THE POLITICAL ECONOMY OF PAKISTAN'S ENERGY POLICY:
DEREGULATION AND PRIVATIZATION IN THE CONTEXT OF DEPENDENT DEVELOPMENT
by

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(ABSTRACT)

This study examines Pakistan’s energy policy since the mid-1980s when the government decided to pursue the path of deregulation and privatization of the energy sector. It identifies and analyses the underlying factors and mechanisms that were responsible for the re-orientation of energy sector policies from the state to the market.

Though there are important differences between the previous statist and the present market approaches, there are also fundamental structural commonalities between them. These commonalities revolve around the key points of capital and technology dependence of the energy sector development on sources outside the national economy. It is argued that both of these approaches are in fact variations of dependent development.

The influx of foreign investments which the new policies are designed to attract, will create new claims on the country’s foreign earnings in the form of private debt service
and repatriation of profits, etc. As energy so produced will not be exported and therefore not directly generate any hard currency, these claims can only be satisfied through either a major expansion in exports or by additional foreign borrowing. This study reveals inveterate structural limitations to major expansion in export sector earnings. Further, recourse to the enhancement of traditional exports will only serve to intensify dependency. As, the national economy does not have the capacity to sustain the new hard currency claims, Pakistan will be compelled to borrow externally and thus sink deeper into the debt trap.

In contradistinction to dependent development strategies for enhancing energy production, are alternative strategies that mainly rely on mobilization of domestic revenue and technical resources along with a selective utilization of external inputs. To solve Pakistan's energy crisis in the strategic sense, this study recommends the creation of an indigenous capacity to develop energy resources. Policies are suggested that would mitigate and eventually break the vicious cycle of dependency. But to do this, the state will have to play a new type of a role, different from that of the past as well as the one suggested by current policies. The real challenge is to bring about major organizational innovations in the public sector, rather than the current emphasis on dismantling it.
Affectionately dedicated to the memory of my mother and my father. Their boundless love, and the life values that they infused, are permanent treasures that I possess.
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Chapter - I

INTRODUCTION

Importance of Study

Lack of a sufficient supply of commercial energy remains a major hurdle in the efforts to develop the economy and improve the living conditions of hundreds of millions of people in energy resources deficient less developed countries (LDCs) like Pakistan. Unavailability of, or high-cost of end-use energy products in developing countries seriously affects their industrial development (load-shedding, high energy costs); agricultural development (constraints on fertilizer use, pump-irrigation, etc.); commerce and transportation (use of expensive imported oil and its products); living conditions of the poor (lighting, lack of supply of clean drinking water, fuel for cooking, etc.) and environment (deforestation, soil erosion, water-logging and salinity in irrigated areas, etc.).

Efforts by Pakistan's energy planners to provide energy for consumption and productive uses have typically focussed on increasing the supply of electricity, petroleum products, and gas to meet the rapidly increasing demand for commercial energy. However, in spite of the emphasis which all recent political leaders have placed on eliminating energy shortfalls, especially that of electricity, the situation remains very grim. As a matter of fact, the gap between
supply and demand, instead of narrowing, has been growing by roughly 1000 megawatts annually. This is in addition to the current shortfall backlog of approximately 2000 MW. Similarly, notwithstanding a gradual improvement in recent years, no major breakthroughs have been made in increasing the domestic supply of petroleum while consumption continues to increase so that each year the country has to import larger quantity of oil as compared to the previous year.

Why is this so? What accounts for the chronic failure to create an energy infrastructure that could meet the growing needs of the economy and population? Surely it has not been due to a lack of policy emphasis by governmental leaders. I believe that in order to appreciate the complex causes of this failure, and in order to understand the problems or issues of policy in this area, one has to move beyond traditional policy analysis and include the effects of the political-economic structural context. The following discussion is a preliminary presentation of structural issues involved as these relate to electricity and oil sub-sectors, and which, I contend, must be taken into consideration.

In the case of electricity, a typical strategy that many developing countries follow is to increase electricity generation through the installation of large thermal powerplants or construction of large hydro-electric dams
where feasible or in a small number of cases, the building of nuclear power-plants. All these methods of increasing the output of electricity face the constraints of capital, technology, and organizational know-how which the developing countries lack by definition and which are normally acquired from advanced capitalist countries or the multilateral donors under their influence. Thus the pursuit of such strategies puts the energy output of developing countries at the mercy of market and external political factors over which they have no control. This dependence creates major problems for energy planning, as even in the best of circumstances, the unreliability of supply of these factors, both in terms of availability and timing, can never be eliminated. Under such circumstances, it is extremely difficult if not impossible to formulate and implement energy policies and planning for the long-run. The usual case has been that policies and planning have often had to be seriously revised as the external market and political factors have changed. This has inevitably resulted in the creation of a patch-work of energy programs and production units whose output has consistently trailed the growth in demand. What has therefore been preempted is the development of a cohesive, well-integrated energy base that is not only capable of meeting current demand but is already
well-positioned to add new capacity as and when demand grows.

The vulnerability and arbitrariness in the energy sector, a result of the past energy policies based upon dependence on western countries for required inputs has cost the national economies and people of developing countries very dearly. For example, in the case of Pakistan it is currently estimated (1993) that for every kilowatt-hour of electricity that is not supplied to the economy, approximately 12 to 15 rupees in national output are foregone.¹

In the case of petroleum and its products, structural factors also have serious constraining effects on the ability of oil-importing LDCs to adequately meet the growing demand. Oil and its products are not only necessary for transportation, but are also used as inputs in the production of fertilizers and water-pump irrigation, and constitute crucial substitutes for wood in domestic use.

¹ This figure is an estimate of the Private Power Cell, a bureau of the Ministry of Water and Power, that has responsibility for promoting privatization of the power sector. Quite plausibly, this figure may have been exaggerated for self-serving reasons by the Private Power Cell. Showing his frustration on the lack of reliable data regarding losses to the economy, Azhar (1991, p.137) aptly remarks: "It is perhaps yet another manifestation of the thumb rule mentality that pervades most aspects of policy making in Pakistan that eight long years have elapsed during which, year after year, industry, agriculture and commerce has suffered badly on account of load shedding, and there still does not exist any remotely reliable composite index of the cost to the national economy of unserved electrical energy per kilowatt hour."
There are two ways in which the shortage of petroleum can be handled. First, a less developed country can attempt to develop its indigenous resources. And second, it can buy oil from the international market. But in both of these cases, LDCs face complex structural problems that limit their abilities to provide for this important energy resource. In the first case, the exploration and development of the full potential of oil and gas resources is sadly lacking, and this is despite the fact that many of these countries have tried to develop such an indigenous capacity. Once again, this is a result of the continuing capital, technology, and organizational know-how dependence of the developing countries on the oil corporations, multinational lending agencies, and governments of the western countries.

The failure of governments of developing countries to develop energy policies that are geared towards creating the necessary conditions for the indigenous exploitation of their oil and gas resources, has resulted in heavy reliance on the second option, that is, importation of oil and its products. As is explained below, this option locks a developing country into an exchange pattern within the global market (international division of labor) that is least conducive to national development.
This occurs because imported oil is normally paid for in hard currencies which can only be obtained by selling national products in the world market or by borrowing from multilateral lenders or the international financial markets. Oil imports are already consuming a very large part of the total foreign exchange earnings of many LDCs. For example, in the case of Pakistan, Thailand, the Philippines and Turkey, oil imports rank number one among all imports, consuming a major part of the foreign exchange earnings which could be beneficially utilized for other much-needed economic and social development schemes. Similarly, in many other developing countries expenditures on oil imports rank among the top categories of national imports.

The need to earn foreign exchange to finance oil imports and for servicing debt incurred from setting up large electricity generating and distribution projects creates pressures to export the most exportable commodities which, given the history of relationships between the core and periphery, are usually agricultural or mineral materials in raw or semi-processed (very low value-added) form. In the case of Pakistan, these export goods consist of raw cotton, yarn, and rice.

This pattern of exchange is detrimental to development due to long-term deterioration in the terms of trade for agricultural and other raw materials in the international
market. Furthermore, reliance on agriculture to supply crucial foreign exchange to finance oil and other imports, creates another vulnerability. It puts the national economy at the mercy of the vagaries of climatic conditions: Failure of rains at crucial moments or their appearance at the wrong time, or their excess, can wreak havoc on the ability to earn hard currencies and therefore negatively affects the national economy, as it has so often happened in the past.

Thus, oil-poor developing countries like Pakistan face a gargantuan dilemma. On the one hand, they must increase the supply and consumption of energy in all sectors of the economy (but especially among the rural areas where many of the poor live), to meet the growing demand so that the national output, productivity of labor, and basic living conditions of the people are substantially improved. On the other hand, their efforts to increase energy supply face numerous external and internal structural constraints. Within this context, conventional energy policies that are by design or default based on foreign dependence in building electricity generating capacity and exploiting domestic hydrocarbon resources, have been unable to address the challenge in an adequate manner.

Specifically, evidence suggests that these policies have failed at three levels. First, these have led to the
intensification of dependency relationship which adversely affects the potential for self-sustaining growth. Second, these policies have failed to address the dimension of poverty alleviation as they do not emphasize small-scale renewable energy that is better suited to direct intervention in the production activities of the rural poor. A majority of them do not have access to commercial energy and are not likely have such access for many decades under current policies. Finally, and this is intricately related to the preceding two factors, conventional policies have typically ignored the nexus between energy and environment.

**Dependency**

As a result of the historical effects of colonization on Pakistan and its insertion into the international division of labor as a raw-material producing region, a complex of vicious structural relations came into existence between it and the developed capitalist core. *Mutatis mutandis*, the qualitative features of these relationships have persisted in the post-independence period. These political and economic structural relations, broadly termed "dependency", constitute the crucial context which has exerted a defining influence on the nature of energy policies and strategies (as well as other policies) that Pakistan has pursued since its independence in 1947.
Within this context of dependency, Pakistan has followed two types of policy strategies to address its energy problems. The first type of energy strategy, that I call State Organized Development Strategy (SODS), gradually emerged in the 1950s and began to wither in the mid-eighties. The second type energy sector development strategy, which I call Private Investment Promotion Strategy (PIPS), emerged in the mid-eighties and quickly became the dominant policy paradigm. Currently, it holds sway over much of the energy policy-making establishment in the country. PIPS is also being, as it has been in the past, forcefully and consistently pushed by western governments and multilateral lending agencies, especially the World Bank group.

In short, SODS and the policies that it has spawned can be identified by their: (a) government ownership and management of energy sector enterprises; (b) financing of these projects through foreign aid and loans; (c) heavy emphasis on the development of large energy projects based on conventional technologies; (d) regulated role of international oil corporations in the oil and gas sector; (e) efforts to develop indigenous technical capacity in petroleum exploration and development in the public sector; (f) government regulated energy prices; and (g) neglect of
non-conventional renewable sources of energy in urban and rural areas alike.

As mentioned above, during the latter half of the last decade, PIPS began to take hold. PIPS supporters, on the one hand criticized the SODS approach for being inadequate, and on the other, offered renewed hopes for resolving the energy problem. With the installation of Reagan and Thatcher governments, neo-liberalism became the dominant economic ideology in the core countries of world capitalist economy. This shift in the core had a profound effect on peripheral economies. Essentially, neo-liberalism identified the role played by the state in developing public sector energy enterprises in a negative light. It emphasized "deregulation" and "privatization" of the public sector as its central policy themes.

Briefly, PIPS approach to Pakistan's energy sector policies can be identified by its emphasis on: (a) assigning a leading role to private foreign corporations for provision of capital and technology; (b) reducing and eventually eliminating the State's role in energy development except for supporting the private sector; (c) privatization of existing public sector energy enterprises; (d) attracting international oil corporations by eliminating restrictive regulations especially in all areas of oil and gas sector; and (e) general de-control of energy prices and bringing
these to the level of prices in the core economies. Two other characteristics of PIPS that are quite likely to emerge are: (f) large plant size as it is reasonable to expect that economies of scale will make larger plants more profitable and hence will be the preferred by private investors\textsuperscript{2}; and (g) continuation of the lack of development of renewable energy sources: Private energy investors are generally averse to investing in the development of alternative energy resources.\textsuperscript{3}

But are these policy changes in the energy sector in any way fundamentally different from the approach followed earlier? Have the energy policymakers identified the core inadequacies of the SODS approach? Do the new policy

\textsuperscript{2}The Hub River powerplant, the first in the private sector and which is currently under construction, is also the country's largest fuel-oil plant yet. Upon completion in 1996, it will have a peak generating capacity of 1292 megawatts of power. It will use imported fuel oil to produce this output.

\textsuperscript{3}Alternative or renewable energy resources comprise solar, wind, biomass, geothermal, and small hydel resources. By its very nature, the production of alternative energy is a decentralized activity, often requiring direct supervision by end consumers or community-based organizations. Private energy corporations are generally averse to investing in such ventures for two reasons. First, they do not provide opportunities to earn substantial, concentrated profits--each producing unit is relatively small and the "raw-material" is available from non-market sources (solar, wind, hydel, etc). Second, as private energy corporations are centralized organizations, these are ill-equipped organizationally to deal with the essentially decentralized alternative energy set-up. Thus, from the point of view of decision-makers (or stockholders) of such corporations, the above two features of alternative energy would mean high "transaction costs" and consequently, high opportunity costs of investments in alternative energy projects. Given a choice between alternative and conventional energy, and given the existing socio-economic conditions (distribution of wealth and access to power), it would only be rational for private energy corporations to invest in the latter type of energy projects.
directions reflect the lessons learned from past experience? What are the differences between the two approaches and what are the trade-offs involved? Are there any pitfalls in the new policies that can be identified and hence avoided? And ultimately, can one realistically expect the PIPS policies to resolve the energy problem? These are some crucial questions that need to be addressed in a serious manner despite the currently dominant euphoria that liberalization and privatization are the panacea for all economic and social ills. In the course of this study, I will raise and answer these and other related questions in greater detail. But for now, the following introductory comments on this subject will suffice.

Though there are important differences between the previous SODS and the present PIPS approaches, there are also fundamental structural commonalities between them. These commonalities revolve around the key points of capital and technology dependence on sources outside the national economy\(^4\) that ultimately prevent a proper and adequate

\(^4\) Here reference is mainly to the governments of developed western countries and Japan, multilateral financing agencies, and private corporations and banks belonging to these countries that dominate the international market in finance and technology. China, like the erstwhile USSR, is a contemporary exception, as it is forthcoming and flexible in providing key capital and technology assistance to LDCs to suit the interests and peculiar situations of these countries. China thus is an important alternative source but which is not being fully utilized for reasons which we shall look into latter. NICs such as South Korea and Taiwan may also provide opportunities that are more attractive compared to those offered traditionally by developed countries. In future, other
national effort to solve the energy crisis. In this sense one can classify both these approaches as dependent strategies as opposed to alternative strategies that would mainly rely on mobilization of domestic revenue and technical resources along with a selective utilization of external inputs.

**Poverty Alleviation**

It is commonly recognized, at least in words if not in deeds, that an important goal of development intervention is to alleviate the social and economic conditions of the poorer segments of the population in developing countries. As a majority of the poor in these countries live in rural communities, it is important that sectoral development efforts emphasize policy interventions that are specifically designed to enhance the productivity and incomes of the people living in rural and remote areas. The development of small renewable energy resources--solar, biogas, small hydel, etc--are ideally suited to quickly supply energy inputs to people living in such areas for small capital costs per project. Policy emphasis on the extensive development of renewable energy sources can successfully make interventions that would enhance the productivity and incomes of the rural poor.

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South-South exchanges may develop which would provide similar opportunities for LDCs.
In contrast, conventional energy policies that are founded on dependent development emphasize, as a matter of rule, the development of commercial energy for industrial and urban consumption. As this results in channelling of available resources to the development of large energy projects and the national electric grid, instead of development of renewable energy, they are evidently biased in favor of the former. Therefore, it is no surprise that energy policies so far followed by Pakistan, except for a few small initiatives undertaken by the 1971-77 Bhutto regime, have largely ignored the development of renewable energy.

Environment

There is a serious concern that an ill-thought out policy of increasing energy supply in the face of desperate shortages, based on current technological and financial strategies of development, may actually create problems in the long-run that could damage the future development potential of peripheral countries. This could plausibly happen through the creation of local, regional, and global environmental effects that deplete the natural forests and agricultural resources, ultimately making it harder for these countries to break out of the cycle of poverty that grips them.
The conventional technological and financial strategies of increasing the output of electricity that are pushed by influential institutions like the World Bank typically ignore the serious long-term local and regional environmental consequences, notwithstanding the rhetoric emanating from such institutions (Rich, 1990). For example, large oil or coal-fired powerplants often constructed through foreign financing are typically built without proper environmental protection or scrubber technology as investor groups view this to be an "additional" expenditure that has the effect of lowering the rate of return on invested capital. Large hydro-electric dams, another favorite of conventional energy policies, use up vast chunks of land, often displacing thousands of inhabitants in the area. These also pose a small but real danger of accidental structural collapse, with unmeasurable catastrophic consequences. Nuclear power-plants can be similarly criticized for their potential accident hazard and the problem of long-term storage of nuclear waste.\(^5\)

In the case of Pakistan, the most serious threat to environmental degradation comes from deforestation rather than sulfur emissions or nuclear waste: A large percentage

\(^5\) Anyhow, the nuclear option for developing countries remains controversial as the western countries view the indigenization of nuclear technology in developing countries with great concern, even hostility, due to its possible military applications.
of Pakistan’s electricity is produced either by non-polluting hydro-electric powerplants or by less polluting natural gas burning plants.\textsuperscript{6} The main reason for deforestation is the large-scale use of wood as a domestic cooking fuel. In order to prevent wanton destruction of forests with possible catastrophic effects, energy planners must devise policies that quickly result in the substitution of firewood with other fuel sources, such as biogas, natural gas, kerosene, or even perhaps coal.

\textbf{Scope of Analysis}

It is in light of these broad constraints that energy policy issues in Pakistan should be viewed and analyzed, rather than through the putative technocratic framework. Moving in this direction, I adopt a political economy framework of policy analysis which \textit{per se} leads us to broaden our field of view. Indeed it is only by doing this that one can approach the object of our study, that is, deregulation and privatization of the energy sector that was initiated in the mid-1980s. The limited scope of this study therefore restricts me to the consideration of Pakistan’s energy policy in the context of the first of the above

\textsuperscript{6} No studies are available to the author on the effects of pollution emanating from neighboring India on Pakistan’s ecology. India depends on coal burning plants to produce most of its power requirements. Detrimental effects on Pakistan’s ecology are entirely plausible (currently or in the future) as the pattern of wind flows in the subcontinent, especially during the summer months, is from the easterly to the westerly direction.
mentioned three energy problem dimensions, namely, dependency. Analysis of policy in the context of the other two dimensions—poverty alleviation and environment—is urgently necessary. Only after such studies are undertaken can one hope to gain a fuller understanding of this crucial sector.

I should clarify here that I am not opposed to adopting a technical framework as such. Adopting a technical framework leads one to focus on intra-sectoral issues such as demand modelling, inter-fuel substitution, optimum energy mix, etc., a' la Riaz (1984), or demand regulation, demand management, operational efficiency, etc., a' la Azhar (1991). These are certainly extremely important issues and considerable work continues to be done in this area. But, exclusive focus on technical issues can only result in the generation of an incomplete picture, and more dangerously, to the adoption of policies which may appear correct within the narrow technical framing of the problem but which could be fundamentally flawed if seen within the larger, political economic framework. The latter framework has the power to capture the multifarious forces and the complex dynamics that influence developments and policies in the energy sector. It provides us with a better understanding and appreciation of current sector-level policies as well as the explanation of their specific historical evolution. It is
in light of this framework that one is able to see not only the formidable structural constraints but also the ignored opportunities that could be availed to adequately solve the energy problem.\textsuperscript{7}

To recapitulate the above discussion, conventional dependent development policies and strategies that attempt to mitigate or eliminate energy shortages can be faulted on three grounds. First, these have resulted in the intensification of dependency relationship which is detrimental to future development. Second, these have not succeeded in resolving the problem of energy shortages and/or supplying energy to the rural poor. Lastly, and this is related to the first two failures, these policies have typically ignored or de-emphasized their effects on the environment, which are enormous even though these are yet to be fully explored and understood.

Needless to say, the formulation and implementation of energy policies that give due consideration to the dimensions of development and alleviation of poverty on the

\textsuperscript{7} There is no question that even if fundamentally correct policy directions are adopted, formidable problems of implementation would remain to be tackled. This in itself would be a difficult challenge given the archaic and inefficient administrative system in Pakistan. However, if the energy policy makers do not fully take into consideration the implications and limitations of political-economic structures (internal and external) along with resource endowments that shape both existing constraints and opportunities, then even in the hypothetical case of the absence of implementation bottlenecks, we cannot expect an adequate long range solution to the energy problem.
one hand, and the environment on the other, is the key to a better future for humanity in poor countries. However, the promise of such policies directly depends on the capacity of policy-making and implementing institutions to identify and follow priorities that bring about the necessary changes without further loss of time. The short and long-term needs of developing countries can only be harmonized through the creation of a policy framework that has the capability to consider the existing energy sector problems as a whole—within the context of dependency—and to chart out a direction for the future that would harness diverse indigenous resources and those which can be acquired externally without recreating and reinforcing the pattern of dependency. This would require the creation of institutional capabilities, that can adequately deal with the issues of capital shortage, technology, and organizational know-how. The current practice of sporadic construction of new power-plants or hydro-electric dams as and when finances become available or political conditions allow, or of inviting foreign companies to invest on their terms and conditions without regard to long term implications for the development of the energy sector as well as the national economy, may mitigate the immediate shortages but are, at the same time, likely to create long-term deformities at both sectoral and national levels.
Without adequate institutionalized capabilities to formulate and implement integrated long-term energy policies, developing countries like Pakistan would not be able to successfully address the dire problems that face them. Needless to say, the consequences of such a failure would be detrimental to both the developed and the developing worlds.

Purpose of Study

Pakistan, with an estimated current population of 128 million, an annual official per capita income of $395, and per capita energy consumption that is one-thirty-sixth of the U.S., is a typical developing country. Its economic and social development is greatly constrained by shortages in the availability of commercial energy, while its environment is being jeopardized by the destructive use of forest resources as firewood by a majority of people to provide for their basic energy needs.8

The purpose of this study is to analyze Pakistan's energy policy as it has developed since the mid-1980's when the government decided to pursue the path of liberalization,

8 Destructive in the sense that trees used for firewood are not being replaced. Community-based re plantation and harvesting programs are urgently required to prevent the reckless use of forest resources and to provide the necessary firewood to rural communities. Such programs need to be made into an integral component of the overall energy policy.
that includes deregulation and privatization of the energy sector, in order to lure foreign private investments to it.

This study shall identify and analyze the underlying factors and mechanisms that have shaped and given direction to Pakistan's energy sector policies and to assess the effectiveness of such policies in terms of meeting the needs of economic and social development.

Problem Statement

The statement of the problem under investigation can be elaborated by identifying the significant elements and interrelationships of the object of this study. These are:

- Explanation of the historical evolution of the energy sector and its characteristic problems.

- Description of the changes in energy sector policies that have occurred between the mid-1980s and the early 1994, when the current government announced its own policies.

- Assessment of the limitations, shortcomings, and omissions of the new policies.

- Explanation of the reasons for the emergence of the policies of liberalization, deregulation, and privatization in the energy sector starting in the mid-1980s. This includes explanation of the role of donor governments and agencies in bringing this about (structural adjustment program and reduction of foreign aid budgets of Western
countries) as well as the domestic fiscal crisis due to increased expenditures on oil imports and debt servicing.

- Analysis of the effects of privatization and deregulation of the energy sector on Pakistan economy's structural relationship with the world economy (dependency).
- Analysis of the political interests, forces, and relationships that have underpinned and shaped energy policies.

Contributions of Study

This study will make three contributions:

First, it shall make a contribution to the current debate on energy policy in Pakistan. Most of the existing analyses approach energy policy analysis from narrow technical, engineering or econometric perspectives. This study contributes to energy policy literature by bringing into the scope of analysis both internal and external macro-level economic and political factors. It also makes policy recommendations for the long-term development of Pakistan's energy sector and identifies policies and programs that will result in breaking the bonds of dependency through the creation of a sustainable energy sector. More specifically, recommendations and suggestions will be made in the following directions:

1. Policies that must be avoided because the reproduce and reinforce dependency.
2. How can national capabilities be created or improved so that a self-reliant and sustainable energy production and distribution system is created?

3. What policy steps need to be taken in the short- and long-run in order to take maximum advantage of contradictions of the world capitalist system so that the above mentioned national capabilities may be created.

4. What type of legislative and administrative changes need to be made so that a streamlined energy policy formulation and implementation process is created that would meet national needs.

Second, this study contributes to the theory and methods of policy analysis. A theoretical model of policy analysis will be synthesized that takes into consideration—and links—dependency/world system theory, state theory, and political economy theoretical approaches to analysis of policy arenas. As shall be developed in the literature review chapter, the concept of the "governing bloc" in policy arenas helps better explain why certain policy options are adopted while others are rejected or not even considered. Although such a model of policy-analysis is particularly useful and lends itself well to the context of developing countries, it can also be applied to specific policy arenas in the developed countries.
Thirdly, this study contributes towards the development of comparative policy analysis. Lessons learnt from Pakistan's experience can be usefully applied, mutatis mutandis, to other developing countries as many of these face similar structural constraints and energy problems.
Chapter - II 
METHODOLOGY

All methodologies are secreted or emanate from different philosophies of science. The type of knowledge produced, and therefore the remedies and solutions that emerge from that particular knowledge, crucially depend upon the methodology employed, which in turn depends upon the particular philosophy of science the researcher adheres to. In this sense, it is triply important for researchers (and their audience) to be self-aware and explicit about the philosophy of science that they base their methodologies on.

But the reality is that, unfortunately, too many Ph.D (after all, doctorate of philosophy in a specific area of knowledge) dissertations are written without much philosophical considerations or making explicit (if at all it is mentioned) the philosophical underpinnings of the research. Being aware of this serious shortcoming, I shall first lay out the philosophical underpinnings of this research effort, and then make an attempt to derive constraints for research methodology based on these considerations. In this way, I hope to make explicit the philosophy of science which forms the background of this dissertation, and its connections to the research methodology and substantive theories that shall be employed.
There is another important reason for following the above course, viz. that the transcendental realist philosophy of science adhered to in this dissertation is fundamentally at odds with positivism, the dominant paradigm in American social science. Indeed, I have paid full heed to the counsel and caution given by Burrell and Morgan in the concluding chapter of their book *Sociological Paradigms and Organizational Analysis*. They write:

Theorists who wish to develop ideas in these areas [other than positivist/functionalist paradigm] cannot afford to take a short cut. There is a real need for them to ground their perspective in the philosophical traditions from which it derives; to start from the first principles; to have the philosophical and sociological concerns by which the paradigm is defined at the forefront of their analysis; to develop a systematic and coherent perspective within the guidelines which each paradigm offers . . . (1979, p.397).

C. Wright Mills aptly remarked that "'Method' has to do, first of all, with how to ask and answer questions with some assurance that the answers are more or less durable" and further: "To have mastered 'method' and 'theory' is to have become a self-conscious thinker, a man at work and aware of the assumptions and the implications of whatever he is about"
In the following, I present the methodological framework that has been devised for this study: But first, I shall lay out its underlying ontological and epistemological considerations from which the methodological framework has been derived.

Ontological and Epistemological Considerations

The overarching analytical approach of this study can be termed as the multi-level method of analysis. The multi-level analytical method adopted in this dissertation is essentially a non-positivist methodology that is based on the philosophy of science called transcendental realism and the philosophy of social science called critical naturalism (Bhaskar, 1975, 1989). The main reason for accepting this philosophical paradigm as superior to positivism is to avoid the errors common to much current social research. On this, Burrell and Morgan appropriately note:

The tendency is much empirical research has been for methodologies to dominate other assumptions in relation to the ontological, epistemological, and human nature strands of our analytical scheme. The wholesale incorporation of methods and techniques taken directly from the natural sciences needs to be severely questioned. The problem of developing methods appropriate to the nature of the phenomena to be studied
remains one of the most pressing issues within the whole realm of social science research. (1979, p.399).

Transcendental Realism

In my view, Roy Bhaskar (1975, 1979) has successfully responded to this challenge by developing a methodology that is appropriate for the phenomena that social sciences study. He does this by, on the one hand, critiquing the ontological and epistemological basis of both positivism and hermeneutics (or interpretive methods) and showing why these are inappropriate, and on the other, by clarifying the differences between the respective ontological and epistemological claims that can be plausibly made regarding the natural and the social world and their distinction. These ideas are presented by Bhaskar as transcendental realism and critical naturalism. I will discuss these briefly in the following.

The transcendental realist view of science is based on the fundamental proposition that objects of knowledge have two distinct dimensions that must always be kept apart: the intransitive and the transitive. This distinction rests on the assertion that while on the one hand the production or creation of knowledge is essentially a social act, that "men in their social activity produce knowledge which is a social product much like any other, which is no more independent of its production and the men who produce it than motor cars, armchairs or books . . .", and on the other hand, "that
knowledge is 'of' things which are not produced by men at all: the specific gravity of mercury, the process of electrolysis, the mechanism of light propagation. None of these 'objects of knowledge' depend upon human activity. If men ceased to exist . . .," these processes would still go on in nature "though ex hypothesi there would be no-one to know it" (Bhaskar, 1975, p.21).

**Intransitive Objects of Knowledge**

The latter of the two dimensions mentioned above, viz, "that knowledge is of things which are not produced by man at all," is called by Bhaskar the **intransitive objects of knowledge** and "in short, . . . [these] . . . are in general invariant to our knowledge of them: they are the real things and structures, mechanisms and processes, events and possibilities of the world; and for the most part they are quite independent of us" (Bhaskar, 1975, p. 22).

Natural sciences most commonly investigate and create knowledge of the intransitive objects of knowledge through the **closed system** of experiment in which scientists create or control patterns of events. However, ontologically, these patterns of events should not be confused with the causal laws which scientific inquiry helps to identify. Patterns of events are produced by the scientist during an experiment but the causal laws are not. According to Bhaskar (1989):
What is so special about the pattern of events... that scientists deliberately produce under meticulously controlled conditions in the laboratory is that it enables them to identify the mode of operation of natural structures, mechanisms or processes which they do not produce. What distinguishes the phenomena the scientist actually produces from the totality of the phenomena she could produce is that, when her experiment is successful, it is an index of what she does not produce. A real distinction between the objects of experimental investigation, such as causal laws, and patterns of events is thus a condition of the intelligibility of experimental activity... The objects of experimental activity are not events and their conjunctions, but structures, generative mechanisms and the like (forming the real basis of causal laws), which are normally out of phase with the patterns of events which actually occur" (p.9).

While in the closed system of an experiment, a scientist can create patterns of events which are in "phase" with the causal laws, thus revealing them, in the open system of the real world "no constant conjunction of events obtain." As the pattern of events in the open system is dynamic and ever-changing, being simultaneously determined by the operation of many and various causal laws, what obtains is that these
patterns of events are "out of phase" with the underlying structures and mechanisms (which ground causal laws) that generate them.

To recapitulate the above discussion, the notion of the intransitive dimension asserts that the objects of human knowledge are real "things" that exist independently of the fact whether one has knowledge of these or not, that phenomena or patterns of events are produced by structures and generative mechanisms which ground causal laws, that reality is structured and differentiated, and that in the open system which obtains in the real world (outside of controlled experiment) causal laws must be analyzed as tendencies which may or may not be realized due to the co-operation of other, and even contradictory causal laws: In other words, in the open system "there is an ontological gap between causal laws and their empirical grounds." (Bhaskar, 1989, p. 11). This is contrary to positivism which necessarily deduces causal laws from empirical invariance, confusing constant conjunction of events with causal laws, and which thereby cannot accept that "just as a rule can be broken without being changed, so a natural mechanism may continue to endure, and the law it grounds be both applicable and true (that is, not falsified), though its effect (i.e. the consequent) be unrealized" (Bhaskar, 1989, p. 11).
Transitive Objects of Knowledge

As opposed to the intransitive objects of knowledge, "the transitive objects of knowledge are Aristotelian material causes. They are the raw materials of science--the artificial objects fashioned into items of knowledge by the science of the day. They include the antecedently established facts and theories, paradigms and models, methods and techniques of inquiry available to a particular scientific school or worker" (Bhaskar, 1975, p. 21).

