CHAPTER ONE: INTRODUCTION: THEORETICAL PARADIGMS AND THE POLITICAL ECONOMY OF INTERNATIONAL OIL.

The primary aim of the present study is to critically analyze the economic and political developments relating to international oil transactions during the period commencing around 1930 and ending around 1990. In the process, the roles of critical actors, interests and institutions in determining outcomes will be critically analyzed with the objective of obtaining a better theoretical understanding of the structure of international relations on which the international petroleum system was based. Energy transactions, especially those relating to international oil, constitute a fascinating intersection of politics and economics. Although since oil is an internationally traded commodity, its pricing, demand and supply can scarcely remain impervious to the inexorable laws of economics, the underlying international political and organizational structure in which the international transactions relating to oil have taken place during the period under study, has been equally if not more important.¹

In fact it would not be an exaggeration to state that transactions relating to the international oil system had considerable impact on the structure of international relations since the beginning of the twentieth century with the start of the scramble for Middle-Eastern oil; they became among the most important factors influencing the course of international relations during the “oil crises” of 1973-74 and 1979-80.2

From a theoretical international relations perspective, transactions in international oil are interesting particularly from the viewpoint of the organizational structures that they have spawned in the form of oligopolies, cartels, international organizations and the consequential regimes that have been created. These regimes and organizational structures have essentially served as instruments at augmenting the control of the dominant actors over this critical energy resource, or alternatively to cushion the adverse impact of such control on the disadvantaged actors.

**Historical Context**

As early as the late nineteenth century, the multinational oil companies (MNOCs), with the active support of their governments, initiated exploration

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activities in various parts of the world to find new sources of oil to satisfy rising demand as the production of petroleum declined in the industrial countries. As a result of this massive search for oil, British, Dutch and U.S. companies obtained a few oil concessions in areas such as the East Indies, Romania, Russia and Latin America. In the United States, fears of the early exhaustion of oil led to determined efforts by U.S. oil corporations, with government backing to conclude similar agreements in areas such as the Middle East, the East Indies and Latin America. The general outcome of this international scramble for oil was the emergence of eight major companies - the international oil majors - which formed an oligopoly of the oil industry. Five of these companies were American, one was British, one Anglo-Dutch and one French. By 1946 these companies came to control 91 percent of the volume of world oil trade. The oligopolistic control over all aspects of the production, distribution and the marketing of oil was exercised through informal mechanisms, strengthened and perfected over time, to limit

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3 Issawi, Charles and Yeganeh, Mohammed: The Economics of Middle Eastern Oil, Praeger, 1962, pp 22-23
4 Yergin, op cit pp 94-96
the possibilities of internecine conflict. These mechanisms took the form of agreements relating to both production and marketing\textsuperscript{6}.

In general, the establishment of these international oil companies as business entities in the various oil-producing countries took place at a time when the national governments in these countries existed in their most primitive form and when the level of social consciousness and political awareness of their peoples was also very low. It is also necessary to emphasize that these concessions were signed against the backdrop of the dominance of colonial power, especially British colonial power, in the Persian Gulf and the Middle-East. It would not be inaccurate to aver that by and large, it was the colonial power that determined the scope and nature of the oil contracts between the producer countries and the oil companies\textsuperscript{7}.

Given the gross political and technical asymmetry between the host governments (i.e. the oil producing countries) and the international oil corporations, the oil concessions that were signed between them were bound

\textsuperscript{6} Moran, ibid, p 580. For a detailed account of the intricate mechanisms by which oligopolistic control was exercised by the oil majors see Blair, John M. \textit{The Control of Oil}, Pantheon, 1976

\textsuperscript{7} For a comprehensive account of oil companies interactions with Middle Eastern governments during this period see Stocking George. \textit{Middle East Oil: A Study in Political and Economic Controversy}, Vanderbilt University Press, 1970. See also, Hartshorn, J.E. \textit{Oil Companies and Governments: An account of the International Oil Industry in its Political Environment}, Faber and Faber, 1962.
to be biased (or at least were perceived to be so biased) in favour of the latter. In fact the oil concessions became the core point of the conflict between the oil producing states and the oil companies. The oil states felt that they were not receiving their fair share of the revenues generated from the production of oil. The growing nationalistic movements in these states saw these arrangements as reflecting the unjust relationship that prevailed in the colonial era.

While a fair degree of stability was maintained during the twenty year period 1940 - 1960 by the international petroleum order based on these concessions and the overall dominance of the international oil companies, the growing discontent generated by the regime of oil concessions brought about the conviction that the status and obligations of the foreign oil companies must be subjected to a new dispensation which was perceived to be more fair and just to the oil producing countries. The increasing contacts among the oil - exporting countries had made them increasingly aware of their mutual interests and heightened their sense of the need for cooperation. These informal consultations culminated with the formation of the Organization of Petroleum Exporting Countries (OPEC) in September 1960 as an economic alliance with Iran, Iraq, Kuwait, Saudi Arabia and
Venezuela as its founding members. Qatar joined in 1961; Indonesia and Libya in 1962; Abu Dhabi (now part of UAE) in 1967; Algeria in 1969; Nigeria in 1971; and Ecuador 1973. Gabon was admitted as an associate member in 1973.⁸

Although founded in 1960, OPEC remained a weak and ineffective organization till virtually the end of the decade. This was mainly because the logic of the demand and supply conditions for oil had created a buyer’s market in which price manipulation through prorationing of output among members was difficult to achieve. The weak market conditions for oil thus played a key role in keeping the oil producing countries from developing consensual plans of action. Also as advantaged actors, the oil companies were most reluctant to give up their decisive advantages over the oil states. As an obvious strategy, the oil companies fully took advantage of the lack of cohesion within OPEC and in fact often actively promoted disunity and discord within this fledgling organization.⁹

Beginning in 1967 and continuing through 1971, the international oil

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⁸ For a comprehensive account of the events leading to the formation of OPEC see Rouhani, Fuad. A History of O.P.E.C., Prager 1971, Ch 1 and 2.

