BACKGROUND OF THE STUDY

1.1. INTRODUCTION

1.1.1. Origins of Oil

The "Black Gold" as popularly known, or "Petroleum" has its origin in the words, Petra (rock) and Oleum (oil). Most geologists agree that oil was formed, over several millions of years, from organic materials of one kind or another. These materials were accumulated at the bottom of oceans or inland seas, or washed inland during periods of inundation, and generally covered by mud or lime deposited on top; although there is less agreement about just how, through the action of temperature or pressure, of particular process of decomposition or perhaps simply of time, these organic sources mixture of hydrocarbon compounds that constitute petroleum. It varies from nearly solid asphalt through the liquid form. Being formed as a fluid, oil could move through any underground strata that were porous and permeable. Being lighter than the salt water also found in the pore spaces of the strata surrounding it, it tended to make its way gradually upwards. So, where it is now discovered may not necessarily be where it began to be formed. That propensity to migrate has considerably complicated the geologists' ideas of just how petroleum could have originated; however, it is also mainly what has made petroleum available to man.¹

1.1.2. Oil Discovery and Petroleum Era

Edwin Drake, is generally acknowledged as the first person to drill for, and find crude oil. In 1859, he discovered the oil fields of Appalachian in Pennsylvania (USA). Thus, the real origins of the modern oil industry are in Pennsylvania.

Until the turn of the century, oil was used primarily as kerosene for lighting and heating, and secondarily as lubricant. Later, fuel oil for boilers in ships and industry came to prominence as significance of kerosene began to fade. The automobile era (1911), in the United States, was perhaps the biggest cause of the rise of oil, along with World War I.
During and after the World War II, transport, industry and military demand for coal, oil and natural gas (petrofuels) increased. Discovery of enormous low cost crude oil reserves in the Middle East, control of World’s oil supply and price by the "Big Seven" and the increasing reliance on oil as the major source of energy were some of the factors that brought about a swing in the consumption of oil after the second World War. However, the exhaustibility of petroleum reserves on the hand, coupled with the vital role that petroleum products play in modern civilization in peace and in war, establishes the compelling need to reduce waste in the production of this valuable earth material.

1.1.3. Oil in The World Economy

Highly sophisticated technological civilization in the 20th Century has been developed through extensive and elaborated utilization of petroleum energy. In this sense, the 20th century is "Petroleum Century".

No commodity plays a more vital role than oil in economic life of the underdeveloped oil exporting countries of the World. Obviously, for nations with enormous oil deposits, such as Venezuela, parts of the Middle East and North Africa, oil is the economic life. Oil exports provide not only a large share of national income but also most of these countries’ foreign exchange earnings. Oil thus, represents great asset which could potentially provide all the capital necessary for economic development. The Members of Organization of Petroleum Exporting Countries (OPEC) can build any type of society that they desire if they are capable of utilizing their oil revenues to form that most valuable of all capital-human capital. This particular goal comprises establishment of schools, technical institutes, and universities. The OPEC Governments should undertake various industrial projects where an industrial labour force, technicians, and managers can acquire the kind of industrial apprenticeship associated with modern, socially progressive societies. Islamic Republic of Iran and Venezuela have some achievements to their credit in so far as this goal is concerned.

It is a widely recognized fact that, oil is the main source of energy in the world. In other words, oil is the blood of modern civilization, and nobody any where can afford to dispense with it. Petroleum products have extensively penetrated, in one way or another, all
aspects of life in industrial nations, and they now form the backbone of the welfare of individuals and economic prosperity of nation\textsuperscript{6}. According to some economists "... energy fuels are indispensable for modern industry and agriculture. For just as capital without labour is useless, so too is sophisticated capital without energy\textsuperscript{7}.

Sudden and substantial price increases are bound to adversely affect the economies of oil importing nations. The deficits created in the external balances of industrialized nations, would be self-correcting by recycling oil money through increased trade and financial flow of capital. This stems from the fact that increase in oil revenues of OPEC Countries, tends them to spend more on imported goods and services from the industrialized countries. By contrast the oil importing nations from the Third World\textsuperscript{*} do not generally enjoy the same advantages. A number of macro-variables such as inflation rates, employment levels, terms of trade, savings, investments, balance of payments etc. would be significantly influenced by changes in oil prices.

