Chapter 4

Producers Responses to Crisis with Special Reference to non-OPEC Nations
Emergence of non-OPEC producers made tremendous impact on the OPEC position in the international oil market. One of the most important features of the global oil market over the past two decades has been steadily increasing availability of non-OPEC oil. The inherent cause for this increase has been in the rise of oil nationalism. Prior to the Seventies, the dominance of major international oil companies in OPEC Countries meant that vast reserves of oil was easy to produce at low cost. It was available to integrated oil company channels. However, events during the seventies, led to the emergence of "OPEC power" and consequent price rises. It radically changed the nature and, in many ways, the importance of the upstream sector of the oil industry. With nationalisation of many international oil companies and production assets by various OPEC countries, it became essential for such companies to find alternative, more secure sources of oil production to feed into their integrated downstream channels. For the first time, at the economic level, the very existence of higher prices made exploration and production of oil feasible in other higher
cost regions of the world.¹

All these factors had led to dramatic and significant increase in upstream activity in non-OPEC Countries which in turn, increase the oil production. Since mid-seventies, non-OPEC oil production had increased by around 9 million b/d. Most of this expansion took place in the years to 1985, when the emergence of three new oil producing regions -- Alaska, the North Sea and offshore Mexico -- generated a period of exceptional growth. Although output was continued to rise in these countries during the early eighties. The industrial environment in which these development took place was equally unusual: high and rising oil prices, high profitability, intense concern over security of supply and a major shift in oil company upstream strategy.²

The non-OPEC upstream industry has adapted well to the changes introduced by the events of 1986. The first tranche of non-OPEC production developed in the seventies and early eighties was relatively of high cost. This was due partly

---

to the fact that the industry in many areas was still at an early point on the learning curve, but also to a high price environment. Since, substantial cost reductions were achieved due to variety of technical and fiscal improvements.³

On the technical side for instance:

(a) The application of three dimensional seismic techniques had greatly improved the industry's exploration capability and reducing uncertainties,

(b) The introduction of sub sea and multiple well completions had reduced the need for surface facilities which led to development of marginal fields in offshore areas;

(c) Improvement in design and Construction procedures have lowered the capital costs of offshore facilities;

On the fiscal side, host government had introduced number of changes, such as:

(a) Reductions, and in some cases even the elimination of taxes and royalties;

---

3. Ibid, p. 3.
(b) Better provisions for cost recovery, including in some areas complete tax holidays until all costs were recovered;

(c) Easing of restraints on the disposal by foreign companies of equity production. 4

Such developments were indicative of rise in competition between host governments seeking to attract foreign investors. In such a competitive environment, the lower cost province, in terms of costs to the company, had a substantial advantage over the higher cost province. 5

The most likely potential constraints on future level of production was lack of investment capital and resources. The cost savings achieved by the Industry had not fully compensated for the reduction in upstream revenues, while additional pressures had been felt in the case of integrated companies from the less lucrative downstream sectors of the industry. As a result of this, there had been a reduction in

4. Ibid, p. 3.
5. Ibid, p. 4.
the amount of capital within the industry for investment in the upstream. Reflecting this situation, upstream investment during 1986 fell by more than half since 1985. However, at the same time, there was a major review of upstream strategy within the industry. This was manifested itself in a tendency for the larger, well established international operators to reduce the emphasis of their Exploration and Production effort in the USA, and to some extent even the North Sea, in favour of an expansion in their activities. The restructuring of BP's exploration division was a move in this direction.6

Some of the smaller US domestic upstream companies faced with high cost operation and limited new opportunities at home have also started increasing their overseas involvement, either through new licenses or buying the existing operations. Faced with the smaller E and P (Exploration and production) budgets, upstream companies had opted for investments in higher risk but potentially higher reward areas. This was particularly to the existing ability to

reduce exploration uncertainties through the use of sophisticated technologies. In addition a number of other developments have helped the industry to use scarce capital.

The non-OPEC exporters were behaving as typical newcomers in an oligopolistic market. The first priority was to secure for themselves a share of the world oil market by maximising the volume of their export sales through offering their oil at prices just before OPEC prices. They also pursued aggressive price and marketing policies in order to achieve a higher share in a shrinking market of eighties. During the period of tight market, as was the case in 1979, the non-OPEC oil producers were selling at higher prices than those officially announced by OPEC. However, in times of soft market conditions, they were selling at lower prices than OPEC. In the early eighties, OPEC was the only price setter in the oil market and the other oil producers followed behind. However, OPEC was facing a new situation because there were two price setters in the same market, and the OPEC producers were committed to defending their prices, even if this should involve a substantial reduction in the
volume of their production. 7

A brief profile of some of the leading non-OPEC producer is essential here.