⁹ On the ineffectiveness of OPEC during its early years, see Ahrari Mohammed E. OPEC : The Failing Giant, (The University Press of Kentucky 1986), pp-30-32
market was transformed from a buyer’s to a seller’s market. The radically changed circumstances were the consequences of the cumulative impact of a number of factors (to be analyzed in detail in later chapters), the primary being the hardening of demand and substantial reduction of surplus production capacity. Moreover largely because of the existence of OPEC, the power balance had shifted in favour of the producer governments vis-à-vis the international oil majors. By 1970, the local governments had acquired full control over volumes as well as revenues, which provided them with a weapon of enormous political power.

Cognizant of the new found power and control, the OPEC effected unilateral increases in the price of crude oil through three agreements during the period 1971 - 1973 which led to the quadrupling of the prices of crude oil with attendant adverse impact on the world economy in general, and the industrialized oil consuming countries in particular. The imposition of the oil embargo in October 1973 in the wake of the Arab - Israeli war by the member states of the Organization of Arab Petroleum Exporting Countries (OAPEC) underscored the energy vulnerability of the Western European countries and Japan.
The response of the industrialized countries to the energy crisis was fashioned essentially under the leadership of the United States, the latter being motivated by its own domestic and international security compulsions. The industrial countries under the banner of the OECD attempted to develop concrete domestic energy policies, the focus of which was to reduce external dependence on energy through the more efficient use of energy as well as to decrease the dependence on oil through the development of alternative sources of energy. The development of a co-ordinated energy policy as a consumer response to the OPEC led to the formation of the International Energy Agency (IEA) in November 1974. The IEA can be seen not only as an attempt to solve the energy problems of the OECD countries on a common basis but perhaps more importantly as a device to mould these countries into an institutional framework controlled by the United States.\(^\text{10}\)

The empowerment of OPEC and the price increases effected by it during the so called ‘oil decade’ 1971-81 brought in their wake certain economic consequences that had the effect of radically transforming the international market for oil. Firstly, the oil shocks of 1973, 1979 and 1980 inevitably had

an adverse impact on world economic activity and the resulting economic down turn reduced the demand for oil. Secondly, faced with such high prices of this energy input, the industrial consumers adopted conservation - oriented policies, the medium and long-range effects of which increased the energy efficiency of their industrial, transportation and residential sectors. Both these factors had the inevitable consequence of reducing the demand for oil. Finally, the high prices of oil expectedly boosted the supply of oil from non-OPEC sources - OPEC’s share of the world production of crude oil declined from around 56 percent in 1973 to around 40 percent in 1981\textsuperscript{11}.

All these factors led to the emergence of a soft market towards the end of 1981. OPEC no longer remained the administrator of prices but was compelled to follow the lead of spot prices in the international market. As a consequence, its political leverage became greatly attenuated in the altered market conditions and by the mid - 1980s, with non - OPEC production rising sharply, its role was relegated to that of a residual producer.

\textsuperscript{11} Ahrari \textit{op cit}, p 203.
**Evolving Petroleum Order**

The political economy of international oil over the period under study is particularly important for a theoretical understanding of the evolving order in the international system of oil and their critical impact on the structure of international relations as a whole. From an analytical standpoint, the international system of oil can be said to have evolved through three distinct structural phases, at least two of which, we will try and establish in this study, had the characteristics of what are referred to in international relations theory as ‘regimes’. Briefly stated, in the first phase, from the period beginning around 1930 to the late 1960s, international oil transactions took place in the framework of what could be termed as an oligopoly of eight international oil companies with their virtual stranglehold on the production, refining and the marketing of oil, with the oil producing countries being relegated to a relatively subsidiary role in the decision making process. Their domination and control, usually with the tacit support of their national governments, was one of the major factors which led to the formation of OPEC to redress what was perceived to be an unequal and exploitative relationship between the oil companies and the oil producing countries. In the second phase, during the so called ‘oil decade’ of 1971-1981, OPEC
virtually functioned as a cartel of oil producers, enjoying considerable freedom to determine the international prices of crude oil. The domination of OPEC in turn led to the creation of the International Energy Agency to facilitate co-ordinated energy policies and responses by the industrialized consuming countries.

In the third phase, the softening of the oil market since the early 1980s coupled with the structural transformation of the oil industry by and large brought to an end the era of overt control and politicization of international oil transactions. The international oil market thereafter came to approximate more closely the neo-classical economic model, in which global demand and supply of petroleum products were the chief determinants of prices and outputs, although the underlying political structure in which the energy transactions occurred continued to remain important.

**Survey Of Literature**

Given the criticality of oil as an energy resource to the world economy, the protracted struggle for domination and control associated with it and the deep impact that this has had on the course of international relations, the subject has expectedly attracted considerable academic interest. In view of the vast scope of the literature on the subject of international oil, it would be
useful from the point of view of the present study to divide it into three broad categories:

(a) the evolution and the structure of the oil industry and the history of oil politics associated with it;

(b) literature on the specific organizational structures associated with international oil such as the OPEC and the IEA; and

(c) literature which aims at developing paradigms to explain international energy transactions in a theoretical context.