Based on the above two concepts of the objects of knowledge, Bhaskar builds his philosophy of science--transcendental realism--in opposition to (but not total rejection of) the principles of Humean "classical empiricism" and current day positivism (Popper, Hempel, and others) as well as the "hermeneutical tradition" (Dilthey, Simmel, Anscombe, Dray, Charles Taylor, Winch, Gadamer, Apel, Habermas, and others). Bhaskar summarizes "transcendental realism" in the following manner:

It regards the objects of knowledge as the structures and mechanisms that generate phenomena; and the knowledge as produced in the social activity of science. These objects are neither phenomena (empiricism) nor human constructs imposed upon the phenomena (idealism), but real structures which endure and operate independently of our knowledge, our experience and the conditions which allow
us access to them. Against empiricism, the objects of knowledge are structures, not events; against idealism, they are intransitive (in the sense defined [above]). On this conception, a constant conjunction of events is no more a necessary than it is a sufficient condition for the assumption of the operation of a causal law. According to this view, both knowledge and the world are structured, both are differentiated and changing . . . (1975, p. 25).

**Purpose of Science and Method of Inquiry**

The purpose of science, then, is to lay bare the structures and mechanisms that produce the empirically evident phenomena, both in the natural and social domains. Although there are real differences between these domains, (and this has epistemological or methodological but no ontological significance as shall be explained below in the section on Critical Naturalism), in both cases the process of production of scientific knowledge is essentially similar. Bhaskar explains this process as follows:

Typically, then, the construction of an explanation for, that is, the production of the knowledge of the mechanism of the production of, some identified phenomenon will involve the building of a model, utilizing such cognitive materials and operating under the control of something like a logic of analogy and metaphor, of a mechanism.
which if it were to exist and act in the postulated way would account for the phenomenon in question (a movement of thought which may be styled retroduction). The reality of the postulated explanation must then, of course, be subjected to empirical scrutiny. (For, in general, more than one explanation will be consistent with the phenomenon explained.) Once this is done, the explanation must then in principle itself be explained. And so one has in science a three-phase schema of development in which, in a continuing dialectic, science identifies a phenomenon (or range of phenomenon), constructs explanations for it and empirically tests its explanations, leading to the identification of generative mechanisms at work, which now becomes the phenomenon to be explained, and so on. In this continuing process, as deeper levels or strata of reality are successively unfolded, science must construct and test its explanations with the cognitive resources and physical tools at its disposal, which in this process are themselves progressively transformed, modified, and refined. . .

Knowledge of deeper levels may correct as well as explain, knowledge of more superficial ones. In fact one finds in science a characteristic pattern of description, explanation and redescription of the phenomena identified
at any one level of reality. But only a concept of ontological depth (depending upon the concept of real strata apart from our knowledge of strata) enables us to reconcile the twin aspects of scientific development, viz. growth and change (1989, pp. 12-13).

**Critical Naturalism**

The pivotal principle of the transcendental realist view of science is that the process of comprehension or knowledge production must move, at any one level, from the analysis of phenomena to an analysis of the mechanisms and structures that generate the phenomena. But is this principle also applicable to the domain of social sciences? How can one approach this issue without committing the errors of reductionism (which denies any ontological difference between natural and social objects, reducing the latter to the former) or scientism (which denies that there are any significant differences in the methods appropriate for the study of the two, whether they are ontologically reducible or not)?

The theory of critical naturalism advanced by Bhaskar (1989) recognizes that there are characteristic differences between natural phenomena and social phenomena, and that these differences extend to the underlying structures and mechanisms that generate phenomena in each case. These differences pivot around the fact that, as opposed to natural objects and
phenomena, social objects and phenomena are emergent, that is, produced by the social activity of humans. According to Bhaskar (1989, p. 38), social structures are different from natural structures in the following important ways:

1. Social structures, unlike natural structures, do not exist independently of the activities they govern.

2. Social structures, unlike natural structures, do not exist independently of the agents' conceptions of what they are doing in their activity.

3. Social structures are only relatively autonomous from each other as the differentiation and development of social activities implies that they are interdependent.

4. Social structures, unlike natural structures, may only be relatively enduring. The tendencies they ground may not be applicable universally across time and space.

Given these important differences between social and natural structures, can one then say that it is possible to study the former by applying the general principles of the scientific method? In other words, can one treat social facts, structures, and societies as "real," as having an independent ontological status, and subject these to scientific investigation? Do they have an intransitive dimensions in spite of the assertion that these are emergent, that is, products of human social activity? A proper and correct resolution of this dilemma is essential if one is to
avoid a collapse into the methods of hermeneutics and phenomenology. What is equally crucial is that the emergent ontological status of social objects and phenomena be fully accounted for in order to avoid the error of scientism which positivist social science often makes.

According to Bhaskar, a realist ontological status of social facts, structures and relations can be clarified following Durkheim’s (1964) two-fold approach. He first establishes the objectivity or autonomy of social objects by employing the criterion of externality, that is, the fact that social objects pre-exist individuals in the sense that individuals are born into a society that already is comprised of particular social facts, structures, and relations, means that the latter exist outside of them. Thus social objects (once these are produced through human activity) are external and independent of people even though these are produced exclusively through their activity.

Second, by applying the same criterion of externality to human activities, Durkheim asserts that because social objects affect what people are able or not able to do, and in their doing of things face the constraints imposed by social facts,
structures and relations, further establishes the reality of social objects. 9

Social objects are thus real, even though their mode of existence is very different from that of natural objects. The mode of existence of the former is emergent, that is, a result of the activity of humans, while that of the latter is cosmic or given by nature, that is, fully independent of human existence. However, and this is a crucial point, because social objects are emergent and have the characteristics mentioned above, the method of their study must therefore be significantly different from that of natural sciences.

These differences fall into three categories which parallel the differences between social and natural objects: Ontological, relational, and epistemological. In the following, I will consider the implications of each of these differences for methodology.

Ontological Differences and Implications for Methodology

The emergent properties of social objects limits and necessitates methodology in certain important ways. The chief limitation results from the property of social objects that

9 Durkheim writes: "I am not obliged to speak French with my fellow-countrymen nor to use the legal currency, but I cannot possibly do otherwise. If I tried to escape this necessity, my attempt would fail miserably. As an industrialist I am free to apply the technical methods of former centuries, but by doing so I should invite certain ruin. Even when I free myself from these rules and violate them successfully, I am always compelled to struggle with them. When finally overcome, they make their constraining power felt by the resistance they offer (1964, p.3)."
they not only cannot be empirically identified independently of their effects (a property which many natural objects have such as magnetic fields, etc.) but that they do not exist independently of their effects. This means that as "Society, as an object of inquiry, is necessarily 'theoretical', . . . it is necessarily unperceivable. . . so that it can only be known, not shown to exist." (Bhaskar, 1989, p. 45). This has major implications for the notions of validity and measurement in social sciences which will be discussed in the next section.

Relational Character of Social Sciences and its Objects

Another important methodological implication that results from the emergent nature of the subject-matter of social sciences is the relational character between the two, viz. between social sciences and their subject matter. Unlike natural sciences, social sciences are internally related to their subject-matter in the sense that "... social sciences are a part of their own field of inquiry, in principle susceptible to explanation in terms of the concepts and laws of the explanatory theories they employ . . . and this necessitates a precision in the sense in which their objects of knowledge can be said to be 'intransitive'. For it is possible, and indeed likely, given the internal complexity and interdependence of social activities, that these objects may be causally affected by social science . . . Conversely, one
would expect social science to be affected or conditioned by developments in what it patently cannot exist independently of, viz. the rest of society" (Bhaskar, 1989, p.47). This is the essence of the notion of causal interdependency between social sciences and their subject-matter, and is in contrast to natural sciences where no such interdependency exists.

But it is crucially important to distinguish causal interdependency between social sciences and their subject matter and existential intransitivity of social objects, the latter being a pre-condition of science, without which no science, whether natural or social, is possible. Explaining this important difference, Bhaskar (1989) writes:

For, although the processes of production may be interdependent [in the case of social science], once some object $O$ exists, if it exists, however it has been produced, it constitutes a possible object of scientific investigation. And its existence (or not), and properties, are quite independent of the act or process of investigation of which it is a putative object, even though such an investigation, once initiated, may radically modify it. In short, the concept of existence is univocal: 'being' means the same in human as the natural world, even though the modes of being may radically differ. The human sciences, then, take intransitive objects like any other. But the
categorical properties of such objects differ. And among the most important of these differences is the feature that they are themselves an aspect of, and causal agent in, what they seek to explain. It is vital to be clear about this point. For if it is the characteristic error of positivism to ignore (or play down) interdependency, it is the characteristic error of hermeneutics to dissolve intransitivity. (p. 47)

Epistemological Differences between Natural and Social Sciences and Implications for Methodology

The vital epistemological feature that distinguishes the possibility of study of social from natural phenomena, and which thus determines the necessity for different methodologies for their respective sciences, is the fact that social phenomena "only ever manifest themselves in open systems; that is, in systems where invariant empirical regularities do not obtain. For social systems are not spontaneously, and cannot be experimentally, closed." (Bhaskar, 1989, p. 45). On the other hand, it is possible to set up a closed experiment in most cases in natural sciences, in which invariant empirical regularities can be produced by scientists thus making it possible for the discovery and analysis of inner structures and mechanisms (causal laws) that generate the empirical phenomena or the relations between different empirical phenomena in the natural world.
It is very important to keep in mind the ontological distinction between causal laws and the empirical regularities that are created by scientists in a closed system. Causal laws reflect the mode of operation of inner structures and mechanism of objects, which have a universal or transfactual application and are ontologically autonomous of humans, while empirical regularities created in a closed system are conjunctions of events that are deliberately created through experimental manipulation. The significance of upholding this distinction can be appreciated by the fact that the real world is an open system in which no empirical regularities obtain but at the same time causal laws are in operation. For otherwise, one would have to accept the absurd notion that there are no causal laws and the natural world is comprised of totally accidental relationships.

In open systems, causal laws can only be applied and understood as tendencies in the sense that it is not necessary that if "A" is considered to be an operative and correct causal law, that the effects "B" that law entails and explains, must then also appear as empirical reality. It is possible for "A" to be operative even though there is no appearance of "B". If the application of knowledge in open systems is to be at all intelligible, writes Bhaskar (1989, p. 9) "causal laws must be analyzed as the tendencies of things,
which may be possessed unexercised and exercised unrealized, just as they may of course be realized unperceived (or undetected) by people. Thus in citing a law one is referring to the transfactual activity of mechanisms, that is, to their activity as such, not making a claim about actual outcome (which will in general be co-determined by the activity of other mechanism)."

The acceptance of the notion of open systems in place of closed systems has radical and far-reaching implications for social science methodologies, implications which have not been fully appreciated by mainstream social science theorists. This is evident from the fact that since Von Bertanlafy’s arguments against closed systems, positivist social theorists almost ritually emphasize their acceptance of open systems, but, "despite the widely recognized deficiencies of the closed system as a theoretical construct in social science, the full implications of an open systems approach have not been pursued in any real depth. The concept has been adopted in a very partial and misleading way . . . confined to recognizing and emphasizing the environment as an influence upon the subject of study and reformulating traditional models in terms of systems concepts" (Burrell and Morgan, 1979, p.60).

In the following discussion, I shall discuss the true significance of open systems to theory-construction and methodology. To begin with, it should be noted that one of
the most significant implication of the acceptance of open systems concept is that it makes untenable the application of all methodologies derived from natural sciences—which necessarily pre-suppose closed systems—to social sciences, which must necessarily investigate its objects of study in open systems, as shown above. Now, as Bhaskar writes:

... practically all the theories of orthodox philosophy of science, and the methodological directives they secrete, presuppose closed systems. Because of this, they are totally inapplicable in social sciences (which is not of course to say that the attempt cannot be made to apply them—to disastrous effect). Humean theories of causality and law, deductive-nomological and statistical models of explanation, inductivist theories of scientific development and criteria of confirmation, Popperian theories of scientific rationality and criteria of falsification, together with hermeneutical contrasts parasitic upon them, must all be totally discarded. Social science need only consider them as objects of substantive explanation. (1989, p. 45).

In a similar line of argument, Burrell and Morgan also note commonly overlooked incompatibility of open systems with putative methodologies. After pointing out that "it has become almost obligatory for social system theorists to decry the inadequacies of closed system theorizing" they write:
Paradoxically, however, as a method of analysis the notion of closed system is still dominant in many areas of social enquiry. The use of controlled experiments and interview programmes, and the attempt to measure social phenomena through attitude questionnaires, all provide examples of closed system methodologies . . . The paradox is compounded by the fact that such closed system methodologies are often employed within the context of theoretical perspectives which emphasise the importance of an open systems approach. The link between theory and method is an extremely problematic one in many areas of social science." (1979, p. 60).

So far I have discussed the critical implications of open systems to social science methodologies derived from the orthodox philosophy of science, that is, mainly positivist social science. In the following, I shall focus on the real consequences of the acceptance of the notion of open systems to theory-building and identify methodological practices which may be said to be consistent with it. In doing so, I shall once again rely on the philosophical analysis done by Bhaskar in his book The Possibility of Naturalism. These consequences or imperatives are enumerated below.

1. A point of fundamental significance to theory-building in social sciences is that, unlike the closed system experiment of natural sciences, in open systems it is in
principle impossible to assemble conditions in which theories can be decisively tested. The profound implication of this is "that criteria for the rational development and replacement of theories in social science must be explanatory and non-predictive. (Particularly important here will be the capacity of a theory (or research programme) to be developed in a non-ad hoc way so as to situate, and preferably explain, without strain, a possibility once (and perhaps even before) it is realized, when it could never, given the openness of the social world, have predicted it.)" (Bhaskar, 1989, pp. 45-46).

In other words, social science theories can only be validated on the basis of their explanatory power. Therefore, all attempts to attribute predictive power to social science theories are ill-founded as, in open systems given the simultaneous operation of numerous other interfering factors, these cannot be assumed to possess any predictive capability. Consequently, hypothesis regarding the structures and mechanisms that underlie and generate phenomena "can be tested quite empirically, although not necessarily quantitatively, and albeit exclusively in terms of . . . [their] explanatory power." (Bhaskar, 1989, p. 49).

2. Due to the historical-transformative character of its subject-matter and the irreversibility of social processes, while measuring phenomena, social science theory must be competent to deal with not only quantitative change but also
qualitative ones. Thus, along with meaningful quantitative measurement of social phenomena, keen attention has to be given to the occurrence of qualitative changes, which after they occur, would thus make initial indexes of quantitative measurements redundant and inapplicable.

3. Quantitative measurement in social science has only partial relevance and has to be supplemented by discourse based on the use of language. This is due to the concept-dependent aspect of the ontology of the subject-matter of social science (see the above discussion on emergent properties of social objects). Many of the most important concepts cannot be measured, only their meanings understood and "hypotheses about them must be expressed in language, and confirmed in dialogue. Language here stands to the conceptual aspect of social science as geometry stands to physics. And precision in meaning now assumes the place of accuracy in measurement as the a posteriori arbiter of theory." (Bhaskar, 1989, p. 46).

4. Because of the openness of social systems, and the fact that the subject-matter of social sciences is continuously developing and changing (including inherent possibilities of qualitative changes), that is, it has a historical-transformative character, social theory will always remain necessarily incomplete. This means that all forms of
historicism, which entail deductive predictability, cannot be plausible or scientific.

The Place of Empirical Inquiry in Realist Research

After noting above the inappropriate and over-extended use of empirical inquiry that is inherent to positivist philosophy of science, and the limitations imposed upon its uses by the fact that social reality is an open system and can be investigated plausibly only as such, I will now consider the proper place of empirical inquiry in realist social scientific research. Keat and Urry outline three such functions in the "Postscript to the Second Edition" of their book Social Science as Theory (1981):

(a) to provide evidence of what is to be explained—the explicandum (for example the distribution of different categories of housing (private/public, owned/rented, etc.));

(b) to provide evidence for the blocking of, or the partial, or the full realization of, the causal powers of a particular entity (for example, of the spread of capitalist social relations in Third World economies, as given by the various indicators of commodification, wage-labour, monetized relationships, etc.);

(c) to provide evidence that a particular entity is providing certain conditions which are necessary for the partial/full realization of the powers of some other
entity (for example, of the increased range of activities of the state, which are in part necessary for the further realization of the powers of the CMP [capitalist mode of production]). (p. 248).

Keat and Urry (1981, p. 248) also present a useful schema that summarizes in a simplified form, the connection between the various levels of theory and the type of scientific practice in realist social scientific practice. This schema is reproduced below with some necessary formal modifications in text.
<table>
<thead>
<tr>
<th>I General ontological and trans-historical claims</th>
<th>Almost entirely philosophical/methodological—e.g. general nature of the social world, possibility and limits of a social science, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>II Theoretical descriptions of specific entities and of their potential causal powers (most such entities will be historically specific)</td>
<td>Mostly conceptual/theoretical. Empirical evidence mainly pertinent through the evidence on III, IV, and V feeding back to this level.</td>
</tr>
<tr>
<td>III Theoretical descriptions of how the causal powers of different entities are/are not realized and how these do/do not provide conditions of each other.</td>
<td>Theoretical debate informed by...[evidence of full/partial blocking or full/partial realization of causal powers of entities, and evidence supporting the influence of entities on others in providing conditions for the full/partial realization/blocking of their powers].</td>
</tr>
<tr>
<td>IV Descriptions of mechanisms which generate empirical events</td>
<td>Guided by III, empirical evidence of full/partial blocking or full/partial realization of causal powers of entities, and evidence supporting the influence of entities on others in providing conditions for the full/partial realization or blocking of their powers.</td>
</tr>
<tr>
<td>V Explanation of empirical events</td>
<td>Theoretical and empirical work to show the explicandum as the 'unity of diverse aspects'</td>
</tr>
</tbody>
</table>

**Multi-Level Analytical Framework for Policy Analysis**

From the preceding discussion on critical naturalism and Keat and Urry's schema presented above, one can delineate the full scope of policy analysis. It includes four dimensions (a) investigation of a particular issue or problem in relationship to political, economic, and social factors (level II; (b) identification and description of governmental policy...
pertaining to that issue or problem (level V); (c) investigation of how policies or their modification come into being and what social groups these cater to (level III): and (d) evaluation of the effectiveness of policies in addressing the relevant issues or amelioration of social problems, and what social effects or changes were brought about in society (levels III, IV, and V).

The task of policy analysis is thus very broad. In this task, the analyst has to deal with numerous social entities and the complex interaction between these within an open system. Among these entities, and their inter-relations, that are necessarily involved as objects of study of policy analysis are the State and its institutions, Government and the political system, the Economy and Social structure, i.e., relations between social classes or groups of people with similar or opposing interests, the administrative system, etc. Further, these social entities and the affects of their inter-relations on the problem(s) at hand must be studied within a specific cultural and historical context, for, as mentioned above, the space-time dimension is one of the important properties of social objects.

The undertaking of such a task would be forbidding, if not impossible, without adopting some starting point, some a priori way of relating social entities and attaching cause-effect directions to these relationships. In other words, a
priori theoretical framework is necessary not only for making sense of facts and data pertaining to intransitive social entities, that is, dealing with the empirical level, but, and this is of even greater importance, it is necessary for identifying what kind of social entities and what kind of relations between these may be of significance from the point of view of creating valid knowledge and therefore must be investigated, as opposed to others which may be excluded from study. Simultaneously, it must be kept in mind that the theoretical framework, or the particular way in which information regarding the intransitive is combined with the transitive dimension to produce a meaningful account of public policy (just as in other areas of social science), is contingent on the philosophy of science or paradigm (in the sense used by Burrell and Morgan (1979)) that the analyst subscribes to.

Now, I will lay out the specific analytical framework adopted for this study that has been derived from the transcendental realist philosophy of science (the radical structuralist paradigm according to Burrell and Morgan (1979)). This framework has been developed on the basis of the analytical schema provided by Keat and Urry (1981), that was reproduced above. The logic of its development is as follows.
The object of study of this dissertation is the changes in the energy policy in Pakistan in the 1980s. At a general abstract level, two interrelated dimensions that comprise this subject can be identified: The nature and development of the energy sector, and government policies designed to affect it. Manifestly, the first dimension is part of the dynamics of the economy and the second, that of the dynamics of the State. These two categories of society thus form the primary objects of analysis for us.

Now, both the economy and the State in Pakistan (and other countries belonging to the non-industrialized world) are recognized to suffer from "underdevelopment" or aberrant development and are part of the larger problem of development. Further, the problem of development involves not just the developing country but also the developed world. More precisely, since the emergence of world economy under mercantilism and colonialism, it involves the nature of relations between the two. In literature, the problematic underlying this relationship is captured by numerous terms such as core-periphery, satellite-metropolis, North-South, Third World-First World, developing countries-developed countries, primary producers-industrial producers, backward-advanced countries, underdeveloped-developed countries, etc. Thus, this relationship forms another dimension that is important to our analysis.
So far I have identified three broad dimensions—economy, State, and core-periphery relations—as integral to our object of study. This approach to policy analysis is more or less in agreement with that propounded by Minogue:

'what governments do' embraces the whole of social, economic and political life, either in practice or potentially. Public policy is self-evidently not a narrow field of enquiry, though policy analysts may well focus only on narrow areas of the broad field. Public policies do things to economies and societies, so that ultimately any satisfactory theory of public policy must also explain the interrelations between the state, politics, economy, and society (Quoted by Ham and Hill, 1984, p. 17).

Ham and Hill endorse Minogue's view of policy analysis (but correctly point out that "economies and societies 'do things' to policies as well as vice versa" p. 17) and they further add:

It follows that policy analysis should give due consideration to the social, political, and economic contexts within which problems are tackled. It also follows that the student of policy process should stand back from the world of everyday politics in order to ask some of the bigger questions about the role of the state in contemporary society and the distribution of power
between different social groups. Unless this is done then policy analysis must remain at best a partial exercise. (p. 17).

As noted above, this approach to policy analysis is more or less congruent to the one adopted for the purpose of this study. From this point of view, it is imperative to situate the analysis of a particular policy within the context of political economy. This necessitates the use of substantive theories that help us to make sense of the virtually limitless events and facts that can reasonably be considered to be a part of any given policy area, for instance, the energy sector’s development and policies pertaining to it. Theories also tell us how, and in what ways, particular events and/or facts can be said to relate to each other, so that one is able to give an adequate and intelligible account, as well as an explanation, of what has been occurring. Furthermore, it is only by using a substantive theory, which identifies entities and their relations that are relevant to the problem at hand, that one is able to select (or ignore) social entities worthy of theoretical/empirical analysis from among numerous such entities. I will discuss the substantive theories adopted in this study in the next chapter. But for now, I return to a further elaboration of our methodology.

Now, our explicandum, i.e., Pakistan’s energy policy, can and ought to be analyzed, following Keat and Urry’s schema of
five levels of theory and the resulting scientific practice, and given the paradigm (in Kuhn's (1970) usage of the term) of dependent development, at the following levels:

1. Philosophical discussion on the questions of ontology and epistemology in social sciences, as has been done above.

2. Discussion regarding theoretical conceptualization of historically specific systems, for example, a theory of the dynamics of the world capitalist system. Specifically, the focus should be on the quintessential conceptualization of the economic system, namely, the mode of production (and reproduction), and concepts of economic surplus and those involving mechanisms of its realization and utilization such as "terms of trade," "capital flows," etc.

3. This level of analysis would include conceptual/theoretical discussion regarding the phenomenal effects of underlying mechanisms and structures of a specific economic system—the world capitalist system in our case—on a particular society, the historical phases of the development of these effects, the separation and integration of the world into core and peripheral areas, and the historical relations between these two. This level would also include an analysis of class relations in a peripheral society, the congruence or incongruence of interests of dominant national and international classes, the State and its role in economic development, markets and their functions, and the nature of
dependent development. Discussion at this level is informed by concepts and explanatory power of the "new" dependency school represented by authors such as Cardoso, Petras, O'Donnell, and Evans (So, 1990).

4. Analysis at this level would involve, inter alia a discussion of the consequences of dependent development on energy resources development and utilization; the role of foreign energy firms in the energy sector; the access to modern technology; the position of foreign energy firms viz-a-viz the State/national government; the position of upper classes/factions/families viz-a-viz the institutions of the State.

5. Empirical description and analysis of the various facets of the energy polices and sector including their histories. This would involve two areas: First, The role of domestic factors and international factors in shaping the development of the energy sector such as, availability of domestic funds and foreign capital, availability of energy resources, domestic science and engineering capacity, etc. Second, description and analysis of the governmental energy policies including how these are formulated and implemented, and the institutions responsible for doing so.

Research Design

We shall select the two energy sub-sectors of petroleum (oil and gas) and power for empirical investigation of the
changes in policies that have occurred since the mid-eighties. I will gather information on both the historical development of policies in these sectors as well as the recent policy changes of deregulation and privatization. The quantitative and qualitative data so obtained will be subjected to theoretical analysis to uncover the implications and ramifications of the policies of deregulation and privatization. Further, data on the strategic variables of economy will be obtained and analyzed to evaluate the viability of these policies in terms of creating the conditions for sustained development.

One of the most pervasive problem a researcher faces in studying the problems of developing countries, is that of obtaining sufficient and reliable data. However, sources of data and information can be found and beneficially utilized, if the researcher has a high degree of familiarity with the social milieu of the country on which research is done. In addition, both the national governments and international organizations involved in development process, have been paying greater attention to a more systematic and regular compilation of data on social and economic factors. Yet, in most cases, as in my own, it is imperative for the researcher to carry out field work in order to complement and substantiate the data and information that is available in
secondary sources. Therefore, both primary and secondary sources of data are utilized in the course of this study.

**Interviews**

The primary source of data consists in information obtained in interviews with high level officials of organizations involved in the energy policy subsystem. The technique of interviewing that was employed is called elite interviewing. Manheim and Rich (1991) write:

The purpose of elite interviewing is generally not the collection of prespecified data but the gathering of information which will assist in reconstructing some event or discerning a pattern in specific behaviors... Elite interviews can provide crucial information about political events that is otherwise unavailable (p. 140).

Elite interviewing is unstructured i.e., without a predesigned format. The researcher asks questions that cue the respondent to talk about information that he or she may have regarding the problem being researched. Further questions are asked based on what the researcher perceives as important.

However, elite interviewing involves certain risks of error like other research techniques. The root cause of this risk is that the researcher has to depend on the subjective perceptions of the respondents and this results in a baggage of problems. Manheim and Rich write:
This [elite interviewing] may threaten the scientific validity of the information obtained if respondents (1) have so narrow a view of events in question that they do not understand which aspects are important in explaining them; (2) have inaccurate information (either because they misperceived events in the first place, or because they have forgotten important events); (3) have convinced themselves, in order to rationalize their own actions, that things are one way when in fact they are another; or (4) intentionally lie in order to protect themselves or others (1991, p. 140).

According to these authors, these risks can be minimized by following certain guidelines. First, "never treat what interviewees say as factual data, but rather treat the fact that they said it as data" (p. 140). Second, "never rely on a single respondent for information about any event, but obtain information about each event from as many respondents as possible" (p. 140). Third, "always seek ways of verifying information from elite interviews by comparing it with information from outside sources" (pp. 140-141). And finally, "learn enough about the subject to be able to recognize incorrect statements, or perceptively to analyze responses for possible sources of invalidity" (p. 141).

Interviews were conducted with the following persons:
1. Secretary, Punjab Mineral Development Corporation, Lahore. This is a semi-government corporation established in 1975 to develop mineral resources in Punjab. This corporation, besides other activities, operates coal mines in Punjab along with private sector companies.

2. Project Director, Acres International, Lahore. Acres International, a Canadian engineering and consulting organization was engaged through a grant to Pakistan by Canadian International Development Agency (CIDA) to enhance strategic planning capacity of Water and Power Development Authority (WAPDA).

3. Joint Secretary, Ministry of Petroleum and Natural Resources, Islamabad. This ministry is responsible for all aspects of oil and gas industry in Pakistan.

4. Deputy Secretary, Economic Affairs Division, Ministry of Finance. This Division is responsible for dealing with foreign donors.

5. Director Gas, Ministry of Petroleum and Natural Resources, Islamabad. This bureau is responsible for the development and transmission of natural gas. It oversees the two hitherto government owned gas pipeline companies: SNGPL and SSGC.

6. Deputy Director, Private Power Cell, Ministry of Water and Power, Islamabad. The Private Power Cell was established by the government to promote the deregulation and privatization of power sector.
7. Chief, National Energy Conservation Center, Islamabad. This autonomous organization is responsible to the Ministry of Planning and Development.

8. Director, Planning and Development, Pakistan Mineral Development Corporation, Islamabad. This is an independent agency under the Ministry of Petroleum and Natural Resources.


10. Program Officer (Development), Canadian Embassy, Islamabad.


12. President, Altern Inc. This is a U.S based company that is engaged in the process of setting up energy projects in Pakistan.


Secondary Sources of Data

Hard data regarding the various aspects and variables of energy and economy was acquired mainly from four types of secondary sources: (a) government publications and documents (both U.S. and Pakistan), (b) publications of the energy industry organizations, (c) publications of international organizations such as the IBRD, UNDP, etc.; and (d) data collected by other researchers in this area.
Presently, I shall provide a sample of sources of data on energy and economy of Pakistan. Important sources of data among Pakistan government publications that were utilized for this study are: 1) Economic Survey of Pakistan (annual), 2) Seventh Five-year Development Plan, 3) Public Sector Development Programme (annual), and Pakistan Energy Yearbook of the Ministry of Petroleum and Natural Resources. Data compiled by U.S. Department of Energy on worldwide energy resources is available in the annual U.S. Energy Yearbook.

UNDP, by itself and in collaboration with the Pakistan government has generated valuable data on Pakistan's energy sector. The recently published (May, 1993) Pakistan Household Energy Strategy Study (HESS) which was produced in association with the Energy Wing of the Pakistan Planning Commission is another valuable source of reliable data. Similarly the mission report of the Interregional Advisory Mission to the Oil and Gas Development Corporation of Pakistan (1993) of the United Nations is a good source of both qualitative and quantitative data. An earlier (1987) study of the UNDP Energy Policies in Asia: An Empirical Study also contains relevant data.

Some of the World Bank publications that were consulted for data and analysis are Energy Demand in Developing Countries: Prospects for the Future (1990); Dams and the Environment: Considerations in World Bank Projects (1990);
Private Sector Electricity in Developing Countries (1992); and Renewable Energy Sources in Developing Countries (1980).

Limitations of Study

This study is limited to acquiring an understanding of the historical evolution of the energy policy in Pakistan and why it has developed into what it is now. It shall not attempt to develop a "better" energy policy, though suggestions for a policy that could fully cope with current challenges facing the country would inevitably emerge in the course of this study.

Other more specific limitations of this study are:
1. It is limited to the analysis of post-1985 policies in the petroleum and power sectors.
2. It is limited to the analysis of the commercial energy sector. Within this sector, this study considers power and petroleum sector policies.
3. It is primarily limited to the study of energy policies of the Federal government. Provincial energy policies and mandates are relatively insignificant and shall not be discussed.
4. It shall not discuss implementation problems directly as an object of inquiry although reference may be made to these aspects.
Chapter - III
LITERATURE REVIEW

This study consults and is informed by three broad streams of literature: (a) literature on core-periphery relations; (b) literature on the State and public policy, especially in the context of peripheral capitalist societies; and (c) literature on energy policy and related issues in Pakistan and other peripheral countries. This follows from the methodological conclusions arrived at in the previous chapter. Below, I shall discuss the relevance of each of these streams to this study, and identify and discuss some of the major authors and their works respectively.

Literature on Core-Periphery Relations

Literature in this area deals with the issues concerning development and underdevelopment in what is generally known as the Third World countries. This literature stream is directly relevant to the present study as its problematic, namely, the energy sector and the policies related to it, is a subset of the larger problem of development. As a matter of fact, crucial characteristic inputs required for energy development, namely, large capital start-up costs, advanced technologies, and specialized technical and managerial skills, are either not mobilized or are not available domestically, and have to be procured from core governments or (and this is more often the case) from their business corporations. Core-periphery
literature, especially the dependency paradigm, captures the essential elements and dynamics of the problematic of development, which, as has been mentioned earlier, is the overarching issue that frames and structures the energy policy (and most other policy) options of developing countries.