The major non-OPEC producers are as follows:

1. **North Sea**: In the North Sea, exploration had started in 1964, the first oil discovery was made in 1967, the final full scale development was undertaken by oil companies after a long interval of four years. But recent development in non-OPEC was tremendous. While OPEC production declined, output from the North Sea's four oil producing countries -- UK, Norway, Denmark and Netherlands had increased by 14.2% in 1984, to an average of 2693000 b/d which was the effective production capacity. In 1985, total north sea oil production exceeded 3.5 million b/d for the first time. 8

I. **The United Kingdom**: U.K. was one of the major non-


OPEC oil producing countries with an actual average output of 2.3 mb/d in 1984. Only the output of Iran and Saudi Arabia exceeded that of U.K. On the other hand, Britain's proved reserves, was estimated at 13 billion barrels in 1984, which was below those of Saudi Arabia, Kuwait, Iran, Iraq, Libya, Nigeria and Venezuela. North Sea is one of the highest cost producing areas in the world. The official estimate was that the average cost in the field on stream before the end of 1982 was around $12 a barrel, while the average for those under development at that time would be around $17 a barrel. (By comparison, Saudi Arabian oil costs something like 50 cents a barrel). The selling value of 1984 output was around $26000 million. 9 It can be seen from table 1:

Table I

**U.K. oil Production scenario in Eighties**

<table>
<thead>
<tr>
<th>Year</th>
<th>Daily average Production (Thousand barrels daily)</th>
<th>Total Production Million Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>1600</td>
<td>77.9</td>
</tr>
<tr>
<td>1980</td>
<td>1650</td>
<td>80.5</td>
</tr>
<tr>
<td>1981</td>
<td>1835</td>
<td>89.4</td>
</tr>
<tr>
<td>1982</td>
<td>2125</td>
<td>103.4</td>
</tr>
<tr>
<td>1983</td>
<td>2360</td>
<td>114.9</td>
</tr>
<tr>
<td>1984</td>
<td>2580</td>
<td>125.9</td>
</tr>
<tr>
<td>1985</td>
<td>2655</td>
<td>128.2</td>
</tr>
<tr>
<td>1986</td>
<td>2665</td>
<td>128.6</td>
</tr>
<tr>
<td>1987</td>
<td>2555</td>
<td>123.3</td>
</tr>
<tr>
<td>1988</td>
<td>2365</td>
<td>114.4</td>
</tr>
<tr>
<td>1989</td>
<td>1905</td>
<td>91.9</td>
</tr>
</tbody>
</table>


As it is evident from above table that production had reached its highest peak in 1986. As it is clear that production was around 1600 thousand barrel daily 77.9 million tonnes i.e. in 1979 which jumped to 128.6 million tonnes in 1986 or 2665 thousand barrel daily and the percentage increase was around 65.08% during 1979-86 period.10

The E and P programmes were taken after 1 January, 1979. It contributed 7% of total cumulative production or more meaningfully for such new fields, 14.9% of estimated total recoverable reserves. These results were not very surprising given that UKcs was a mature province and the biggest reserves had already been developed and put into production. However, these factors had not fully explained the very low level of development activity in the UKcs in the period 1979-81 when prices and market expectations were very buoyant.

The explanation for this expansion in development activity seemed to lie with changes in the fiscal regime. In June, 1979, the government was spurred by the rise in price which led to the imposition of a higher level of taxation on oil. It raised petroleum revenue tax (PRT) by 18 percentage points, and cut both the uplift (introduced to compensate for interest accumulated on capital borrowed) and the oil allowance by half. The introduction of a further tax the supplementary petroleum duty (SPD) in March 1981, effectively tripled royalty payments and led to cessation of new offshore exploration and development at a time of very high
In 1982, in response to both the companies 'strike' and the weakening of the market, the government withdrew the SPD, abolished royalty for new fields and doubled the oil allowance for new fields. These changes later played a fundamental part in sustaining a flow of new developments through the price crash of 1986, although these development were confined to the 'Satellite' reservoirs that could be exploited cheaply. By 1988, however, development activity returned to 1986 levels. In 1988, plans were approved for the development of Miller, "a medium-size field on a stand-alone" basis. Yet oil price were low (the Brent price was fluctuating between $12 and $17 per barrel). Development could only have been spurred by fiscal incentive, the introduction of cross-field allowance in 1987 which allowed the capital costs of a new projects to be deducted from taxable income of another field already on stream. From 1978 onwards one can, therefore identify a relationship between development activity and the fiscal regime which offset the prob-

lems created by low and volatile oil prices.

II. Norway: Norway's position as a petroleum exporter was achieved in a short-period of time. The production and development of fields was expected as result of discoveries and development activities made during the seventies and early eighties. Oil production capacity was expected to increase to 1.6 million bbl/day in the 1990's depending on future development expansion. Increases in the Norwegian production will take place parallel to an expected decline in production on the UK shelf. The rise in Norwegian production has taken place parallel to decline of market shares for the OPEC countries. From 1980 to 85 OPEC's market share was reduced from 60% to 35%. During this period, Norway became an oil producer of the same magnitude as medium-sized OPEC exporter, representing 2% of world oil production.


Oil pricing has great importance for the Norway's economy. In the early seventies, it was argued that maintaining activities at the present level would be like 'putting too many eggs in one basket'. Although a long term depletion policy was chosen, some argued that a small economy like Norway would be highly vulnerable to the developments in the International oil market. The point was, indeed, clearly illustrated in 1986 when, over the course of a few months, oil prices declined from about $30 to about $10 bbl. Considering that in 1985, the oil sector constituted 20% of national product and 40% of export earnings. Thus, Norway has a clear interest in stable and reasonably higher oil prices and it was also in the interest of the global economy. Crude oil prices which reflect the long-term value of oil would facilitate planning for continued economic growth. It would benefit consumer and producer countries alike. Many countries experienced some short term economic benefits. In terms of the crude oil production, Norway is the second largest oil producers from the North Sea and a significant part of its crude oil production is exported. In 1981, approximately 83% of its oil production was exported. The main market for Norwegian oil is the US and most of the
remaining crude oil exports are marketed in European countries.

