtailed
  - Increased capacity addition and greenfield investments in new refineries by PSUs

- **Lack of competition**
  - Absence of private sector participation due to control on prices
Conclusions & Recommendations

- Introduction of targeted subsidy delivery mechanism to avoid leakages
  - Introduction of cash transfers
  - Using the UID mechanism to deliver subsidy
- Focusing on investing in clean renewable technologies
- Rationalizing the taxation regime
  - Current tax regime is part ad-valorem and part specific
  - Increase in taxes with rising crude oil prices
  - Duties and taxes need to be redefined towards becoming more specific in nature
Thank-you
Refining Capacity in India

Source: PPAC
The diagram shows the trend in Rs. Crore from 2004-05 to 2008-09. It compares the following sources:

- PDS Kerosene
- Domestic LPG
- Petrol
- Diesel

Each year, the total Rs. Crore increases, with a significant rise in 2008-09.
## OMC financial performance

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<td><strong>Debt Equity Ratio</strong></td>
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<tr>
<td>IOCL</td>
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<td>0.78</td>
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<td>BPCL</td>
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<tr>
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### Under Recoveries and fiscal deficit

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<tr>
<th>Year</th>
<th>Under Recoveries</th>
<th>Fiscal Deficit</th>
<th>GDP</th>
<th>FD/GDP</th>
<th>FD+UR/GDP</th>
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<tr>
<td>2005-06</td>
<td>40000</td>
<td>239560</td>
<td>3540559</td>
<td>7%</td>
<td>8%</td>
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<td>2006-07</td>
<td>49386.55</td>
<td>230432</td>
<td>3874632</td>
<td>6%</td>
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<td>2007-08</td>
<td>77122.687</td>
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<td>4247918</td>
<td>5%</td>
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<td>2008-09</td>
<td>103292.16</td>
<td>473947</td>
<td>4465360</td>
<td>11%</td>
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<td>2009-10</td>
<td>46050.82</td>
<td>597414</td>
<td>4807222</td>
<td>12%</td>
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