Not unexpectedly, there is a virtual flood of literature in categories (a) and (b). However, despite the immense theoretical importance of the subject from the view point of the structure of international relations as a whole, particularly during the period under scrutiny, the available literature on category (c) is not even a trickle. In point of fact the present study represents a modest attempt at rectifying this imbalance.

An excellent starting point for a broad overview of the history and evolution of the international oil industry and the minutiae of the international politics associated with it, is Yergin's (1991) magnum opus.\textsuperscript{12} The work recounts the panoramic history of oil and the struggle for power

\textsuperscript{12} Yergin, Daniel, op cit.
and domination that has usually been associated with it. The canvas of the work is enormous - from the drilling of the first oil well in the U.S., through two world wars to the Iraqi invasion of Kuwait.

Another very useful overview of international relations and the oil politics relating to international oil transactions is the work of Odell (1986)\textsuperscript{13}. Apart from a comprehensive introductive overview of the world oil industry, it contains insightful chapters on specific country policies of the major actors such as the US, Western Europe, Japan, the erstwhile Soviet Union and the major oil exporting countries. The intersection of these policies is summed up in the concluding chapter on ‘Oil in International Relations and World Economic Development’.

Useful analysis of national energy policies is contained in the volumes by Lindberg (1977)\textsuperscript{14} and Stunkel (1981)\textsuperscript{15}. These two volumes give the reader a sense of the variety of national and institutional responses to the energy crisis. Yet another work on broadly a similar theme is the one by Yergin and Hillenbrand (1983)\textsuperscript{16}. Apart from containing a very useful overview chapter,

\textsuperscript{13} Odell, Peter. Oil and World Power. Viking Penguin, 1986.
the work attempts to situate national energy markets within a broader framework of changing world and national economies. An exhaustive description of the historical evolution of the international oil order during this period is contained in the work of Schneider (1983).\textsuperscript{17} In terms of sheer depth of the historical material, this work is unlikely to be surpassed soon. However as is usually the case in studies of this nature, no attempt has been made to abstract from the wealth of historical detail, any paradigm of market-politics intersection.

Another work which probably deserves mention here is by Pachauri (1985).\textsuperscript{18} It traces the links between global energy developments, the world oil market, the actions and strategies of OPEC and their impact on international economic relations. Pachauri's main conclusion is that a global approach is essential for tackling the energy problems of the world.

On the subject of the policies and practices of the international oil companies during this period, how they came to influence foreign policy and

\textsuperscript{17} Schneider, Steven. \textit{The Oil Price Revolution}: John Hopkins University Press, 1983

in turn alter global relationships, the work of Sampson (1975)\textsuperscript{19} remains a classic. Regarding the elaborate procedures created by the seven major international oil companies to set up a formidable oligopoly with wide ranging control of international oil, encompassing all the stages - from production, refining and transportation, to distribution - the work of Blair (1976)\textsuperscript{20} is clearly unparalleled. A theoretically rigorous study on the structure of the large international oil firms and the economics of their decision making is contained the work of Penrose (1968).\textsuperscript{21} Another study which attempts to identify and evaluate factors which have been responsible for shaping major developments in the oil sector, laying particular emphasis on corporate behaviour and strategies of enterprises is that by Mikdashi (1986).\textsuperscript{22} An incisive analysis of the oligopolistic behaviour of the international oil industry is contained in the paper by Moran (1987).\textsuperscript{23} Its main thesis is that the key to understanding the international oil oligopoly

\textsuperscript{19} Sampson, Anthony. \textit{The Seven Sisters: The Great Oil Companies and the World They Created}, Coronet 1975.

\textsuperscript{20} Blair, John M. \textit{The Control of Oil}, Pantheon, 1976.

\textsuperscript{21} Penrose, Edith T. \textit{The Large International Firm in Developing Countries: The International Petroleum Industry}, Allen and Unwin, 1968.


lies not so much in the tacit interest in colluding, or the explicit opportunities
to collude, but rather in assessing the participant’s ability to limit the scope
for independent action when collusive arrangements came under stress.

In regard to organization specific literature, there is a spate of work
covering virtually every conceivable aspect of OPEC such as its history,
evolution, organization, impact, internecine politics, decision making
processes, future prospects etc.

Among the seminal works in this category is that of Rouhani (1971),
a former Secretary General of OPEC. Not unexpectedly, the work views the
formation and evolution of OPEC from essentially an ideological and
polemical standpoint, the main refrain being that its formation and
subsequent actions were both necessary and justified in order to redress the
unequal relationships imposed on the oil producing countries by the oil
majors in an unequivocally colonial context.

A comprehensive and balanced assessment of the policies of OPEC and
their impact is contained in the volume by Ahrari (1986). The main thesis
of this study is that the pricing behaviour of OPEC is essentially economic in

25 Ahrari Mohammed E. O.P.E.C : The Failing Giant, 1986
nature, even if the political dimensions cannot be entirely excluded from OPEC's decisions. The overriding factor governing these decisions was the desire to either maximize economic payoffs or to minimize the impact of harmful effects emanating from the international economy such as inflation, recession etc.

Another definitive work on OPEC set in a historical context is by Skeet (1988)\textsuperscript{26}. The book looks at the history of OPEC, and the political and economic events that have shaped the organization and the world economy since its creation in 1960. It assesses the successes and failures of the organization in the post 1973 period and the role of intra-OPEC politics and contradictions in determining policy outcomes. In conclusion Skeet is of the view that the policies of Saudi Arabia, the largest OPEC producer will be the most critical factor in determining the organization's ability to survive the emerging soft market.