Table 2

"Norway: Production Scenario in eighties"

<table>
<thead>
<tr>
<th>Year</th>
<th>Daily average Production (Thousand Barrels daily)</th>
<th>Total Production (Million Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>385</td>
<td>18.8</td>
</tr>
<tr>
<td>1980</td>
<td>525</td>
<td>25.8</td>
</tr>
<tr>
<td>1981</td>
<td>505</td>
<td>24.9</td>
</tr>
<tr>
<td>1982</td>
<td>530</td>
<td>25.7</td>
</tr>
<tr>
<td>1983</td>
<td>660</td>
<td>32.0</td>
</tr>
<tr>
<td>1984</td>
<td>755</td>
<td>36.8</td>
</tr>
<tr>
<td>1985</td>
<td>835</td>
<td>40.3</td>
</tr>
<tr>
<td>1986</td>
<td>910</td>
<td>44.1</td>
</tr>
<tr>
<td>1987</td>
<td>1005</td>
<td>49.1</td>
</tr>
<tr>
<td>1988</td>
<td>1155</td>
<td>56.7</td>
</tr>
<tr>
<td>1989</td>
<td>1530</td>
<td>74.9</td>
</tr>
</tbody>
</table>


As it is evident from above table that production is continuously increasing which reached to 18.8 million tonnes in 1979 to 74.9 million tonnes in 1989 an increase of 29.84 % in ten years.

From being a rather small petroleum producing country, simply adjusting to the events which took place in the
international oil market during the seventies and early eighties, the growth in Norwegian production has given Norway a more significant and influential role. It became clear that the dramatic developments in the oil market in the eighties required a careful thinking of its market policy. This was the background to the new policy line introduced by the Norwegian government's declaration in 1986 when oil price collapsed, that Norway should contribute to stabilising international oil market at a reasonably high price level. With only 2% of world oil production, Norway despite its increasing importance, can only exercise limited direct influence on the oil market. Thus, any Norwegian measure presupposes that other oil exporting countries would also take realistic measure to stabilise the market. The Norwegian government regarded the decisions taken by OPEC in Geneva in 1986 as important steps towards stabilising the market. The government decided to withdraw 80,000 bbl/day from the crude oil market during last two months of 1986 to tackle glut situation of oil market. Government chose to do this by refining royalty crude oil and storing the oil

products as permanent emergency preparedness stocks. In January 1987, the government decided to prolong these measures by reducing crude oil production by the equivalent volume for the first half of 1987 for price stability in the global oil market. In July 1987, the measures were extended for the rest of the year. It is important for Norway that OPEC pursue a moderate and responsible policy. The OPEC pricing policy was recognised by most parties as responsible, taking due regard for both producer and consumer interests in eighties. It was also the Norwegian policy to maintain good bilateral relations with other oil producing countries in and outside OPEC. Norway was in a position to endeavour to bring about discussion which were necessary if stable and predictable conditions in the oil market have to be secured. Norway attempted to contribute to global energy policy inter-relations based on greater contact and deeper mutual understanding between oil-exporting and importing countries. 15

The continued development activity in a period of weak

15. Ibid, p. 106.
market expectations was evident from the Norwegian Petroleum Directorate's success at keeping activity at a controlled level on its own terms. Four of the five projects initiated between 1979 and 1985 come on stream by 1988 and contributed 363 mb to national production and 2,145 mb of total recoverable reserves to the Norwegian reserve base. The price collapse of 1986 turned this favourable situation around very quickly. Many steps were initiated to meet and the situation of oil price collapse in 1986. Although many developments were initiated in 1986, they were all gas related with small oil reserve. In January 1987, wide ranging changes were introduced to the fiscal regime. Royalty was reduced to zero percent; the special tax was reduced from 35% to 30%; Capital costs were deducted during first year of production, an extra 15% was added to non-taxable production allowance and state oil partners were no longer to carry State oil's exploration costs. These measures had a marked effect on development activity despite the continuing weakness of the market. In just two years 1987 and 1988, seven oil related projects accounting for some 1936 mb of reserves (20.5% of the total 9458 mb which were put into
developments) had joined a queue to wait for approval.  

2. Mexico: The rapid emergence of Mexico as an increasingly important producer and exporter of oil has become the single most encouraging and exciting development. Mexico's South eastern region has been revealed as a province potentially of Middle East proportions. Proven reserves and production had risen sharply, bringing the country into top rank of the world's producers. With the certainty that this role can continue to grow throughout the eighties. While the consuming world - particularly the USA has found an important new non-OPEC supplier, Mexico's economy has a means of delivery from the severe economic and social problems that was beset the country for so many years. Development of the industry was carried out on planned both horizontally and vertically, from aggressive exploration throughout the country to the build-up of refinery capacity. It would permit large scale product exports, and of a petrochemical industry to meet domestic needs and for export. Patrollers Mexican (Pemex), the state oil company had spent $  

19 billion during 1977-82 to pursue this development. The sharp increase in proven reserves estimates had facilitated the heavy international borrowing required to meet initial commitments while cash flow from exports was made. 17