In the following, I elaborate the dependency paradigm, introduce some major discussions within it, and describe how the paradigm has evolved over the last two decades. I also discuss its central shortcoming, which is, that, notwithstanding recent attempts to elaborate this paradigm in order to empower it to explicate the rapid development in certain previously underdeveloped countries, it nevertheless is poorly equipped to do so. In addition, it is awkwardly situated in terms of dealing fully with the contemporary economic forces at work at the global level, and behind the current impetus towards intensified regionalization\(^\text{10}\) of production and exchange. In other words, it is unable to explain why some regions (and countries in these regions) are

\(^{10}\) I prefer the term "regionalization" to "globalization" as it more precisely portrays the recent developments in the world economy. Regionalization, in a metaphorical sense, is akin to division of the world marketplace during 19th and first-half of the twentieth century by major powers. The term "globalization" on the other hand, conjures up the an image of the advent of "a level playing field" on the world scale. Far from it, the creation of EU, NAFTA (and in future, an expanded NAFTA to include rest of Latin America), the Japanization of East Asian countries, represent the formal or informal trade blocs of the three major economic power-houses of the world: Germany, Japan, and the USA. The emergence and consolidation of such blocs evidently shows the process of regionalization rather than globalization of the world economy.
experiencing the phenomena of development while other are stagnating or even going retrograding. In order to explain these phenomena, one has to take into consideration the expansionary tendencies of capitalism on the one hand, and the possibilities and opportunities for these tendencies to take root and be realized in specific regions of the world. This necessarily involves shifting the unit of analysis from that of a particular country and its relations with the world economy to the that of the world economy itself.

For the purpose of analyzing and understanding the operations of the world economy, I utilize elements of the World System perspective elaborated by Immanuel Wallerstein, et al., who use the theoretical framework of analysis of the process of capitalist production, reproduction, and accumulation on a global scale to explain why certain regions have historically experienced development while others stagnation, and how and why regions that were once peripheral achieved semi-peripheral or core status and vice versa. From this perspective which looks at the long haul, one gets a dynamic picture of the world economy that leaves open the possibility that the current underdeveloped countries could achieve semi-peripheral and eventually core status while the current core could develop into semi-peripheral areas.

Dependency Perspective
The dependency perspective can be said to have evolved through two stages, the old and new. I shall discuss this evolution below.

**Early Dependency Perspective**

The dependency perspective was first articulated cohesively by Paul A. Baran in *The Political Economy of Growth* (1957), and Andre Gunder Frank in *Capitalism and Underdevelopment in Latin America*, (1967) and *Latin America: Underdevelopment or Revolution*, (1969). These seminal works inspired a number of studies in the 1970s, a good representative collection of which appear in *The Political Economy of Development and Underdevelopment*, a volume edited by Charles K. Wilber, whose first edition was published in 1973. The backdrop and reasons for the emergence of this perspective are well-stated by So (1990):

The dependency school first arose in Latin America as a response to the bankruptcy of the program of the U.N. Economic Commission for Latin America (ECLA) in the early 1960s . . . Many populist regimes in Latin America tried out the ECLA developmental strategy of protectionism and industrialization through import substitution in the 1950s, and many Latin American researchers had high hopes for a trend towards economic growth, welfare, and democracy. However, the brief expansion in the 1950s quickly turned into economic stagnation. In the early
1960s, Latin America was plagued by unemployment, inflation, currency devaluation, declining terms of trade, and other economic problems. Popular protests were followed by the collapse of popular regimes and the setting up of repressive military and authoritarian regimes. Needless to say, many Latin American researchers were disappointed. They became disillusioned with both the ECLA program and the American modernization school, which proved unable to explain economic stagnation, political repression, and the widening gap between rich and poor countries." (pp.91-92).

The two main contributions of the early dependency perspective were: (a) that it pointed to the indispensability of incorporating the history of colonial domination and the particular division of labor imposed on the colonized countries into the analytical framework; and (b) that it highlighted the role of unequal exchange relations between developed capitalist countries and underdeveloped countries as a factor that contributes significantly to stagnation in the latter.

However, the early dependency theory suffered from at least three major shortcomings. These were: (a) it theorized core-periphery relations at a very high-level of abstraction, meaning that it treated all underdeveloped countries as essentially similar, overlooking the possibility of analyzing
and understanding separate societies differently on the basis of their respective internal factors; (b) it looked at underdevelopment almost exclusively as an economic phenomena; (c) it inevitably relegated the possibility of development of an underdeveloped country to the rather impossible imperative that it sever all ties with the capitalist core and international markets dominated by its business groups.

New Dependency Perspective

These shortcomings were addressed by latter researchers within the tradition of this paradigm. Notable among these are: Fernando H. Cardoso (1973, 1977); Cardoso & Falleto (1979); James Petras (1978, 1982); Petras & Morley (1990, 1992); Guillermo O'Donnell (1978, 1988); O'Donnell, et.al (1986); Peter Evans (1979, 1983); Evans, Rueschemeyer, & Stephens (1985); Chilcote (1982); and Gold (1986).

Altogether, these authors expanded the dependency perspective along three different dimensions. First, following Cardoso's historical-structural method, dependency literature started paying much greater attention to the specific historical circumstances in which different countries become dependent and the particular nature of each dependency relationship. The discussion deepened from the level of general and abstract analysis of the relationships between core and periphery to the specific and concrete analysis of
the dependency linkage of different Third World countries with the core.

Second, while early dependency theorists had mainly focused on the effects of external relationships of dependent countries, characterized at first by the distortions and deformities created in them by European colonial exploitation, and later, by the system of unequal exchange, the new dependency studies, while not ignoring these dimensions, mainly focused on the internal socio-political conditions within peripheral countries that make the continuation of dependency relationship possible. In other words, it focussed on the "internalization of external interests." In doing so, these authors have given primary attention to the class-basis of various political regimes and the role of the state. A "quick and dirty" synopsis of their argument would go something like this: There are three dominant actors in the context of dependent countries. These are the bureaucratic-technocratic state that is "relatively autonomous" from the control of national dominant classes, the indigenous bourgeoisie, and the transnational corporations (TNC) of the core countries. The interests of these three forces come

11 On the notion of "relative autonomy" of the state, for a seminal work see Nicos Poulantzas, Political Power and Social Classes (London: NLB, 1973) and for a review of the past two decades of discussions surrounding this notion, see Bob Jessop, State Theory: Putting the Capitalist State in its Place (University Park, PA: Pennsylvania State University Press, 1990).
together in certain specific areas, namely, in creating social and political stability; in keeping wage increases in check; in orienting industrial manufacturing for production for export markets; in gaining access to the international markets for traditional products produced by the peripheral country; and in development of a modern communications and energy infrastructure. These common interests provide the context and basis of the formation of a "triple alliance" between the State, national bourgeoisie, and the TNCs. But it is an uneasy and limited alliance in which each party tries to maximize its interests and which can only be sustained given certain favorable circumstances, most important of which is an expanding international market.

Such alliances were put together in many Latin American countries in the late 60s and 70s, most notably in Brazil, Chile and Argentina. As a result of the policies of the triple alliance regime, the economies of these countries experienced high growth rates up until late 70s when the external conditions became unfavorable due to the world-wide recession.

The latter dependency theorist reshaped the original argument of this school considerably but without violating its basic premises. In this regard, two important points must be noted here. First, contrary to the early dependency theories which postulated that the domination of foreign corporations
in the national economy precludes any possibility of development, the latter theorists advanced the idea of conceptualizing the existing socio-economic processes in terms of associated dependent development. Doing so accounted for the contradictory nature of development in peripheral countries under political and economic conditions that are established by the core countries. This account for the phenomenon of dynamic economic expansion that some third world countries experienced in the 1970s which not only resulted in the growth of the internal market but which also re-molded their economies in certain basic ways in accordance with the imperatives of world capitalist system. Second, that the development that did take place was limited, lopsided, disintegrated, and only the classes associated with the triple alliance regime benefitted from it, while the majority of the people were left outside this narrow circle of beneficiaries.

**Current Relevance of Dependency Perspective**

Notwithstanding the changes that have occurred in many peripheral capitalist countries in the 1980s, the analytical framework of the dependency perspective is still quite useful in explicating the internal and external contexts and imperatives of government policies. From example, using this framework, what one sees occurring in 1980s and early 1990s in many peripheral countries, is an internal re-alignment of the triple alliance, in which the TNCs (and the sponsors of
commercial and multi-lateral international capital, i.e., commercial banks and lending agencies like IMF, IBRD, etc. respectively) now enjoy a more favorable position, while the position of the state has weakened considerably and its role in economy diminished. This reinforced domination of international capital will have a profound impact on all aspects of social life in peripheral societies, not the least of which would be the question of how this would re-site a country's point of insertion in the matrix of division of labor of the world capitalist system.

However, certain limitations of this perspective still remain and it is necessary of overcome these in order to rig a theoretical framework with greater explanatory powers. Thus, while the new dependency perspective successfully focuses on the class alliances to explain the internal developments, it nevertheless lacks a cohesive and dynamic explanation of the underlying mechanisms and structures that produce the structural conditions of peripheral capitalism. The new dependency perspective also lacks the conceptual power to bring into purview and analyze tendencies and developments that may exist or unfold outside the particular external links of a peripheral country, but nevertheless affect it due to articulation and manifestation of capitalism on the international scale.
In my opinion these limitations can be overcome by viewing the world economy as a single and whole system of production based on capitalist relations, that is, by shifting the unit of analysis from the nation-state to the world capitalist system that transcends political boundaries and links regions or countries into a pattern of definite relationships of division of labor and distribution of income on a global scale. In many ways, the dependency school strongly implies such relationships which are certainly consistent with it. But its view remains one that is from the "bottom up" or from the "periphery to the core." In other words, it does not help one to simultaneously view developments in the core and the periphery, and thus is likely to lead one to overlook the reciprocal effects of periphery on the core and the dynamics within the core. It rather concentrates on explaining developments in the peripheral countries given developments in the core countries and/or external markets controlled by core countries.

**World Economy Perspective**

The world-systems perspective put forward by Immanuel Wallerstein (1979, 1984, 1987) and others who have followed his methodology, attempts to do precisely this. It is not our purpose to explore the world systems perspective to the full or to critique its shortcomings (see Alavi, 1982, for example) or to compare it with the dependency perspective. Our purpose
here is simply to note two important contributions of the world systems perspective that enhance the explanatory power of the dependency perspective: And both of these are related to understanding the external conditions of Third World countries. First, world-systems perspective emphasizes that it is important to view the dynamics of the world capitalist economy as a whole. By viewing the contemporary world economy as a single system of capitalist production and exchange that articulates itself on a global level, incorporating the developed, socialist, as well as the underdeveloped countries, the world-systems perspective is able to capture the reciprocal effects of various regions on each other. But in doing so, and this is the second important contribution, instead of the bi-modal world of core-periphery that dependency perspective delineates, the world systems perspective includes a third level--the semi-periphery--that is countries which are situated between the core and periphery in terms of their production structure and trade. Semi-peripheral countries attempt to emphasize the manufacture and trade of high value-added goods in their external economic exchange in an attempt to avoid the deleterious effects of unequal exchange associated with the traditional pattern of trade. Depending on particular internal and external conditions, countries and regions can move from one status to
another. The history of world capitalist system is replete with examples of such changes.

It seems that Pakistan's leaders currently think of it as one of those peripheral countries that is likely to break out of its current peripheral status to become a semi-peripheral country in the near future. This could well happen provided certain internal and external conditions are met: But such a move can only be accomplished by an energetic and active State which succeeds in erecting a matrix of policies that create a selectively permeable protective cover that allows for only such exchanges with the world system that lead to augmentation of internal accumulation of capital, intensification of the domestic market, development of export potential of high value goods, etc. Internally, this does not necessarily mean that the State play a direct role in the economy through ownership of industrial, commercial, or financial assets, although such methods shall remain necessary in some areas of the economy such as energy, heavy industry, technology development, etc. As a matter of fact, the State can play an activist role in many other ways, most notably through preventing or at least reducing the outflow of economic surplus from the country, acting as a catalyst for enhancing high value-added exports, improvement and development of infra-structure, investing in human resources, and creating political stability. Externally, Pakistan would
have to comply with the political demands of the core powers, especially the United States. This means that she would have to walk a very thin line between upholding its national and security interests while not appearing to be in conflict with U.S. geo-political interests. If Pakistan can manage to do this, then it would be in a good position to alter the pattern of exchange with the world-capitalist economic system.

A move from the current peripheral status to a future semi-peripheral status would create enormous challenges for the energy sector. Energy output, especially that of electricity, would have to increased substantially to satisfy the growing demand which is bound to exceed the current 8% annual growth level. How successfully the government handles this sector and what energy policies it follows shall be of crucial significance in determining whether Pakistan continues with its external exchange pattern or if she is able to insert itself into the world-economy as a semi-peripheral country that is able to prevent the outflow of its economic surplus.

Literature on the State and Public Policy

The second stream of literature that informs this study concerns the nature and role of the State and the contributions made by the relatively new field of policy studies in understanding how public policies are formulated and executed. As much of this literature has evolved within the context of the evolution of western capitalist states, the
question of its applicability to peripheral societies, and the necessary modifications involved, would also be addressed.

Historically, there are many instances of the State playing an active and determining role in efforts to create the pre-conditions and conditions for the development of capitalist and non-capitalist economies alike. Some of the more outstanding and well-known examples are: Policies of developing domestic industry and protectionism against foreign competition that the American State pursued through much of the 19th century; the role of the Japanese State in effecting industrialization after the Meiji Restoration in 1868; the State's role in promoting industrialization in Germany in latter half of the 19th; the rapid economic and social development in erstwhile Soviet Union and China through socialist planning; and the recent efforts of Third World to industrialize through creation of public sector enterprises in industry, trade, communications, and energy.

An important point needs to be noted here. Mention of state activities in the capitalist economies (core, semi-peripheral, or peripheral) as in the examples mentioned above, often lead to a serious misconception that I would like to avoid. It is the putative view that the state stands above the economy/society, separate and neutral to it, which may "intervene" from occasion to occasion, with negative or positive consequences as seen by different schools of
economics. Analysis of this sort relegates the state to an irrelevant or marginal position, either ignoring it completely or treating it as a mere consumer or house-hold among others (neo-classical economic theory and micro-economics in general). Or else, it treats the state as an "instrument" outside the realm of economic activity that can be used to rectify the disruptions caused by the free operations of market forces (Keynesian theory), or in the case of public choice theory as an institution that is best suited to supplying needed goods and services which the private entrepreneurs are not able to supply at acceptable profit margins.

The view of the state-economy/society relations that this study follows is that of an organic link between the nature and activities of the state and the nature/level of development of capitalism and the internal conflicts specific to it. It is based on a synthesis of recent developments within the realist theory of the state, which investigates the state at different levels of analysis. I will presently discuss, in brief, the main components of this synthesis.

**Capital-logic School**

At the most abstract-simple level, theorists of the "capital logic" school such as Altvater (1973), Blanke et al. (1976, 1978), Mueller and Neusuess (1978), and others have derived the nature and role of the state in conditions of
generalized commodity production and specified a set of general pre-conditions and conditions that such a state must secure in order to make possible capitalist production.\textsuperscript{12} Among these functions, three have a direct bearing on the object of this study. These are:

"[1] that the state will have to secure the provision of those use-values which are necessary to capital accumulation but whose private production proves unprofitable. This could involve nationalization or some form of state subsidy. [2] The state must also ensure the supply of use-values which take the form of 'public goods' and/or whose production involves a 'natural monopoly'. . . [3] since the total capital is also divided into different national capitals, the state has to promote the interests of its particular national capital as well as to cooperate with other states in securing the conditions necessary for continued accumulation on a world scale" (Altvater 1973, quoted by Jessop 1990, p.37).

\textbf{Historical Analysis Approach}

The second component of our state theory synthesis is provided by the work of theorists who while agreeing with the "capital logic" school's theoretical view of the nature and

\textsuperscript{12} For a review of this school, please see Jessop (1990, pp. 35-38 and passim.}
role of the capitalist state, lay emphasis on the necessity to understand the changes in its nature and role on the dynamics of class struggle. Some authors of this approach are von Braunmuhl (1978), Hirsh (1978), Gerstenberger (1976a, 1976b, 1978), Hollaway and Picciotto (1978), and Offe (1975, 1984, 1985). These authors have introduced historical dimension into the analysis of state, thereby moving from the purely conceptual and abstract-simple level of analysis (Level I of Keat and Urry's methodological schema discussed in the previous chapter) of the "capital logic" school to less abstract and more concrete-complex levels (approximating Keat and Urry's Levels II and III). In doing so, they trace and provide explanations for the changing character of the capitalist state from the time of its emergence in the mercantilist period, through its 19th-early 20th century laissez-faire period of limited role, to the current stage of advanced capitalism where state involvement in economy is generalized and all-encompassing. It is important to take note of the two analytic dimensions that this approach highlights and which are theoretically important to this study. These are:

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13 Offe too must be included here although the starting point of his analysis is not the "capital logic" model.

14 For a brief overview of this approach please see Jessop (1990) pages 38-41.
First]. . . because there is no necessary [meaning automatic] correspondence between state intervention and the needs of capital, crisis play a major role in reshaping its form and redirecting its thrust. For it is during crisis that the immanent necessities of capitalism are most likely to become apparent. In this sense it can be said crisis acts as a steering mechanism of state intervention. [Second] . . . since crisis are the complex effect of various contradictory factors and affect different classes in contradictory ways, there will be continuing conflict in their interpretation and resolution. This means that crisis-management will assume the form of trial and error responses, whose content is determined by the changing balance of political forces. (Jessop 1990, p.40).

Class Politics Approach

The third development in realist theory of the state and the final component of our approach, operates at an even more concrete-complex level of analysis as compared to the second component discussed above. At this level, the focus of analysis is the actual classes and their relationships to one another and the state in a social formation rather than at the theoretical construct of capitalist mode of production. In other words, analysis moves from the realm of general theory
(Keat and Urry's Level III) to the derivation of specific theory (Keat and Urry's Level IV), taking account of the particular characteristics of a social formation, in order to see how the underlying structures and mechanisms of capitalism manifest themselves at the phenomenal level in that social formation. While the seminal work of Antonio Gramsci (1978, 1992) laid the essential foundations of this analytical approach, it is Poulantzas (1973, 1975, 1976, 1978) who is considered to have developed it to its fullest scope (Jessop 1990).

Poulantzas focused his attention on the relationship and interface between dominant social classes and the state in capitalist societies. Rejecting simplistic and misleading Marxist models that had gained ascendency under the influence of Stalinism (which commonly views the state as a "tool" that ruling classes use to control the dominated classes), as well as the pluralist assumptions regarding the class neutrality of the capitalist state, he developed an analytical framework that viewed the state as being a complex of mainly public and some private institutions that were "relatively autonomous".15

15 Poulantzas based his concept of relative autonomy of the state on the elaboration of ideas presented by Marx and Gramsci regarding this problematic. He conceptualizes relative autonomy as a unity of two aspects: As the relative autonomy of the state vis-a-vis the field of class struggle and as the relative autonomy of the state vis-a-vis the dominant classes and/or their fractions. Regarding the first aspect, he writes: "... The relation between the state and political interests of these [dominant] classes ... establishes itself only by a relative autonomy between the state and these
classes. . . . The capitalist state is not directly linked to the economic interest of the dominant classes, in the sense that economic struggle is absent or that the agents of production distributed in classes are present in the form of 'people-citizens'; rather it is linked to their strictly political interests by being relatively autonomous from these classes.

What then is the role of the capitalist state in this context? It can be stated as follows: it takes charge, as it were, of the bourgeoisie's political interests and realizes the function of political hegemony which the bourgeoisie is unable to achieve [over society on its own, i.e., without the state]. But in order to do this, the capitalist state assumes a relative autonomy with regard to the bourgeoisie.

For this relative autonomy allows the state to intervene not only in order to arrange compromises vis-a-vis, which in the long run, are useful for the actual economic interests of the dominant classes or fractions; but also (depending on the concrete juncture) to intervene against the long economic interests of one or other fraction of the dominant class.

However, in order concretely to take on this relative autonomy which, inscribed in the play of its institutions, is what is precisely necessary for hegemonic class domination, the state is supported by certain dominated classes of society, in that it presents itself, through a complex ideological process, as their representative. In this way it succeeds precisely in making the dominated classes accept a whole series of compromises which appear to be in their political interest.

Thus, in its relations to the field of the class struggle, the capitalist state's relative autonomy depends on the characteristics peculiar to the economic and political class struggle in the CMP [capitalist mode of production] and in a capitalist formation. This must be understood in a general sense of the relations between the structures and the field of the class struggle. In this sense, the state sets the limits within which the class struggle affects it; the play of its institutions allows and makes possible this relative autonomy from the dominant classes and fractions. The variations and modalities of this relative autonomy depend upon the concrete relation between social forces in the field of the political class struggle; in particular, they depend on the political struggle of the dominated classes. (1973, pp. 280-289). For a detailed discussion of this aspect of relative autonomy, please see Chapter 3, Part IV.

In its second aspect, the relative autonomy of the state is conceptualized as state's autonomy from the various components of the power bloc. Poulantzas writes: "In fact, along with the coexistence on the terrain of political domination of the several classes and fractions which make up the power bloc, we find their characteristic incapacity to raise themselves to political unity under the protection of the hegemonic class or fraction. In other words, we find the bourgeois class or fractions of that class are incapable of raising themselves to the hegemonic level through their own parties on the political scene. The are incapable (through their own organizational means) of transforming their specific interest into the political interest which would polarize the interests of the other classes and fractions of the power bloc. Thus, they cannot provide the unity of the classes and fractions of this bloc. This is principally due to the profound division of the bourgeois class into antagonistic fractions, a division which starts from the level of the actual relations of production." . . . What is the role of the state in this case? In fact, it is the factor of the political unity of the power
from the control of the dominant or hegemonic social class but only insofar as former functioned within parameters that did not adversely affect the latter's position of dominance vis-à-vis the dominated classes. He thus problematized the question of how and to what extent the dominant class(es) effectively influence the shaping of state policies, rather than either taking it to be pre-given (as in simplistic marxist models) or dismissing the class nature of the state (as in pluralist models). In addition, his notions of "hegemony" and the bloc under the protection of the hegemonic class or fraction. In other words, it is the factor of hegemonic organization of this class or fraction since its specific interests are able to polarize those of the other classes or fractions in the power bloc. 

This function of the capitalist state also determines its relative autonomy vis-à-vis the power bloc and to the hegemonic class or fraction, an autonomy which may take on several concrete forms. The state may, for example, present itself as the political guarantor of the interests of various classes and fractions of the power bloc against the interests of the hegemonic class or fraction, and it may sometimes play off those classes and fractions against the latter. But it does this in its function of political organizer of the hegemonic class or fraction and forces it to admit the sacrifices necessary for its hegemony. 

(1973, pp. 297-302). For a detailed discussion, please see Chapter 4, Part IV.

16 Poulantzas's own explanation of "hegemony" is given below. The concept of hegemony, which we shall apply only to the political practices of the dominant classes of a capitalist formation, and not to its state, is used in two senses:

1. It indicates how in their relation to the capitalist state the political interests of these classes are constituted, as representatives of the 'general interest' of the body politic, i.e. the people/nation which is based on the effect of isolation on the economic. This first sense is for example implied in the following quotation [from Gramsci, Prison Notebooks], which should now be considered in the light of the above remarks:

A third moment is that in which one becomes aware that one's own corporate interests, in their present and future development, transcend the corporate limits of the purely economic class, and can and must become the interests of other subordinate groups too. This is the most purely political phase, and marks the decisive passage from the structure to the sphere of the complex superstructures; it is the phase in which previously germinated ideologists become 'party', come into confrontation and conflict, until only one of
"power bloc" and the recognition of the possibility of non-
them, or at least a single combination of them, tends to prevail, to
gain the upper hand, to propagate itself throughout society---
bringing about not only a unison of economic and political aims, but
also intellectual and moral unity, posing all the questions around
which the struggle rages not on a corporate but on 'universal'
plane, and thus creating the hegemony of a fundamental social group
over a series of subordinate groups. It is true that the state is
seen as the organ of one particular group, destined to create
favorable conditions for the latter's maximum expansion. But the
development and expansion of the particular group are conceived of,
and presented, as being the motor force of a universal expansion, of
a development of all the 'national' energies. In other words, the
dominant group is coordinated concretely with the general interests
of the subordinate groups, and the life of the state is conceived of
as continuous process of formation and superseding of unstable
equilibria (on the juridical plane) between the interests of the
fundamental group and those of the subordinate groups---equilibria
in which the interest f the dominant group prevail but only up to a
certain point, i.e. stopping short of narrowly corporate interest.

2. The concept of hegemony is also used in another sense, which is
not actually pointed out by Gramsci. The capitalist state and the specific
characteristics of the class struggle in a capitalist formation make it
possible for a 'power bloc', composed of several politically dominant
classes or fraction to function. Amongst these dominant classes and
fractions one of them holds a particular dominant role, which can be
characterized as a hegemonic role. In this second sense, the concept of
hegemony encompasses the particular domination of one of the dominant
classes or fractions vis-a-vis the other dominant classes or fractions in
a capitalist social formation.

The concept of hegemony allows use to make out the relation between
these two characteristic types of political class domination found in
capitalist formations. The hegemonic class is the one which concentrates
in itself, at the political level, the double function of representing the
general interest of the people/nation and of maintaining a specific
dominance among the dominant classes and fractions. It does this by virtue
of its special relation to the capitalist state. (1973, pp. 140-141).

17 Poulantzas explains the concept of the 'power bloc' as follows:
"In its specific structure and relations with the dominant classes
and fractions the capitalist state presents a further particular feature,
compared with other types of states. This is the problem of the 'power
bloc'. The concept of hegemony may help us to study the functioning of the
political practices of the dominant classes or fractions in the power bloc
and to locate the relations between the state and this bloc.

... A social formation is formed by an overlapping of several
modes of production, which implies the coexistence in the field of the
class struggle of several classes or fractions of classes and therefore,
possibly, of several dominant classes or fractions.

But this characteristic is not in itself sufficient to explain the
phenomenon of the power bloc... At any rate, though this coexistence of
several classes is a general characteristic of every social formation, it
takes on specific forms in capitalist formations. In these formations we
can establish the relation between (a) a specific institutional operation
inscribed in the capitalist state's structures and (b) a particular
configuration of the inter-relations between the dominant classes: these relations, as related to the state, function within a specific political unity, covered by the concept of the power bloc.

A. The reasons for the appearance of the power bloc can already be found in the structure of the capitalist state. This structure presents the following particular feature: namely that it has as an effect the coexistence of the political domination of several classes and fractions of classes. Strictly speaking, by the internal play of its institutions, the capitalist state (in its relation to the field of the political class struggle, a relation conceived of as that which provides the limits to that struggle) makes the constitution of a power bloc possible.

B. The phenomenon of the power bloc is thus related to the field of the political practices of the ruling class in a capitalist formation: it depends on the existence of a 'plurality' of dominant classes (and fractions) characteristic of this formation. This in turn depends on the general fact that in every formation several modes of production and hence several classes and fractions coexist.

C. Further, in the CMP [capitalist mode of production], the class of the bourgeoisie appears as constitutively divided into fractions. The problem of fractions of a class is in fact rather complicated in Marx. It is important to point out that certain fractions of the bourgeois class, such as commercial, industrial and financial, are not (as is often the case with fractions of classes in a formation) related simply to the concrete combination of the various modes of production, or to the particular effects of the political instance alone.

The commercial, industrial and financial fractions are, however, related to the very constitution of capital in the process of expanded reproduction, as a relation of production.

This presence of big landowners, the bourgeoisie and various fraction of the bourgeois class in a formation dominated by the CMP is one of the important cause of the power bloc. The structures of the capitalist state and the existence of these classes and fractions, i.e. the particular participation of several classes and class fractions in political domination, enable use to discern the relations which hold between this state and the political organization of these classes and fractions in the power bloc.

The concept of the power bloc indicates the particular contradictory unity of the politically dominant classes or fractions of classes as related to a particular form of the capitalist state.

... the power bloc constitutes a contradictory unity of dominant classes or fractions, a unity dominated by the hegemonic class or fraction. This unity of the power bloc is constituted under the protection of the hegemonic class or fraction which politically polarizes the interests of the other classes or fractions which are part of it. (1973, pp. 229-234). For a detailed discussion, please see Chapter 4, Part IV of this book.

*Thus political unity of the power bloc under the protection of the hegemonic class or fraction means unity of state power, in so far as it corresponds to the specific interests of this class or fraction. This characteristic is related, amongst other things, to the internal play of the institutions of the capitalist state, to the unity and relative autonomy peculiar to it, here considered from the point of view of the state’s function vis-a-vis the power bloc. For, from the another point of view, this particular relation between the state and the hegemonic class or fraction in no way derives from a direct dependence of the state
congruence between the "politically dominant class" and the "hegemonic social class," provide essential conceptual tools in understanding the real dynamics and nature of the interface between dominant social classes and the state in capitalist social formations.

Poulantzas based his analytical framework on prior realist tradition in analysis of the state as well as Weber's work "since he [Weber] contributed a great deal in elaborating the position of the particular relations of bureaucracy and bureaucratism to (a) the capitalist system and (b) political democracy . . . [and further] Weber's analyses provide valuable guidelines for us, especially if we take into account the critiques which can be made of them" (1973, p. 341).

In his analysis of the bureaucratic phenomenon, Poulantzas makes two important distinctions. The first is between bureaucracy as a social category composed of a complex of institutions and staffed by persons from various classes that function as an integral and cohesive part of the state in a determinate social formation, and bureaucratism which is a "specific system of organization and internal functioning of the state apparatus, which expresses above all the political impact of bourgeois ideology on the state" (1973, p. 332). He

'...machine' on this class or fraction. On the contrary, it goes hand in hand with a relative autonomy both from the latter, and even from the power bloc in its ensemble." (1973, pp.296-297).
thus separates the political from the purely technical dimensions of the phenomenon, the former occupying the center of his attention. Given this distinction, bureaucracy is thought of as a specific effect on the social formation of the political requirements of the hegemonic class or fraction in its dynamic efforts to maintain its hegemony over the power bloc and dominated social classes. For this reason, bureaucracy, although a social category by itself that is internally cohesive and relatively autonomous from the hegemonic class, is at the same time, immanently connected to the politics of class domination. In other words, because bureaucracy is a part of the state apparatus, it functions within the class power of the state. Contrarily, bureaucracy cannot be thought of, by itself, as constituting a class or a fraction of a class with its own independent power base and agenda simply because it controls the functioning of the power of the state. And neither is the behavior of the bureaucracy determined directly by the class background of the members of its decision-making higher strata, though this is not to deny that members of this strata come from dominant social classes: But the class from which the members of the higher strata originate may or may not identify itself with the hegemonic class or the power bloc. As Poulantzas writes, the behavior or "functioning" of the bureaucracy, on the other hand:
depends on the concrete functioning of the state apparatus, i.e. on the place of the state in the ensemble of a formation and on its complex relations with the various classes and fractions. This is precisely why the bureaucracy, as a social category, is able to possess its own unity and coherence, despite the diversity of recruitment and class affiliation of its various strata: this political unity of the bureaucratic category cannot therefore be related to the class in charge of the state. (Poulantzas 1973, p. 335).

The second significant conceptual distinction made by Poulantzas in developing his theory of bureaucracy is between the concept of the state apparatus and state power. State apparatus refers to the institutions and administrative units that comprise the state, i.e. its various agencies and departments, and the problems that are specific to these, in the actual functioning of the state. State power, on the other hand, refers to the ability to provide and sustain a designed direction to the activities of the state apparatus, and is articulated through the sites of institutionalized political power, viz. the parliament, presidency, etc. in capitalist democracies. State power may be likened to "governance" and state apparatus to governmental organizational structure, concepts that are more commonly used in putative public administration literature.
It may be useful to point out here that this dichotomy between state apparatus and state power should not be seen as something similar or parallel to the familiar administration/politics dichotomy that has been a part of conventional wisdom in academic public administration for much of its history, despite sustained criticism. As a matter of fact, these two dichotomies carry exactly opposite meanings: The purpose of Poulantzas in making his conceptual distinction is precisely to emphasize that "the bureaucratic phenomenon is a specifically political phenomenon" (1973, p. 344) rather than create a false separation between administrative activity and political activity.

To recapitulate. From the point of view of our study Poulantzas's central theoretical contribution consists in the consolidation and development of concepts required to investigate the relationship of social classes to the state in capitalist societies. His emphasis on the relative autonomy of the state and bureaucracy from the immediate agenda of the hegemonic class or fraction, creates the pre-conditions for analyzing bureaucracy's activities in a given social formation that avoid the two fallacies, namely, (1) that the state/bureaucracy acts as an tool at the beck and call of the ruling class, and (2) that it is class-neutral and somehow hovers above society like a flying saucer unaffected by the "gravitational forces" of classes. Both these misconceptions
involve viewing the state as an entity independent of social classes.