1.1.4. Formation of OPEC

The irrational pricing policy followed by the multinational oil companies may be considered as one of the main reasons, which encouraged the oil producers to establish the Organization of the Petroleum Exporting Countries (OPEC) on 14th September 1960. The objectives of this permanent and intergovernmental set-up were designed to unify oil policies of the Members, and to lay down the best means for safeguarding their interest, individually and collectively, as well as to stabilise prices, with due consideration for the interests of both producing and consuming nations. It is to be noticed that the Member Countries, considered individually, would not have been in a position to recover the rights of sovereignty over their national resources from the transitional oil companies. However, there are some authors who believe that "... OPEC's major actions on prices were no more than a series of reactions to external events which took place, mainly in certain Member Countries, and which had the effect of reshaping the oil market before OPEC as a group could decide to undertake any real change, or to confirm the change that had taken place or, at best, to carry it further\textsuperscript{8}.

* With the exception of South Korea, Taiwan, Hong Kong, Singapore and India which enjoy a significant potential for exporting commodities and manufactured goods.
1.2. Background of The Study

1.2.1. A Distinct Field of Inquiry

Economics of oil became a distinct field of inquiry after the World War II, as oil began to account for a major source of energy in the World. OPEC emerged on the world scene as a distinct Organization by 1960. Despite the fact that OPEC share in the global oil production has witnessed a declining trend, it still plays a pivotal role as the oil supplier in the world. The oil reserves located in OPEC Member Countries are by far the largest in the World, amounting to about 84 per cent of total proven World oil reserves of some 921 billion barrels (excluding the former CPEs). The life span of non-OPEC areas' reserves-at present rates of production is about 19 years; that of OPEC, well over 100 years. Hence, crude oil reserves assume crucial importance in the future world oil market. No doubt, OPEC will have the stick.9

1.2.2. Objectives

The main objectives of the study may be stated as under:

[a] Study the pattern and growth of the oil industry
[b] Analyse the events leading to the formation of OPEC and its structure
[c] Delineate crude oil pricing policies followed by OPEC since 1970s and bring out their implications
[d] Evaluate the impact of the major oil shocks of 1973-74, 1979-80 and the 1986 oil price collapse on the economies of Member Countries
[e] Assess the role of oil and the OPEC decisions with regard to price and production of crude oil especially on the economies of Islamic Republic of Iran and the United Arab Emirates
[f] Attempt formulation of different scenarios in oil price trends by way of futuristic exercises and assess the impact on certain economic variables of the Member Countries.
1.2.3. Methodology

This study is based on secondary data published by OPEC, OAPEC, U.N., International Monetary Fund, World Bank, Central Banks of I.R. of Iran and the U.A.E., Shell and Exxon Oil Companies, East-West Energy Center, USA, American Institute of Petroleum, Abu Dhabi Chamber of Commerce and Industry, Statistical Centre of I.R. of Iran, National Iranian Oil Company, Central Statistical Department of the UAE (Ministry of Planning), Abu Dhabi National Oil Company (ADNOC), Erasmus University (Rotterdam), Oxford Institute for Energy Studies, the Japanese Institute of Middle Eastern Economies, Middle East Economic Survey, (MEES), etc.

The secondary data obtained from official sources were compiled, adapted and tabulated so as to make them directly relevant and useful for interpretation, analysis and evaluation. Several graphs and diagrams were prepared in order to highlight the impacts of various policy decisions taken by OPEC on the economies of Member Countries. The use of mathematics is generally avoided except in cases where some futuristic exercises are attempted in chapter Eight. The main thrust of the thesis is on interpretation and evaluation of impacts of OPEC decisions.

During the course of study it became necessary to peruse and profit from a large number of books, journals, research papers and monographs published by various reputed energy organizations of the World. The researcher visited a number of libraries both in India and I.R. Iran. The libraries of Indian Institute of Management, Ahmedabad, Oil and Natural Gas Commission, Institute of Oil Reservoir, Indian Petrochemical Corporation Limited, University of Bombay, Sardar Patel Institute, Gujarat University, Shivaji University etc. were some of the libraries in India that the researcher visited. The researcher also benefited from the libraries of Iranian Ministry of Petroleum, (Tehran), Technical Library of National Iranian Oil Company (N.I.O.C.), (Ahwaz), Abadan Institute of Technology (A.I.T), (Kut-Abdullah), Central Bank of IR Iran, (Tehran), Statistical Centre of IR Iran, (Tehran), Statistical Centre of IR Iran, (Tehran) etc.
The following Journals were consulted both for references and interpretations:

Energy policy, Oil and Gas Journal, Energy Economics, Petroleum Economist, the Economists Intelligence Unit, the Iranian Journal of International Affairs (IPIS), Petroleum Intelligence Weekly (PIW), etc.