In the event, Mexico's oil production was climbed steadily, far outpacing domestic needs. In March 1978 it had averaged 1 million barrels production for the first time, and the last 12th December 1978, it exceeded 1.5 million b/d, nearly twice 1978's average daily domestic consumption of 783595 b/d, as reported by pemex. The first three reforma fields on stream-cactus, Sitio, Grande and Samaria - produced a total of just over 14000 b/d in 1973; In July 1978, their combined production reached 485000 b/d, of which Samaria alone accounted for just over 300,000 b/d. A number of new fields had started production in 1977 and 1978, including Agave, Artesa, Mundo Nuevo and Rio Nuevo and their output was expected to rise in the near future. So rapid was development of the new fields that Pemex was forced into a number of target revisions. The end-1982

production goal of 2.25 million b/d, of which 1.1 million b/d would be exported, was rescheduled for the end 1980. Various scenarios for future production rates ranging to around 10 million b/d have been envisaged for the period 1980-85. 18

The latest estimate of proven reserves includes a crude oil and NGL Component of 26 billion barrels, which puts Mexico well ahead of Venezuela (18 billion barrels) and just below the USA (about 29 billion barrels) while it was well below the proven reserves of most of the Arab gulf countries, such as Saudi Arabia with its 165.7 billion barrels of proven reserves. Many analysts believed the Mexican figure would reach 60-100 billion barrels in near future, which would put it in the same class as Iran (62 billion) and Kuwait (67 billion). The criteria was used by Pemex in arriving at its reserves estimates, had been something of a mystery. It was believed that the methods were closer to accepted international practice than has been the case previously. The pemex stated, "Proven reserves are calculat-

ed using international engineering principles and include those reserves which are expected to be produced through primary and secondary recovery, using existing technology and operating methods at current levels of production costs and petroleum prices, but do not include the areas where new petroleum discoveries have been made and not yet brought into production."\textsuperscript{19}

The policy of announcing reserves estimates closer to reality appeared to be linked to the pressing need to raise funds from International Capital markets. The result of the government's pragmatic approach were impressive. Most analysts agreed that revised financial and monetary policies were headed the economy back toward an even keel and resulted in a new upsurge in investment both from the domestic banking system and from abroad. Pemex has encountered no trouble in lining up a spate of International loans which was at the end of 1978, amounted to the equivalent of $4.5 billion, of which 82% were in US dollars. The rise in production of crude oil and natural gas liquids to 1.5

\textsuperscript{19} Ibid, p. 111.
million b/d in January 1978 had created an exportable surplus that the National Bank of Mexico could make Pemex self financing.20

Table 3

Mexico : Production Scenario in Eighties

<table>
<thead>
<tr>
<th>Year</th>
<th>Million Tonnes</th>
<th>Thousand Barrels Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>80.8</td>
<td>1630</td>
</tr>
<tr>
<td>1980</td>
<td>107.3</td>
<td>2155</td>
</tr>
<tr>
<td>1981</td>
<td>128.3</td>
<td>2585</td>
</tr>
<tr>
<td>1982</td>
<td>149.4</td>
<td>3005</td>
</tr>
<tr>
<td>1983</td>
<td>146.6</td>
<td>2950</td>
</tr>
<tr>
<td>1984</td>
<td>150.4</td>
<td>3015</td>
</tr>
<tr>
<td>1985</td>
<td>149.7</td>
<td>3015</td>
</tr>
<tr>
<td>1986</td>
<td>135.6</td>
<td>2750</td>
</tr>
<tr>
<td>1987</td>
<td>141.8</td>
<td>2875</td>
</tr>
<tr>
<td>1988</td>
<td>141.0</td>
<td>2855</td>
</tr>
<tr>
<td>1989</td>
<td>141.2</td>
<td>2875</td>
</tr>
</tbody>
</table>


As it is evident from above table that production was more or less in an increasing trend. The production in 1979 was around 80.8 million tonnes which has increased to 141.2

million tonnes in 1989, an increase of 74.7% in ten years. Mexico was the only country to experience a significant increase in proven reserves and crude oil production.\textsuperscript{21}

A brief description of co-operation between OPEC and non-OPEC is imperative here. Since 1982, OPEC had been under severe pressure as a result of its policy of production restraint. This pressure has caused it to lose part of its market share to other producers and the fact that it formally opted it in December 1985 known as "fair market share policy". This led to the price collapse of 1986 and OPEC's return to production restraint at the end of 1986, was a clear admission on its part that it was the main victim of the price war. It continued its efforts to hold production down with varying degrees of success throughout 1987 and 1988. It was once again on the brink of repeating its 1986 experience in October 1988. The November accord 1988 was a

new attempt by OPEC to close its ranks and achieve a kind of stability in the global oil market. Throughout this period, the position of the non-OPEC producer was that of an observer. They welcomed OPEC's ability to carry out its agreements and were angry when OPEC weakened and its members failed to keep up to their commitments, but overall played no practical role in sharing the burden of stabilising the oil market. 22

The salient points explaining the importance of cooperation on the part of non-OPEC producers can be summarised as follows:

I. The non-OPEC producers cannot expect OPEC to adhere to the agreement in order to stabilise world oil market at a time when they were taking over OPEC's market share. OPEC's share has declined to around 43% of world pro-