However, Poulantzas does not tell us much about how this relative autonomy of the state and bureaucracy actually plays out within the context of class relations in a social formation. In order to see how this happens, one has to further increase the "power of resolution" of our theoretical framework, i.e. operate at a still more concrete-complex level. This I will do below with the help of the contributions made by the field of policy analysis. But first, let us recapture the salient points of the discussion so far in this section.

Social reality has an emergent nature: It appears at the phenomenal level as the manifestation of underlying structures and mechanisms, the tendencies of which can be enhanced, vitiated, or blocked by the interference of the operation of other structures and mechanisms. Together, this determines the emergence of the actual empirical social phenomena. In order to capture this emerging social reality into our knowledge and understanding, we therefore need to use analytical frameworks that have the capability and capacity to operate at different levels of analysis--from the highly abstract-simple level of pure theory to the concrete-complex level of interaction of actual social forces in a given social formation.
The three frameworks of "capital logic," historical analysis, and relative autonomy that I have employed above operate at various levels of analysis, from the abstract theoretical to the level of the actual social formation. Together, these provide a powerful theoretical capability for analyzing the role and function of the state in capitalist societies and the policies they espouse.

In the words of Jessop (1990) the three frameworks have: dissolved the orthodox approaches in terms of the state as a thing or subject that is external to the capitalist mode of production. In their place, they have focussed attention on the social nature of capitalist production and the its complex economic, political, and ideological preconditions. This means that the state and state power must assume a central role in capital accumulation, even in those apparently counterfactual cases characterized by a neutral, laissez-faire state, as well as those in which the state is massively involved in the organization of production. Moreover, as the state is seen as a complex institutional system and the influence of classes is seen to depend on their forms of organizations, alliances, etc. a crude instrumentalist approach must also be rejected. It is no longer a question of how pre-existing classes use the state (or the state itself acts) in defence of capitalism defined at an economic level.
Henceforth it is a question of the adequacy of state power as a necessary element in the overall reproduction of the capital relation in different societies and situations. And state power must be considered as a complex, contradictory effect of class (and popular-democratic) struggles, mediated through and conditioned by the institutional system of the state. In short, the effect of these studies is to reinstate and elaborate the idea that the state is a system of political domination. (p.45).

He further writes summarizing the three frameworks that: The recent discussion further argues that the economic state apparatuses and their means of intervention are not neutral, but are integrated into the movement of capital and constitute a field of conflict between different interests. This means that state intervention has inherent limitations in securing the conditions for capital accumulation and is always subject to the inevitable influence of various class and popular-democratic struggles. It also means that the adequacy of particular policy instruments and general forms of intervention will vary not only with changes in economic structure but also with changes in the balance of political forces. Related to these arguments is the further point that the forms of political representation
also have distinct effects on the efficacy of different forms of intervention. This in turn implies that the failure of specific policy measures or general instruments may be due to the inadequacy of the forms of political representation with which they are linked, rather than to mistaken economic analysis. It means as well that the reorganization of the state apparatus may be necessary before economic problems or crisis can be solved. (p.46).

A word of clarification may be in order here. Although this study employs all the three analytical frameworks discussed above, and notwithstanding their overlapping boundaries and interconnectedness, I am not making an attempt to develop a theoretical synthesis of the three: That would be the task of a separate theoretical study. Here, in this study, I shall merely use these three in tandem, to elucidate and explain the phenomenon of public policy at successively lesser levels of abstraction or vice versa.

**Policy Governing Bloc**

In the discussion on State above, I specified its nature and role in capitalist social formations. However, further theoretical development is necessary in order to elaborate a set of concepts that could help bring to light the concrete internal functioning of the state. What interests us here, at this level of analysis, are concepts that can help us to
understand not only the processes and dynamics of policy-making, but more importantly, what policies are adopted by the state and why. In other words, from the point of view of realist policy analysis, it is crucial to understand how the structural interplay between socio-political factors and processes (social classes, political representation process, interest lobbies, etc.) and organizational principles of State (state apparatus and state power) combine to ensure that policies adopted by the state are, first and foremost, congruent to the interests of the classes that have a presence in the power bloc. The concept of the policy governing bloc, which may be defined as the dominant coalition within a particular policy arena (or field of class struggle), in my view, helps to conceptualize this dynamic and fills an analytical gap in realist analysis.

Analytical Gap in Realist Analysis

The analysis of the activities of the state at the level of policy formulation is markedly absent from the realist analysis of the state. Thus, while the realist approach provides an indispensable theoretical framework of state analysis by taking into account the political, social, economic, and historical dimensions of a given social formation, yet it has by and large ignored or overlooked the presence of an analytical gap at the level of policy formation or concrete functioning of the state. For example, it is the
presence of this analytical gap in the contributions contained in *State versus Markets in the World System* which prompts its editors to point out in the Introduction that:

Given the way in which this volume was defined, the relative absence of detailed discussions of the internal dynamics of state apparatuses is striking. The authors provide marvelously intricate analyses of both classes and markets, but the state itself remains surprisingly opaque [emphasis added]. With a few exceptions . . . the state remains monolithic. We have an inadequate conceptual framework for analyzing the state in a way that is comparable to our analysis of markets or classes. If, then, these nine chapters [of the book] can be said to point to a single programmatic lesson, it is that, even for those who recognize the central role of the state as an institution and social actor and who are willing to engage in careful historically grounded analysis of evolution of particular states, an adequate set of concepts and theoretical propositions for analyzing the internal dynamics of the state is simply not available. Its development should be high on collective intellectual agenda. (Evans, et. al., 1985, p. 29, emphasis added).

The bridging of this gap is essential to full elaboration of this approach's analysis of the state. It is the
contention of this study that certain methods and concepts that have evolved within the field of policy analysis can be fruitfully adapted to fulfil this analytical missing link, once we strip these of their pluralist theoretical garb, dislocate them from their positivist roots, and subsume them under the realist theory of state elucidated above. In the following, I shall identify and outline the stream of policy analysis literature and its major concepts, and theoretical propositions that may be used to enhance the explanatory powers of a realist theory of the capitalist state.

Policy subsystems

A stream in policy analysis literature shares the view that state policies in democratic polities are produced within a composite of informal/formal arrangements that combine elements of the state with those of civil society, viz. that policy is formed through a process of informal/formal interaction of legislative bodies, administrative bureaus, and "private" interest groups (note that the use of the term private is not precise at all as it covers multi-million membership trade unions as well as single large business corporations or even individuals). Various names have been given to these informal arrangements by different authors such as "iron triangles" (Cater, 1964; Freeman, 1965), "sub-governments" (McConnell, 1966), "issue networks" (Heclo, 1978), and "policy subsystems" (Wamsely, 1985). Our purpose is
not to comment on the merits or demerits of these concepts, or how well or poorly each succeeds in portraying accurately the empirical phenomenon of policy-making. Our purpose is rather to take note of some useful starting points and concepts that these "images" or "labels" explicitly or implicitly provide, and use these in conjunction with the realist theory of state, to synthesize the concept of policy governing bloc. And insofar as I do this in the following discussion, I use the term "policy subsystem" to denote all of the various "images" of this literature stream.

Policy subsystem approach provides us with conceptual tools to investigate the formulation and implementation of the policies of the State in a policy area in any given period. This it does by identifying the main "stakeholders," "players," or "actors," the "policy/political arena", and the ""values" or issues" over which there is contention between different societal groups (Dunn, 1981; Wamsley, 1985; Heclo, 1978). It thus provides us an opportunity to empirically witness the process of "authoritative allocation of values" (a widely used term in this stream of literature that signifies policy-making) at the micro-level. Importantly, this approach, either explicitly or implicitly, also recognizes

18 The terms "images" and "labels" are used by A. Grant Jordan to describe various conceptualizations of the policy process in his article "Iron triangles, woolly corporatism, and elastic nets: Images of the policy process, Journal of Public Policy, February 1991:95-123.
that what governments do not do is also to be regarded as a part of making of policy (Dye, 1992).

These are useful starting points. But before one can proceed to utilize these concepts in our theoretical framework, it is necessary to de-obfuscate certain terms such as "values," "interest groups," etc. This is so because these terms are commonly used in an imprecise and hazy manner in policy analysis literature, a practice that ends up concealing reality more than what it reveals of it.

Insofar as one is discussing state policy and its effects on society, the term "values" cannot have any other meaning but an economic one in the final analysis. "Allocation of values" thus dissolves into either the category "distribution of income" or "re-distribution of income." Take for example the "value" called health and its authoritative allocation, that is, the health policy. Now, whenever one speaks of a particular health policy, it entails a definite commitment for a particular pattern of government spending (or non-spending), that is, a specific pattern of re-distribution of income through fiscal measures. Similarly energy policy, minimum wage policy, free or concessionary award of natural resources and public lands to businesses, etc., are in essence policy measures that create a pattern of income distribution and wealth in society. Stability of a social system (capitalism), that is, homeostasis, necessitates that "values" be allocated
in more or less consistent pattern overtime, and not in an erratic and accidental manner. State policies play a crucial role in determining/enforcing a set pattern of distribution/re-distribution of income and wealth. Maintenance of the status quo thus preserves the existing pattern of distribution while disturbance of the status quo creates a new pattern of income and wealth distribution. The minimum goal of all interest groups is to always to preserve the status quo while their maximum goal is to change the balance in ways that are more favorable to them. Incidentally, game theory is based on the recognition this basic logic.

Given the above view of "authoritative allocation of values," it is reasonable to posit that interest groups that defend the status quo are the ones who benefit from the existing pattern of distribution of income and wealth within a particular policy arena, as opposed to those that seek to change existing policy. This means that among the various "players" that we find in any policy subsystem, there shall be those that are able to translate their agendas into new policy directions, i.e., the dominant interest groups, and those which are unable to do so. One thus needs to identify and explore the basis of the relative political capacities and strength of resources that various groups are able to marshall in their quest to promote their agendas. But in order to do
this, it is necessary to explore the connections between various interest groups and the socio-economic classes or class fractions in society. It is vitally necessary to understand and give importance to this aspect of policy subsystems in order to understand why certain policy options are adopted while others ignored. Doing so advances our abilities to analyze and understand state polices. In the following, I look at the basis of relative political capacities of private interest advocates in a policy arena.

The idea of dissimilar capabilities of different interest groups to influence policy directions has received some attention in the literature. Some authors, for example Heclo (1978), ignores the importance of dissimilar powers and imply that it is of no consequence to policy direction: The state in their view is neutral and provides a level playing field for all societal groups. Others like Jordan (1981) recognize the dissimilar capabilities of policy actors but mainly focus on government bureaus as having more power as opposed to societal groups. For instance, he writes that "Not all parties are equal: the governmental department is an actor with special resources (legitimacy, prior knowledge, staff) not available to all other actors" (1981, p.106). However, no attention has been given in the policy analysis literature to dissimilar policy-influencing capabilities of private policy actors due to the fact that they represent the
interests of different social classes or fractions that are asymmetrically situated in society. *Ex hypothesi*, no attention has been paid to the changes in the balance of class forces due to the dynamics of class tensions, and the effect of such changes on the relative balance of power within policy subsystems.

**Subsuming Policy Subsystems Concept Under Realist Theory of State**

At best, the received policy sub-system approach is good at shedding light on the "how" and "what" values are allocated to different sectors of society, it does not address the questions the "why" and "for whom." In order to identify and understand the "why" and "for whom" patterns of this allocation, one needs to move beyond and inter-link it with the conceptual categories of state theory, as elucidated above.

At the first level of analysis, which derives from the "capital-logic" approach discussed above, this can be done by distinguishing "players" in a policy area into the two basic theoretical categories of capitalist mode of production: Capital and Labor. Private groups can thus be distinguished into those that represent the interests of capital and those who represent the interests of labor. Obvious examples of these categories would be industry or business interest groups and trade unions respectively. However, many groups may not
be so easily classifiable. Groups that do not at first sight easily fall into one of these two categories need to be closely scrutinized for the impact of their agendas on the process of capital accumulation and/or their ideological stances.

It is to be expected that the unequal relations that exist in society between capital and labor will be more or less approximated within policy area also. Thus, one cannot expect policy actors or players to have equal resources, political power, or legitimacy. The concept of "pluralist democracy" hides this fundamental reality in capitalist societies.

At a second, less abstract level of analysis, one can associate different private groups with specific classes or class fractions by following Poulantzas' method of analysis outlined above. Thus various political parties and interest groups can be identified as belonging to the different components of the power bloc, hegemonic and dominant social classes or their fractions, or secondary allied classes, or the dominated classes. As the power bloc is characterized by "disequilibria of compromise" between its various components, the picture one gets is that of a dynamic tension between the power bloc groups and those from the dominated classes as well as a highly dynamic interaction within the dominant coalition in a policy arena. The political, economic, social, and
ideological positions of the power bloc, including the remaining unresolved points of contention between its components, are more or less replicated at the level of the policy governing bloc. However, it is here that its remaining conflicts are resolved and policy directions firmly established. It is only through the successful construction and maintenance of policy governing blocs that are in line with their interests that the hegemonic class or fraction can hope to establish its priorities as state policy.

Most policy governing blocs consist in formal (and informal) interconnections between one or more government bureaus, a few private groups from dominant classes, plus representatives of the power bloc through which the latter exerts overall control over the activities of the governing bloc. Occasionally, as a result of sudden shifts in the political balance in society, it is even possible that an interest group from the dominated classes may become a part of the governing bloc, albeit usually for a short period of time.

But as soon as the political balance in society changes once again, the policy governing bloc is reconstituted in accordance with the requirements of classes comprising the power bloc. The constitution and reconstitution of the policy

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19 These are the ministers, and other political appointees who have direct charge over governmental bureaus. These also consist of officers of legislative committees that oversee particular departments or policy areas.
governing bloc is not only a result of the dynamics within the power bloc, viz. changes in the political balance between various classes/fractions of the power bloc, but also reflects the political balance between the dominant and dominated classes in society.

Relative Autonomy of the Policy Governing Bloc

The nature of activities of the constituents of policy governing bloc accords a relative degree of autonomy from the power bloc, but within certain limits. For instance, though parts of the state apparatus, i.e., bureaus, departments, agencies, etc., are relatively autonomous in their day to day functioning, these can only be so insofar as they, in their activities, do not cut across the interests of the power bloc as a whole: But still, this provides quite a broad scope of autonomy to their managers. Similarly, powerful business groups, especially transnational corporations, or international financial institutions such as the IMF and World Bank, can be expected to have considerable leverage in dealing with the power bloc as well as the potential to directly influence the bureaucratic components of the policy governing bloc. In addition, it can by no means be guaranteed that the very guardians of the power bloc within the policy governing

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20 Both in terms of application of law, rules, and procedures, that is, administrative discretion, as well as in finding creative ways of extending their authority in new directions.
bloc, that is, the ministers and political appointees in bureaus, continue to faithfully pursue the policy agenda of the power bloc: The phenomena of political appointees "going native" or the forced resignation of ministers who differ with the dominant consensus in the power bloc is quite common. Finally, it must also be mentioned that the synergy created by interactions between various players within a particular governing bloc, can potentially lead to the creation of shared understanding of a policy problem that is at odds with that of the power bloc.

All of these factors raise the question of bounding the autonomy of the policy governing bloc. Specifically, how the power bloc actually exercises control over the bureau depends on the historical evolution of particular legal-constitutional (or politico-juridical) forms and practices prevalent in the various capitalist countries. In the United States, it is mainly exercised through the subcommittees of the Congress and the political appointees of the president. Occasionally, the power bloc may exercise control over the bureaus through the courts. In parliamentary systems, the cabinet is the main conduit through which the power bloc exercise control over the bureaus.²¹

²¹ However, we cannot ignore the latent but widespread and systemic practice of obtaining direct control over bureaus by elements of the power bloc through various methods ranging from offers of jobs or business opportunities to key officials, to outright bribery. For example, neither
As noted above, the general composition of policy governing blocs varies with the constitutional-legal order of different states as it determines the accessibility to, and participation of, various political forces/interest groups in the policy arena. But within a specific form of constitutional-legal order, their particular composition varies according to the nature of the policy area in terms of whether it is of immediate, direct interest to dominant classes, as for example trade, energy, wage policy, etc. or whether it is of indirect interest such as education, physical infrastructure, etc. The less a policy area is of immediate interest to the dominant classes, the more remote and indirect would be their participation, unless there is a real danger of replacement of the existing governing bloc by one which is dominated by group(s) belonging to subaltern classes: that is, if there is a perceived or actual crisis of control in a governing bloc.

Some Aspects of State and Policy Analysis in Pakistan

The concept of governing bloc will be applied in this analytical study of the energy policy in Pakistan. However, the depth nor extant of recent revelations of criminal relations between dominant Italian political groups, business groups, and the mafia to prevent the possible displacement of the power bloc by the dominated classes comes as a surprise to critical observers of power politics in capitalist societies. Neither is the Italian case a rare exception: The present and past histories of all capitalist societies are replete with similar examples, and it would be safe to assume that not all will ever be told or known.
in doing so, attention will be given to certain peculiar institutional/contextual features of policy making that are common to Pakistan and many other peripheral capitalist countries. These are: (a) the weak representative institutions; (b) the politicized bureaucratic-military oligarchy; (c) the existence of informal and formal interest groups; and (d) the influence and involvement of foreign governments, multilateral financial groups, and private corporations in policy arena.

Literature on Energy Policy in Pakistan

Literature on this topic is quite limited. A search of the PAIS Index revealed that not even one doctoral dissertation has been written on this topic. The paucity of written material is quite striking. An extensive search of books on this topic in various libraries came up with only three publications.

Tariq Riaz's *Pakistan: The Energy Sector* (1984) is a study in sector planning as the second subtitle of the book points out. This study essentially consists in developing mathematical models for projecting energy demand and supply over a 25 year planning period (1980-2005) and then, on the basis of these, develops a "partial equilibrium model" and links it with an existing model of the Pakistan economy. Such an exercise is claimed to reveal a "nearly optimal" energy sector plan through an iterative approach.
The output of the model is used for two purposes: first, to prescribe short, medium, and long-range energy policies; and second, using these prescriptions as the correct policy criteria, to critique the existing government policies.

The theory adopted by Riaz for the purpose of analyzing energy policies is that of neo-classical marginalist analysis. Based on this theory of economics, Riaz uses the methodologies of econometrics to produce an energy demand model, a energy supply model and macroeconomic model for Pakistan's economy. The models used are primarily regression and linear programming type models.

Owing to the theory and methodology adopted, Riaz's book has only limited relevance for this study. The main reason for this that it takes an essentially closed system methodology and extends it to the analysis of an open system. This makes the book open to much of the criticism that has been leveled against positivist objectivism. However, it is refreshing to note that the author himself is deeply aware of some of the limitations of purely quantitative analysis in dealing with energy policy issues that are socio-economic and political as well as technical in nature. The first paragraph of the Preface to the book eloquently states this:

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For detailed exposition and critique of positivist objectivism, see Burrell and Morgan *Sociological Paradigms and Organizational Analysis* (Portsmouth, NH: Heineman, 1979) pp. 102-106.)
This study deals with development alternatives in the rather narrow sense of alternative energy sector allocation programmes. This narrow scope and the use of a formal sectoral model as the principle tool of analysis imply a view that process of economic planning is essentially independent of social organization. Such a view is implicit in much of the literature—especially the planning and programming literature. However, in my opinion, one cannot speak of planning as independent of social organization. For example the very concept of 'socially optimal' and 'efficient' cannot be defined independently of social forces. In a society divided by class, religion, and caste system, groups stand in conflict with one another; their positions may not be reconciled under some vague concept of 'general welfare'. Often, in work on economic planning, economists obscure conflicts by assuming that market is somehow an impersonal arbiter of class differences, but in fact, it simply reflects the existing power relation of society.

(p. xv).

It is unfortunate that Riaz does not develop a line of investigation or methodology based on the above insightful assertions. He rather stays content with quantitative
methods. As a result he completely ignores the external political and economic environment of energy policy setting. Similarly, the internal political forces and dynamics are ignored except for occasional references to political instability in the country. Also, organizational issues pertaining to the energy sector are giving a short and superficial treatment.

Quite naturally, there is no discussion of the policies of privatization and deregulation as this book was published a year before Pakistan’s policymakers started moving in this direction. However, despite its narrow methodology, it should be noted that the book offers useful insights into a number of issues, for example, planning the future energy mix, building of future power generation capacity, price subsidization, rural energy alternatives, etc. that could be beneficially used in analyzing the policies of privatization and deregulation. It also provides useful historical data.

The Quest for Power: Pakistan’s Policy Options for the Nineties (1991) by Tanveer Azhar deals exclusively with the problems and issues of electricity generation, transmission, and distribution in Pakistan. It systematically and thoroughly critiques government policies and procedures in

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But to his credit, it must be said that throughout the book he consistently points out to the limitations and inadequacies of the techniques employed.
each of these areas and offers rational policy solutions and options that address the identified problems.

An aspect of energy policy that Azhar emphasizes, and which is ordinarily ignored by other writers in this field, is the issue of class-based nature of electricity consumption and the serious technical and economic implications that it creates for energy planning, besides the issue of equity. However, the author does not provide any explanation of the underlying structure or mechanisms that are responsible for this phenomenon, and simply contents himself with denouncing such behavior as morally repugnant and irrational from energy planning point of view (p.52). It shall be one of the tasks of this dissertation to build upon Azhar’s investigations and explore this phenomenon more completely by providing a plausible explanation of its underlying causes.

Similarly, while the author emphasizes the continuing problem of shortages in the availability of domestic capital relative to the required level of investments in energy (and this, incidentally, is true of other sectors as well), he does not, once again, explore the reasons behind it. It is my intention to build upon the author’s work by showing that the twin problems of chronic capital shortages and technological incapacity are a function of the particular nature of the exchange relationships of Pakistan’s economy with the global capitalist system.
Two other aspects of this book are useful for the purpose of this study. The first is a treatment, though brief and preliminary, of the policy of deregulation and privatization in the energy sector (pp 197-208). But Azhar mainly focuses on cost of production issues and ignores the external dimensions and future implications of such policies. Second, there is a discussion of the problems involved in Pakistan's efforts to acquire nuclear powerplants which introduces the dimension of political relationships with western countries and the question of technological dependence. This type of reasoning shall be developed and applied in the present work and it will be shown how dependent development limits and restricts the full growth potential while only partially fulfilling the immediate needs.

Charles K. Ebinger book Pakistan: Energy Planning in a Strategic Vortex (1980), is the broadest in scope of the books examined on the subject so far. Elucidating his approach he writes:

Although the subject of the Pakistani energy environment may at first glance appear to be highly specific, this is not the case. An examination of the pattern of energy policy formulation, energy utilization, and future energy development transcends parochial energy issues and serves as a catalyst for examination of Pakistani social, political, and economic systems. This examination of
Pakistani "energy environment" raises fundamental questions about the distribution of economic and political power within the country, the economic power base of regional and national elites, the process of bureaucratic policy formulation, and the future stability of the social order." (p.8)

Ebinger thus emphasizes the need to incorporate a socio-political dimension in the analysis of Pakistan's energy policy. On the whole, his approach is more political-economic in orientation and less technical-econometric and engineering-based as it is the case of both Riaz (1984) and (to a lesser degree) Azhar (1991).

Ebinger's structuring of the energy policy problem is grounded on an approach that focuses on the political and economic environment of energy policy arena. For this reason, he not only focuses this attention on the narrow technical and financial questions of the energy sector, but also focuses on the constraints imposed by the policy environment, both domestic and external. This makes Ebinger's study broader in scope and more directly relevant for the purpose of this study, as compared to the two discussed above.

At the same time it must be noted that while pursuing his analysis, Ebinger does not make his theoretical framework explicit. For example, while he states that the United States has actively marshalled advanced western countries to oppose
Pakistan's efforts to develop nuclear technology, he attributes this primarily to U.S. strategic interests. But the question why does U.S. has such "strategic interests" (and not, let's say Kenya for instance) is not explored at all. In my view, such a theoretical exploration could reveal the "structure" behind the current economic and political relations between countries, which could then in turn be employed to explain other international phenomena and events, including the dynamics of the international markets. Proceeding from the theoretical standpoint of the existence of an international "structure," this dissertation attempts to build on Ebinger's analysis by providing it with greater theoretical power.

Besides the works discussed above, a number of World Bank and United Nations reports, as well as studies conducted by the various energy departments of Pakistan will also be utilized, both for the purpose of obtaining data, and a perspective on past and current thinking of policy actors in the energy policy arena.
Chapter - IV

EVOLUTION OF POLICIES IN PETROLEUM AND POWER SUB SECTORS

Introduction

While one can begin the study of Pakistan's energy sector from a number of starting points, I begin mine study with a description and analysis of the history of policy in this area that the government of Pakistan has pursued since Independence. In the following, I separately describe policy dynamics in the two major areas of commercial energy, \(^{24}\) that is, petroleum (oil and gas) and power sub-sectors. In doing this, I layout the circumstances of each sub-sector, identify the main issues that policy-makers have faced, and describe and analyze the policies that were pursued. In this chapter, my focus will be on tracking the evolution and consolidation of the policies of deregulation and privatization in the 1980s.

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\(^{24}\) Commercial energy consists of energy resources that are traded while non-commercial energy resources consist mainly of firewood, bagasse, and dung cake, which rural house-holds collect or prepare on their own. The importance of non-commercial energy can be judged by the fact that while in 1991-92, the total availability of commercial energy amounted to 31.831 million TOE (HDIP, 1993), the most reliable survey yet of non-commercial energy estimated the household non-commercial energy consumption in 1991 to be 17.185 million TOE (HESS, 1993). In other words, non-commercial energy constituted 35% of the total energy availability in the country. In terms of final consumption, non-commercial energy came to nearly half (49%) of the total energy consumed in the country (HDIP 1993, HESS 1993).

There are three main forms of commercial energy in Pakistan: Power, petroleum, and natural gas. In 1991-92, these provided respectively 15.1%, 46.6%, and 28.8% of the total end-use consumption of commercial energy. Among them, they comprised over 90% of total commercial energy consumption (of the remaining, coal provided 8.8% and Liquified Petroleum Gas 0.8%). These three sub-sectors are inter-linked with, and influence each other in several ways: Petroleum and gas are major inputs in power production, while many domestic, commercial, and industrial uses of power can be replaced by petroleum products or gas. The latter two are substitutable with each other to a large degree as well.

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and latter. In the next chapter, I analyze the issues, implications, and ramifications of deregulation and privatization both at the sectoral as well as the national level.

Petroleum Sector

In the petroleum sector (oil and gas sector), there are four main areas activities and government policy. These are exploration, production, refining, and distribution. In the following, I shall focus mainly on the GOP's exploration policy. There are two reasons for doing this: First, exploration policy has crucial significance for not just the discovery of petroleum but it also has profound implications for all downstream activities. Second, it is in this area that the structural relations between an underdeveloped country, international oil corporations, and multilateral institutions dominated by the developed countries play out their dynamics most vividly. For these reasons, analysis of exploration policy is particularly suited to this study as one of its purpose is to discover whether shifts in the energy policy of the country are explicable in terms of the changes in the framework of external dependency linkages.

I begin with a brief presentation of background information and the main features/patterns of the petroleum situation in the country. Next, I trace the evolution and
changes in exploration policy in detail up to the present: More precisely, I look into how the recent policy thrust of deregulation has shaped things in this area. Then I take account of the other major policy thrust that has been ascendant since the mid-1980s, that is, the policy of privatization of the public sector energy enterprises. Finally, I trace the process and efforts to privatize the three of the biggest State-owned institutions in the petroleum sector.

**Exploration Policy: Past and Present**

Geological surveys have revealed that Pakistan has two large sedimentary basins that potentially contain oil and gas deposits: Indus and Baluchistan. The former basin is subdivided into three zones called the upper Indus (Potowar), middle Indus (Sulaiman) and the lower Indus (Kirthar) basins. Altogether, potential oil-bearing onshore area consists of 611,000 sq km while the size of offshore area is 216,000 sq km. By 1992, out of this total potential area only 200,000 sq. km had been offered as concessions to exploration companies (Idris, 1992) and of this, not all of the area has been explored.

At the time of Independence from Britain in 1947, there were only four small operational oilfields in territories that
came to comprise Pakistan\textsuperscript{25}. Producing only 1,500 barrels per day (b/d henceforth) altogether, these were located in the upper Indus basin and were owned by Attock Oil Company, a British company based in London. In 1949, Attock Oil Company formed a subsidiary called Pakistan Oilfields Limited (POL) for the purpose of exploration in which the Government of Pakistan (GOP henceforth) held a 30 per cent share. The formation of POL occurred in the wake of the promulgation of the Petroleum Production Rules earlier in the same year, the purpose of which was to encourage the exploration and development of the new nation's oil resources.

Early on, an impression existed in the international oil industry of favorable chances of discovery of oil in Pakistan. Many factors had contributed to this among which were huge oil discoveries in the neighboring areas of the Persian Gulf, the similarity of geological characteristics between the Baluchistan basin and the oil-rich Iraqi basin, and the existence of fairly large sedimentary basins in Pakistan. An earlier discovery of oil in Baluchistan at Khattan in 1885 and the discovery and commercial exploitation of Khaur oilfield in Potowar basin in 1915 positively indicated the presence of hydrocarbon resources in the region.

\textsuperscript{25}The term Pakistan is applied to its current territory, which was called West Pakistan up till 1971 when East Pakistan broke off and became independent. All data in this dissertation refers to the territories that currently constitute Pakistan.
Exploration Activities in 1950s

The potential discovery of large oil reserves attracted another foreign company to Pakistan soon after independence. In 1950, the British owned Burmah Oil Company set up a subsidiary called Pakistan Petroleum Limited (PPL) which inherited Burmah Oil's interests in Pakistan. This was part of Burmah Oil's reorganization and diversification after it suffered the loss of its oil assets in Burmah during World War II, and in addition, faced new post-decolonization conditions in both Pakistan and India; This company had substantial distribution assets and interests in the erstwhile British India. It applied for and received a concession in the Baluchistan basin in early 1952 and in the same year struck gas in the Sui anticline near the town of Dera Bugti. Subsequent appraisal testing proved this find to be very large, indeed Asia's largest gasfield.

The Sui discovery led to heightened interest on the part of international oil companies to explore in Pakistan. In 1954 Standard-Vacuum Oil Company (Stanvac), a 50-50 partnership between Jersey Oil and Mobil Oil, signed an agreement for exploration. Then in 1955, Pakistan's ambassador in Washington, Syed Amjed Ali--who himself hailed from a big industrial family--signed a 60-year concession with Hunt Oil for exploration in a 20,000 sq mile area. This was
the first major oil exploration agreement made by the GOP and it established the parameters for later concessions.

Hunt Oil planned to invest up to $42 million in exploration in the concession. On its part, the GOP committed itself to share one-fourth of the exploration costs up to a maximum of $5.25 million. In case of discovery, the share of GOP and Hunt was fixed at 25% and 75% respectively. And "if oil or gas is discovered" wrote The Oil and Gas Journal, the Pakistan Government will share in ownership on the same 25-75 basis, and the Hunt organization will purchase the government's 25 per cent of oil at its well-head value" (TOGJa, September 19, 1955). Clearly, this was a far more unfavorable deal for Pakistan than what even the U.S government had been pushing its oil companies to accept overseas: At that time, the U.S. government was promoting the 50-50 model of production sharing between national government and U.S. oil corporations.26 As the U.S policy makers saw it, such preemptive concessions to the growing demands for a larger share in the national oil wealth to a country's government would help avert the threat of outright nationalization of oil reserves in the post-war period of heightened nationalism. The Iranian government's attempt in

26 However, the GOP claimed, perhaps to offset domestic criticism, that the depletion allowance and other financial provisions in the contract would result in a 50-50 division of profits.
1951 to nationalize oilfields and the necessity of Anglo-U.S intervention to undo it, provided the backdrop to this wisdom. Thus, it was argued that it was in the interests of U.S. oil companies to do so (Yergin, 1991).