The period chosen for the research study is 1974-89. It is a widely recognized fact that quadrupling of oil prices (First Oil Shock) in 1973/74 and doubling of oil prices in 1979-80 (Second Oil Shock) were witnessed during this period. It would be of interest to examine the impacts of OPEC decisions and the consequent inflow of oil revenues into the OPEC treasury on expenditure and saving patterns of the Member Countries. Irrespective of whether reverse oil shock of 1986 was exogenous or endogenous, the subsequent loss of oil revenues caused tremendous financial pressure on OPEC. The impacts needed to be fully analysed. Recent developments in oil industry after Iraqi invasion of Kuwait and the subsequent Persian Gulf War are also examined at some length in the study.

1.2.5. Hypotheses

The following hypotheses of a general nature were framed in order to focus on certain critical issues:

[a] OPEC as an international organization could and in fact did manipulate oil prices.
[b] The price changes effected by OPEC had significant impact on the economies of Member Countries.
[c] The impacts could be observed on certain important macro variables and quantified in terms of gains in GDP, Public expenditure, welfare measures, foreign exchange earnings, improvement in balance of payment etc.
[d] The impact of OPEC decisions on IR Iran and the UAE has been significant.

1.2.6. Review of Literature

There is a large number of studies devoted to the analysis of various events which ultimately led to the formation of the Organization of the Petroleum Exporting Countries (OPEC) in 1960. For instance, C. Tugendhat (1968), studied in detail the relationship
between the major oil companies and the host countries. He pointed out the role of Venezuela which was the most experienced in bargaining with the Companies in encouraging the other oil producers to demand a greater share in (50/50 profit split) the profits. He also examined the nationalization of Iranian oil by Dr. Mossadegh which led the Governments of other producing countries to take similar steps. M. A. Adelman, (1971), examined the supply, production costs, and market structure of oil. He also analysed the market price of oil from 1947-70. M. S. Al-Otaiba, (1974), reviewed the petroleum industry before the formation of OPEC. The objectives, structure, membership and the oil policy of OPEC were also dealt with.

Though OPEC emerged on the world scene as a distinct organization in 1960, it was only a decade later, notably with the first oil price like of 1973-74, that OPEC caught the attention of researchers in the field of oil. The Economists, through various theoretical and empirical analyses, attempted to forecast OPEC behaviour and decisions. For instance N. Choucri, (1975), examined the emergence of OPEC and the subsequent changing power relationship between the major oil companies and OPEC members. N. Fallon, (1975), examined in detail the impact of 1973/74 oil price rise. He tried to forecast the oil revenues and wealth of the producing countries, with emphasis on the interdependence of producers and consumers. He also described the role of banks in assisting the Middle East Governments and individuals in implementing their plans. R. Mabro, (1975), reviewed the implication of the October 1973.

M. Lipton (1976), in an article studied the impact of first oil shock on the world economy and pointed out that all oil importing countries will be working toward development of indigenous energy sources. K. G. Fenelon, (1976), surveyed the UAE’s economic and social developments following the discovery of oil in Abu Dhabi and the first oil price hike. F. Fesharaki, (1976), focused on economic and political implications of the early oil concessions of Iran, during 1901-51. He also discussed nationalization of oil industry in 1951, the domestic activities of NIOC in Iran and the role of oil in the Iranian economy till 1973. T. Rifai, (1976), studied the pricing patterns of crude oil in and outside the Persian Gulf area as guideline for an international energy policy. R. Fallah, (1976), in an article presented to a symposium, concluded that Iran’s oil industry has pricing and marketing policies, but that these are now controlled from Tehran, not London. For coping
with the world energy crisis following the oil price rise of 1973, R. Fallah suggested interalia, (a) steps by the Western world to narrow the gap between rich and poor nations, (b) foreign investments by producing states with surplus petrodollars (c) transfers of responsibility for local capital investments from the oil companies to the host Governments in some OPEC States, and (d) trading oil that generates surplus funds in some countries, e.g., Saudi Arabia, for convertible energy bonds. F. Fesharaki (1976), also in an article, focused on the petrodollar position of Iran and the future expenditures. He suggested that if expenditures have to be reduced owing to a fall in foreign exchange, foreign investments should be cut first. He believed that Iran's development goals should be maintained but implemented at a somewhat slower pace.