22. Ibid, p. D1
duction, shutting away around 40% of its production capacity, while non-OPEC producers were pumping at full capacity. A further factor was the unutilised production capacity available to OPEC would increase in the near future due to: (I) An increase in the production capacity of Iraq and Iran after the cease-fire and the beginning of reconstruction. By the end of 1990, it was expected that their production capacity would increase by 30%. This would be accompanied by an expansion in their export capacity which would give them an added incentive to exceed their quotas if prices remain weak.

b) A large increase in the petroleum reserves of some OPEC states, which means that some of these countries would find it difficult to accept their present quotas. These countries will represent a weak link in the organisation, since, they were likely to accept lower prices which would coincide with their long-term interests.23

2. Some of the non-OPEC producers continued to pursue a policy of non-cooperation with OPEC. It could even be worse considering that OPEC production in case of free-for-all, could exceed 23 mn b/d and repetition of 1986 was expected.

3. The non-OPEC producers should more convinced now than at any time in the past that co-operation with OPEC was necessary, on account of two reasons:

a) The huge decline in their oil revenues since 1986, oil price collapse at a time when these revenues were a major part of their income.

b) The steps taken by some of these countries to subsidise or support their petroleum industries through tax incentives to encourage the oil companies to produce at previous rates and/or to explore for more oil. 24

A realistic analysis of the state of co-operation between non-OPEC and OPEC producers shows that it was not gone beyond the simple expression of a desire for co-operation.25

The concept of co-operation between OPEC and non-OPEC producing countries, in order to stabilise the oil market, was emerged officially in the eighties. During the second half of the eighties, 'non-OPEC producers' and the concept of co-operation with OPEC to stabilise the market was felt intensely.26 The OPEC's reserves have been continually increasing from a level of 420.9 billion barrels in 1973 to 762.8 bn b. in 1988, or from 72.5% to 76.9% of world reserves during 1973-78. This large rise was contrasted with the moderate one outside OPEC, from 159.6 bn barrels in 1973 to 228.7 bn barrels in the same period. Although OPEC


production was remained more or less stable between 1973 and 1979, at about 31.0 million barrels per day. It was suffered a precipitous decline to 15.4 mb/d in 1985. This was caused by the decrease in world oil demand especially in the first half of the eighties, and ever increasing level of non-OPEC production from 24.5 mb/d in 1973 to 31.9 mb/d in 1979 and 37.8 mb/d in 1985. The net increase of 13.3 mb/d between 1973-79 in non-OPEC production, was shared by the OECD (3.2 mb/d). These production rates were reflected in generally declining reserves to production ratios in both the OECD and CPEs, with slight improvements in the developing countries. While the ratio for OPEC increased from 37.2 years in 1973 to 95.2 years in 1985. The inherent policy of the consuming countries was to reduce the dependence on OPEC oil.
**Table 4**

World-Crude Oil reserves

(billion barrels)

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>%</th>
<th>1985</th>
<th>%</th>
<th>1988</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>56.0</td>
<td>8.9</td>
<td>54.2</td>
<td>7.2</td>
<td>50.9</td>
<td>5.1</td>
</tr>
<tr>
<td>CPEs</td>
<td>82.1</td>
<td>13.0</td>
<td>82.8</td>
<td>10.9</td>
<td>83.6</td>
<td>8.4</td>
</tr>
<tr>
<td>DC excl.OPEC</td>
<td>57.3</td>
<td>9.0</td>
<td>81.7</td>
<td>10.8</td>
<td>94.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Total Non-OPEC</td>
<td>195.4</td>
<td>30.9</td>
<td>218.7</td>
<td>28.9</td>
<td>228.7</td>
<td>23.0</td>
</tr>
<tr>
<td>OPEC</td>
<td>436.2</td>
<td>69.1</td>
<td>537.0</td>
<td>71.1</td>
<td>762.8</td>
<td>76.9</td>
</tr>
<tr>
<td><strong>Total World</strong></td>
<td>631.6</td>
<td>100.0</td>
<td>755.7</td>
<td>100.0</td>
<td>991.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Table 5**

World Crude Oil Production (Mb/d)

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>%</th>
<th>1985</th>
<th>%</th>
<th>1988</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>12.7</td>
<td>20.2</td>
<td>14.9</td>
<td>27.9</td>
<td>14.0</td>
<td>24.2</td>
</tr>
<tr>
<td>CPEs</td>
<td>14.2</td>
<td>22.6</td>
<td>14.7</td>
<td>27.6</td>
<td>15.5</td>
<td>26.8</td>
</tr>
<tr>
<td>DC excl.OPEC</td>
<td>5.0</td>
<td>8.0</td>
<td>8.2</td>
<td>15.4</td>
<td>8.7</td>
<td>15.0</td>
</tr>
<tr>
<td>Total Non-OPEC</td>
<td>31.9</td>
<td>50.8</td>
<td>50.8</td>
<td>70.9</td>
<td>38.3</td>
<td>66.1</td>
</tr>
<tr>
<td>OPEC</td>
<td>30.9</td>
<td>49.2</td>
<td>49.2</td>
<td>29.0</td>
<td>19.6</td>
<td>33.9</td>
</tr>
<tr>
<td><strong>Total World</strong></td>
<td>62.8</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>57.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Against such background, OPEC was placed in increasingly difficult situation to stabilise the oil market, and prevent a large-scale decline in its revenues, from a high of $ 287 bn in 1980 to $131 bn in 1985. The decrease in revenues occurred in spite of strenuous efforts to maintain prices, by continually scaling down OPEC production and the institution and maintenance of production quotas for member countries since April 1982. During this period, non-OPEC producers benefited from increasing production by exploiting the price structure supported by OPEC along. Though they were generally remained competitive by pricing their oil at a discount, compared with that of OPEC. In contrast, although OPEC retained its concern of the seventies to conserve oil and adopt a longer term view of its resources, but its loss of market share would eventually undermine the price structure. Because OPEC began to find it increasingly difficult to lower its production levels and revenues simultaneously. The organisation's wide production base in late seventies helped it to defend the price structure, and when this base shrank to the level of 1985, caused by minimal
co-operation among producers, the market witnessed the price collapse of 1986. Many price fluctuations were experienced since then. Although OPEC regained some 4.0 mb/d up to the end of 1988, to reach a production level of 19.6 mb/d, non-OPEC production continued to increase but at much lower rate than before. Falling OECD production, particularly from the US, was more than compensated by a 0.8 mb/d increase in CPE production and a further 0.5 mb/d rise in developing countries after 1985. In general, this analysis suggested that non-OPEC producers were still following a production maximisation policy. Non-OPEC countries curtailed investment due to the price decline which made it more difficult to increase production at previous rates.27