The Hunt concession agreement negotiations brought to light the two major points of perennial contention between Pakistan and international oil companies: The relative share in exploration costs and the relative share in profits from production. As in the case of other underdeveloped countries, the international oil companies only accepted to commit to a minimum of exploration costs while they aspired to retain as large a share of profits as possible.²⁷

Other foreign companies that joined petroleum exploration in Pakistan in 1950s were Shell, Sun Oil and Tidewater. Exploration activity increased over the years, peaking in 1958. But compared to the vast, potentially oil bearing basins, this activity was grossly inadequate: Altogether, these companies drilled only 45 exploratory wells in this period (Petroleum Policy, 1992). Barring the discovery of the

²⁷ The interests of the underdeveloped countries, on the other hand, lie in securing just the opposite. As I note elsewhere, these two issues have been, and continue to remain, the key parameters of exploration policy. The relative shares of exploration costs and production that GOP has been inclined to accept have largely been a function of its commitment to explore and develop petroleum resources indigenously. But the deeper Pakistan sinks into the dependency nexus, the less able and willing is it to pursue policies that can weaken or break dependency, the weaker are its efforts to develop this crucial industry, the more favorable the terms which international oil corporations can extract from it.
Mari gas field by Stanvac in 1956 (Stanvac later became Esso), which was of low calorific value and hence more suited to fertilizer production rather than as a fuel source, no other commercial discoveries were made.28

By 1960, the post-Sui optimism among international companies of making quick, inexpensive large discoveries in Pakistan had evaporated, and one by one they terminated their exploration efforts and left Pakistan for more lucrative opportunities elsewhere. Among this first wave of explorers, the last exploratory well spudded was by Shell in 1958, Hunt in 1959, Stanvac in 1960, Tidewater in 1962 and finally Sun Oil in 1964. However, POL and PPL remained in the field, sustained by their respective discoveries in Potowar and Sui of oil and gas respectively.

Growth in Energy Demand

The implementation of the First and Second Five Year Plans in 1955-60 and 1960-6529 respectively had given a spurt to economic activity. The demand for commercial energy grew rapidly, faster than the rate of growth of Gross Domestic

28 The Mari discovery, originally made by Stanvac, was seriously developed in the mid-1970s when fertilizer plants that used its gas as feedstock were built. In 1983, Fauji Foundation, a domestic corporation, bought out Standard Oil's (Esso) 51% share in Mari gasfields. In 1985, Mari gasfields were take over by the newly established Mari Gas Company Limited (MGCL). This company was fully domestically owned, with Fauji Foundation and GOP having 40% shares each, while the OGDC held the remaining 20 per cent.

29 Pakistan's fiscal year runs from the 1st of July to the 30th of June of the succeeding year.
Product. While the government encouraged industry to shift from imported oil and coal to gas from Sui by pricing the latter below the former—in order to reduce the growth rate in their imports—it was piqued and concerned at the cessation of exploration by foreign oil companies. It recognized the urgent need to find indigenous oil but was helpless to do anything: There was no capacity in the public sector while the private sector had shied away from such risk ventures, except for the limited efforts of POL and PPL.

Public Sector Role in Petroleum

Help in the development of indigenous resources came from an unlikely source. Though Pakistan at that time was firmly embedded in the Western sponsored anti-Soviet CENTO and SEATO politico-military alliances, the Soviets offered technical and financial help to set up an indigenous public-sector oil exploration organization. At a time when the Cold War was at its height, the Soviet Union viewed the dominance by western, mostly American, oil companies of the petroleum resources of Third World countries as having strategic global implications. A report of the National Petroleum Council, Impact of Oil exports from Soviet Bloc, laid out the Soviet view by referring to an "an article in an authoritative Soviet publication" which it quoted as stating:

It should be borne in mind that oil concessions represent, as it were, the foundation of the entire
edifice of Western political influence in the (less
developed) world, of all military bases and aggressive
Blocs. If this foundation cracks, the entire edifice may
begin to totter and then come tumbling down. (Quoted by
Tanzer, 1969, p.81).

The Soviet objective of lessening the dependence of
underdeveloped countries on western oil companies and the
growing recognition on the part of GOP of the importance of
developing indigenous oil resources provided the motivation
and a common ground for both parties to cooperate despite
political differences. The Soviets pushed for the idea of
setting up an indigenous public sector organization which
would replace western oil companies. Negotiations quickly led
to establishment of Oil and Gas Development Corporation (OGDC)
in 1961. OGDC was to be entirely owned and controlled by the
GOP. The Soviet Union agreed to provide equipment, technical
assistance, and training. To finance these, it also offered
loans on soft terms.³⁰

Strong GOP commitment and eastern bloc assistance were
responsible for OGDC's establishment and consolidation in the
60s. By the 70s, OGDC had come to play a substantial role in

³⁰ Besides Soviet assistance, OGDC also benefitted from Rumanian help.
In later years, some western bilateral and multilateral agencies also
provided financial and technical assistance.
the exploration and development of oil and gas resources of the country.

OGDC commenced its exploration activity in July of 1963 by drilling three wells which proved to be fruitless. However, in the next seven years, its exploration efforts were rewarded by discoveries of Toot and Meyal oilfield and gas at Sari and Hundi. During the Third Five Year Plan (1965-70) OGDC along with Geological Survey of Pakistan (GSP), conducted extensive geological/geophysical/seismic survey of Pakistan and "it was during this period that the Potowar Plateau, although producing oil since 1916, was recognized as a significant oil basin" (Ebinger, 1981, p 41). During the 1963 to 1975 period, OGDC was responsible for 17 out of a total of 37 exploratory wells that were drilled. The rest were drilled by foreign companies or their subsidiaries, including PPL and POL. All in all, the record of OGDC is quite impressive. In the first 29 years of its activities, that is, from 1963 to 1992, it completed the drilling of 87 wells out of a total of 210 drilled by all companies operating in Pakistan. Out of these 87 wells, 34 were successful (16 oil, 7 condensate, and 64 gas discoveries), giving a success rate of 1:2.6. The overall success rate of all companies in exploration in Pakistan is 1:3.9 (HDIP, 1993. Figures have been aggregated and calculated from information given on pp. 55-59). Thus, it is quite clear that in spite of being a relatively new
organization and given the resource constraints that it has had to face, the performance of OGDC has been remarkable.

State Role in the Gas Sector

While all production was in the private sector up until first OGDC gas discoveries in the 1960s, the government, nevertheless, was involved in transmission and distribution of gas from the time of the Sui discovery. This was because no domestic private sector company was financially capable or willing to do so, and neither were any foreign companies interested. The first State-owned gas distribution company, Sui Gas Transmission Company was incorporated in 1954. Using government finances and foreign contractors and materials suppliers, it constructed a pipeline linking Sui fields to the southern cities: Gas was first supplied to Karachi, Hyderabad, and Kairpur in 1956. Subsequently a pipeline was laid to supply the central city of Multan. But instead of foreign contractors, this project was undertaken by Pakistan Industrial Development Corporation, a public sector company. From these early beginnings, a vast transmission and distribution network was created which was managed by two public sector companies, Sui Northern Gas Pipelines Limited (SNGPL) a new company incorporated in 1963, and Sui Southern Gas Company Limited (SSGCL) which was the successor company to SGTC. The former was given responsibility for the management of supplies to the provinces of Panjab and NWFP as well as
Northern Areas and Azad Kashmir, while the latter was made responsible for the provinces of Sind and Baluchistan. In 1992, SNGPL had a network of 3,136 km of transmission lines and about 10,236 km of distribution lines and served 1 million customers in 63 towns. In the same year, SSGCL had a network of 1,870 km of transmission lines and 7300 km of distribution lines and it served 800,000 customers in 43 towns (Idris, 1992).

The 1970s

Notwithstanding the exploration and development efforts of OGDC, by the beginning of 70s, Pakistan was becoming more and more dependent on imported oil and its products. As noted above, this was mainly the result of high growth rates of the 1960s that increased demand for power generation, transportation, agriculture and domestic sectors. End use of oil products in the 1964 to 1974 period grew in these sectors at an average annual compound rate of 25.4%, 6.1%, 6.4%, and 6.6% respectively. This was so despite government policy to encourage the shift in consumption from oil products to domestic gas where ever possible. Much of this growing demand had to be met by increasing imports as domestic production lagged behind. Due to a lack of development of adequate refining capacity, the imports mostly consisted of expensive refined products such as gasoline, diesel, kerosene, and jet fuel rather than the cheaper crude.
By the early 1970s Pakistan possessed three refineries, two in private and one in the public sector. But their cumulative capacity proved to be insufficient to meet the growing demand for certain products as these lacked the technical capabilities to adjust the refinery output-mix. What these refineries lacked were "cracking" units that could break down the heavier molecules of furnace oil into higher demand lighter distillates such as gasoline and kerosene, whose demand was increasing at a relatively higher rate. Thus, as refineries attempted to increase the production of the distillates in demand, this led to the problem of output-mix imbalance resulting in surplus production of furnace oil. Furnace oil or fuel oil, is a substantial by-product of ordinary refining of crude oil and is commonly used for heating and power generation purpose. But, it had a limited indigenous market due to the availability of cheap natural gas, and the problems associated with its transportation upcountry from the port city of Karachi where all the refineries had been built. Ebinger (1981) points out to the fuel oil surplus problem but insinuates a wrong solution:

Because of the availability of unrealistically low-priced natural gas . . . the higher cost furnace oil produced in Pakistan's refineries was increasingly priced out of the domestic market. Because the demand for furnace oil is affected by the demand for other petroleum products, a
rise in demand for other products increased the surplus of furnace oil. Thus, although furnace oil production was expanding throughout the 1964-1974 period, it was not effectively utilized. (Ebinger, p.55).

However, the right solution was not entirely as Ebinger and others have (elsewhere) laid out, that the price of gas should have been increased to bring it at par with fuel oil, something which may have been justifiable on other grounds. The solution rather lay in the construction of a hydrocracker plants that could process the surplus furnace oil and naphtha into distillates such as gasoline that were more in demand. This has been recognized as a need of the oil sector for at least the last twenty years. However, as the GOP could not raise foreign financing on which it has come to rely for development projects, the hydrocracker plant could not be built. In the meanwhile, due to continuing refinery output mix imbalance, Pakistan has been under compulsion to export surplus furnace oil and naphtha, both low-value added products, while it has had to import higher value-added gasoline, kerosene and diesel.31

The advent of the nationalist-popular Bhutto government in late 1971 and the conditions imposed by the 1973 oil

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31 The problem of refinery output imbalance has still not be resolved. By early 90s, furnace oil exports amounted to of 0.35 million tonnes annually.
crisis, led to numerous policy changes and initiatives in the petroleum sector. Bhutto sought to reverse the basic direction in which Pakistan's economy had been developing as a result of the Ayub regime policies of 1960s (Adams and Iqbal, 1987). In contrast to previous economic policies which favored the development of consumer goods industries, the main thrust of the new regime was the development of basic industrial infrastructure, including the energy sector, and it choose the public sector as the vehicle to do so.

Even before the advent of 1973 crisis, the Bhutto government had been compelled to take a serious view of the increasing oil imports, which, in the 1963 to 1973 period had roughly doubled from 1.64 million tons to 3.5 million tons (Ebinger, 1981, p 73). The 1971 separation of East Pakistan whose jute exports were a major source of foreign exchange required for importing oil, added to the exigency. The Bhutto government responded to the situation with a two-track petroleum policy. While devoting larger resources to broadening the scope of the activities of OGDC, it simultaneously wooed international oil companies to provide a fresh impetus to exploration activity. As a result of the new policy, four new companies—Marathon International Oil Company, Amoco, Wintershall and Pakistan TOTAL (a subsidiary of CFP of France)—were attracted to Pakistan. The GOP signed exploration and development agreements with them in FY 1972-
73. All of these companies were, however, "international oil minors": For various reasons related to the structure, competition, and conditions of the global oil industry, Pakistan had failed to attract any of the major oil corporations.

The exploration activity conducted by these companies did not result in the discovery of new oilfields. As in the 1950s, the exploration activity was neither extensive nor intensive. Out of the paltry total of 13 wells spudded by these companies (TOTAL did not explore at all) only one attempt (Amoco's) was successful: But instead of oil it yielded less desirable natural gas. By 1975, companies operating under these concession agreements had essentially abandoned their exploratory efforts. The consequences of the failure these four foreign companies to undertake a serious exploratory effort became far more ominous in face of the fact that during the same period in which these companies were active in Pakistan, that is from 1972-73 to 1975-76, annual domestic crude oil production actually declined from 3.06 million barrels to 2.51 million barrels. In terms of total oil supply, domestic production in this period constituted an average of 12.1 per cent annually (ES 1992-93, Table 5.2, p. 84). In the early 70s, Pakistan was importing nearly 90% of its oil needs.
The 1973 Oil Crisis

The sudden leap in the price of oil that followed the Arab oil embargo during the 1973 Arab-Israeli war had a devastating impact on Pakistan's economy. The oil import bill, which stood at $64.9 million in 1973 jumped to $400 million in 1974. By 1979 it had gone up to $540 million, which amounted to 45% of the current account deficit for FY 1979 and one-third of the value of merchandise exports (Ebinger, 1981).

The escalating oil bill put a severe strain on the country's ability to finance other necessary imports and its balance of payments position deteriorated rapidly. For this reason, in the aftermath of the 1973 price hike, Pakistan was classified as among the 'Most Severely Affected' countries by the United Nations. It thereby became eligible for concessionary balance of payments support from the IMF that, for the time being, ameliorated its acute current account deficit problem. As in the case of other oil importing countries, the 1973 crisis suddenly brought salience to the energy related issues and forced immediate government attention to it.

The GOP, having realized that its 1972-73 exploration policy had failed to attract substantial and sustained exploration interest by international oil companies, responded with a number of new policy measures that were designed to provide more favorable incentives to foreign companies. Some
of these measures were simultaneously aimed at curtailing the growth in demand for oil products. First, it decided to raise the well-head price of new oil and gas discoveries; in the mid-1970s, oil prices were fixed at $3.50/barrel in line with past agreements, while gas price was around $0.07 mcf based on the cost-plus formula previous agreement (CIDA, 1989, p.32). The government also decided to gradually raise the retail price of energy products as demanded by multilateral lenders but, because of the strong political support it enjoyed among the lower classes, it was afraid of damaging political fallout from decreed price increases. As a counter-weight, it therefore simultaneously decided to subsidize energy products most used by the poorest segments of the population: Kerosene, charcoal, and fuel oil. It also subsidized light diesel oil in order not to harm the transportation and agricultural sectors. Pointing to this dilemma that the Bhutto government faced, Ebinger (1981) aptly remarks:

> Between 1973 and 1978, it [GOP] raised consumer energy prices on six occasions, each increase resulting in serious riots in several major cities. Given the other difficulties Prime Minister Bhutto was encountering in the political system, he had to weigh carefully his chances of remaining in power if he adopted the energy pricing policies dictated by the International Monetary
Fund (IMF), The World Bank (WB), the Asian Development Bank (ADB), the Pakistan consortia, etc. (p. 111).

Change in Development Strategy

Bhutto sought to alter the energy sector in more fundamental ways than merely increasing the producer and consumer prices. Having little faith in the intentions and capabilities of private entrepreneurs, or in the theory that the dynamics of a free market economy could or would address the peculiar structural problems of underdevelopment, Bhutto's policies envisaged a leading role for the State in development. Being deeply impressed by the experience of socialist China in its efforts to industrialize, he pushed for a State Organized Development Strategy (SODS) in all the major sectors of the economy.

This strategy had a profound impact on all areas of the energy sector. In the area of exploration and production, for example, budgetary allocations of OGDC were increased by 70% during the Bhutto period. In refining, the government nationalized the National Refinery (one of the three refineries in the country) early in its tenure. Similarly, in marketing of petroleum products, all locally owned marketing companies were taken over to form Pakistan State Oil (PSO) in 1974. PSO purchased a foreign owned marketing company, Esso,
in 1977 and became the dominant force in this area. Also in 1974, two other important energy companies were set up in the public sector. One was the Pak-Arab Refinery Limited (PARCO) which was a joint-venture between the GOP and the Abu Dhabi National Oil Company (ADNOC) with 60:40 share holding respectively. It laid a products pipeline from Karachi to Multan that became operational in 1981. PARCO also planned to construct a refinery at Multan.

The second public sector company set up in 1974 was the State Petroleum Refining and Petrochemical Corporation. This company was created for the purpose of developing refining and petrochemical industries in the public sector. A year later, a research organization, the Hydrocarbon Development Institute of Pakistan (HDIP) was also set up for the purpose of providing support services to public sector organizations in the energy sector. Thus, along with the previously established OGDC, SNGPL, and SGTC, the establishment of the above organizations dramatically increased the role of the State in the energy sector during the Bhutto period (December 1971-July 1977).

The new public sector organizations, as well as the increased support to OGDC could not be expected to yield

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32 PSO currently controls 75% of the distribution market while the rest is shared between two foreign subsidiaries: Pakistan Burmah Shell and Caltex.
immediate benefits: Even under the conditions of strong and continuing political support and substantial budgetary allocations, these still had to go through a long gestation period before producing tangible results. For the interim, it was recognized that foreign oil companies would be necessary, especially in the area of exploration. Consequently, in 1975, the government agreed to the most important demand of oil companies. It announced that the well-head price of oil in all new concession agreements would be equivalent to the international price of similar crude oil. However, on the downside from the companies viewpoint, it refused to increase the well-head price of gas which had historically been discovered more commonly than oil.

But soon to follow was a much more comprehensive policy package designed to further woo the international oil companies. The National Assembly passed a bill in November 1976 empowering government owned OGDC to enter into production sharing agreements with oil companies in addition to forming joint-ventures. This had become possible and a desirable thing to do after the nationalization of National Refinery and the creation of the petroleum products marketing and distribution outfit, PSO.33 Other features of the new policy

33 In the earlier agreements, the GOP was obliged to sell its share of production to collaborating company at well-head. It never actually controlled any oil, and could not benefit from downstream business activities. It is in refining and distribution activities rather than
were: (a) royalty tax of 12.5% of wellhead value was included as part of the total aggregate payments owed to GOP (previously it was in addition to other government claims; (b) payments to GOP were not to exceed 55% or be less than 50% of gross profits; (c) a concessionary rate of 5.25% customs duty were to apply to all machinery and equipment that the companies imported for their use for first 24 months; (d) the wellhead price of oil was to be its international market minus the costs of transportation of oil to the market; (e) the companies were allowed to repatriate all profits. In return, (f) the companies had to agree to spend a minimum agreed amount on exploration within an agreed time; and (g) in case of commercial discovery, the government reserved the right to acquire a share after reimbursing the companies for a part of their exploration expenditure.

The new terms were more favorable to international oil companies than had hitherto been the case except regarding the well-head price of gas. To further sweeten the pot, the GOP offered additional incentives in 1976, which removed the reservations of oil companies to the 1975 policy. As a result of these favorable policy changes, a number of fresh companies entered into concession agreements and began exploratory production where the largest volume of profits are made in the petroleum industry (Bromley, 1991; Yeargin, 1991; Tanzer, 1969).
efforts in Pakistan. And once again, it was the international minors, having been locked out of much of more lucrative Middle Eastern and African oil producing areas by the "seven sisters," that showed greater interest. In addition to Esso Eastern, Husky, Texas Gulf, Marathon, Union Oil, Union Texas, POL, and PPL which already held concessions, four new companies were initially attracted to Pakistan as a result of the 1976 incentives while a few others followed soon. The initial four were Amoco, Gulf, Occidental, and Murphy Oil. Important details of production sharing agreements signed with the new companies are provided in Table 4.1 below.

The inducement of more favorable terms of the 1976 policy notwithstanding, it was once again the particular conditions in the global oil industry that materialized after the 1973 crisis which were responsible for the decision of a number of companies to sign exploration agreements with GOP. It should be kept in mind that the decision to obtain exploration concessions and decisions to actually do exploratory drilling are governed by two separate but inter-related set of criteria. Oil companies, which are as a norm simultaneously involved in different parts of the world as well as operations in their home countries, are always on the look out to obtain exploration concessions in likely oil bearing areas in order to expand their reserves base and prevent rivals from acquiring these. They constantly monitor the conditions in the global oil industry, and in their context, evaluate the exploration terms being offered by various countries. The country which offers the best terms from the point of view of the oil companies, is the one which succeeds in attracting the most companies for exploration.

But the decision of companies to actually carrying out exploration work depends upon the actual or anticipated movements in the price of crude oil. As the price of crude oil shows upward tendency, the scale of exploratory drilling increases and even areas considered to be higher risk are opened up. Conversely, as the price of crude slides, exploration activity slows down and as it is to be expected, it is in the marginal areas where the companies decide to cease their exploratory activities. In this situation, the home-country government once again faces the earlier dilemma: Either it must change its existing concessions policy and offer even more favorable terms to the companies to attract them away from other, more lucrative operations or it has to accept the alternative of continued dependence on oil imports which it can ill afford. Of course, this situation arises due to the lack of development of adequate indigenous exploration technological capacity, something for which the home-government, in a case like Pakistan, has only itself to blame.
Table 4.1

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area (sq. miles)</th>
<th>Location</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occidental</td>
<td>8,845</td>
<td>Sukkur, Sind</td>
<td>Exploration costs shared 80/20 with OGDC; on production, OGDC acquires 50% share with option to increase to 67%</td>
</tr>
<tr>
<td>Amoco</td>
<td>9,095</td>
<td>North Potowar</td>
<td>Seismic costs shared 80/20 with OGDC, drilling costs 50/50; OGDC interest 62.5% on commercial production.</td>
</tr>
<tr>
<td>Murphy</td>
<td>27,300</td>
<td>Baluchistan</td>
<td>Murphy to spend $0.6m in first year, rising to $2.5m in third year on exploration. OGDC production share of 47.5% plus bonus of $1m rising to $5 m at 200,000 b/d.</td>
</tr>
<tr>
<td>Gulf</td>
<td>24,453</td>
<td>Potowar</td>
<td>Geophysical costs shared 85/15 with OGDC; royalties and taxes to GOP between 50 and 55% of annual profits.</td>
</tr>
</tbody>
</table>


While the post-1976 agreements stipulated wellhead price of oil at international level, the pre-1976 agreements were not modified and their wellhead price remained at previously agreed level which was much below the international price in the mid-seventies. Although production at this price level was still profitable, as the continued operations of POL at the Meyal and Adhi oilfields in the late 1970s and 1980s testifies, almost all companies suspended exploratory drilling in the pre-1976 concession areas. Generally, they either opted to sign agreements for new concession areas under the 1976 policy, or, withdraw from Pakistan entirely. Among the pre-1976 companies that withdrew were Wintershall and Texaco. These companies had been attracted to Pakistan in wake of encouragement offered by GOP in early 1970s as well as the changed conditions in the world oil market in the wake of the
1973 price hike. Union Texas and Amoco, which were present prior to 1976, decided to sign new concession agreements with GOP.

The new entrants started exploration activities very slowly. In the 1977-1979 period, Union Texas, under a new concession agreement drilled only two exploratory wells while Gulf and Amoco drilled one each, as did Husky. Among all companies engaged in exploration at this time, the public sector OGDC was the most active: Though it spudded a paltry total of four wells only, still, this was more than that of any other company. The main reason for the lack of activity of foreign companies was the fact that this was a period of relative calm in the oil market: Oil prices remained more or less stable between 1974 and 1978. Under stable or declining oil prices, exploration activity generally tends to decline, as companies are not wont to invest capital in this high-risk facet of the oil business. But soon, in the wake of the 1979 Iranian revolution and the out-break of the Iran-Iraq war in 1980, oil prices jumped up once again increasing three-fold and remained at this level until 1985.

**Exploration Activities and Policy in 1980s**

Although the GOP revised the gas well-head price formula in 1981, new exploration concessions were awarded to foreign

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35 Husky, continued to operate under the pre-1976 agreement for a while.
oil companies on slightly less favorable terms as compared to mid to late 70s: The main difference was that the GOP or its representative, the OGDC, generally stuck to the standard concession agreement formula of sharing only 5 per cent of exploration costs while acquiring a 50% share in production in the event of commercial discovery.\textsuperscript{36} This standard cost and production sharing formula was applied to joint ventures where OGDC was not the operator and the foreign company held working interest.\textsuperscript{37} Out of a total of 28 concession agreements in force in November 1992 in which foreign partners held working interest, 24 stipulated 5% share in exploration costs for OGDC while only 2 agreements stipulated more than this: The Badin Block II agreement signed on January 20, 1992 which fixed OGDC's share in exploration at 49% but which was considered very low risk due to earlier discovery of oil in the same area, and the one signed on August 19, 1991 with Tullow, an Irish petroleum company, which fixed OGDC exploration cost

\textsuperscript{36} As we have noted above, the concession agreement with Hunt Oil and other companies signed in 1950s did not conform to this arrangement which has been the standard at least since mid-50s in many parts of the world. It is only very recently, as we shall see later, that foreign oil companies have been able to pressure the GOP to alter this standard formula and obtain more favorable concession agreements.

\textsuperscript{37} Working interest is defined by DOE's Annual Energy Review, 1991, as "an interest in a mineral property that entitles the owner to explore, develop, and operate a property. The working interest owner bears the cost of exploration, development, and operation of the property and, in return, is entitled to a share of the mineral production from property or to a share of proceeds." p.347.
share at 10 per cent.\textsuperscript{38} In terms of share in production proceeds, all but three concession agreements in force in November 1992 prescribe 50\% share for OGDC, while the Adhi agreement with PPL prescribes 61\% share (OGDC 50\%, GOP 11\%). Only two agreements prescribe less than 50\%, the one with UTP for Badin Block-I signed in 1977 which fixed OGDC production share at 40\%, and the Dhurnal concession agreement in which working interest is held by Occidental and which fixed Pakistan’s production share at 45\% (OGDC 20\%, GOP 25\%) (Ostrander, Attachment-7, 1993).

The new concession agreements coupled with higher prices and generally uncertain supply conditions in the world oil markets, especially in the first half of the 80s, gave a boost to exploration activity. The GOP on its part, also took certain secondary policy measures to improve the conditions and incentives for foreign companies. In the case of eight onshore blocks that GOP offered in 1983 for concession bidding, for instance, the royalty rate of 12.5\% was made constant even if production increased (instead of the normal sliding scale), duty-free import of equipment for exploration was allowed, and some other tax benefits offered. Then in

\textsuperscript{38} Details of the other two, one with PPL for Adhi oilfield originally signed on June 20, 1975 and renewed on January 19, 1991, and the UTP Badin Block-I concession agreement signed on April 20, 1977 are not available to the author. But it is very likely that these conformed to the standard (5-50) cost and production sharing formula.
June 1985 GOP gave a further incentive to foreign companies when it raised the well-head price of gas to 66% of landed-cost of fuel oil at Karachi.\(^{39}\)

Non-financial policy improvements were also initiated, mainly in the simplification of cumbersome bureaucratic procedures for awarding concessions which normally took as much as two years to approve (EIU 3/1985, p.19). Further simplification of procedures continued to be made over the next few years. As a result, by the fall of 1991 the GOP could claim with some satisfaction that the time it took to process a concession application had been reduced to two months in most cases (EIU 3/1991, p.20).

Other non-financial measures were also taken. One was to actively seek out foreign companies. In 1989 and then again in April 1993, the Ministry of Petroleum and Natural Resources (MPNR) arranged presentations in London and Houston in a bid to reach out to prospective investors. Forty three concession blocks were offered in 1989 and 17 in 1993 (EIU 1/1989, p.20; EIU 3/1993, p.35). Addressing another long-standing concern of exploration companies regarding the lack of security arrangements in certain areas, the government set-up a special

\(^{39}\) This was a bench-mark price. The actual price was fixed for different producers by taking the bench-mark price less a negotiated discount that was based on several factors, mainly the extent of infrastructure investments that would be required to connect the discovered gasfield to the national transmission grid, costs which had to be borne by GOP.
security force to protect the property and staff of the companies.\textsuperscript{40} The creation of such a force, along with new efforts to mollify local tribal chieftains, was expected to make many potential oil-bearing areas of Baluchistan once again safe for exploration activities.\textsuperscript{41} It may be mentioned that mainly because of insecure conditions, no exploratory work has been carried out in large areas of the Baluchistan basin in over 15 years (Anwar Saifullah Khan, Minister for Petroleum and Natural Resources: PTOW, April 8, 1994, p.7).

Reviewing the tempo of exploratory activity of foreign companies in the 1980-91 period one sees that in each year starting from 1980, foreign companies drilled 3, 6, 3, 8, 13, 10, 7, 2, 12, 15, 8, and 3 exploratory wells respectively.\textsuperscript{42} In the same years, OGDC drilled 0, 1, 1, 7, 5, 6, 7, 10, 7, 10, 7, 9, 9 wells respectively\textsuperscript{43} (Energy Yearbook, 1992, pp. 57-59). Thus, while in the case of OGDC we see a consistent pattern of drilling, especially in the late 1980s and early 1990s, in the case of foreign-owned companies, the trend was erratic: It increased rapidly until 1985 after which it

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\textsuperscript{40} However, by agreement, the expenses of this force are to be met through a special levy on the companies (EIU 3/1991, p.20).

\textsuperscript{41} Interview with MPNR official, August 1993, Islamabad.

\textsuperscript{42} In the first six months of 1992 for which data is available, the figure was 3.

\textsuperscript{43} In the first half of 1992 for which data is available, OGDC sunk 6 exploratory wells, outstripping the combined efforts of all foreign companies.
declined for two years, picked up again in 1988 and 1989, and then dropped again in 1990 and has remained subdued in the early 1990s. On the production side we also see a similar pattern. Crude oil production shows a strong upward movement, increasing from approximately 10,000 b/d at the beginning of 1980s until it peaked at 64,349 b/d in FY 1990-91. After this, it has been declining gradually, and in May 1994, it had fallen to approximately 58,000 b/d.

By 1990, the decline in the exploration activities of foreign companies forced the government to reconsider certain fundamental aspects of its exploration policy. The loss of supplies from Kuwait as a result of the Iraqi invasion in August of 1990 only made matters worse. In view of these conditions and given the fact that "Pakistan’s oil development programme is heavily dependent on foreign companies..." (EIU 1/1989, p.20), the GOP in 1990 was compelled to retreat from the standard 50:50 production sharing arrangement with foreign companies. This radical measure got the attention of companies, in the short run. As EIU writes, "the government’s drive to step up oil exploration has been paying off. During the last quarter of 1990 the government signed seven exploration agreements covering 183,000 sq. km and involving

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"Pakistan had long-term agreements with Kuwait for the supply of crude oil and petroleum products prior to the Iraqi invasion. It could thus acquire a substantial part of its imports at rates better than the spot market."
29 foreign and local firms. The terms being offered to foreign firms provide that in the event of discoveries they will not have to sell more than 40 per cent of their working interests to the government" (p.22, emphasis added). Thus, faced with the difficult circumstances arising mostly out of the lack of seriousness with which the government endeavored to develop its own exploration capabilities in the 1980s, and which in turn inevitably enhanced the ability of the international companies to exert pressure upon it, the GOP was left with no choice but to succumb to the terms of the companies, and acquiesce to a reduced share for the nation of its oil wealth.

Other concessions followed soon. In November 1991, the government announced a new petroleum policy which involved additional incentives to the oil companies. It contained provisions for negotiating production sharing agreements on case-by-case basis. It also simplified import duties, imposing a uniform five and quarter per cent duty on all equipment imported by oil companies at all stages instead of the previous system where companies paid no duties at the exploration stage, paid five and quarter per cent duty on imports at development stage (two to five years) and normal (higher) import duties thereafter. But most importantly, the new policy acceded to the long-standing demand of oil companies to raise the well-head price of gas although not to
a point which they had demanded. The well-head price of non-associated gas\textsuperscript{45} was increased from 66% of the border price of high sulphur fuel oil less discounts negotiated at the time of signing of the mineral lease agreement,\textsuperscript{46} to 75% of high sulphur fuel oil border price minus discounts negotiated at the time of the signing of exploration agreement. Similarly, the price of associated gas was increased from existing Rs 5 per million cubic feet to 66% of border price of fuel oil less negotiated discounts which were essentially determined by the type and classification of the area in which exploration is done (Petroleum Policy, November, 1991).

But still, these fresh incentives did not fully satisfy the foreign companies. The foreign oil companies continued to demand gas price at parity with the border price of high sulphur fuel oil. Consequently, the GOP revised the 1991 policy in September of 1992. According to the revised policy, the well-head price of non-associated gas was made at par with the border price of high sulphur fuel oil while the price of

\textsuperscript{45} Associated gas is natural gas that is produced as a by-product in crude production. Many times associated gas is set ablaze or flared as the companies find it uneconomical to process and distribute it. This is a wasteful practice which GOP has attempted to control. When a well yields only gas (commonly along with pentenes), it is called unassociated natural gas.