M. S. Al-Otaiba (1977), reviewed the economic structure of the UAE before and after (till 1975) the discovery of petroleum in the United Arab Emirates. He determined the role of oil in the development of the UAE's economic structure after the discovery of petroleum.

P. R. Odell and L. Vallenilla (1978) dealt with various political and economic events leading to the formation of OPEC and the consequences of shift in oil power from major oil companies to the Member Countries of OPEC. The authors dealt with the problems faced by the OPEC countries in connection with the possession and management of enormous financial resources following the first oil price hike of 1973/74. The effects on the world economy of the balance of payment surpluses accumulated by the OPEC, as a result of hike in oil prices in 1973 is examined by C. H. Feinstein and W. B. Reddaway (1978). The article is also concerned with the implications for the UK.

"OPEC and Future Energy Markets" was the theme of the Seminar held in Vienna, (1980), in October 1979 during which a number of distinguished speakers pointed out, inter alia, the various issues relating to the energy, OPEC policy and the challenges faced by the Organization. L. S. Hiraoka (1980) reviewed the reaction in the USA to curtailed exports of crude oil from Iran following the downfall of the Shah. Ian Seymour (1980), in his famous book "OPEC: Instrument of change" had a comprehensive review of prices and profits before and after the formation of OPEC. Among other topics, he dealt with the major oil shocks of the 70s, OPEC's Aid to Third World and the North-South dialogue.
P. Hallwood and S. W. Sinclair (1981), examined inter alia, some of the major aspects of the 1970s World economic malaise, and showed how and under what circumstances the OPEC Countries were able to wield influence over oil prices in the early 1970s. T. H. Moran (1981), attempted to construct a framework for modelling OPEC behaviour based on the calculation of maximizing economic benefits and suggested an alternative political decision-rule to account for the conduct of energy policy by OPEC’s largest Member, Saudi Arabia. The Channels through which certain developing countries gained (e.g., trade, labour migration to OPEC Members, and inward remittances) were also examined in detail.

R. Mabro, (1982), described the impact of the decline in demand for OPEC oil and analysed new features of the petroleum situation and their significance for OPEC’s behaviour and OPEC’s policies. J. F. R. Fabritius and C. E. Petersen, (1982), developed an empirical measure of OPEC responding to compare the situation in 1979/80 with that in 1973/74. The simulation results suggested that the degree of responding is crucial for the impact of the oil price increase in industrial economies and that Europe is more sensitive to variations in OPEC responses than the USA. The impact of the second oil crisis, and the directions of Western energy policies after the crisis were the subject of a book edited by W. L. Kohl, (1982). F. Al-Chalabi, in a paper examined the oil developments of 1979 and concluded that the 1979 oil price hike was another process of correcting imbalances, this time created by the market and not by OPEC.

F. Fesharaki and D. T. Isaak, (1983), in a study tried to bring out changes in the world petroleum market and the way a set of activities within OPEC, primarily concentrated in the Persian Gulf, is likely to affect the structure of World petroleum trade. They examined the policy plans, options, and perceptions of the oil exporters in terms of their policies towards production, export, and price of crude, as well as their ventures into hydrocarbon processing industries (refining, tanker transportation and petrochemicals.). H.S. Zakariya, (1983), examined the petroleum lending programme of the World Bank to oil importing developing countries from its inception in 1977. F. Ghadar, (1983), studied the petroleum industry in Oil Importing Developing Countries (OIDC), and tried to bring out the role of OPEC and other oil exporting nations in the development of OIDC oil industry. J. Amuzegar (1983) reviewed the post-1973 developments and their effects on future

P. R. Odell, (1984), believed that a return to the preferential use of low cost oil can only be achieved in the context of OPEC-OECD agreement on a long-term development strategy.