The communique of the 70th conference, Vienna in July 1984, acknowledged finally and for the first time the need for co-operation with non-OPEC producers. It stated: "The

----------------

27. Ibid, p. 4.
conference noted that the increased production from oil exporting countries, non-members of OPEC, has greatly contributed to the recent market situation and decided to establish contacts with those countries, with a view to finding ways and means of enhancing co-operation between OPEC and those countries, in a joint effort to shoulder the responsibility of stabilising the oil market and defending the oil price structure.  

28. OPEC managed to gain Mexico's support, when the latter was agreed to limit its export to 1.5 mb/d and to align its prices with that of the organisation as far as possible. It came forward to co-operate by reducing its exports by 1.4 mb/d, followed by Egypt cutting output by 30,000 b/d. The 77th (Extra-ordinary) meeting of OPEC conference, held in Geneva in March and April 1986, stated in its communique: "The conference also held fruitful and constructive discussion with certain non-OPEC oil producers, namely Angola, Egypt, Malaysia, Mexico and Oman,

in which both parties expressed concern about the present market situation and agreed that their common objective is to support the oil price structure, with a view to gradually reaching the target of restoring the OPEC reference price to its official level of $28b.\textsuperscript{29} The conference also formed a group of five ministers, the Heads of delegation of Indonesia, Kuwait, Nigeria, Saudi Arabia and Venezuela,\textquoteright in order to make necessary contacts with non-OPEC oil producing/exporting countries with a view to reaching an agreement for a joint effort to stabilise the market." The aim of non-OPEC producers was clear to restore price to $28/b. But what was unclear was their proposed means of supporting. OPEC in order to achieve such an objective, especially since the price of Arabian light, for instance had fallen by that time to $11.17/b. Differences of opinion within the organisation itself were prevented the emergence of specific demands to be negotiated with non-OPEC produc-

\textsuperscript{29} Ibid, p. 238.
By July 1986, as price fell below $10/b, co-operation began to emerge from some non-OPEC producers in the following manner.

a) Oman would reduce production by 50,000 b/d, from a level of 500,000 b/d,

b) Norway would review its development programme and reduce its planned increase in oil production,

c) Malaysia would reduce exports by ten percent (about 35,000 b/d) if OPEC opted for production management,

d) Mexico would reduce exports by 150,000 b/d, from a level of 1.5 mb/d. It was however, also tied to production management by OPEC;

e) Egypt would reduce production by 70,000 b/d;

f) Angola would reduce production by 20,000 b/d;

There was a continued increase in non-OPEC production and this coupled with excess production from the OPEC. It undermined prices which led to the urgent attention by OPEC. The decision of the 75th meeting of the conference in Geneva in July/August 1986, had limited OPEC's ceiling to 16.0 mb/d. This was considered to be an interim action and a temporary cut in OPEC production. OPEC's position was clearly stated and reiterated in the 79th conference in Geneva in October 1986. The return to a fixed pricing system at the end of 1986. Egypt was agreed to reduce its 1987 production level by 70,000 b/d, from 940,000 b/d. Norway would reduce its production by 7.5% from planned maximum capacity, which amounted to a reduction of 80,000 b/d at the time. Oman promised a 32,000 b/d cut from exports.

But as the prices improved, even to less-than-desired

levels, the urgency of co-operation became less important. Prices improved substantially in the first-half of 1987, due to OPEC action and perceived support of non-OPEC producers. This by itself did not prevent OPEC president Rilwanu Alhaj Lukman, laying down the facts as they were, in his opening speech of the 81st conference in Vienna in June 1987, when he said: "When OPEC reached its agreement last December; it was expected that non-OPEC producers would co-operate with us and similarly reduce output, because this would bring obvious benefits to all participants in the markets. But the available reports for the first four months of this year appear to tell a different story. That some non-OPEC countries, including some of those which had publicly supported OPEC's stand, in fact increased production compared with same period last year."33