The study of the International Energy Agency (IEA) does not seem to have attracted as much academic interest as the OPEC, presumably because it was viewed as a relatively ineffective forum of consuming nations,

\textsuperscript{26} Skeet, Ian. \textit{OPEC: Twenty Five Years of Prices and Politics}, Cambridge 1988
constituted at the behest of the USA, with little bargaining leverage, ranged against the combined might of the oil producer's cartel. However, Keohane (1978)\textsuperscript{27} has done a useful study on the functioning of the IEA, the main conclusion of which is that the formal decision making process in the organization was a function of state behaviour, and the interplay of national policies against the backdrop of US dominance, was the primary determinant of IEA policy outcomes.

We now come to a review of the third and, for the purpose of this study, the most relevant category of literature, namely those works which rise above the minutiae of oil company policies, energy policies of national governments, evolution and structure of organizations such as the OPEC, the intricacies of international oil politics, etc. in an attempt to build a theoretical construct or paradigm which could serve to better explain the historical flow of international energy transactions in an intellectually satisfying manner. As Wilson III points out in his perceptive paper:

A thorough search of the literature reveals only a mere handful of review articles or monographs which seriously debate the relative explanatory power of competing paradigms for the world oil markets. Given the immense practical importance of

the subject and the interest shown by social scientists, and in the light of the potential intellectual payoffs, the quality of theoretical literature is meagre at best. A void exists at what should be the centre of the field.\textsuperscript{28}

In the interest of analytical clarity, the literature under this category is proposed to be reviewed under three sub-categories:

1. **Neoclassical Economics:**

The main thrust of this argument is that economics has been the primary driving force behind international energy transactions. Politics has essentially been secondary and where it has intruded it has been to overcome limited market imperfections. Perhaps the best known proponent of this view is M.A. Adelman and his *World Petroleum Market (1971)* \textsuperscript{29} is perhaps the most original work in this area. His numerous writings over the years have more recently been published in an omnibus compilation\textsuperscript{30}. The misconceptions which Adelman purported to have effectively demolished were that the world supply of oil was limited and that as the demand for oil increased the problems of access to oil would become critical. In the same vein, according to Adelman, exporting countries would never cut back their


\textsuperscript{30} Adelman, M.A. *Economics of Petroleum Supply*. MIT Press, 1993
production for political reasons as the market logic was to the contrary. In other words, it was essentially the market, and not government or politics, which were critical in the context of international resource allocation. Thus, according to this view, world oil markets were in the final analysis, much more important than world oil politics.

The neo-classical arguments have been further refined in an important work by Heal and Chichilnisky (1991). The authors using a general equilibrium model put forward a somewhat contrarian proposition that the OPEC, despite its considerable cartel power in the production of oil had, in the ultimate analysis, little control over the real prices of crude oil, which were almost entirely the outcome of the interaction of economic variables.

2. Public Policy / Political Paradigm:
The proponents of this view, although concerned with the intersection of politics and markets, give primacy to the role of power, leadership and interest in determining the outcome of world oil transactions. An excellent study under this genre is by Choucri (1976), the main thesis of which is that the energy problem is basically political in nature. “It emanates from

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disputes over who controls energy transactions, what the rules of the game will be, who gains and who loses, and at what costs to whom.” 33 The book in the words of the author aims to provide “political correctives for economic assumptions, and to introduce a distinctly political dimension in the assessment of economic strategies.” 34

The other notable works that can be placed under this category include the studies by Moran (1978) 35 (1981) 36 and Quandt (1981). 37 Moran forcefully argues that models of economic maximization are inappropriate, inaccurate as well as misleading when applied to OPEC decision making and that the most complete and powerful explanations are those which acknowledge that “political and security concerns wag the economic tail, and not vice versa; where they conflict the former prevail”. 38 Quandt in his perceptive study of Saudi Arabia provides a long list of variables that must go into any production or pricing decision. These include a mix of economic

\[ x \times (f) \leq \frac{1}{n^2} \]

\[ p \]

33 Ibid, p.xiii.
34 Ibid, p.xiii
38 Moran (1981) op.cit, p.264.
and political factors. In conclusion, no single factor can be said to have unequivocally dominated decision making in OPEC countries.

3. The Regime Model:

While the neo-classical economic model emphasises the primacy of economic imperatives and the political model the role of power and interest, the regime model is much more interested in the broader political context in which international transactions are embedded and in the politically determined ‘rules of the game’ which shape them. According to Gilpin (1975), “An economic system does not arise spontaneously owing to the operation of an invisible hand and in the absence of the exercise of political power. Rather, every economic system rests on a particular political order”. As a useful and necessary corrective to the more narrow focus of neo-classical economics, as well as the rather simplistic tenets of the structural realist paradigm, especially in so far as its applicability to the political economy of international oil, the regime model as we shall argue in this thesis, is particularly well suited for purposes of analysing the world oil system. However, although the regime framework has been widely applied to a number of aspects of international relations, it is indeed a matter of

considerable surprise that the full conceptual framework of the model has not been applied to the international oil system or its components.