\textsuperscript{46} A mineral lease or contract was signed after confirmation of commercially exploitable discovery. After the confirmation of reserves, the government's negotiating position would be strengthened and therefore, at this point it could secure better discounts from foreign companies. The reverse was true at the time of signing of an exploration concession agreement.
associated gas was increased to 75% of its value instead of 66% as laid out in the November 1991 policy. However, offshore associated gas was to be priced at par with high sulphur fuel oil. According to an official of the MPNR, these changes were "welcomed by the industry." In an interview with the author, he went on to add optimistically that "we have advertised a bidding round for concessions and some 17 blocks are on offer. The date for submission of application is September 15th [1993] so that should give us an idea of what people think of our policy today, in terms of response we get from the private sector" (official at MPNR interviewed by author, August, 1993, Islamabad).

Exploration Policy of the Current Government

However, as I discuss below, two key factors prevented the 1992 policy from having the desired effect of attracting foreign oil companies for the objective of giving a boost to exploration activity. The first was the unravelling of the Soviet Union in 1991. The second was the lack of development of appropriate refining capability, either in the public or private sector, that could handle the more often discovered waxy crude oil of Badin district.

As has already been mentioned above, exploration and development/production activity has been declining since 1991. This has been so despite the policy measures adopted in 1991 and 1992 that offered the most favorable terms yet offered to
foreign companies, which conversely, reduced the country's share in its oil and gas wealth. There are different sets of reasons for these trends. The decline in development/production activity is because of the lack of appropriate refining capacity. In the case of exploration, the causes basically lie in the radically changed conditions in the international oil market that have emerged as a result of the dissolution of the Soviet Union and the simultaneous decapitation of its production planning and resource allocation structures. This has resulted in the emergence of weak States in areas of the erstwhile Soviet Union, the governments of which are desperately seeking hard currency to boost their failing economies. One easy way to earn hard currency for these governments has been to offer their mineral wealth, especially oil, to international oil companies. The dissolution of the Soviet Union thus opened up vast oil and gas rich areas of the planet in one fell swoop. For the western, mainly U.S. oil companies, majors and minors alike, for whom these areas had been out of bounds ever since the 1917 revolution, this presented unprecedented opportunities to augment their reserve bases and extend their control over the world supply of oil.

Lured by the possibility of grabbing far more lucrative agreements from the feeble states of Russia and the newly independent countries of the Central Asian region such as
Kazakhstan, Turkmenistan, and Uzbekistan, many of the exploration companies thus began to leave Pakistan (and other marginal producers) for new, more promising prospects. Their lack of interest in Pakistan became evident when the bidding process for the latest offer of exploration concession blocks closed on September 15th, 1993. The response could not have been more dismal: "Only three foreign firms – Royal Dutch, Tullow Oil, and USA Aviation submitted bids for exploration rights in five of the 17 concessions in Sindh and Punjab offered during presentations by OGDC in London and Houston last April" (EIU 4/1994, p.36). Immediately thereafter, on September 31, the government responded by declaring that it was considering further improvement in the terms being offered in order to "encourage badly needed new investment in hydrocarbons and stem the departure of foreign companies" (EIU 4/1994, p.35). The main features of this modification in policy were:

1. The government further reduced the national share in production from 40% to 35% in onshore production and fixed 20% as its share in offshore commercial production, while its share in exploration costs in each case remained at 5% as was previously the case: The foreign companies thus could now keep up to 65% of the oil profits in the case of onshore and 80% of profits in the case of offshore production and they were free, according to the policy in force since 1975 to
repatriate profits to home countries in foreign currency which GOP was obliged to provide.

2. Oil price discount was fixed at 5% of equivalent Middle East crude price when price is between $16 to $25/barrel and at 50% if the price of a barrel of equivalent crude is above $25. Previously, the discounts were negotiated between GOP and companies at the time of signing of concession agreements "keeping in view the prospects of the areas and size of investment" (Petroleum Policy, 1992, p.4);

3. The price of associated gas was increased from 75% to 100%, and of offshore gas from 100% to 125% of border price of high sulphur fuel, while unassociated onshore gas remained at 100% parity;

4. The import of exploration equipment was made completely free of duty while a discounted 5.25% duty remained in force for development/production equipment and materials.

5. The concession applications were to be processed and decided upon within two months instead of three, as was previously the case (EIU 4/1993, p.35).

However, in spite of these new incentives, which further reduced the country’s share of its oil and gas wealth, the companies were not satisfied. EIU, which is considered to be well-informed about the thinking of business decision-makers ominously commented that "industry experts felt that the incentives were insufficient to attract a meaningful increase
in investment, not least because of the opening up of the gas-rich Central Asian states" (EIU 4/1993, p.36).

The government policy-makers were thus forced to concede further ground in their fruitless efforts to attract foreign companies. The new government of Benazir Bhutto elected in October of 1993 set up a Task Force on energy to recommend policy changes. Following its recommendations, a new petroleum policy was announced in February 1994. The main features of the new, current exploration policy are:

1. Government share in production was reduced further. Concession blocks were classified according to risks and costs into three zones. In Zone 1, which is considered to be high risk/high cost, GOP’s share in production is fixed at 15 per cent. In Zone 2 which is medium risk/medium cost, GOP share is fixed at 20% of production. In Zone 3, which is considered to be low risk/low cost, GOP share is fixed at 25 per cent of production. Thus, the new policy offers a much better percentage share of production to foreign companies as compared to the 1993 policy which fixed it at 35% for all concessions.

2. The GOP share of exploration cost was reduced from 5 to 4 per cent. This shall reduce government outlay on exploration to a small extent.

3. The price of crude oil was made fully at par with comparable Middle Eastern crude as the previous practice of
negotiating discounts which made domestic oil cheaper than foreign oil was abandoned. However, producers are required to deliver oil to the nearest refinery at their cost. Refineries would thus save only transportation costs from nearby oil producing regions of Middle East if they bought their oil from there rather from producers in Pakistan. These savings cannot amount to much.

4. The government allowed companies to dispose off their gas as they chose in Zones 2 and 3. Only in Zone 1, the GOP would specify buyers within 3 months of discovery. If GOP does not specify buyers within 3 months the companies could sell their gas as they wished. In all cases, if GOP does not come to an agreement to lift gas supplies within 6 months, the companies would be free to dispose their gas as they chose. Until now, the government reserved the right to allocate or distribute gas according to its overall energy policy priorities, such as assuring supplies to fertilizer plants and utility powerplants.

5. The price of gas, both associated and non-associated was delinked with high sulphur fuel oil and linked to a basket of Arabian/Persian Gulf crude oils according to the zones where it was produced. In Zone I, it was fixed at 77.5% of the basket, in Zone 2, at 72.5% of basket and in Zone 3, at 67.5 per cent.
6. The price of LPG from new production plants was made at par with its C&F import price. Its price which was previously set below the import price to encourage domestic production. For existing producers, only the price of LPG produced in addition to their declared production obligation has been raised to its FOB international level.

7. All import duties and license fees for import of exploration equipment have been eliminated. Only after commercial discovery, would a reduced rate of 3% be charged on annual basis for import of equipment used in production activities. This replaced all previous import duties and license fees. Furthermore, companies providing services to exploration and production companies were declared exempt from any duties or license fees.

8. To encourage local petroleum companies, an additional two and half per cent share in production from GOP’s working interest was made available to them. For the same reason, the GOP also agreed to accept 5 per cent of exploration costs as opposed to 4% for foreign companies.

Besides the above substantive changes in exploration policy, certain other modifications, mainly administrative in nature, were also announced. Among these were fixing the "welfare" expenditures, which the companies are routinely required to spend on communities in the area of their operations on such activities as the promotion of education,
health, sports, etc. Certain other procedural changes were also made to make the concession award process more competitive, transparent, and less discretionary.

Summary of Discussion

The petroleum exploration policy of Pakistan has been historically formulated under conditions of technical and financial dependence on western oil companies. The formation of OGDC was an attempt to break this dependence by creating an indigenous capacity to carry out exploration. However, OGDC has not been given the kind of resources and top-level commitment that were necessary for it to carry out its mission effectively. The continued growth in the demand for oil products and major jumps in its price, especially during the 1973-85 period, put tremendous pressure on Pakistan's current accounts forcing it to borrow hard currency from international sources. The government recognized that oil imports had to be curtailed. This it did by curtailing the growth in demand for petroleum products and by encouraging indigenous production. As OGDC was not made fully capable of handling exploration work in the entire country, the government had to depend on foreign oil companies to do so. But because the exploration investment behavior of western oil companies is fundamentally

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47 Previously, the volume of such expenditures was settled on a case by case basis in negotiations between officials of MPNR and oil company representatives.
determined by the conditions in the world oil markets and the relative lucrativeness of the concession offers by the government, on the one hand their exploratory efforts have been inconsistent and incongruent with Pakistan’s needs. On the other, they have been successful in progressively extracting more favorable agreements from the GOP. Clearly, the push for deregulation of the oil and gas industry, within the current context of dependency in which Pakistan is embedded, has led its government to acquiesce to a reduction in the country’s share of its potential oil and gas wealth from the long established fifty percent to between fifteen and twenty-five per cent. Only in the case of a fully OGDC owned and operated concession, is the country the full beneficiary of its natural wealth.

Privatization in the Oil and Gas Sector

By the middle of the 1980s, a well-developed public sector was playing a central role in the oil and gas sector of the country. Though it had its beginnings in the 1950s with the need to set up a gas distribution pipeline infrastructure, as at that time no private domestic or foreign company was willing to do so, it was under the state-organized development strategy so vigorously pursued by the Z.A. Bhutto regime (1971-77) that foundations were laid for the state to play a key
role in all aspects of the petroleum industry.\textsuperscript{48} The Zia regime that came to power in 1977 initially continued with Bhutto's economic strategy, albeit as a default. By 1983, it felt confident enough to put forth its own economic agenda, which in essence was to restore the private sector to its pre-Bhutto days of dominance. However, it was not until the late 1980s that public sector in petroleum sector began to face the music of privatization, although steps in this direction had been already taken.

As far back as the middle of the eighties, the GOP had adopted policy directions to privatize State enterprises in the petroleum sector. "But plans remained on paper until . . . [Benazir Bhutto's] government came to power [in the fall of 1988]. Despite the PPP's record under Miss Bhutto's father, she immediately appointed the UK merchant bank N.M. Rothschild, in conjunction with the World Bank's IFC, to act as consultants to the government on a privatization programme" (EIU 4/1989, p.11). These consultants were among the first to

\textsuperscript{48} By early 1990s, the public sector in petroleum industry consisted of the following institutions: 1) OGDC, responsible for exploration and production of oil and gas; 2) OGTI, (Oil and Gas Training Institute) responsible for imparting training to public and private sector personnel; 3) SNGPL, responsible for transmission and distribution of gas in the provinces of Punjab, NWFP, Northern Areas, and Azad Kashmir; 4) SSGPL, responsible for transmission and distribution of gas in the provinces of Sindh and Baluchistan; 5) PSO, responsible for transportation and distribution of petroleum products in the entire country; 6) PERAC, responsible for oil refining (it operates National Refinery and Pakistan Refinery, refining 80% of total in 1991-92) and petrochemicals production, and; PARCO, a oil pipeline company in joint venture with state-owned ADNOC (Abu Dhabi National Oil Company); and HDIP, a hydrocarbon science research and consulting organization.
recommended the privatization of SNGPL and SSGPL, and OGDC along with state enterprises in other sectors. As I examine in Chapter-6, privatization of state-owned energy units was part of the adjustment polices which both the IMF and the World Bank strongly advocated during the 1980s. Since then, the policy of privatization has gradually become the centerpiece of Pakistan's economic policy. All the five governments that have followed since the 1990 elections, have been more vociferous than their predecessors in proclaiming to be more committed to carry out privatization.

In an interview given in October 1992, the Secretary of the Ministry of Petroleum and Natural Resources laid out the outlines of the "very large and radical privatization program" that the policy-makers had charted out for the energy sector in Pakistan. He stated that within two to three years, "all aspects of the country's oil and gas business will be put in private hands" through issuing shares to the public and that the government would only "retain minority stakes in the privatized companies." According to him, the sequence of future privatization will start with the gas transmission network (SSGPL and SNGPL), followed by oil products distribution and marketing operations (PSO), then oil refining (NRL and PRL), and oil and gas exploration and production (OGDC) (Idris, 1992a). In the following, I look at the process of privatization of OGDC and SNGPL, the two public
sector enterprises which have been put on the anvil of privatization so far, and the implication of these in terms of policy and national interest.

Oil and Gas Development Corporation

The OGDC was conceived to be privatized in a two-step process: In the first step, it was to be corporatized into an financially independent and autonomous but GOP-owned body, and in the second, to be sold off to private investors, domestic or foreign.

The initial strategy to carry out the privatization of OGDC was first outlined in the Seventh Five Year Plan (1988-93), which states:

The Seventh Plan envisages that OGDC will be strengthened and restructured and its operations streamlined to transform it into a financially viable and administratively autonomous entity. It is expected that OGDC will meet its development needs through self-financing. About 25 per cent of the investment required to meet its exploration expenditure will also be financed from its own resources whereas the remaining cost will be met through the federal budget. During the initial years of the plan, the government may provide a higher percentage of funds for its exploration programme which will be gradually reduced in later years." (Ch. 25, p.204).
A governmental committee was subsequently formed to oversee the transition process which was headed by an Additional Secretary, Ministry of Finance (budget section). Besides working out targets and budgets for the Seventh Plan period "[t]he committee further deliberated that some of the key issues in deciding whether OGDC would become financially self-sufficient would be:

1. OGDC be paid prices of oil and gas at par with other producers operating in the country.
2. OGDC be allowed to retain all the funds generated by it through its operations.
3. Commercial borrowing of OGDC to be facilitated by the Government in the form of guarantees and credit allocations, etc.
4. Allocation of sufficient amount of free foreign exchange to OGDC so that its operations are not hampered." (Ostrander, 1993, Attachment-6).

The issues brought out in the committee deliberations as well as the need to support exploration activities through government grants, show the complex nature of support systems that have made it possible for OGDC to come thus far and become a reliable and successful petroleum exploration and production company. Similarly, the operational problems that OGDC has to deal with make it necessary that it have a privileged relationship and access to GOP so that it can deal
with its environment effectively and fulfil its mission of national importance. To illustrate, in 1988, OGDC faced two serious problems that would have hurt it badly had GOP not helped it (OGDC then was fully a part of MPNR). The first concerned the refining quota allocated to OGDC for its crude production from newly developed oilfields. The OGDC had the capability to produce and sell 13,400 b/d but much less was being produced "due to lack of refining capacity available to OGDC." Consequently, "the potential of these fields could not be fully exploited. As a result of this impediment OGDC had been unable to maintain a desired level of cash flow and in order to sustain the existing operational capability" the MPNR was approached which subsequently allowed it an enhanced refining quota of 10,500 b/d. However, the OGDC stressed that it was "desirable to increase the OGDC's quota still further to 13,400 b/d. It is considered imperative that OGDC be allowed to deliver its entire production from southern fields for refining." (Ostrander, 1993, Attachment-6). This problem arose in the environment of competition between OGDC and foreign oil companies which were vying for the same refining capacity. Of course, hypothetically, if there was no shortage of refining capacity, then OGDC would not have had to rely on the GOP to help it out. But, realistically speaking, as distortions and impediments are likely to remain in the Pakistani economy in the foreseeable future, public sector
organizations involved in strategic aspects of the economy would require special access to the government resources, in order to fulfil their mission of national importance.

The second serious operational problem that OGDC faced in 1988, a year prior to it being placed off-budget, was that of the effects of declining international oil price on its operations. In preparing the self-financing plan, the above-mentioned government committee, appointed to reform OGDC into a financially independent corporation, had assumed a US $17.62 average price of oil in international markets. "However", as a 1988 report of OGDC writes, "there is a considerable decline in oil prices and prevailing oil prices are moving around US $12.00 per barrel. This means a decrease of Rs 1.373 million per day and Rs 501.145 million per year in OGDC's revenue." The report then goes on to says that "[i]t is needed that OGDC's base price should be fixed at US $14.10 per barrel to offset the decrease resulting from declining oil prices in the international markets for the time being so that OGDC could maintain the level of activity envisaged for 1988-89 at the time of preparation of ADP [Annual Development Plan] for 1988-89" (Ostrander, 1993, Attachment-6, p.14).

While the decision to turn OGDC into an independent corporation was taken in 1987, it was finally taken off the federal budget in the FY 1989-90. In its very first year of autonomous operations, OGDC showed good results. In 1989-90,
it emerged as the largest oil producer in the country, overtaking foreign and domestic private companies for the first time in its history (by 1990 November, it was producing 27,000 b/d) and paid Rs 1.5 billion in the form of debt repayment, royalties and excise duties. (EIU 1/1991, p.22). In the second year of its off-budget operations (90-91), it showed a profit of Rs 1.5 bn, which was "triple the previous figure and without any government financing" (EIU 4/1991, p.21). In the following year, it made a profit of US $80 million (Rs 2.32 billion, approx) and paid $300,000 (Rs 8.7, approx) in taxes to the government. And as we saw above, throughout this period, OGDC was in the forefront of exploration and development. By any measure, this is an impressive performance.

However, the government is moving ahead with the second phase of privatization, that is, divestment and full-scale commercialization, which means OGDC would be treated by GOP as all other oil and gas companies. In August 1993, when the author interviewed a high official of the MPNR, no decision had yet been made about how to proceed with full privatization. The official stated: "we are not sure how to go about it. There are several options, we may either hive it off, let's say a small share is sold to the private sector, say 10 or 15%, or we may go all the way. I don't know, we
haven’t made up our minds yet. But this is something we are looking at right now."

Sui Northern Gas Pipelines Company

The second public sector organization in the petroleum sector to be put through the process of privatization is the SNGPL. It was in the second quarter of 1992, that the government began to actively consider the privatization of utility companies including SNGPL, SSGC, and WAPDA (EIU 2/1992, p 34).

Before privatization, the state and government controlled institutions, essentially state-owned banks and insurance companies held 89.6% of SNGPL shares while the Burmah Castrol held 6.7% and the remaining 3.7% were held by the general public. On July 27-28, the GOP offered, through

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49 Burmah Castrol resulted from Burmah Oil’s restructuring in which it sold off most of its global oil interests and bought Castrol, a British company which mainly produced lubricants from oil. As a part of this restructuring, Burmah Oil attempted to sell its holdings in Pakistan in 1986, which totalled 49.9% of equity and 78% of preference shares in PPL (Sui gasfields); 31.6 per cent interest in Burshane Pakistan (an LPG producer); 15% stake in PRL, and its interest in SNGPL to Royal Dutch Shell. But since Shell already held interests in Burshane, Pakistan Burmah Shell (a petroleum products marketing company), and PRL, it would have ended up controlling 37% of Pakistan’s oil and gas sector. Although the MPNR became the a strong supporter of this deal, it was equally strongly opposed by the Ministry of Production, the federal ministry responsible for state enterprises. Eventually, the deal came to the attention of the National Assembly and the national press and became highly controversial. The main issues debated were “what stakes foreign companies should be allowed to have in Pakistan’s energy sector and what restraints should be placed on the freedom of multinationals to agree among themselves on moves in and out of key economic sectors” (EIU 1/1987, pp. 15-16). Although no government sanction would have been required for the deal to go forward, had the two companies agreed to pay off a GOP guaranteed, $80m. IFC loan to PPL, the companies decided to withdraw from the all but signed deal in order to avoid further limelight and controversy.
underwriters led by the Muslim Commercial Bank, 51.27 million shares of which 47 million were earmarked for the general public. In addition, the government was hopeful of selling 34.18 million shares to a foreign corporation, as yet unnamed, at the same price it had set for domestic investors, that is, Rs 40.15 per share. The policy purpose of such an offering was to bring down state held interests in SNGPL to 40% and to sell 20% shares to a foreign collaborator.

However, the offering went badly. Only 15% of the shares were subscribed at the offered price. Financial analysts and investors were unanimous in blaming the debacle on the official offer price of shares, which in their opinion should have been Rs 15, that is about one-third of what the government had set. The three foreign companies also termed the offered share price excessive. The underwriters ended up with the unsold shares and are obliged to make another public offering in the future.

Inspite of this bad experience, the government was moving at full speed to privatize the gas utilities. In an interview conducted in August 1993, a high official of the MPNR stated that the government had finalized a technical collaboration agreement with a foreign company and that by the year's end, SNGPL would be fully privatized. As far as the

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50 There are strong indications that this company is Novacorp, a Canadian energy company.
privatization of SSGC is concerned, the same official disclosed that an agreement with a European company was in advanced stages of finalization to sell a substantial part of it, and that by June 1994, the first stage of privatization of SSGC would be completed.

The Power Sector

Background of Power Development

At the time of Independence, Pakistan had a very limited power generation and distribution network. As can be ascertained from different sources, it had a total generation capacity of 73 MW, out of which 20.7 MW was hydel power produced by three small power stations, two in NWFP and one in Punjab. The rest was generated by small, mainly diesel but some coal, thermal plants located in larger cities. In the 1947-58 period, only 46 MW of additional capacity was added. The overall stagnation in economy during the period of colonialism which continued into the first decade after independence, resulted in low levels of power demand. This demand was essentially created by the urban consumers who mainly consisted of members of the feudal class resident in cities, traders, and a sprinkling of professional households. There was little industrial demand for power in this period.

The GOP initiated development planning with the launching of the First Five-Year Plan in 1955. Its main emphasis was to
give impetus to industrial growth, in which Pakistan was pathetically lacking. Anticipating a progressive growth in the demand for power, the government established two autonomous public sector organizations in 1959 to plan, develop and manage the power sector (Ebinger, 1981, p.37). These were: Karachi Electric Supply Corporation (KESCO) and the Water and Power Development Authority (WAPDA). The former was originally established in 1913 as Karachi Electric Supply Company and produced DC power from a diesel powerplant for the city of Karachi. In 1951, the GOP had bought out majority shares of KESC, transforming it into a public limited company (Azhar, 1991, p. 2). In 1959, KESC was transformed into KESCO, a public sector organization with responsibility for providing power to the Karachi area, while WAPDA, a newly formed organization, was given the mandate to take over all existing powerplants and distribution systems and given the responsibility to organize power supply for rest of the country.

The evolution of the power sector was greatly influenced by two factors that occurred early in its history. The first factor was the resolution of the dispute between Pakistan and India over sharing of waters of the Indus basin rivers. The resolution of the dispute was brought about by the intervention of the USA and the UK, both of whom also committed to mobilize the capital needed for the required
projects necessary for the agreed sharing of waters. The signing of the Indus Basin Water Treaty in 1960 had a profound impact on the future of power in Pakistan. Besides the construction of numerous canals and other irrigation works, the Treaty also envisaged the construction of two large dams, Mangla and Tarbela, which were financed by multilateral and bilateral lenders and donors.

Of far reaching implication to the power sector was the fact that construction of Mangla and Tarbela dams provided a unique opportunity to add-on power generation facilities for nominal additional costs. In a fortuitous way, this made possible inexpensive generation of hydel power. As Azhar (1991) explains:

Since the complete cost of construction of Mangla and Tarbela dams and the creation of reservoirs had been justified and incurred on the basis of the irrigation requirements of the country, only the incremental capital cost of setting up the power houses were charged to the power sector. The result was that the cost of generation from these hydel stations was also very low, on account of the low capital cost component. No wonder WAPDA could afford to sell electricity to its consumers at much cheaper rates compared to other power utilities in the region (p. 11).
The second factor which greatly influenced the development of the power sector was the discovery of natural gas in abundant quantities in the early 1950s. The gas from Sui was priced at cost-plus basis according to the agreement between GOP and PPL, the discoverer and operator of the Sui gasfields. Thus, while it was profitable for PPL to produce the gas at the negotiated price, it was still quite inexpensive. As fuel costs are the biggest contributor to the cost of generation of thermal plants, availability of cheap indigenous gas made thermal power generation inherently inexpensive.

In a cyclical manner, the availability of cheap power fueled economic growth during the 1960s which in turn increased the demand for power in industrial, commercial, agricultural, and domestic sectors. Azhar explains that "the availability of cheap electricity had set the stage for spiralling increase in demand. The low electrical tariff was in fact a major contributor in the development of industry, agriculture, and commerce, as well as the general improvement in standard of living during the sixties and early seventies" (1991, p. 11).

With the coming on line of Mangla dam in 1967, the expected completion of construction of the huge Tarbela dam in the mid-seventies, and the planned even larger Kalabagh dam, power planners in the late 1960s and the early 1970s felt
confident that the country would easily be able to meet future growth in demand for power. For after all, the existing and planned generation was still much below the potential of these dams, and there was a large room to expand capacity. Clearly, in the 1960s and the early 70s, there was a general consensus among Pakistan's power planners, that its power future lay in the development of its hydel capacity. The only policy problem that was considered to be serious enough to be given attention was how to complement diminished hydel generation capacity during three or four winter months in which the flow of rivers decreased considerably. The solution was found in the construction of a few imported oil-fired powerplants that would be used to complement winter hydel generation and meet peak demand at other times, when need be. This strategy of course made sense in the period prior to 1973, when oil was cheap and its real price had been showing a long-term declining trend.

Then came the oil shock of 1973. In the wake of the oil price hike, the Bhutto government ordered the conversion of all fuel oil based powerplants to be run on domestic gas, some of which were fortunately of the combined cycle type. The GOP also started looking into the possibility of alternative sources for power as it was clear that Pakistan could not afford the expensive imported oil. The slow but discomforting realization that no major gas finds had occurred since the
early 1950s, that the Sui reserves were not inexhaustible, and that natural gas could be used for more economically sound ends, such as petrochemical and fertilizer production, added to the desirability of alternative fuel sources power generation. This need was only accentuated by the gathering opposition to the planned construction of the Kalabagh dam due to its alleged negative effects on the provinces of Frontier and Sindh.

The Bhutto government looked into two alternative sources: coal and nuclear, but only pursued the latter seriously. This option was given a boost by International Atomic Energy Agency's two reports in the early and mid-seventies that expounded the rationality and desirability of developing the nuclear power industry in Pakistan. Consequently, a long-term nuclear power program was formulated that, in its final form, envisaged the construction of up to twenty plants by the end of the century. This program was to be implemented under the aegis of the Pakistan Atomic Energy Commission (PAEC). However, the test explosion of a nuclear bomb by India in late 1974 and subsequent pronouncements by Bhutto that Pakistan would match the former's new capability, created suspicions among western countries, which were to supply the technology to Pakistan. Consequently, western countries changed their minds and in the following years, transfer of nuclear technology was forbidden to Pakistan under
an informal embargo instigated by the United States, and eventually, the entire nuclear energy development plan, based on IAEA's own feasibility assessments, had to be shelved.  

At the time of the Bhutto's ouster by the coup d'état led by General Zia, the country's power situation was basically in balance. The hydel capacity created under the Indus basin programs and the ample investments made in the Bhutto years on the construction of thermal powerplants (Azhar, 1991, p. 15) were sufficient to meet the growth in demand.  

**Power Policy during Zia Period**

During the preparatory work for the formulation of the Fifth Five Year Plan (1978-83), an important power policy debate took place. On one side of this debate were WAPDA and PAEC, and on the other side were bilateral and multilateral lending agencies (Ebinger, 1981, p. 119-122). The main bone of contention was the future rate of growth in the demand for power. The former held to the position that power demand would continue to grow at the historic rate of nearly 12% during and beyond the Fifth Plan. Yearly demand in

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51 Pakistan continued its efforts to acquire a nuclear powerplant commercially but its efforts did not bear fruit until 1988 when China agreed in principle to build a 300 MW powerplant at Chasma in collaboration with PAEC. This deal was finalized at the end of 1993 and construction work has begun.

52 It may be that the depressed level of economic activity in the final years of the Bhutto regime was artificially responsible for this balance. Demand for power grew at only 7% during Bhutto years while it had been increasing at approximately 12% prior to that.
the 1965-77 period had increased at the average rate of 11 per cent. Ebinger (1981) writes that based on their calculations and "understanding" of not only the power situation but also the national interest:

Both WAPDA and PAEC argued that failure to expand capacity would severely retard economic growth. The July 1977 draft, for instance, called for laying the foundations for a tripling of generation capacity between 1978 and 1987. Installed capacity was to increase by 192%. This increase was to be met by a 50 percent increase in hydel power, a 13 percent rise in nuclear (Chashma), and a 36 percent increase in thermal power (including a 500-MW [coal] facility at Lakhra). Whereas existing electrical-generation capacity consists of 59 percent gas turbine and steam, 35 percent hydel, and 6 percent nuclear, the plan stated that the capacity would be 45 percent hydel, 45 percent thermal, and 10 percent nuclear (p. 119).

On the other hand, basing their projections on the poor GDP growth during the 1971-76 period, in which demand increased by only 7 per cent annually, the lending agencies believed that it would grow by much less. Challenging the 12% growth in demand projected by WAPDA, they brought pressure to bear on the latter to reduce it. After Bhutto's overthrow, they succeeded in convincing WAPDA to lower its power demand
projection to 10.8 per cent. The lending agencies, especially the USAID, were also strongly critical of the WAPDA/PAEC investment plans to increase generation capacity and placed more emphasis on cutting transmission and distribution losses (ibid, p. 120).

The Fifth Plan was approved after Zia took over. The winner of the above debate, finally, were the multilateral and bilateral lending groups as is evident from the fact that the "energy/GDP coefficient as it finally emerged in the Fifth Plan . . . did reflect the belief held by Pakistan’s major international donors that far less energy could be used per unit of GDP if power losses and theft were curtailed" (Ebinger, 1981, p. 121). This meant that the new development plan laid less emphasis on immediate need for expansion in power generation capacity as WAPDA and PAEC would have liked.

The power sector development was to suffer an even more serious blow soon. In term of economic policy, the Zia martial law regime favored private sector development and de-emphasized public sector growth. As Azhar writes, "the changed sectoral priorities of the new Government proved to be the coup de grâce for the already tottering supply-demand balance of electrical energy in Pakistan" (1991, p. 15).

In the crucial late 1970s to early 1980s period, when growth in demand was being spurred by many factors, the Zia regime chose to ignore the warning of WAPDA and PAEC planners
and others who "... had been crying themselves hoarse for the past many years that a power shortage crisis was brewing. ..." (Azhar, 1991, p. 7). Thus, due to inadequate power sector investments, a serious and expanding gap started to emerge between existing supply and the demand for power. After 1982, WAPDA and KESC have been regularly resorting to the ominous practice of "load shedding", in order to ration existing power supplies so that those connected to the network could be supplied at least some of the time.

### Deregulation of the Power Sector

The confluence of three factors that emerged in the 1982-85 period led to the adoption of the policy of deregulation and privatization in the power sector. These factors were: (a) the emergence of a widening gap in the supply and demand of power, the genesis of which I have discussed above; (b) a shift in the lending policies of external financial organizations led by the World Bank, on which the GOP had come to depend on for financing development projects, which I shall discuss in Chapter VI; and (c) the pro-private sector ideological orientation of the Zia regime, which I shall also discuss in Chapter VI.

Deregulation of the power sector, which had been considered at least as early as the middle of 1983, became

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53 Statement of Mr. Raja Sikander Zaman Khan, Federal Minister of Water and Power (EIU (3/1983, p. 16).
official policy with the announcement by the government in early 1985 that it was willing to buy power from the private sector if the latter set up powerplants. Later in the year, the Federal cabinet’s chief economic policy body, the Economic Coordination Committee announced the terms on which the private sector could participate in power generation. These terms provided that GOP, through its agency WAPDA, would purchase a mutually defined quantity of power at an agreed price and that foreign firms could participate in power generation on the same terms as were applicable to ordinary industrial investment. The GOP opened up all areas of the power sector for foreign and domestic private investment except the large hydroelectric sub-sector.

In retrospect, it is quite clear that the GOP took this decision in desperation as a possible way out of the dire straits it had got itself into as a result of its historical policies of dependence on external resources (capital and technology) for power sector development, inadequate power sector investments during the 1978-83 period, and concomitant unmanaged growth in domestic sector consumption. This is obvious from the fact that when this completely new policy direction was adopted, no serious analysis or policy preparation work had been done regarding how best to approach deregulation while at the same time preserving the national interest. All crucial policy parameters were left
undetermined and not even a preliminary model for private sector investments was developed regarding the type of primary fuel, size of project, financial structure, capitalization of profits, etc. A political decision to deregulate the power sector had been taken and nothing more. On this Azhar correctly remarks:

To define the concept of private sector participation in power generation had been relatively straightforward, but to devise the tools that would translate this concept into reality proved to be much more arduous. The concept was a pioneering one at least in the context of the third world, and no model existed elsewhere which could be adapted to Pakistani conditions. In fact, no clear ideas existed as to what should be the yardsticks and criteria used for the evaluation of these proposals (1991, p. 198).