This was reiterated strenuously in Mr. Lukman's opening

speech of the 82nd Conference in Vienna in December 1987, when he said; "The support we have received from other oil producers has been fragmented, in spite of the fact that many of them have capitalised on our organisation's success. Some countries, such as the United Kingdom, have publicly declared their opposition to any form of co-operation among producers to stabilise the market. Others have promised to help stabilise the market by controlling output levels and have done so at times, but have then faltered as market conditions changed. Some countries have on other hand, remained true to their word, Norway and Mexico, for example, have in fact restrained their production in co-operation with OPEC. Generally, however, if a country wishes to bring stability to the market, and publicly promises to assist in efforts to do so, then a subsequent contrary action may do more to general confidence than if it had not made the promise in the first place. It must be pointed out, however, that while we naturally welcome co-operation from other oil producers, the burden of price defence is still largely
borne by OPEC, which as a whole, is producing at only about half of its capacity in order to support market stability."34

The price deterioration at the end of 1987 and during 1988 intensified contacts between OPEC and non-OPEC producers. In March 1985, a group of non-OPEC Producers, consisting of Angola, China, Columbia, Egypt, Malaysia, Mexico and Oman met in London to discuss the state of the oil market and the possible means of supporting it. During the April 1985, they met a group of OPEC countries, namely Algeria, Indonesia, Kuwait, Nigeria, Saudi Arabia and Venezuela in Vienna. The non-OPEC countries present preferred to be called the independent producing exporting countries and took it upon themselves to try to secure the participation of other nations. The important outcome of this meeting was that: "..... Angola, China, Egypt, Malaysia, Mexico and Oman proposed to cut back their respective export volumes by

34. Ibid, p. 267.
five percent during the crucial remainder of the second quarter i.e. May and June 1985. The basis for such a cut would be average exports of the past six months. Implementation of such measures would be contingent upon a similar proportional response by OPEC. 35 This cut was estimated be around Mexico 68,000 b/d, Egypt 22,500 b/d, Oman 27,000 b/d, Malaysia 15,000 b/d, Angola 20,000 b/d, China 30,000 b/d and the total was around 182,000 b/d. The cuts were much less than those promised in 1986 and were also conditional upon a proportional response from OPEC. This made it difficult for consultative meeting of the conference on 28th April, 1988 to make a decision on the issue and later Mr. Lukman told in a press conference that: 

"The proposal made by the independent producers required more time for clarification of some of the points in the offer and to enable consultations with member countries' governments on the form cooperation should take in the future. OPEC.

was not interested in merely propping up the market temporarily. Short-term stability was of course, also of concern, but ultimately it was long-term stability of the market that was important to all producers, both OPEC and non-OPEC, and it was to this issue that they must address their attention.36 Obviously OPEC was not satisfied with such a proposal. To reject it would make it look as if the organisation was not interested in co-operating with other producers, and this was clearly contrary to what it had been trying to achieve during the previous years. To accept the proposal, on the other hand, would have meant a further reduction in OPEC's market share, which had been at the root of the problem behind the market collapse of 1986. It was also felt in 1989, that the second quarter of the year might witness some price weakness, unless help was forthcoming from non-OPEC producers. Technical experts from OPEC and IPEC (Independent Petroleum Exporting Countries)

-------------

met in London on 26th January 1989, to develop and strengthen co-operation towards the achievement of oil market stability. The IPEC representatives included experts from Angola, the province of Alberta in Canada, China, Columbia, Egypt, Malaysia and Mexico, Norway, Oman, the states of Alaska and Texas in the USA, the former Soviet Union and the Yemen Arab Republic. Although the representatives from Canada, Norway, USA and Yemen attended as observers, it was obvious that the IPEC movement was attracting more interested parties, in recognition of what OPEC had achieved as a result of its 1988 agreement.37

During the eighties repeated attempts made by OPEC to gain their co-operation. Non-OPEC production increased from 18.6 mb/d in 1979 to 24.1 mb/d in 1988 i.e. an increase of about 5.5 mb/d. Similarly their net exports increased from 4.6 mb/d in 1979 to 9.5 mb/d. In 1988, i.e. an in-

crease of about 4.9 mb/d. The major part of this increase occurred before 1985, but even after that their production as a group rose by 1.4 mb/d and their net exports by 1.1 mb/d. This had always cast doubt upon the effects of the production or export cuts that have been repeatedly announced by these countries. With the exception of the U.K., which has remained consistently in its position against any form of co-operation with OPEC. This argument was true for only the group as a whole but also as individual countries which had all increased their production, with the exception of Mexico and Egypt, whose production declined from the level of 1985, though it remained substantially higher than in 1979. It will be shown from table 6.