As far the literature on regime theory is concerned, volume number 36 of International Organisation (Spring 1982) contains by far the best and the most comprehensive collection. Krasner’s integrating essay in this volume provides an excellent overview of the subject. Krasner defines international regimes as “principles, norms, rules, and decision making procedures around which actors’ expectations converge in a given area of international relations”. As pointed out by Krassner, the various articles in the volume contain essentially three approaches to the concept and significance of regimes:

(a) essays by Young, Hopkins and Puchala view regimes as a pervasive

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41 Ibid, p 2.
characteristic of the international system and seem to argue that no ordered international behaviour can be sustained for any significant length of time without being based on a congruent regime;

(b) those such as Strange\(^{44}\) take the classical structural realist view that the concept of regime is a misleading one because it obscures basic interests and power relationships that are both the immediate as well as the final cause of action in the system of international relations; and

(c) those such as Stein\(^{45}\), Keohane\(^{46}\), Jervis\(^{47}\), Ruggie\(^{48}\), Lipson\(^{49}\) and Cohen\(^{50}\) occupy the middle ground; they accept the structural realist position which views the international system as being composed of power maximizing states in an anarchic environment, but also maintain that under certain restrictive conditions under which individual action fails to secure


outcomes that can be regarded as being Pareto optimal, international regimes may have a significant impact.

Among the more recent important works on regime theory and international relations is the volume edited by Rittberger\(^{51}\) which significantly builds upon the literature surveyed above. In the words of the editor:

Regime analysis, which cannot be separated from the broader study of international 'governance without government', has broken new ground in international relations theory because it has tackled - more successfully than other approaches - the puzzles of international co-operation and of international institution building in a world of sovereign states, a world which is anarchical in the sense that there is no central government capable of making and enforcing international rules of conduct. Regime analysis has thus filled analytical gaps which other theoretical approaches either did not address at all ........or proved ill-equipped for ... \(^{52}\)

The concluding chapter, co-authored by Mayer, Rittberger and Zurn\(^{53}\) provides an excellent summary of the ideas expressed in the essays contained in the volume. In this chapter the state of regime theory is evaluated from the stand point of its three main functions:


\(^{52}\) *ibid*, p.1.

(1) explaining the formation, persistence, and demise of regimes, (2) accounting for regime properties and their change, and (3) determining regime consequences and explaining their variation. The authors make a strong plea for greater empirical research efforts in this important conceptual area of international relations.

A recently published work which significantly builds upon and expands the domain of international regime theory is the volume by Hasenclever, Mayer and Rittberger (1997). The volume analyses further the three schools of thought within the study of international regimes, namely, the realists, who focus on power relationships; the neo-liberals, who base their analyses on constellations of interests; and the cognitivists, who emphasize knowledge dynamics, communication, and identities. While there are often significant differences in the positions adopted by the proponents of the same school, a major distinguishing property between the three perspectives is the degree of ‘institutionalism’, namely the view that regimes and institutions do indeed matter in international relations, that each school admits to. In conclusion, the authors argue that the differences between the

three schools have been vastly overstated by their proponents and that considerable scope exists for the development of a unified and integrated theory of international regimes. In fact it is their view that the outlines of such a theory are already visible.

**Theoretical And Research Issues**

As already mentioned earlier on this chapter, the primary aim of the present study is to attempt to place the far reaching developments in the realm of the international oil system, during the period 1930 to 1990, within the framework of a satisfactory theoretical paradigm in order to gain a better understanding of the nature of the international oil transactions among the principal actors, namely the consuming nations, the oil producing countries and the transnational oil companies, and their impact on the structure of international relations as a whole. The review of literature undertaken in the previous section has indicated three broad approaches to this issue, namely neo-classical economics, structural realism and regime theory. We will argue in the course of this study that regime theory provides theoretically the most satisfactory basis for analyzing the nature of energy transactions in the international oil system over this period. We proceed therefore, to very briefly analyze the drawbacks of the other two approaches before following
it up with a detailed discussion on the applicability of regime theory to transactions in the international oil system during the period under study.

In its applicability to international oil markets, the neo-classical economics paradigm applies in straightforward manner the fundamental organizing tenets of neo-classical economics: since oil is an internationally traded commodity, the assumption follows that buyers and sellers of oil intersect in markets that clear and ultimately operate in equilibrium. Any increase in price depresses demand and at the same time encourages fresh supplies. Disequilibria are at best temporary and where the state intrudes it is to overcome limited market imperfections. However, any move beyond this point only results in reducing everyone's welfare, by leading to a position that is less Pareto-optimal.

While the long run validity of fundamental economic principles in determining the demand, the supply and consequentially the price of oil, can scarcely be questioned, the model failed to anticipate the far reaching changes that took place in the nature of international oil transactions during the 'oil decade' of 1970-1980. Instead, "politics crept in or, rather, thundered in, wreaking havoc on economic predictions and economies of importers and
exporters alike." This point is well brought out in the words of Noreng (1978):

On the basis of recent experience, it can be argued that market forces, particularly through the price mechanism, are only going to be effective in establishing equilibrium in the energy market over a long period of time, perhaps 25 to 30 years. In the meantime, political factors such as the policies and preferences of a few key countries could have a profound influence upon the long term 'solutions' worked out by market forces ... This limited ability of the price mechanism to regulate the demand and supply for energy creates the potential for abrupt changes, primarily price discontinuities. *It is the impact of organizational and political factors that is critical in the world energy market.*

In this century, the price of oil has only to a limited extent been determined by open transactions in a free market. In fact, there is historically no systematic relationship between the price of oil and costs of production. (emphasis added)

Doran (1977) has emphasized the same point in the following words:

International oil involves a blend of politics and economics. Pure economic models lose the meaning of the struggle over petroleum among Governments and Corporations because control rather than Pareto Optimality is at the core of oil relations. The longer the interval one discusses, the more relevant are equilibrium notions of the market; however, the more closely one examines actor motivation and behaviour, the more relevant become power-oriented conceptions of the oil market. 57