The impact of the first and second oil price hike on global energy, and international economic relations was the subject of inquiry for R. K. Pachauri, (1985). Ali Jaidah, (1985), analysed the major problem facing oil exporting countries in general and OPEC in particular, for maintaining market stability. He pointed out the respective roles of non-OPEC Countries and Saudi Arabia in price formation and stabilizing the oil market. F. Al-Chalabi (1985), analysed the issues relating to oil prices in OPEC’s long term strategies after reviewing the events which led to the first oil shock.

I. F. Shihata and N. A. Sherbiny N. A, (1986), reviewed the nature and role of OPEC during the first 25 years of its existence and, in view of the recent decline in oil revenues, discussed its future prospects. J. Amuzegar, (1986), believed that the price fall has short term gains, but in the long run extreme price volatility benefits no one. As a result of oversupply of cheap oil in the world oil market in 1986, the private international sector, represented by the transnational oil companies either cancelled or drastically curtailed budgetary allocations for new investment in petroleum exploration and development in the third world. H.S.Zakariya (1986), examined the role of the public International sector in financing petroleum projects in the LDCs. S. Clubley (1986), focused on the origins and development of the world oil industry.

V. C. Rao, (1987), attempted to review the flows of financial assistance from OPEC Countries to other developing countries. M. V. Samii, (1987), studied the OPEC’s decision to return to fixed oil pricing policy during post-1986 oil collapse.
F. Al-Chalabi, (1988), pointed out the importance of the Persian Gulf OPEC Members, by the end of this century, as the centre of gravity of the world supply demand balance. He also believed that it will be the Persian Gulf Countries which will set the price of oil at reasonable levels and which will be able to defend it. Akin Iwayemi, (1988), suggested that a pricing and production strategy based on cooperation among producers is the only sustainable option to avoid a price collapse. In other words "consensus" rather than "conflict" or competition should govern producers' relationships. V. C.Rao, (1988), discussed the Indo- OPEC trade relations.

P. R. Odell, (1989), examined the prospects of energy in Western Europe, and the alternative energy source available to them. F. Fesharaki, (1989), et al, in a survey studied the impact of lower oil prices on OPEC production capacity (Persian Gulf Producers), on export refineries, petroleum trade, balance of payments and on OPEC domestic demand. P. R. Odell (1989), after revising world energy demand since 1860 pointed out the structural changes in the energy system after the mid-1970s. He suggested that over at least the rest of the century OPEC will dominate world's supplies of energy. Hisham Nazer, (1989), pointed out that the moderation in Saudi Arabia's oil policy, seeking both stability and predictability is supported by the long-term capital needs of a country.