Given the fact that the GOP did not put forward a well developed model that incorporated the multifarious national development dimensions, stronger and more cohesive players with capital resources, such as the World Bank, foreign private corporations, and foreign commercial banks, all of whom are committed to the world-view of complete freedom for private foreign investors to operate in the manner of their choosing, and who are fundamentally suspicions of the idea government controls and public sector enterprises, were able
to play the dominant role in devising the model that was to finally emerge after many years of contesting negotiations. The model that finally emerged and is incorporated in the current power policy was actually sculpted during the negotiations over one private sector project, the Hubco powerplant. I shall describe the current policy in detail below. But first, I discuss what expectedly became the most contentious issue that dogged the development of the deregulation policy, and whose history of contention shows how the GOP eventually came to accept the conditions demanded by foreign investors, despite resistance from its power agencies like WAPDA and KESCO.\footnote{It should be noted that with the building momentum for the proposed breakup and privatization of WAPDA and KESCO, at least since the beginning of 1991, the ability of these organizations to resist this has become progressively weakened. The recent law passed by the National Assembly, which amended the 1958 WAPDA Act taking away the public monopoly mandates of both organizations, has of course severely emasculated their political clout.}

The controversy centered around the tariff\footnote{Official publications on the power sector use the somewhat misleading term "tariff" instead of the more clearer "rate" or "price". I have retained the term "tariff" in order not to cause any confusion.} issue, that is, the price at which the GOP has to commit itself to buy power from private sector producers.

**Tariff Incentives to Private Investors**

Initially, there was a large discrepancy between the tariff which private investors were demanding and what the GOP offered. For example, in the case of a coal-fired plant proposed around the middle of 1985 by a private joint venture
of Habibullah Energy and Siemens, the investors demanded a tariff of Rs 1.25/Kwh. The GOP rejected the project as the proposed rate was deemed to be too high at a time when WAPDA’s own thermal plants were generating power at a cost of Rs 0.70/Kwh. But, nearly three years later, the GOP was compelled to revise its offer as no other private power investor came forth. The GOP offered to the same group a power purchase price of Rs 0.93.5/Kwh for their proposed 2X15 MW coal-fired powerplant to be set up near Quetta, and Rs 0.62/Kwh for their proposed 2X100 MW powerplant to be setup near the coal producing area of Lahkra. In both cases, load factor was assumed to be 65 per cent. Both of these revised GOP offers were still not acceptable to the private investors.

The real basis for the discrepancy in tariffs lay in the fundamentally different objectives of each party. The GOP’s objective was to purchase power at the lowest cost at which it could be produced, so that it could supply it to the consumers at the lowest possible rate. To obtain an idea of what it could be, it looked at the cost of production of similar WAPDA powerplants. WAPDA plants could produce power at a lower rate because it was a public sector organization and did not add profit costs to the sale price. Maximization of profits, on the other hand, is the paramount motive of private investors. They, therefore, demanded much higher tariffs. Acquiescence to higher power purchase tariffs was eventually the price that
the GOP had to pay in order to attract private capital to the power sector.

Negotiations over power purchase tariffs caused much bad feelings between the GOP and private investors. The proposed private sector projects which the government was anxiously trying to solicit in order to deflate political pressure being caused by power shortages, got bogged down and delayed. WAPDA continued to object to the relatively higher tariffs being demanded by private investors, mainly foreign ones, and argued that it could produce the same power cheaper given similar access to resources. In order to break the logjam, GOP finally broke away from the practice of comparing demanded tariffs with equivalent WAPDA costs of production. Instead, in determining the acceptability of tariff rates, it decided to take into account the variation in cash flow needs of different projects over time because of the differences in their financial structures. A part of this approach to determining tariffs was the guaranteeing of 18 per cent rate of return on equity. In the words of an official:

Now, when we negotiate a tariff with a private party, we have to go over the various legitimate cost items. One of the cost items is obviously the return on equity, how much is the return that you expect, how much is the return we are willing to give you. Now, because of this expectation and what is possible, a lot of negotiations
and feedback situations arose. And ultimately, we found that 18 percent return on equity is something which does interest the private parties, they would not say thank you much and we are not interested. Eighteen percent is something in which most of the parties would be interested . . . and this is in real terms. They can build up their financial models in such a way that one of the line items would be return on equity equal to 18 percent of their investment and we won't have any objection to that. Anything more than that, maybe we would like to discuss and find the rationale but 18 percent or less than 18 percent would be immediately acceptable. That is something which is quite a big comfort to the private sector. 56

Apparently it was not such a big comfort to the private investors as companies continued to object to fixing the rate of return on equity even though it was reasonably high. Subsequently, this approach was altered by the new government that came to power as a result of the October 1993 elections. Soon after assuming office, it constituted a Task Force on energy which gave its recommendations at the end of January 1994. On the basis of the recommendations, the Federal Minister for Water and Power announced a new power sector

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policy in March that offered a ten-year fixed tariff in US dollars of $0.065/Kwh or approximately Rs 2.08/Kwh at the then prevailing rate of exchange. Besides this, it also offered an additional premium of $0.025/Kwh for projects over 100 MW that come on line by the end of 1997, thus bringing their tariff up to $0.90 or Rs 2.88/Kwh. Compared to this, for example, the tariff that was negotiated earlier with Hubco under the 18 percent return on equity formula was Rs 1.362/Kwh.

Non-Tariff Policy Incentives for Private Foreign Investors

In addition to the highly lucrative tariff of $0.090/Kwh, the GOP has offered other economic and financial incentives to foreign private investors in power generation that are of direct interest and relevance to our study. These are enumerated below:

1. No restriction on the type of fuel used by private sector powerplants. The type of fuel used can also be imported directly by the private sector.
2. Tariff is to be indexed to offset exchange rate changes and domestic rate of inflation so that revenues and profits of investors are protected from free play of economic forces.

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57 It should be noted that this price does not include transmission and distribution costs which the utility companies will have to defray by charging the end users. The price for end-users, therefore, would be higher than this. By way of comparison, the average nominal price of electricity sold to all end-users by all utilities in the U.S was $0.066 cents/Kwh for 1990 and was estimated at $0.068 for 1991 (Annual Energy Review, 1991, p. 229).
3. 30% of total cost or 50% of the foreign exchange requirement of approved private sector projects can be financed from Private Sector Energy Development Fund (PSEDF). Administered by a GOP's autonomous financial organization, National Development Finance Corporation (NDFC), the PSEDF was established by the contributions of the World Bank, Export Import Bank of Japan, US AID, Nordic Investment Bank of Scandinavia, the Governments of Italy and France, US Exim Bank guaranteed credit. It is anticipated that contributions will also be received by the UK's ODA, Germany's KFW, and Canada's CIDA (all of these are official bilateral lending and aid giving agencies of respective governments). However, this credit is mostly tied meaning that the borrowing party is restricted to purchasing equipment and/or services from the country of origin of the loan funds. Services or equipment thus purchased is priced much higher compared to competitive international market prices.

4. The convertibility of currency (rupees into dollars), availability of foreign exchange for the purpose of required imports (eg. of fuel or coal), debt service, profits, and capital repatriation is fully assured.

5. Private power companies shall pay no corporate taxes.

6. Private power companies shall not pay any customs duties, sales tax, or import surcharges.
7. Private power companies can employ foreign managerial and technical staff without any government permission or restriction.

The government hopes that as a result of the new incentives, especially the higher tariff, the private sector would invest up to Rs 102 billion in new power generation facilities over the Eighth Plan period (1993-98). Out of this, the projected foreign exchange investments are Rs 86 billion while local currency investments are Rs 16 billion. This volume of investment, coupled with other measures such as demand regulation, reduction in transmission and distribution loses, and better operational efficiency of existing powerplants is, in the view of the government, sufficient to eliminate power shortages by the end of FY 1997. Whether this actually happens remains to be seen. It is not the first time that policy makers have promised the elimination of loadshedding within the "next three to four years". In the present case, the fact that a lot of emphasis has although been correctly put on demand side management/regulation (projected to cut peak load by 1800-2000 MW in five years) and improvement of operational efficiency (projected to add 460 MW to system), these measures have proven to be the most difficult to implement. The fact that much of the load that is to be saved by demand regulation aims at cutting the luxury
consumption of the upper classes\textsuperscript{58} who carry tremendous legal, para-legal, and illegal political clout, and are not shy of using it to their advantage, makes one extremely skeptical about the implementability and effectiveness of such measures. This will be especially difficult in the present period of the relative strength of the upper classes due to the current ascendancy of the "free enterprise" ideology.

Actually, if demand side management fails and operational efficiency measures falter, the projected investment required over the Eighth Plan period to satisfy the demand of those connected to distribution network would be more than three times that of what the government currently expects the private sector to invest (Rs 329 billion instead of Rs 102 billion). This was stated by the Federal Minster for Water and Power while announcing the new power policy:

With demand growth rate anticipated at 8.8 per cent, if traditional planning approaches were followed [that is, without effective demand side regulation/management and better operational efficiency], a minimum of 7000 MW of generating capacity would need to be added to the system to enable the existing shortage to be gradually overcome by the year 1998, he said.

\textsuperscript{58} The aim of demand side regulation/management component of the power policy is "to control and regulate the growth of the unproductive component of demand, and discourage wasteful and expensive patterns of consumption" (PTOE, March 4, 1994, p. 10).
The Minister added that addition of 7000 MW of generation capacity, and associated generation and transmission facilities would require a total investment outlay of Rs 329 billion over five years.

About the present projections of private sector investments, he said it was around Rs 54 billion . . . (PTOE, March 4, 1994, p. 10).

Notwithstanding the fact whether the new power policy attracts or fails to attract the required private investments, or whether the demand side regulation would indeed shave off 2000 MW of luxury consumption, or how much gains are made in operational efficiency of powerplants after planned privatization or in the current status, it is obvious that the authors of the current policy have not taken into consideration certain crucial dimensions which must be addressed in order to lay the foundations of a self-sustaining development strategy. These pertain to the particular position that Pakistan occupies in the world system, specifically as a result of its dependency status. Ironically, these dimensions have been ignored by policy formulators despite the fact that the Prime Minister, while receiving the report of the Task Force on Energy "directed officials in the energy sector to think in terms of the long-term solutions rather than short-term jugglery of facts and figures. 'The people are the object of our initiative and all
our policies must benefit the common folk’ she said" (PTOE, January 28, 1994, p. 12). In the same speech Prime Minster Benazir Bhutto also stated that "We want to lead Pakistan into the next century without loadshedding and the policy framework currently being drawn pursues that objective" (Ibid). Quite contrary to her pronouncements, this policy framework, as we shall see in the following chapters, has been tailor made to address the demands of international financial institutions and the short-term financial contingencies which the GOP is facing.

Privatization of the Power Sector

Although the idea of privatization the two power utilities has been discussed since the mid-eighties, it was not until the beginning of 1992 that the World Bank put increased pressure on the GOP to proceed with it urgently. The pressure came in the classic stick and carrot form of a mixture of threats and inducements. The EIU wrote in its second quarter issue of 1992 that "The World Bank is reported to have threatened to stop lending to WAPDA unless meaningful moves were made to render it more commercial. The Bank is offering $100 mn to help ‘restructure’ the authority and has promised to mobilize other donors as the privatization process takes shape" (2/1992, p. 34).
Consequently, in May 1992, the GOP set up a Power Sector Privatization Commission to formulate procedures for divestment, evaluate purchase offers, carry out the sales negotiations, and draw up a regulatory framework for the operations of private sector power companies. Earlier, a U.S. consultancy firm Energy International Resources was hired by the World Bank to draw up the privatization plan for WAPDA. This firm has been instrumental in devising the privatization plan for Pakistan's power sector.

Energy International Resources recommended a four-phased privatization plan. In the first phase, assets to be sold were to be selected and the necessary preparation for their sale was to be completed by the end of 1992. The second phase envisaged the reorganization of these assets into independent profitable units, as well as the sale of at least some such units. This phase of the plan also called for the setting up of a National Regulatory Authority to regulate tariffs and eliminate cross-subsidization of the domestic and agricultural sectors by the industrial and commercial sectors. In the third phase, which was proposed to begin in 1994, all of the thermal generation units of WAPDA were to be sold off to the private sector investors. WAPDA was to retain only the large hydro-electric facilities. During the final fourth phase, the sector was to be fully privatized with multiple private generators selling power to private distribution companies.
Energy International Resources strongly recommended that all new powerplants should be in the private sector and only if the private sector failed to invest should investments be made by the public sector (EIU 3/1992, p 28).

The actions that the GOP has taken since then to privatize the power sector have closely followed the above plan although the implementation is considerably behind schedule. One of the main problems here has been the enactment of necessary amendments to the constitution to permit the privatization of WAPDA. The political instability in 1993 which saw five different governments in power, precluded such a step. However, the care-taker government of Prime Minister Moeen Qureshi, a former Vice President of the World Bank, took the initial constitutionally-required step on September 13, 1993 by securing the approval of the Council of Common Interests for the necessary amendments to the 1958 WAPDA Act. These amendments were necessary to legally clear the way for the privatization of WAPDA.59 Shortly thereafter, on September 21, the caretaker government also ordered the privatization of KESCO in which the government owned 80% shares. The Privatization Commission was given the responsibility to devise a plan for selling off this utility.

59 WAPDA’s privatization was eventually cleared in May 1994 when the parliament passed a bill making the necessary changes in the 1958 WAPDA Act.
In the meantime, groundwork for the privatization of WAPDA's assets has been proceeding ever since the Energy International Resources, a U.S. consulting firm, paid for by a loan extended by the World Bank, developed the plan for Pakistan's power sector privatization. However, numerous problems have being encountered in the actual implementation of the four-phase strategy devised by the firm and adopted in essentials as policy by the GOP. Basically, there are three main problems: The first concerns ascertaining and establishing the sale value of assets to be sold; the second concerns financial matters such as the problem of assumption of the existing debt and unpaid bills; and the third concerns the lack of interest shown by the private sector in investing in the area of power distribution.

In order to tackle these problems, in February 1994, "World Bank and Asian Development Bank teams held extensive meetings with . . . the Privatization Commission to discuss and complete the preparatory work for the privatization of WAPDA . . . (PTOE, February 25, 1994, p. 4). It is to be expected that these organizations are likely to put pressure on the government to lower the sale price and provide additional perks to the foreign and domestic private sector.

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60 The current cumulative total of WAPDA's bills amounts to nearly Rs 12 billion, more than half of which are owed by government agencies and the remaining by the private sector.
investors. This is more so likely in light of the failure of the first attempt to dispose of WAPDA's plants in 1993 when none of the 11 thermal units and the 8 distribution facilities earmarked for privatization succeeding in attracting any serious interest on the part of investors.

It is very difficult to give an accurate prognosis of how privatization of WAPDA and KESCO would actually proceed and what the consequences are going to be. But given the corrupt political and social context of a peripheral capitalist underdeveloped country, indeed it would be a miracle if the privatization of the power sector proceeds smoothly and without damaging the overall capacity of the country to produce and distribute power, at least in the short-run. In the longer run, the crucial thing to watch would be whether private foreign investments in the power sector are in congruency with, and help in achieving the larger goals of self-sustaining national development, or whether they shall merely reinforce the pattern of dependent development that Pakistan has thus far followed.

In the next chapter, I shall explore these and other concerns and issues which the current policies have raised. I shall also look into the ramifications of the current policies for the future development prospects of the energy sector, given the fact that such policies are being adopted within the
context of dependent status of Pakistan vis-a-vis the world capitalist core.

Conclusion

Between the late 1950s and the middle of 1980s, Pakistan’s petroleum exploration and power sector polices, were characterized by: (a) the norm of 50-50 production sharing agreements in joint ventures with foreign oil companies; (b) the gradual expansion of the petroleum public sector; and (c) the development of the power sector based on state-ownership and concessional non-commercial foreign loans obtained from bilateral and multilateral sources.

In the late 1970s and early 1980s, due to the rapid growth trend in the demand for commercial energy on the one hand, and the insufficient state investments in both power and petroleum sectors on the other, Pakistan began to face a growing energy crisis. In the petroleum sector, this crisis manifested itself, in conjunction with escalating oil price, as rapidly ballooning oil import bill. In the power sector, it appeared as shortages resulting in the practice of loadshedding. At the same time as the crisis intensified, the traditional sources of foreign assistance began to dry up. In this changed context, the state was unable to meet the energy sector’s investment needs through either foreign aid or internal resources.
As a result, by the early 1980s, the previous policy norms began to erode quickly. The need to acquire alternative, private sources of investment funds became the driving force of energy sector policies. Due to the extraversion of Pakistan's economy as a result of three decades of dependent development, the domestic private sector was not in a position to supply the required technological or capital resources. The only choice was to seek them from foreign private investors. In the next few years, both the exploration and the power sector policies underwent radical changes which reflect these compulsions. These changes are characterized by: (a) acceptance by the GOP of a smaller share in production agreements (conversely, foreign companies share has gone up); (b) privatization of the petroleum public sector; and (c) the deregulation and privatization of the power sector. In consequence, the state's role and responsibility for the development and management of the power sector is being replaced by the private sector.
Chapter - V

DEREGULATION AND PRIVATIZATION: ISSUES AND RAMIFICATIONS

Introduction

In the previous chapter, I laid out the course of development of the petroleum and power sub-sectors and traced the evolution of the policies of deregulation and privatization in each. Based on the patterns and tendencies revealed therein, and additional information gathered through interviews with energy sector officials, in this chapter, I identify and discuss the leading concerns, issues, and ramifications of the deregulation and privatization process and policies. Insofar as it is possible, I abstract from the concrete developments of the two sub-sectors and treat these together. This is necessary in order to discover and show the common forces at play in both of these sub-sectors. This also corresponds to a shift from the fifth to the fourth level of analysis of our methodological framework as laid out in Chapter-II.

In the various interviews conducted with officials in Pakistan's energy sector during July and August 1993, some major concerns were expressed which are summarized below. In addition, there are a number of issues and ramifications of current policies of deregulation and privatization that are far more fundamental in nature and of greater importance. But these can only be "seen" and understood by using the framework
of the theory of dependent development. Sadly, none of the officials interviewed showed any awareness of these crucial issues which are likely to have a determining affect on the future development prospects of the country. Below, we shall summarize these as well. But first, the concerns expressed by officials.

Concerns Expressed by Energy Sector Officials

The officials interviewed expressed four major concerns regarding government policies to deregulate and privatize the energy sector. These are discussed below.

Privatized Companies may not follow Governmental Priorities

The GOP follows certain specific policies to promote socio-economic development in the remote areas of the country. Among these policies, the supply of electricity and petroleum products has a high priority. Similarly, many rural areas have not yet been connected to the national energy supply network, whether it be the national power grid or gas distribution network or marketing of petroleum products. For instance, according to a 1991 survey of domestic energy consumption, only 41 per cent of national households had access to electricity (HESS, 1993, p. 22). Providing energy to such areas is a costly, but nevertheless, necessary undertaking, both for political and developmental reasons. Judged strictly on the basis of economic criteria, it is not cost effective to provide energy to the remote and rural
areas. Nevertheless, the government has been doing so because it can afford to ignore the pressure of economic motives for the purpose of higher obligations to greater public good.

A common concern which officials expressed was that after full privatization, the energy companies may not follow government's guidelines on socio-economic development, as supplying remote areas with the required energy products will not be profitable from a strictly commercial point of view. Thus, private energy companies may not only not provide energy to new areas but may even decide not to do business in remote or rural areas which have already been covered by public sector supply networks. In the words of one official:

a private company is always going to look for profits and nothing else, whereas the government has to look in the wider sense. Like Sui Northern [after privatization] may decide that there is no point in providing gas to Gilgit\(^6\) because it is not profitable. . . . The same applies to power. Rural electrification may not be economical for WAPDA if it is privatized or any private company for that matter.\(^6\)

\(^6\) Gilgit is a remote city located in the difficult mountainous terrain of northern Pakistan. It straddles the strategic road link to China, popularly known as the Silk road.

\(^6\) Interview with an official of Ministry of Petroleum and Natural Resources, Islamabad, August, 1993.
Deregulation/privatization Without Regulatory Framework

While the government (under pressure from its creditors, as explained in the next chapter) has been moving hastily to privatize state energy enterprises, it has done very little to create independent regulatory authorities appropriate for the task, notwithstanding the profuse and ritualistic rhetoric that flows from it regularly. In the telling words of an official:

> [f]or privatization, we are lacking regulatory framework, we don't have any experience, we are extremely short of manpower in our department. . . But over and above, the lack of a regulatory framework in the country, especially in this sector [gas], is a big drawback. Though we are undertaking certain studies now on how to enhance the regulatory framework, that will take time. Even if we just start off with that, we cannot anticipate any improvements here in the next five or six years. But privatization is coming very shortly. Unless regulatory control is there, the private sector may initially take us - the customers - for a ride.63

Expressing a similar view, another official said the following regarding the lack of regulatory authority while privatization is being pushed full steam:

... a major worry is, particularly in the utilities is that these become monopolies in the private sector. ... from my personal point of view, I think it is absolutely essential to have a proper regulatory mechanism in place before these bodies are completely privatized. 64

However, the creation of independent and viable regulatory bodies is still far away. And yet privatization is proceeding in full swing. For one, the existing laws would have to be changed. But given the partisanship which has become the hallmark of the Pakistani politicians, a quick legislative process regarding this may not be so easy to achieve. Even if this is achieved, there shall be other formidable issues that would have to be properly resolved in order to create viable regulatory bodies. Among these, to name a few, are 1) the problem of finding honest and competent personnel; 2) the creation of an up-to-date information system; and 3) putting in place mechanisms that would prevent the companies from unduly influencing the regulatory process. Resolving these practical administrative issues would certainly take some time. Doing this in a haste, for political expediency or for formal satisfaction of conditions imposed by the World Bank, would only result in the creation of inept and corrupt institutions. Furthermore, even in the

best of circumstances, it normally takes a long time for a new administrative process to mature and become effective.

Given the urgency with which the government would like to proceed in this matter, it is more likely that the regulatory bodies will be hastily created without the necessary preparatory work. As a result, these bodies would lack necessary expertise, information, and other material resources. In such circumstances, it would be highly likely they would come to depend on same private companies that they are supposed to regulate for needed information and analysis. That this is a realistic possibility is evident from an offer made to GOP by British Gas, one of the top contenders in bids to acquire shares in SNGPL and SSGC. According to EIU, "British gas, probably the most successful of UK’s privatized companies, has offered to help the government draw up a regulatory framework for its denationalisation plans." (2/1992, p.34). It is not known to the author whether this offer was taken up or not. However, an Asian Development Bank (ADB) financed study is currently underway on matters related to the creation of a regulatory framework in the gas sector. Expectedly, this study will be the only one and the recommendations made by the consultants would be accepted as policy as has been the historical practice. These recommendations are bound to give priority to the view of multilateral lenders on this subject.
Producer Price Increase

While the government has raised the producer price of crude oil and gas to international levels, it has so far resisted full deregulation of retail prices of energy products.

The problem of deregulating consumer prices is quite complex and it also has serious political ramifications. One official at the Ministry of Petroleum and Natural Resources put it this way:

If you look at consumer pricing, that deregulation is probably some time away. I suppose it is best to have a deregulated environment as far as pricing is concerned if there is enough competition in the marketing of petroleum products. Gas, deregulation of pricing, I don't think we are on it right now. But this would perhaps happen sometime in the future. There is a shortage of gas, there are monopolies amongst the distributors, there are monopolies all over in this sector except for producers, so that will probably take some time.65

Besides the technical issues involved, the government is keenly sensitive to the political ramifications of increases in energy prices as these affect all segments of the population, especially in the more volatile urban areas. It

65 Interview, ibid.
is for this reason that despite the consistent pressure from multilateral lenders, especially the World Bank, the government has raised energy prices very cautiously. On this, an official interviewed by the author responded by saying:

The question is why can’t we keep increasing the consumer price, the answer to that is that there is purchasing and buying power of the consumer which creates the political limits. The political limits have been observed in the past couple of years. We couldn’t comply with the World Bank covenant simply because the political governments could not take decisions and they are just deferring this."

According to loan covenants signed with the World Bank, the GOP was required to raise the domestic consumer price of gas to 100% of border price of fuel oil by June 1993, but it did not do so. In the case of industrial and commercial consumers, the World Bank covenants require the price of gas to be equivalent to the domestic price of fuel oil. In order to fulfil its obligations to the World Bank, the government has been consistently increasing the consumer price of energy products, but in piece meal fashion.

In the gas sector, the discrepancy between the higher producer price sanctioned by the government and what it allows

"Interview, Directorate of Gas, Ministry of Petroleum and Natural Resources, Islamabad, August, 1993."
to be charged to consumers, has created the problem of large recurring deficits for public sector distribution companies. Presently—and this can only be a temporary arrangement—this deficit is being improperly covered by spending monies that are collected for a special fund called the "development surcharge pool". The development surcharge is a levy imposed on consumers which is over and above the utility's government allowed selling price. Development surcharge collected by the gas utilities (as part of normal billing) from consumers and deposited with the government under a separate account category. Monies thus collected form a capital pool.

The original purpose of this pool was to finance the expansion of the gas transmission and distribution network. But after the government agreed to pay higher prices to producers (prices at parity with fuel oil) without allowing gas supply companies to equivalently raise the consumer price of gas, the latter began to run a deficit. This deficit is now being covered by diverting monies belonging to the development surcharge pool. Consequently, this pool has been shrinking and, in future, it will not be able to finance the requisite expansion of the transmission and distribution network.

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67 The selling price of utilities is composed of 1) price paid to producers, 2) transmission and distribution costs, and 3) profit margin for distribution utility. The price that the consumer actually paid was thus the utility's selling price plus the development surcharge.
Two problems can be identified here: (a) money collected from the public by the government for one purpose is being diverted to another; and (b) the expansion of the transmission and distribution network has been jeopardized by the diversion of this fund to pay for higher prices to producing companies. In the Pakistani political context, which is effectively devoid of any accountability, the first question is moot. As regards the second, the government has been compelled to rely on the commitment of foreign companies to make the necessary investments for the expansion of the gas transmission and distribution network. According to a gas official:

"the government has made it known to the foreign companies that they would have to expand the transmission and distribution networks that would be required to utilize the newly discovered gas. The outcome of this will be known when these companies take up exploration and development activities.\textsuperscript{68}

The GOP is indeed taking a major risk by relying of foreign companies instead of the development surcharge mechanism to finance the expansion of the gas distribution system. Apparently, no contingency plans exist in case the former fail to meet expectations. In view of this, the

\textsuperscript{68} Interview, \textit{ibid}.

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depletion of the development surcharge pool ought to be of serious concern to the policy-makers.

Lack of Qualified Personnel in Ministries

Numerous changes spawned by policies of deregulation and privatization are throwing up new management challenges for the directly concerned departments and bureaus such as the Ministry of Water and Power, and the Directorate of Gas in the Ministry of Petroleum and Natural Resources. Up until recently, the personnel of these bureaus had only to deal with policies, problems, and issues related to the state sector enterprises for which they were responsible. For successful performance of functions, what officials required previously was mostly technical expertise. They had little or no exposure to dealing with financial matters, the business environment, capital markets, etc.

The shift to deregulation and privatization requires officials to be knowledgeable in financial matters, if they are to make informed decisions. Ministries would have to substantially retrain their existing personnel as well as hire new ones as the work load is bound to increase. An official at the Directorate of Gas explained the matter quite candidly:

There are financial management constraints also. With this technical background, people do not really have the financial expertise over here. If we bring in people from the financial institutions, there is a lack of
opening for them [under the present system], and they are not interested. That is one of the major institutional problem of the department. . . In fact at the moment, we are working with borrowed people from various institutions. It needs to be institutionalized because the number of people we had 20 years back, the strength is more or less the same, but with the volume of work that has come up . . . we have about plus-10 LPG marketing companies, then we have to look at gas pricing on a biannual basis, etc. The work has increased, I think ten-fold but our staff strength has remained the same. In order to make its [Directorate of Gas] work effective, this needs to be strengthened. Otherwise, I don't think there would be an effective monitoring over the system. Again, after privatization, it would be all the more essential to streamline this.69

Fundamental Issues Ignored by Current Policy Framework

The dominant policy position rests on the logic of construction of the energy problem in the following manner: 1. Both the demand for power and the demand for petroleum products is increasing rapidly, resulting in power shortages in the former case and high oil import bill in the latter;

69 Interview, ibid.
In order to maintain planned GDP growth levels, substantial investments would have to be made in the energy sector, up to $20 billion in the next 10 years;

3. The government does not have the monies to invest in the energy sector to meet (a) growing power shortages, (b) enhancing exploration and development of oil and gas;

4. If government accedes to the demands of foreign investors, and makes policies favorable to them, they will make investments in the energy sector;

5. Thus, the private sector, primarily foreign investors, will take the leading role in solving the energy problem, while the task of the government is to make sure that liberal inducements and incentives are given to keep them in Pakistan.

This is the crux of the current official policy thinking, and more than anything, it reflects the political and economic relations of dependency into which the country has sunk deeper over the last decade. In the next chapter, I will show how this view came to be the dominant policy framework. Here, I will briefly identify the issues that the dominant framework either underestimates or those that it leaves out of policy analysis entirely.

In reading official and non-official publications on energy, and in interviews with government officials involved in formulating and implementing energy sector policies, one thing that quickly becomes clear is that the energy policy
problematic is structured without taking into consideration the implications of Pakistan's structural linkages with the world capitalist economy.

It is because of the manner in which officials structure the energy problem, that wrong or inappropriate remedies have been often proposed resulting in the worsening of the energy crisis over the past decade. As they are largely unaware of the recurring dynamics of dependency, they are unable to recognize the structural constraints that this peculiar relationship imposes on energy sector development (and development in general). Consequently, they do not recognize the real opportunities and alternative strategies that could be created within the present system, which could be effectively exploited to break its vicious cycles.70

70 This way of structuring the problem is not exclusive to the technocrats. Leaders of both the mainstream political parties, the People's Party and the Muslim League, and most of the parties allied with these, are all partaking in the same manner of energy problem structuring, and for this reason, there has been no substantive difference between the treasury and opposition benches on this important national issue. In addition to the domestic policy-makers, the frontal institutions of metropolitan capitalism—the IMF, the World Bank, Asian Development Bank, etc., also subscribe to the above mode of energy problem structuring.

It is important to recognize that it is not a mere chance that these three players, viz., energy sector officials, political leaders, and multilateral financial institutions share a similar approach. Rather, as I explain in this study, initially this approach was systematically and consciously pushed by the World Bank and IMF. And over the course of the last decade, through the so-called policy dialogue on structural adjustment, and application of stick and carrot principle, these institutions have succeeded in making it the dominant view among the domestic bureaucratic and political policy-makers. But this could not have occurred unless the latter saw material opportunities for themselves, and their class, in adopting this approach.
The following are some major issues related to energy policy which the dominant framework ignores. Without addressing these issues seriously, it is not possible for policy-makers to devise an appropriate and effective long-term energy policy.

The Problem Of Creating A Viable Regulatory Framework

As I pointed out previously, the policies of deregulation and privatization have been proceeding without the creation of proper and effective regulatory authorities in either petroleum or power sectors. I have also mentioned above that energy officials do recognize the importance of having a regulatory authority in place prior to, or at least in step with deregulation and privatization of the sector. According to one official:

regulatory authority must ensure protection of the consumers, revenues, and of course a rate of return, a reasonable rate of return to investors, so, to kind of ensure a field with fairness all around - consumers, investors, companies, everybody. This fairness all around . . . I think is essential.71

In saying this, the official was directly echoing the policy position of the World Bank on this matter. According

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71 Interview with an official of the Ministry of Petroleum and Natural Resources, Islamabad, August 1993.
to the World Bank’s policy paper regarding the creation of regulatory authorities in developing countries:

"... regulatory approaches need to be established that appropriately balance protection of the public interest with the need for enterprise autonomy. This may require regulatory bodies independent of both government ministries and enterprises themselves. With a more independent and transparent regulatory body, consumers, investors, and environmentalists could all be heard in determining policies related to investment programs, pricing, access to service, reliability of service, energy conservation, plant location, and environmental issues." (World Bank, 1993, p.14).