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55 Wilson Ill, op cit, p.132
56 Noreng, op cit, p 2.
The strengths and weaknesses of the neo-classical paradigm can be summarized as follows. Among the major strengths are that the approach assumes, correctly, that the logic of market behavior, will in the long run determine the behaviour of the individual actors involved in the production and exchange goods and services, including oil. It also stresses the complementarity and interdependence of producers and consumers, implying thereby that despite major political or economic conflicts, there is in the final analysis no real alternative to accommodation, particularly in the context of a critical energy resource such as oil. Finally, by emphasizing the long to medium term adjustments towards equilibrium in the oil system, it introduces an important dynamic perspective. Among the weaknesses, a major flaw is that it fails to capture key aspects of market - politics interactions. It also affords inadequate emphasis to the role of organizational structures in significantly conditioning market responses in respect of international transactions in oil. Finally, by its very definition, the neo-classical model takes far too dichotomous view of economics and politics to be really useful in any comprehensive and holistic analysis of the international oil system.
The realist view of the world is much more difficult to critique, supported as it is by a formidable body of academic work covering a very wide area of international relations. It may be recalled that, realism essentially views the modern state as a rational actor engaged in strategic action vis-à-vis other states. State behaviour at the international level is thus a function of national power and co-operative arrangements, including regimes, wherever they seem to exist are merely, in the final analysis, a reflection of the balance of power. International regimes or any other co-operative arrangements at the international level, only serve to obfuscate the underlying power structure and at best can be viewed as intermediate variables with no real consequences or impact on outcomes.

The realist view, at least in its classical form, however, is difficult to sustain for the purpose of providing a satisfactory analysis of developments in the international oil system. In the first place, the realist paradigm affords too little importance to non-state actors, such as elites, corporate entities and non-governmental organizations, its primary focus being on state power and national security. In the international oil system the role of non-state actors, primarily the trans-national oil companies, has been far too crucial in lending stability and order to the system, to be easily accommodated in the
realist paradigm - the oil majors were not merely instruments of state policy but often determinants of it.58 Moreover, to characterise the enormous power and influence wielded by the conglomerate of oil companies during the period 1930-1960, as being merely an adjunct of state power would, in our opinion, tantamount to a gross over simplification.

Secondly, since in the realist conception, regimes are inconsequential, being only a reflection of the prevailing balance of power, in order to establish the validity of this approach, it would be necessary to directly correlate the sharp discontinuity in the international petroleum order in 1970-74, as well as the decline in the strength of the oil producer’s cartel after 1981 to corresponding shifts in the balance of international power. Such direct linkage between regime change and shift in the underlying power structure is indeed difficult to establish and, as we shall argue later, these changes appear to have been driven by other factors. As Krasner has observed: “A change in power distributions does not always imply a change in outcomes because regimes may function as intervening variables”. Regimes may assume a life of their own, a life independent of the basic

causal factors that led to their creation in the first place. \(^{59}\)...Regimes may become interactive, not simply intervening variables. \(^{60}\)

**Regimes and the International Petroleum System**

The international oil industry has in this century, until the early 1980s, been characterized by an unusual degree of order as in terms of oligopolistic control. In respect of no other internationally traded commodity has such sustained oligopolistic action or cartelisation been possible. As Moran has observed:

> the experience of the oil industry has been, until recently, extraordinary. It has had a history of generating oligopoly rents for more than a century, with varying degrees of achievement but an impressive record of maintaining price more than ten times the marginal cost of production of most of its proven reserves. To accomplish this, the members have had to master three tasks: setting a price, agreeing on how to divide the market, and making credible commitments not to encroach upon each other's market share by expanding output or discounting sales. \(^{61}\)

This extraordinary degree of control, which until 1970 also produced a remarkable stability in international oil transactions, has prompted some

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\(^{60}\) ibid, p 500.

\(^{61}\) Moran (1987) op cit, p 575
analysts such as Lawrence Frank and Oystein Noreng to describe the international petroleum order in terms of regimes. According to Frank:

The first oil regime was controlled by Britain, the United States, and the great energy corporations known as the Seven Sisters. Together, they developed procedures to regulate the production rates and price levels of petroleum. Although, this regulation was primarily conducted by consortia of private firms, it was based on the domination of the Middle East by Anglo-American political and strategic power. The regime served both national and corporate interests by providing a secure source of plentiful and cheap oil.\(^{62}\)

According to Noreng:

The First Oil Regime was characterised by an integrated pattern of organisation, based in the major consuming countries, and a low price for oil. During the First Oil Regime the centre of the world’s oil production gradually shifted from North America to the Middle East. Decreasing exploitation costs and the political dominance of important producing areas by major consuming countries made this shift possible. The Second Oil Regime is characterised by a fragmented pattern of organisation and a much higher price of oil. The centre of world oil production is the Middle East.\(^{63}\)

While these characterisations contain important kernels of truth, the term ‘regime’ has been used in a very broad sense to imply the existence of an order or dispensation founded on an ensemble of power and authority and

\(^{63}\) Noreng, op cit, p.27-28.
strictly not in the formal sense of what the term connotes in international regime theory. The mere existence of order does not *ipso facto* imply the existence of a regime as in the case of the order that is created by the invisible hand of the market. As mentioned earlier on in this chapter, there has been no systematic attempt to apply international regime theory to the international system of oil and the present study constitutes an attempt in that direction.

The starting point for our discussion is Krasner’s definition of what constitutes an international regime. The concept of ‘regime’ has already been introduced earlier on in this chapter. To recapitulate, according to this definition, regimes are “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations”[^64]. Although widely accepted as a consensual definition, it has been variously criticised as being “yet one more woolly concept”[^65], “vague”[^66], and exhibiting “a disconcerting elasticity” which “does not allow us to identify regimes with precision and to separate

[^65]: Strange, Susan."Cave ! Hic Dragones: A Critique of Regime Analysis" in ibid, p. 342.
regimes easily from the rest from the rest of international relations." 67 Also, that its various constituents are regarded as aspects that are "hard to differentiate conceptually and often overlap in real-world situations," 68 with different elements often merging into one another.