Table : 6

Non-OPEC Production Cut-back announcements

Second quarter 1989 b/d

<table>
<thead>
<tr>
<th>A.5% Cut</th>
<th>Base Exports</th>
<th>Cut Back Level</th>
<th>Export after Cut-back</th>
</tr>
</thead>
<tbody>
<tr>
<td>USSR</td>
<td>2,000,000</td>
<td>100,000</td>
<td>1,900,000</td>
</tr>
<tr>
<td>Mexico</td>
<td>1,372,000</td>
<td>68,600</td>
<td>1,303,400</td>
</tr>
</tbody>
</table>

.....Continue.....
<table>
<thead>
<tr>
<th>Country</th>
<th>Planned Exports</th>
<th>Implied Cut-back</th>
<th>Export after Cut-back</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>636,000</td>
<td>31,800</td>
<td>604,200</td>
</tr>
<tr>
<td>Oman</td>
<td>555,000</td>
<td>27,750</td>
<td>527,250</td>
</tr>
<tr>
<td>Egypt</td>
<td>480,000</td>
<td>24,000</td>
<td>456,000</td>
</tr>
<tr>
<td>Angola</td>
<td>437,200</td>
<td>21,860</td>
<td>415,340</td>
</tr>
<tr>
<td>Malaysia</td>
<td>345,000</td>
<td>17,245</td>
<td>327,755</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,825,200</strong></td>
<td><strong>291,255</strong></td>
<td><strong>5,533,945</strong></td>
</tr>
</tbody>
</table>

B. Export Freeze

<table>
<thead>
<tr>
<th>Country</th>
<th>Planned Exports</th>
<th>Implied Cut-back</th>
<th>Export after Cut-back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>225,000</td>
<td>33,500</td>
<td>191,500</td>
</tr>
<tr>
<td>North Yemen</td>
<td>220,000</td>
<td>30,000</td>
<td>190,000</td>
</tr>
</tbody>
</table>

C. Reduction From Planned Production

- Norway: 115,000
- Burnei: 7,500
- Alberta: 33,000

Total Cut (including Freeze and reduction): 510,255

Source: Official announcement of OPEC Secretariat, Vienna.

On the other hand, OPEC could not formulate a position of specific demand or action to be asked from non-OPEC producers. Some reasons for this were as follows:

a) The absence of a formal non-OPEC group to approach as a
single body. Even when IPEC representatives met, some of them agreed to attend as only observers. Other did not wish to co-operate with OPEC.

b) The political pressures on some non-OPEC countries not to co-operate with OPEC. Norway, for instance, was criticised by some of its allies and partners in the IEA and the OECD for co-operating with OPEC. Accordingly, Norway has always maintained that its actions are "unilateral in character and limited by time".

c) The differences within OPEC itself with regard to the desired market share and means of sharing incremental demand with non-OPEC producers. There are several reasons why non-OPEC producers should have been more forthcoming in their co-operation with OPEC:

I) The revenues of these countries from their oil exports

increased $46.36 bn in 1979 to $94.79 bn in 1985, largely due to OPEC's support to Price structure. It led to the organisation to cut its production and suffer a reduction in its revenues. The non-OPEC revenues, however, declined $67.88 bn by 1988 which was still higher than that of 1979, while OPEC revenues were lower than the 1979 level. With the exception of Angola and Oman, non-OPEC oil exports as a percentage of GDP in 1988 were reasonable, which suggested that further support for the organisation could have been possible without adverse effects on their economies, which in addition have more diverse economies than those of OPEC. Some of them have problems of high debts and social development requirements, but the same condition also affects OPEC countries.39

II) Economic relations between OPEC and selected non-OPEC countries remained overall strong. The value of exports to OPEC by those countries remained strong on the whole. The value of exports to OPEC by these countries increased from

$10.81 bn in 1979 to $11.52 bn in 1988. Ironically, the biggest beneficiary of this trade was the U.K., which had refused adamantly any form of co-operation with OPEC. The U.K. got the benefits of large financial deposits from OPEC countries into its banking system.

III) The investment required in the future to support a strong reserve base was obviously higher per barrel in Non-OPEC countries than in OPEC. The support for OPEC would have ensured a more stable market with higher prices and revenues for all, and this would have facilitated large scale investment.40

In retrospect, some analysts suggested that OPEC and non-OPEC co-operation during the eighties was only moderately successful. Nevertheless, in the difficult circumstances facing the oil industry during the decade, it was believed that this co-operation had at times a positive effect on the

40. Ibid, p. 16.
oil market and helped absorb some fluctuations in price at a critical periods. Both OPEC and non-OPEC still viewed this co-operation as essential and in fact, they were turning their attention to the long-term issues, the oil industry was likely to face during the 1990's. But it is clear from these arguments that OPEC tried its best to have co-operation with non-OPEC producers to maintain stability in the international oil market, despite the fact that non-OPEC oil was a diminishing resources more than the OPEC.

Hence for the OPEC and non-OPEC producers. As it is also evident from the above study that non-OPEC producers came forward for co-operation with OPEC in grave crisis situation during the eighties. Alternative was to intensify bilateral contacts, which could result in individual initiatives towards co-operation. Despite the multiplicity of channels of communication, this required, steps which could facilitate various types and degrees of co-operation on the part of non-OPEC such as the decrease in the actual level of production, a cut-back in oil exports, a reduction in output....
from the level of planned production capacity (as in the case with Norway) or the adoption of a policy of not increasing production in 1989. But the means to achieve these objectives could be different. Some countries might consider giving tax relief to the operating oil companies as compensation for the enforced reduction in production capacity. On the other hand, other countries might reconsider their tax relief policies which could lead to reduction in production from high cost fields and hence to necessary reduction in their production. These depend on the nature of crisis and its impact on consuming countries. Thus, a detailed discussion of consumer's responses to crisis with special reference to IEA is imperative because IEA is the organisation from consumer's side. It is for protecting the interest of consumer against the upheavals in oil prices. A detailed discussion on all these issues will be discussed in the next chapter entitled "Consumer's responses to the Crisis with the especial reference to IEA."