S. A. Al-Fathi, (1989), believes that in order to promote a stable world energy balance, both, oil supply security and stable level of demand are necessary. M. Shams, (1989), tested the impact of OPEC's oil revenues on the major macro-economic indicators-GNP, investment and inflation. Higher oil revenues meant higher Government spendings and hence higher economic activities and vice versa. The author suggested that due to unpredictability of the world oil market, the OPEC Members should consider domestic financing for improving their economic performances. Dr. Subroto, (1989), dealt with long-term prospects for oil market stability and preservation of the environment. Walter Goldstein, (1989), attempted to analysis and forecast the oil market in the 90s. S. A. Al-Fathi, (1989), reviewed the likely development of OPEC's refining industry (considering the challenges facing the industry in the future) to the year 1995, the prospects for product exports and their share in total exports. John Gault et al, (1989), attempted to derive a formula for OPEC production quotas, considering the elements of individual member's oil production capacity and (merchandise) imports per capita.
J. Yarjani, (1990), reviewed I.R. Iran's First Five Year Plan and the economic development strategies. He explained various projects undertaken by the Iranian Government during the First Plan, thereby enhancing the oil and gas production capacity and refining. V. K. Rajuk (1990), examined the role of petrodollar and its impact on international liquidity, exchange rates, interest rates, inflation, balance of payment, world debt and development of the OPEC. Peter Nulty, (1990), holds that the Middle East cannot be relied on for petroleum and the world will have to intensify the search for alternatives and natural gas will lead the pack. Todd May, (1990), reviewed oil prices during the recent Persian Gulf War. He believed that the jump in oil prices this time does not compare with the earlier ones. Brain O'Reilly, (1990), examined the U.S. high costs of crude oil imports and the role of OPEC (Persian Gulf Members) in meeting the U.S. demand for petroleum products. Ahmed Yamani, (1990), reviewed the oil market during 1970s and 1980s and then attempted to forecast the oil market in the 1990s. J. G. Borpujari and M. F. Melhem, (1990), reviewed the policy changes undertaken by the Major Oil Exporting Countries (MOECs) since 1973. J. Amuzegar, (1990), pointed out new developments in the Middle East and within OPEC. He also reviewed the market after mid-1986 oil collapse. M. Takin, (1990), analysed relationship of OPEC with the oil importing countries in general and with Japan in particular. He also pointed out the position of the Middle East within OPEC. C.E. Suarez, (1990), analysed evolution of oil prices for the USA since 1860 and for the international market since 1950. Using this reference, he analysed the causes of price variations in 1970s and 1980s and attempted to forecast the evolution of oil prices in the future. S. A. Al-Fathi, (1990), discussed the historical developments in the relations between OPEC and non-OPEC oil producers. He critically looked at the outcome of the cooperation and the prospects for the future by assessing the oil demand and supply balances. S. A. Al-Fathi, and B. E. Okogu, (1990), attempted to study the feasibility of meeting the Toronto (1988) emission reduction targets for protecting the environment. The paper proposed a "production permits" formula, based on proven reserves, as a means of meeting the said target. S. Kayama, (1990), pointed out that while the consumption of energy and oil increased during the 1990s, the production by non-OPEC countries has stagnated. He suggested strengthening of the interdependence system, development of alternative forms of energy and improvement in energy efficiency (considering the environmental protection) to solve the international energy problems in the 90s. M. Dabbagh, (1990), evaluated the effect of co-operation between OPEC and non-OPEC States.
He also reviewed the trend of world oil supply and demand between 1973-89, and assessed the impact of lower Gulf Cooperation Council's (GCC) oil revenues between 1982-87 on the economies of their trading partners. G. Ahgazadeh, (1990), Minister of Petroleum, Iran emphasized the importance of regional co-operation in consolidating political, economic, and cultural development of the Persian Gulf States. N. Gurer and R. Birol, (1990), examined the world oil market and prices following the Iraqi invasion of Kuwait.