While many writers have considered these lacunae to be serious drawbacks, Nayar has perceptively observed that "...in the social sciences most concepts and theories are contestable and their potential for analysis does not wait on defenitional perfection." 69 In fact, we consider the Krasner formulation to be particularly useful since it has the crucial attribute of flexibility, permitting thereby a wide range of applicability of regime theory to different facets of international relations. We also believe that an over emphasis on definitional purity could seriously limit its applicability and thereby diminish its utility as a powerful analytical tool. The international petroleum order is a case in point.

We propose in this study to apply the concepts of international regime theory to the international oil system. This system refers to three

interconnected functions - production, distribution and consumption - as well as to the mode of their inter-connectedness via public and private transactions. We will propose that the actions of the main actors in the international petroleum system were governed by two distinct regimes during the period commencing around 1930 and ending around 1980.

For the purpose of this analysis, we propose to draw upon two strands of thought within regime theory - the Grotians and the modified structuralists. The Grotians regard regimes as social institutions in which transactions within the issue area in question are influenced by the subjective perceptions of the governing elites. “This perspective on regimes emphasizes that they are human artifacts, having no meaning apart from the behaviour of individuals or groups of human beings.”\(^{70}\) According to this view, state action in a world of complex interdependence is necessarily constrained and the scope for unfettered value maximization considerably limited. The incentives, therefore, to enter into some form of collaborative arrangements at the international level are extremely compelling and the existence of

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\(^{70}\) Young, *op cit*, p 277
regimes correspondingly pervasive.\textsuperscript{71}

The focus of the modified structuralists on the other hand, is on rational self interested states acting in an anarchic international environment. In such a milieu, actors will eschew individualism and be part of a regime only if such collaborative action is likely to ensure a better return than the pursuit of individual self interest through independent decision making. A regime thus will be established and maintained only if provides the expectation of gain beyond the pursuit of pure individualism, as perceived by rational self - interested actors. In brief, according to the modified structuralists, the establishment and maintenance of regime is rational act which will not take place unless the regime provides a collective good for all the participants in the arrangement.\textsuperscript{72}

It would be pertinent to mention here that, in contrast, in the Grotian view, a regime need not provide any collective goods - actors may join because they do not see any other alternative or, in the extreme, even be forced into a regime. The minimum function of a regime which is implicit in

\textsuperscript{71} Hopkins and Puchała, op cit, p 86

\textsuperscript{72} Keohane (1982), op cit, p146 and Stein (1982) op cit, p 116
this formulation, however, is the provision of a certain degree of stability and predictability within the issue area which is governed by the regime. This could in some sense be regarded as a collective good, although its benefits may be distributed quite unevenly. Haas (1982) perhaps comes the closest to a convergence of the two approaches when he states that:

"...a regime is an arrangement whose members seek to manage and limit conflicts of interests among them because they recognise that complex interdependence makes a game of pure conflict too costly."^73

The brief review of the two approaches above enables us to put forward the following propositions for inclusion within the definitional ambit of what could constitute a regime:

(a) A regime can be contractual or non-contractual. A non-contractual regime has the property that no formalized agreement or contract which regulates or co-ordinates behaviour exists between the most important state actors in the issue area under consideration. The fact that no government to government agreement or contract exists means that the regime in question may consist of only principles and norms. Contracts

^73 Haas, Ernst B, "Words can hurt you; or who said what to whom about regimes", *International Organisation* 36,2 (Spring 1982) p 207.
agreements may exist among the non-governmental actors or between some of the governmental and non-governmental actors. Further, a non-contractual regime at the international level is also likely to be un-institutionalised.

(b) The regime may encompass both governmental as well as non-governmental actors.

(c) Regime can at different stages function as an intervening or an independent variable.

Let us elaborate these propositions a little further. Both the approaches discussed above allow for the existence of a non-contractual regime. The Grotians most certainly do so since their informal regimes arise spontaneously. The modified structuralists on the other hand do admit of the possibility of a regime without any institutional framework. As Stein has observed “regimes can be non-institutionalised as well as institutionalised....”\(^74\) This school also states that regimes may stem from tacit mutual expectations and have the character of a convention rather than a specific set of rules.

\(^{74}\) Stein (1982) *op cit, p 317*
Both the approaches also permit the role of non-state actors, the Grotians assigning a role that is much more significant than that envisaged by the modified structuralists. In fact in the Grotian view elites are the practical actors in international relations, the states being essentially ‘ratified abstractions’. Haufler has very clearly brought out the essential differences between the two points of view:

There are two ways we can conceive of the relationship between states and non-state actors in regime creation and maintenance. First, states can build an international regime upon the foundation of practices and norms previously laid down by non-state actors. They can also use private sector agencies to implement some of the functions of the regime itself. In other words, the relationship between the state and non-state actors within a regime may be instrumental in nature, with the state dominant ...Second, the relationship between state and non-state actors may be reversed. Private sector actors may construct independent international regimes, or play a relatively equal role with states within a regime of mixed parentage.75

Finally, we postulate that a regime during the course of its existence can function both as an intervening as well as an independent variable. Thus the creation of the regime may conform to the modified structuralist position, in that the regime comes into being at the behest of hegemonic power and serves as an intervening variable between international power and national

interests on the one hand, and actor behaviour and final outcomes on the other. However, having once come into existence, through various feedback mechanisms, the regime is transformed from being merely an intervening variable to an autonomous variable, taking on in effect a life of its own. Further, if the distribution of benefits of the regime are perceived to be iniquitous by the participating actors, this can result in the basic norms of the regime being challenged and the emerging contradictions can lead to the ultimate collapse of the regime. Finally, the collapse of the old order could, in true Hegelian tradition give rise to a new regime, which in many ways is the very anti-thesis of the earlier one, being based on norms and principles which are the very opposite of those that sustained the regime that it has replaced. In brief, we argue that regimes can function as independent variables and have consequences on the international system far wider than what a straightforward balance of power equation could satisfactorily explain.

Hypotheses

Against the theoretical and conceptual canvas outlined above, we propose the following broad hypotheses for purposes of further exploration in this study:
An international regime existed in the international oil system between 1930 and 1970, with a break during the period covering World War II.

The regime had the following main characteristics:

(a) it was informal, semi-contractual and un-institutionalised;

(b) it involved both state as well as non-state actors;

(c) it was formed in the context of British colonial domination of the Middle East and thereafter propped up by the hegemony of the United States.

The regime was based on the following dominant norms and principles:

(a) an oligopolistic arrangement among the large international oil firms was best suited for providing stability and predictability in the international oil market;

(b) competition in the international oil system was neither necessary nor desirable for the long term health of the system;

(c) an integrated form of industrial organisation encompassing the three main functions, namely production, processing and marketing was best suited to meet the requirements of the international oil system;

(d) as far as possible all forms of direct state intervention in the international oil market was to be avoided; and
(e) the production of oil was to be on the basis of long term concession agreements which were legal contracts between the oil firms and the producer states, with very little role for the latter in major strategic decisions, such as those concerning rate of production and pricing.

(2) The first oil regime was replaced by another oil regime during the period 1973-1980.

The second oil regime had the following major characteristics:

(a) it was informal and non-contractual;

(b) there was a greater degree of institutionalization than in the first regime, with separate organizations representing the interests of producers (OPEC) and consumers (IEA);

(c) the regime comprised both state as well as non-state actors, with the former playing a much more significant role than in the earlier regime.

The regime was based on the following dominant norms and principles:

(a) the producer countries should have effective control of their own resources;

(b) cartelisation of oil production through a cartel of oil producing nations was the appropriate instrument for providing both equity and stability in the international oil system;
(c) oil was strategically too important a commodity for production, pricing as well as consumption decisions to be left to be determined by the market and therefore direct state intervention in the market was both desirable and necessary;

(d) there should be greater competition in the international oil sector and the entry of new players should be encouraged; and

(e) there should be no specific preference regarding the form of industrial organization in the international oil sector.

(3) The second oil regime gave way to a phase commencing around 1982 in which the market forces dominated international petroleum transactions. This third phase lasted right up to 1990, that is, till the end of the period covered under this study.

(4) The primary drivers of regime change during the period under study were endogenous to the system in the sense that they were reactions to the operation of the regime itself and were not external to the system. Regime change was therefore not strongly linked to changes in the power structure in the international system.

The choice of period of the study covering six decades from 1930 to 1990 has been predicated by the fact that the international petroleum system over
this time interval evolved through three distinct phases as described earlier. The process of evolution as well as the organic linkages between the three phases is clearly brought out by a detailed examination of the international petroleum transactions over this period.

**Methodology**

The study entails essentially a reinterpretation of existing historical data using the tools and concepts of regime theory. The methodology used therefore is analytical with main reliance being placed on already available secondary data.

**Chapterisation**

The primary aim of this study is to attempt to develop a theoretical construct or paradigm which could satisfactorily explain the flow of international energy transaction during the period 1930 to 1990. Towards this end, we have, in the present chapter, examined the relative merits and demerits of the various competing paradigms which could provide us an insight into these theoretical questions. We have argued that regime theory provides perhaps the most satisfactory tools for analyzing the structural evolution of the international petroleum order over this period.
In Chapter 2, titled the "First Oil Regime", we proceed to describe the nature of the oil regime that was established by the seven major international oil companies, the elaborate mechanisms that were established to exercise control over the international oil system and the salient norms and principles on which this regime was based. We also briefly analyze the relationship between regime and state power during the first oil regime.

Chapter 3, titled "The Path to Regime Change" essentially analyses the impact of the first oil regime on the international petroleum system and how this process led to the growth of competing norms. However, this transformation was initially only on the fringes and was not a serious threat to the established order, notwithstanding the fact that OPEC was established during this period. We further argue that the process of regime transformation was on account of factors that were endogenous to the system.

Chapter 4, which is titled "Regime Collapse", describes in some detail the process by which the first oil regime, which was already in its death throes by the beginning of the 1970's, finally collapsed. The factors responsible were both economic as well as political, with greater weightage being ascribed to the latter.
Chapter 5, titled "The Second Oil Regime", describes the international oil regime set up by OPEC, its operating norms and principles and the manner in which price control was exercised by the oil producer's cartel. It also analyses the response of the Western World, especially of the U.S. which was their leader and the foreign policy dilemmas that it faced.

Chapter 6, titled "Markets over Politics" describes the gradual decline and ultimate collapse of the second oil regime. It argues that the main factors leading to regime delay were due to the response of the international petroleum system to the operation of the regime itself. As a result, after 1985, it was the market, more than anything else, which determined the prices and production of international oil.

Chapter 7, provides a summary of the main argumentation and reasoning contained in this study and sets forth the major conclusions emanating from this research.