P.R. Odell, (1991), attempted to review the fictions and fallacies that ruled the supply-side of energy (regional and global) over the past twenty years. M. S. Kumar, (1991), undertook an investigation into the efficiency of the crude oil futures market and the forecasting accuracy of future prices. The author also explored the predictive power of future prices by comparing the forecasting accuracy of end-of-month prices with weekly and monthly averages, using a variety of different weighting schemes. Jibril Aminu, (1991), tried to show the direction for oil and gas development in the Nineties, after reviewing the past performances of OPEC. He suggested a cooperation of all the parties involved in the market. Al-Shan Pari, (1991), Oman's Minister of petroleum, called for "Supply Management", without which the spare capacity would put downward pressure on prices. He believed, that the oil exporters would be able to defend crude oil export prices (by means of supply management) at a reasonable level, i.e., $21 per barrel through 1995, despite rising spare capacity. He further believes that "in return for providing supply security to the oil-importing countries, the consumers should be asked to refrain from undue steep increases in product taxes which would result in an unfair distribution of the rent". G. Kartasasmita, (1991), the Minister of Mines & Energy, Indonesia, after reviewing various events of the Persian Gulf War and the developments in the former USSR, pointed out the benefit of a dialogue between Indonesia and South Korea. He explained how these cooperations have resulted in mutually beneficial arrangements, providing Korea with security of supply and Indonesia an assurance of return on investments. He suggested that the "... spirit of this kind of cooperations could be attempted on world wide consumers and producers dialogue". Dr. Subroto, (1991), Secretary General of OPEC, insisted on a greater and closer co-operation between both producers and consumers for removing some of the constraints on energy development to examine their impacts on the global energy markets during the 90s. C. Constantinou, (1991), discussed the various conclusions that the Department of International Economic and Social Affairs in energy arrived at prior to the
Persian Gulf crisis with regard to the world energy situation and its prospects. He also, analysed the impact of the Persian Gulf crisis on different issues. The author also examined the prospects for oil demand-supply and a need for an international cooperation\(^6\). The assessment of Global warming and CO\(_2\) emission and the need to protect the world climate for the present and future generations was the subject of A. Miremadi, (1991). OPEC Countries’ position on these issues were examined too\(^7\). D.J.O’Brien, (1991), observed that political rather than market structure will determine the broad direction of oil prices and to a lesser degree, supply and demand. He further believed that by 1995, the Middle East oil production will increase to 21 million b/d of which 16 to 17 million b/d will go into international trade. He examined additional investments in refining required in Asia-Pacific region\(^8\). F. A. Berger, (1991), after discussing the changes in three inter-related geopolitics, economic and environment, attempted to frame a post-cold war scenarios for energy industry\(^9\). G. Aghazadeh, (1991), Petroleum Minister of the Islamic Republic of Iran, after reviewing recent developments in the world, pointed out the fact that a continuation of economic growth in the Western nations is the major factor in securing the demand for oil. He suggested that oil producers must satisfy the energy requirements of the consumers. Oil consumers on the other hand, should guarantee demand for oil. These mutual beneficial arrangements would bring a stability into the global oil market and a major block of capital would not be wasted by maintaining the Strategic Petroleum Reserves, (SPR). He also believes that the environmental issues should be the main subject of debates in national and international deliberations. Exchange of information on technical, scientific, economic and marketing issues of oil should be encouraged to promote mutual producer-consumer understanding\(^9\). Silvan Robinson, (1991), after examining various global socio-economic developments, attempted to examine their impacts on the global energy markets during the 90s\(^1\). K. Mc-Lachian, (1991), reviewed the foreign exchange requirements of IR Iran for undertaking various reconstruction schemes, and the role of oil this regard\(^2\). Peter Davis, (1991), reviewed the prospect for oil prices over the coming 12-18 months, (after 1991). He focused on the impact of the Persian Gulf crisis on oil market and the likely effect of the unravelling of its after effects on oil market in the future\(^3\). K. Mork et al (1991) attempted to study the impact of the substantial decline in oil prices on seven OECD countries, the USA, Japan, the Federal Republic of Germany, France, Canada, the United Kingdom, and Norway. The empirical study (based on data through second quarter of 1988) analysed the macro economic variables of GNP, inflation rate, short-term interest
rate, rate of change in wages, unemployment rate and the overall index of industrial production in the OECD area. Ibrahim Ismail, (1992), attempted to examine the impact of the slide in oil output of the former Soviet Union on the OPEC production.

1.2.7. Knowledge Gap In The Literature

It appears from the review of literature that few studies have attempted to analyse the impact of decisions taken by the Organization of the Petroleum Exporting (OPEC) with regard to oil prices and production on the various macroeconomic variables of Member States, although some of the studies Fallon (1975), Seymour (1980), Moran (1981), Fesharaki and Issak (1983), Jaidah (1985), Al-Chalabi (1988), Shams (1989), Fesharaki et al (1989), Al-Fathi (1990), Aminu (1991), Isamil (1992), have analysed the OPEC behaviour on the basis of the past performances. However, a detailed study covering the impact of OPEC decisions on the Member Countries in general and Islamic Republic of Iran and the United Arab Emirates in particular has not attracted the serious attention of researchers in the field. It would be appropriate to study the effects of fluctuations in oil prices/production in a disaggregative framework to get insight into the economies of individual OPEC Member Countries.

The present study which examines the impact of OPEC decisions on the Member Nations in general and IR Iran and the UAE in particular, is a modest attempt to fill an important gap in the literature in this area of inquiry. It is hoped that it would encourage further research in this area.

1.2.8. Limitations Of The Study

The present study is primarily concerned with OPEC decisions regarding crude oil prices and production. Hence, the prices and production of Petroleum products and gases are kept out of purview of the study. Various activities undertaken by petrochemicals and refining industries of OPEC have been ignored. Since the focus is on two Member Countries Viz., IR Iran and the U.A.E., the impact of OPEC decisions on other Members has not been taken up for detailed study. The study by its very nature is "expost", although an attempt is made to have a peep in future through some futuristic exercise in the Eighth chapter.
This study focuses on the impact of OPEC decisions on the economies of the Member Nations. However, the discussion is kept within the bounds of the international oil industry. The analysis of price/production after the first oil price hike of 1973/74 highlights the OPEC behaviour in formulating its pricing policies.

A special consideration is given to the economies of IR Iran (high absorbing) and the UAE (low absorbing) as each one of these Member Countries belongs to a separate category.
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