This quite obviously is a recipe for regulatory authority that has been taken from the American political context and experience. It assumes the existence of a mature democratic process and pluralist political culture. Pakistani political process and culture, on the other hand, lack democratic depth. The system is democratic only in appearance. It is only formally democratic while the manner in which different aspects of political power manifest or function, is far from democratic. Indeed, the manner in which ruling politicians and their opponents conduct their political business, whether it be in the parliament, within their respective political parties, or in society at large, clearly shows that
notwithstanding the democratic garb, the system is actually authoritarian in its functioning.

One of the major reasons for the authoritarianism of the political system is precisely the absence or erosion of strong institutions, both within the state and in civil society. This situation enables powerful groups in society to exert extra-legal influence above and beyond the legal influence that they can muster. There can be no doubt that in a country in which authoritarian political practices are a norm, and that has weak civil institutions, business groups that have millions or billions of dollars at stake in private power projects would easily be able to exert enormous pressure on any so-called "independent regulatory body." They would easily and successfully mould the output of such bodies to suit their financial interests. It is at best naive to expect that American style regulatory authorities could be created and, more importantly, function as intended in Pakistan. But, notwithstanding this, the creation of "independent" regulatory bodies is being required by the World Bank. One may wonder whether the Bank is indeed serious about the creation of viable regulatory bodies or whether such institutions are merely being put in place to maintain the necessary illusion of "fairness".

Quite clearly, such bodies would not be able to perform their core mission of being neutral judges among the varied
interests of various stakeholders, and especially of protecting the interest of the politically voiceless masses. If created, they would, predictably, quickly become "captive agencies" of the dominant player(s) in the relevant policy arena. But, both the domestic policy-makers and their supervisors in the multilateral institutions have not addressed such problems associated with the creation and functioning of independent regulatory authorities.

The Gamble of Complete Reliance on Foreign Investments

Policy-makers have grossly underestimated the issues involved in attracting foreign capital investments, especially in such large volumes on which they have based the current energy sector development strategy. For instance, according to a recent newspaper report "[Prime Minister Benazir Bhutto] said Pakistan had charted out a highly ambitious energy sector development plan and some 10 billion U.S. dollars were likely to be invested over the next five years in this field that had been made an exclusive domain of private sector, particularly foreign investors" (PTOE, March 25, 1994, p.8). This optimism is based on three factors, according to statements of various officials: (a) the pursuit of macro-economic policies according to the guidelines established for Pakistan by the IMF; (b) sector-level reforms as recommended by the World Bank, and (c) offer of highly lucrative contract terms to foreign investors.
Government initiative have indeed attracted interest on the part of foreign companies in the power sector. Recently, a number of foreign companies have signed contracts or MOUs in setting up powerplants. However, serious doubts remain whether all or even most of these investments will actually be made. It is quite possible that many of these investors may have moved quickly to simply acquire contracts in order to prevent potential competitors from doing so. In future, they may or may not actually make the decision to invest. A lot would depend on their assessment of the overall situation in Pakistan.

In making investment decisions, foreign investors not only take into consideration the global (specifically, expected future) conditions in a particular industry, but also compare a host of other non-policy indigenous factors among countries, especially internal and regional political stability, level of development of communications infrastructure, comparative natural advantages in a particular industry, quality of human resources (education, training, etc), and even socio-cultural environment. In all these

72 August-September 1994.

73 According to official sources, U.S companies have signed contracts for $3.5 billion and a Hong Kong based investor has signed a MOU for $7.5 billion to develop powerplants.

74 Interview with a U.S. based businessman who was part of the September 1994 delegation of U.S investors that was led by Energy Secretary Hazel O'Leary.
areas, Pakistan lags behind other regional countries such as Thailand, India, Malaysia, etc. who are also wooing foreign investors.

It should also be noted that while foreign companies have shown a great deal of interest in the power sector, they have shown little interest in the exploration and development of petroleum. The main reason for this discrepancy is the fact that current policy has virtually made investments in power risk-free for foreign investors: Investments in petroleum sector carry the normal inherent risks, although the new terms promise much better returns.

Indeed, there is little reason to be optimistic about attracting large volumes of foreign investments. This is also borne out by the past as well as recent experience. For example, total actual foreign investment, including portfolio investment, in all sectors of economy in the three fiscal years from 1989 to 92 was $200m., $254m., $562m. respectively while the annual average for 1985-90 period was $165.8 million (ES 1992-93, Table 10.1, p. 136).\(^75\)

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\(^75\) The only foreign investment power project from among the many proposed since 1988 that has come off the drawing board is the Hubco plant. Construction of this project was finally initiated in December, 1993. The financial structure of this project is highly complex. There are numerous sources of equity, funding, and guarantees and many private and government players are involved in project implementation /operations. The rigid structuring of this project caused by the building in of numerous strict risk protection mechanisms and walkaway clauses can cut both ways. Undoubtedly, on the one hand, they have made the project possible. On the other, they make it highly vulnerable to failure in a fluid and volatile economic environment. Thus things could still go wrong either in the
A related issue which policy-makers and political leaders have not so far considered, is what to do if the hoped-for foreign investments did not materialize to the extent envisaged. This is a matter of grave concern and should be addressed seriously as no contingency planning is being undertaken in the case of non-materialization of the foreign investments. A potentially disastrous situation could arise in the future as the strategic investment programs of the now-being-privatized energy sector are emasculated or abandoned, while the hoped for foreign investments do occur. As things stand now, the government has no contingency plans if such a situation did arise.

The Problem of Effects of International Prices of Energy on Domestic Economy

Policy-makers have over the years, first in the case of crude oil, then gas, and finally electricity, accepted the notion that the energy producers should be allowed the "international" price for their output. Of course, the contention over what price the producers ought to get has been an enduring one, with the producers insisting on higher prices and various governments in the past trying to keep them construction or operational stage. From Pakistan's point of view, this would be catastrophic as it would not only get stuck with an incomplete plant but would also have to assume all the liabilities of this expensive project. If things were to go wrong, as they did in the case of many large projects in Brazil in the 1980s, it would eventually be the poor of Pakistan who would have to bear the burden. Really, in the final analysis it is they who are carrying the risk, not the foreign investors.
lower. The current policy thinking now deems it necessary to offer international prices in order to attract foreign investors. Clearly, once foreign private sources came to be relied upon as the primary source of investments in the energy sector, it became necessary to do so. But what is not equally clear is whether the policy-makers fully appreciate the full range of present and future implications of doing so.

What Pakistani policy-makers or their World Bank associates call "international" prices are prices at which these products are available in the advanced capitalist countries. These are actually either determined by market conditions (petroleum) or set by regulators (gas and power) in the advanced industrial countries.\(^7\)

The international spot price for crude oil, which Pakistan pays its foreign oil producing companies, is determined mainly by the demand of U.S. refiners. The bulk rate of US$ 0.065/kwh base price for power which the government recently agreed to pay private power producers, once again reflects very closely (Pakistani

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\(^7\) Political events in the Middle East also play an important role during certain times. However, the scale and intensity of their effects has diminished greatly over the years as advanced capitalist countries have taken a number of measures to reduce their dependence on Middle Eastern oil. Since its creation in 1974, the International Energy Agency of the OECD has played a leading role in coordinating energy policies of member countries with the aim of reducing the oil vulnerability of advanced capitalist countries since it became obvious after the 1973 OAPEC embargo. In addition, supplies from Alaska and North Sea oilfields now act as buffers against short-term supply dislocations. For more details, see Mohammad Ahrari (1986).
offer is actually higher) what American state regulatory authorities have allowed their utility companies.

Energy product price determination in large markets in advanced capitalist countries are based on economic conditions, such as income level of consumers, the relative price of factors of production, level of productivity, etc., that have nothing in common with that of an underdeveloped country like Pakistan. Because energy is an input in all productive and service processes,\textsuperscript{77} it is inevitable that when these alien prices are introduced in Pakistan's economy, with its different set of conditions, it is bound to produce economy-wide distortions such as inflation, lowering of real wages, changing urban/rural terms of trade, making exports more expensive, etc. These factors would eventually slow the rate of long-term growth.\textsuperscript{78} It is beyond the scope of the present work to analyze in detail all the ramifications of introducing energy prices in Pakistan that are at par with those prevalent in the advanced capitalist countries. For our purpose, it shall suffice to note three points: (a) that such an analysis was not done by policy-makers before making the

\textsuperscript{77} Actually it could legitimately be considered to be a factor of production in its own right, as some authors hold.

\textsuperscript{78} It should not be forgotten that the availability of cheap energy was one of the main contributing factor in the rapid growth of the economies of advanced countries after World War II. Conversely, it is also well established that higher energy prices after the 1973 oil embargo led to a sustained slow down in the same economies.
decision to introduce "international" energy prices and that this issue ought to be of major concern to them; (b) "international" energy prices were introduced as a concession to foreign investors and has the effect of enhancing their profits while it will, most likely, cause distortions in Pakistan’s economy; (c) that "international" energy prices could only be forced through the policy process because of the existence of dependency relationship between Pakistan’s economy and ruling elites on the one hand and core capitalist countries, on the other.

The Problem of Meeting Hard Currency Obligations Created by New Policy

Another area which the proponents of the policy of deregulation and privatization have completely ignored is the burdens and pressures which the current energy policy will impose on the country’s already troubled external economic linkages. More specifically, the question is how would Pakistan be able to provide foreign currency for the repatriation of profits, etc. and what will be the effect of such policies on Pakistan’s balance of payments, foreign trade structure, import capacity, and foreign debt.

In the case of the power sector, these burdens and pressures shall be created by the demand generated for foreign currency by: (a) repatriation of profits to foreign investors; (b) repayment of interest and principal on loans acquired for
building the powerplant; and (c) miscellaneous payments in foreign currency such as consultant fees, insurance premiums, salaries of foreign staff, etc. As powerplant operating costs in Pakistan are projected to run in the range of $0.02-0.03/KWH including the cost of fuel oil, the surplus margin or gross profits shall indeed be quite large given the $0.065/KWH price at which the GOP is committed to purchase power. It is reasonable to expect that most of the surplus margin shall normally be converted into foreign exchange and remitted overseas.

In addition, the import bill for fuel oil on which almost all of the expected projects are based, such as the very large Hubco plant, shall impose another burden on the national economy. Considering the fact that fuel costs form a very substantial proportion of the operating costs of thermal powerplants, much of this expenditure will also be incurred in foreign exchange.

Now, if we take the required foreign exchange parts of both the operating costs and the surplus margin together, it is easy to see that a large part of the gross revenues,

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79 Interview with a private power investor.

80 The large difference between operating costs and government purchase price gives us an idea of how enormously profitable such ventures shall be. For example, the Hubco plant running at 65% capacity shall produce a revenue of $1,512888.00 over a 24 hour period. If we take out one-third of this as operating costs, we are left with a staggering one million dollars per day surplus margin.
perhaps as high as 70% or more, of foreign owned plants shall converted into foreign exchange and remitted abroad.\textsuperscript{81} The fact that all of the power produced will be consumed internally and not exported, means that some other sector of the national economy will have to bear the burden of providing the requisite hard currency.\textsuperscript{82}

\textsuperscript{81} The extra burden which the economy will have to carry comes into sharper relief if we compare projects that the new policies will spawn, such as Hub, with the financial structure and technology configuration of SODS based plants such as the Lakhra fluidized bed coal-fired powerplant. The latter will use indigenous coal and hence shall not incur any foreign exchange operating costs, is owned by WAPDA and thus all profits will remain in the country and cause no burden on foreign exchange, and will be built using mainly Chinese components but also Pakistani ones. According to one businessman involved in setting up a small powerplant near Lahore who was interviewed by the author and who had closely reviewed powerplant equipment prices around the world, equivalent Chinese equipment costs less than half for what it is available in Western countries. Furthermore, the utilization of coal by the Lakhra plant will lead to the development of the newly discovered very large coal reserves in the area bringing employment opportunities to a less developed region of the country.

\textsuperscript{82} An argument that is often presented to justify present policy is that as the economy suffers a loss of Rs 12-15 for every kwh that is not supplied, it would be cost-effective to pay foreign companies a tariff of US $0.065 (approximately Rs 2.0 at Fall 1993 exchange rate). The value created by the availability of an additional kwh would therefore be able to more than compensate for high tariff at which the government has agreed to purchase power from private producers.

Assuming the estimate of Rs 12-15/kwh loss to GNP is accurate, its average would be Rs 13.5/kwh. Now, as the annual average ratio in five year period from 1987-88 to 1991-92 of exports to GNP comes to 12%, we can only project that 12% of the additional GNP contributed by additional power produced by foreign investment will be exported and earn foreign exchange. This comes to Rs 1.62 or US $ 0.050 which is 23% less than what the government will be paying the foreign power producer.

It is worthwhile to remember that the above rough calculation is based on an estimate of unserved kwh provided by a government bureau whose raison d'etre is to attract private power investments. A lower cost of unserved Kwh would mean even a greater burden on foreign exchange resources. Azhar (1990) refers to "the only existing study which evaluated" the cost of unserved Kwh as being Rs 7.00 (p.187). This author reports the results of his own calculations which determine the cost of unserved Kwh to commercial sector at Rs 4.20 (for first hour when it is the highest), Rs 15/Kwh for agriculture during peak sowing season, and Rs 6.7/Kwh for industry. No costs are provided for either bulk consumers (such as railways, hospitals, defense production facilities, etc.) because these cannot be put on loadshedding or for domestic sector for which the
Clearly, in order to fulfil its obligations to make foreign exchange available to foreign companies to cover repatriation of profits, debt service, cost of fuel oil imports, etc., the country would have to earn additional foreign exchange from its export products, which in the main are raw cotton, cotton yarn, and rice. Thus, the long-term pervasive effect of such policies as the government is pursuing now in the power sector would be to reinforce the complex and cyclical relationships of dependence.

Similarly, the petroleum policy has also created a serious burden for the national economy as one of its effects is that Pakistan has to pay part of the price of its own oil in foreign exchange, the extent of the part being contingent upon the production sharing agreement. This happens in the following manner. In a joint venture with a foreign producer, the total amount of oil that is pumped out, is sold in the local market. The purchaser (private or public-sector refineries) pays for the oil in local currency. After the

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costs are more "social" than economic. In any case, the cost of unserved Kwh to them cannot be higher than the weighted average of commercial, agricultural, and industrial consumers, which comes out to be Rs 7.57 per Kwh, according to our calculations based on the above figures provided by Azhar. Incidentally, this figure is quite close to the figure of a study to which Azhar refers elsewhere. Now, allowing for fact that the data is from 1989 and given 10% average depreciation of the rupee, in 1993 the cost of unserved Kwh comes out to be Rs 10.59, substantially below the figure of Rs 13.50 that we used in our calculation of the burden on foreign exchange that foreign investment in power sector would cause. At Rs 10.59/Kwh cost of unserved power, the burden would of course be greater.
deduction of various production costs, the income is split between the foreign company and the GOP (or OGDC) according to the production sharing agreement. Foreign companies normally convert their local currency income into hard currency, which the GOP is obliged to furnish, and remit their income to their parent companies as profits, etc. In this manner, Pakistan's own oil is partly paid for by Pakistan in foreign currency.

In other words, Pakistan is compelled to purchase its own oil partly in foreign exchange: The foreign exchange component of the price depends upon the production share of the foreign company. In a 50-50 production agreement, which was the norm until recently, 50 per cent of the production belongs to foreign company, a substantial part of which is converted into foreign exchange and sent abroad. Now, in the wake of the latest policy changes, if a production sharing agreement stipulates 75-25 split for foreign partner and GOP, then Pakistan will be purchasing its own oil in foreign currency to the extent of nearly 75% of the international price. And if the government allows 100% share

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83 Operating costs, some of which are payable in foreign exchange such as salaries of foreign employees, interest on foreign currency loans, etc are defrayed from the joint-venture's oil revenues and then the income is split according to the concession or mining agreement. But local currency operating costs are generally minimal once production starts. Therefore, it is reasonable to assume that nearly the entire percentage of foreign partner's income is transferable abroad in foreign exchange.

84 It should be remembered that petroleum production costs ordinarily constitute only a small part of total revenues.
to a foreign company, then Pakistan would be buying its own oil entirely in foreign currency, just as if it bought it from the international market. The central question then is, how is the country going to raise foreign exchange to buy its own oil? It has only two options: Either it earns this additional amount by increasing its exports of cotton or its low-value added products and rice, or it borrows from international financial sources. In the former case, as we shall see in Chapter VII, there are very serious limits, while in the latter, the country sinks further into debt. If Pakistan was in a position to export petroleum and earn foreign exchange, then it would be a different story. But as it is, domestic production only comprises one-fourth of current demand (which is actually lower than what it would be had it not been suppressed through policy measures).

From the point of view of strategic development policy and planning, sober and accurate analysis to answer these questions is of utmost importance. In Chapter VII, among other things, we shall look at the structure and dynamics of Pakistan’s economy and try to come to an informed judgement about whether or not the economy has a capacity to generate

85 Conversely, when OGDC is the sole owner of a mining concession, all of the oil that is produced is paid for in local currency. No burden is put on foreign exchange resources of the country in this case.
foreign exchange resources that could offset the consequences of the policies of deregulation and privatization.

The Problem of Outflow of Surplus

The dominant policy framework completely ignores the question and significance of the type of "surplus flow channels" that result from the pursuit of different energy policy options. By "surplus flow channel" we mean the string of economic locations through and to which the economic surplus generated by a specific enterprise flows, each such location having a claim to a part of it as determined by the capital structure of project. And by "economic surplus" we mean the revenue that is left after defrayment of operating costs and depreciation (Baran, 1964). Surplus comprises and is the source of profits, interest payments, royalties, rent, and other categories of payments not related to the production process such as taxes, government duties, and such.

It is important to trace and map the string of economic locations to which surplus flows because this tells us who becomes the owner and controller of newly generated capital, and where the accumulation of capital will occur. For instance, if a map of a hypothetical surplus flow channel

"Economic locations" could be businesses, institutions, or individuals. This concept also has "geographic" underpinnings. Therefore, it not only identifies who the recipient of surplus is but also in which country or region is it based. It would be more productive to think of geography not simply in its putative sense, but rather as geography of the core-periphery relationships.
shows surplus being produced in region "A" and flowing into another region "B", we can say that capital accumulation will occur in region, "B", although all the production and employment is occurring in region "A". As weak accumulation of capital, which is reflected in the relative shortage of capital, is one of the characteristic hallmark of underdeveloped economy, it is crucial for policy-makers in such countries to understand the implications of this phenomenon in terms of the policies that they adopt.

Charting and understanding surplus flow channels is especially important in the case of oil exploration and development policy for this could reveal the opportunities lost for the entire economy. In this matter, Tanzer (1969) points out to the crux of the matter:

One aspect of oil's potential role in an underdeveloped country is worth special mention: oil's capacity to be a leading factor in the development process even without being exported [emphasis added]. Most development economists would probably say that an indigenous petroleum sector is not well suited to playing a leading role, because crude oil production involves little "backward linkage" as compared with an industry like steel which tends to generate demand for the output of other industries. It is our belief that such a view is mistaken in that it fails to take account of the enormous
potential for capturing capital [emphasis added] from an indigenous crude oil production center.

This potential arises from the fact that, of all the major commodities involved in international trade, crude oil has by far the largest gap between the average cost of production and the price. The existence of this gap lays a basis for large capital generation by an indigenous crude oil sector (pp. 4-5).

In devising the current petroleum policy, Pakistan's policy-makers have shown no indication that they understand this crucial ramification of oil for the national economy. By following the policy of dependence on foreign oil companies to explore and develop the country's petroleum resources, means that capital accumulation from this important source is decreased to the extent of overall foreign share in petroleum production. For this reason, the new petroleum policy's retreat from the previous norm of 50-50 production sharing agreements will further negatively affect capital accumulation.

Similarly, deregulation and privatization policies in their present shape will undermine the process of capital accumulation in other sub-sectors. In the power sector, for instance, mapping of surplus flow channels will show that most of the surplus generated by Hubco plant will not stay in the country. One is bound to find similar implications for
capital accumulation if the policy-makers choose to rely on foreign companies to exploit the recently discovered coal reserves, rather than chalking out a plan to develop these resources in such a manner that the surplus flow channels end up at indigenous economic locations.
Chapter - VI
FROM STATE RESPONSIBILITY TO FOREIGN INVESTMENTS

Introduction

This chapter describes the main features of the new overarching approach to economic development that emerged in the early eighties (which we call Private Investment Promotion Strategy or PIPS) and analyzes the factors responsible for the shift from state sponsored development strategy to one of reliance on the private sector. It was a shift in the basic economic philosophy of the government that led to the adoption of a new development strategy, and which spawned changes in the country's energy policy. Politically, this shift corresponds to the demise of the nationalist-popular Bhutto power bloc (1972-1977) and the consolidation of the pro-business Zia power bloc in the early 1980s period. In order to understand and give context to the subsequent changes in energy sector policies, it is crucial to recognize the significance of this ideological shift and comprehend how the new development strategy came into being. In the following, I describe and analyze both the philosophical and empirical factors that led to the establishment of neo-liberalism as a dominant development strategy. First, I trace the emergence of neo-liberalism in Pakistan under the Zia regime and its deliberate attempt to justify it in terms of Islamic injunctions. The ascendancy of neo-liberalist ideology
transformed the development strategy from state sponsorship to reliance on private sector. But this could not have occurred without the enlarged role that the frontal institutions of world capitalism--The IMF and The World Bank--came to play in Pakistan. 87

Next, I present a model of how the interaction of various internal and external factors led to the emergence of major policy changes in the energy sector, given the earlier establishment of the ideological domination of neo-liberalism.

Neo-Liberal Philosophical Foundations of PIPS

By the time Pakistan launched the Sixth Five Year Plan in 1983, the Zia regime had clearly formulated its economic strategy which, in later years, had a far reaching impact on the economic development of the country including it's energy policy. The clear enunciation of the new approach to economic policies was preceded by nearly six years of drift during which the government continued the Bhutto regime's State Organized Development Strategy (SODS) on the one hand, while giving verbal and policy signals to encourage the private

87 The twin events of ascendancy of neo-liberal ideology and the enlarged role of the IMF and World Bank in policy affairs, is symbolically represented by the appointment of Dr. Mahbub ul Haq, an ex-vice president of the World Bank, as the chief of the Planning Commission in 1982. Dr. Haq (no relation to General Zia ul Haq) was also previously the chief of the Planning Commission under General Ayub. The events in Afghanistan, which led to massive U.S. financial and military backing for Pakistan, were the major cause of the consolidation of pro-business, pro-western Zia power bloc.
sector to once again begin to invest, on the other. However, private investments failed to respond in this period as the industrialists were not sure of the Zia regime's fundamental direction. This was mainly due to the uncertainties created by Zia's unabated pronouncements that the purpose of his government was the "Islamization" of the economy and society. The policies embodied in the Sixth Five Year Plan finally put the fears of the industrial class to rest and they started to make investments, albeit, once again in consumer goods industries.

A sharp break in the overall approach to economic development occurred with the promulgation of the Sixth Plan. This plan represents the shift from SODS to PIPS. The justification for is explicitly presented in governments's Economic Survey 1983-84. This particular Economic Survey edition is unusual, and therefore of special interest, in that it includes both philosophical and theoretical analyses that reject SODS, espouses neo-liberalism, and justifies liberal ideas in terms of Islamic injunctions; all for the purpose of justifying PIPS. In order to capture the main ideas presented in this document, we would do best by quoting it's relevant sections:

88 The Economic Survey is published annually by the government and it overviews the performance of the economy in the stated year of the report. It also presents government's economic policies briefly.

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For example, on the role of the government in economy it states:

The liberal conception of the role of government is to restrict it to ensuring the liberty of individual actions, from which a spontaneous social and economic design would result rather than the government itself first conceiving a grand design and then attempting to legislate the implementation of that design. To the extent that this fundamental conception underlies the philosophy of the Sixth Plan, the success of the Plan will be more the result of private actions and less of government design. This conception of the relative roles and responsibilities of the private sector and the government is a sharp break with our entire tradition of politics and administration, and change must therefore be gradual and over an extended period. (ES 1983-84, p.5).

This document also discusses the question of the compatibility of Islam with liberal ideas of governance and private property. After a summary discussion that finds fundamental similarities between the ideas of the 17th century English liberal philosopher John Locke and Islam, the document states:

Liberalism therefore is inseparable from the institutions of private property, which is the material part of the protected individual domain. This right to private
property and government protection from infringement of this right, is central to both liberalism and Islam, although it has been challenged by the socialist tradition in Europe, and some very recent neo-socialist re-interpretations of Islam. However, no traditional scholar of Islam would endorse any attempt to dilute these rights, which are provided in the Quran, exhibited in the Hadith [a collection of writings that is considered to be an important source of Islamic law], and unquestionably maintained in the pre-Marxian history of Muslims; and, the present government has endorsed these rights. (ES 1983-84, p.4).

After justifying private property (and thereby delegitimizing state ownership) in terms of Islamic rights, this document then addresses the issue of distribution of income. After explaining the fundamental principles of liberal jurisprudence, it boldly states:

This conception of justice, with allowance for the ignorance of the Quran and Sunnah among the English liberals, would find broad support within the Muslim tradition. One practical consequence of this view of justice is the rejection of any concept of "social justice" independent of human actions. Thus the conception that it is the duty of the government to provide all citizens (and a moral right of individuals to
receive) a customary level of income, as long as they continue to honestly strive for it, is contrary to liberal principles. The economic policy of a liberal government cannot assure particular results to particular people, and the government may not be asked in the name of "social justice" to intervene and protect the existing position of some group. (ES 1983-84, p.5).

Finally, this document pronounces the relevance of its philosophical assertions to the main thrust of the Sixth Plan: . . . the Sixth Five Year Plan sets out a bold new direction for economic policy in Pakistan in its advocacy of mainstream liberal principles. The Sixth Plan advocates "massive de-regulation" of economic activities in order to "liberate" the "creative energies" of the private sector, leading to the emergence of a spontaneous economic order, which would be vastly superior to any arrangement or organization which could be created by government commands or regulations. (ES 1983-84, p.3).

Thus, it is quite clear that by the early to mid-eighties, the top decision-makers had broken away from the previous strategy of SODS and adopted PIPS as the strategic approach to economic development. They were going to go beyond the immediate de-nationalization of the smaller industrial units that had been nationalized by the Bhutto
regime, and which had been mainly completed by then. The quintessence of the new strategy was neo-liberalism: It assigned market forces and the private sector a leading role in determining the economic future of the country while redefining the role of the State by ousting it from direct involvement in the economy. First, public sector economic activities would be curtailed by halting new investments, and then eliminated by selling their assets to private domestic and foreign investors at essentially bargain-basement prices. Finally, PIPS aimed at maximum de-regulation of foreign and domestic investments, internal and external commerce, and other areas of economic activity in which the government had a regulatory or guiding role. All these policy measures were, in the minds of it’s architects, underpinned by the belief that domestic investors and foreign corporations would find Pakistan a very attractive place to invest their

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89 Most of the units that were returned to their previous owners were from the spate of the 1976 nationalizations. These affected approximately 2000 cotton ginning, flour milling, and rice husking mills. Larger industrial and financial units nationalized earlier were kept under government control, barring a few.

90 There have been a steady flow of allegations regarding the implementation of the policy to privatize publicly owned industrial and financial assets. It is believed by large sections of the public that the process was rigged and particular fractions of the ruling classes benefitted given their informal access to political leadership at the federal level. For example, the Mansha group, which is known to have close ties with ex-Prime Minister Nawaz Sharif, not only ended up acquiring a large nationalized bank (Muslim Commercial Bank) but also five of the nation’s larger cement plants, effectively making it a price-setter for cement (EIU 2:1993, p.36). Similar allegations exist vis-a-vis the current Prime Minister, Benazir Bhutto.
capital. In devising these policies, no regard, concern, or understanding was shown to either the perennial domestic trends, such as the country's chronic political instability or more importantly to the low level of domestic savings rate, or to the recent trends in the global economy which have made the Pacific Rim region a privileged place in terms of attracting international investments. And neither were the consequences of a possible failure of PIPS given much thought. A plunge was made into neo-liberal economic policies on the basis of what appears to be mere assumptions and beliefs and a lot of bravado.

That these policies were adopted in the first place was remarkable enough. What is even more remarkable is that all the governments that followed the military regime of General Zia, each in its own turn not only adopted neo-liberalism but was more vociferous than it's predecessor in its claim of adherence to this economic approach. And the fact that both those who were aligned to the Zia regime in one way or another during is long rule, and the so-called "opposition" Pakistan People's Party of Benazir Bhutto, the daughter of the man who was overthrown by the coup led by General Zia and latter hanged under his orders, now walked the same road, shows that there is a fundamental commonality of interests and a basic consensus among those who have governed Pakistan from 1977 onwards. It is my contention that this consensus can be
plausibly explained in terms of (a) the coalition of class interests that these regimes represent, (b) the strategic political and structural economic issues that they faced internally, and (c) the limited and diminishing scope of autonomy they have vis-a-vis international creditor institutions represented by the twins: IMF and the World Bank. I will discuss these issues, both at the general level of economic strategy and at level of energy policy in Chapters 7 and 8. In the following, I present a model that describes how PIPS came about in the energy sector. In addition, I also describe the policy changes in each component of this sector that ensued as a result of the adoption of PIPS.

   Model of Energy Policy Change from SODS to PIPS

   Figure 6.1 presents a model that depicts various forces and factors that were operative and were responsible for the
FIGURE - 6.1
MODEL OF EMERGENCE OF DeregULATION AND PRIVATIZATION POLICIES IN ENERGY SECTOR
adoption of PIPS in the energy sector during the mid-eighties. Though these operated conjointly and interactively, for convenience of explanation, I separate these forces and factors into internal or external categories.

Internal Forces and Factors

Revenue Constraints

One factor that has historically limited the ability of the government to increase its revenue base has been the exclusion of agricultural income from tax obligation. This practice had its roots in the British colonial times when the authorities found it necessary to maintain the loyalty of the landowning class. After Pakistan gained independence, this practice was continued as the landowning class has had a dominant position in all the governments that the country has seen until recently.91

Another factor that limits the revenue base is that a substantial part of Pakistan’s economy thrives in the informal sector and is out of reach of the tax collection process.

91 An agricultural income tax was finally imposed recently. The interim Prime Minister Moeen Qureshi announced a mild income tax of Rs. 2 per PIU (a PIU or Produce Index Unit is a measure of the productivity of land in terms of area), for those agriculturists whose lands generate output in excess of 4000 PIUs. This is roughly equal to 60 acres of irrigated land and would apply to only 1 to 1.5% of land owners. Collection would begin in fiscal 1994-95. This is indeed a very mild tax and it is not expected to generate much revenue. However, the fact that it was levied is significant in itself. The IMF-WB had been pressing the government to levy such a tax for a long time but to no avail. So have been the domestic industrialists. It shows that the landowning class finds its power weakened vis-a-vis the increasingly powerful industrial class and the increasingly strong influence of the lending institutions.
According to a recent study conducted by KPMG Peat Marwick and quoted by the Country Report on Pakistan of The Economist Intelligence Unit (EIU 2-1992, p.28), the size of the informal sector is 42% of the actual GNP. The study found that "Broken down sectorally, the relative importance of informal activities vis-a-vis formal ones is as follows: small scale manufacturing - 159 per cent; wholesale and retail trading - 149 per cent; transport, storage and communications - 90 per cent; services - 50 per cent; fishing - 33 per cent; and livestock - 25 per cent. The study estimated the volume of funds fueling the informal sector in a given year at $5.276 billion" (p.28). According to research conducted by the National Taxation Reform Commission and quoted in the same report, of the funds fueling the informal sector, $1.393 are derived from direct tax evasion and $1.249 are derived from indirect tax evasion. This adds to a staggering amount of $2.642 billion that the government is unable to collect annually. This figure is three times larger than the average annual net disbursements of official foreign lending in the 1990-93 fiscal period. It outstrips the merchandise trade balance for 1991-92 by $406 million and is nearly 40% of Pakistan's exports for the same fiscal year.

The EIU Country Report on Pakistan (3:1992) notes that "a fundamental structural problem remains" regarding tax
revenues. Providing details of the existing tax base, it writes:

Pakistan's budget position will not be put on a sound basis until its precariously narrow tax base is widened. According to the finance and economic affairs ministry, only 850,000 people [out of a total population of over 120 million] pay income tax, including some 300,000 from whom it is deducted at source. Of the total, just 16,000 to 17,000 earn more than Prs 100,000 annually. Officials say another 2mn people should be paying tax. Given the narrow base, rates are high and therefore an inducement to evasion. Moves are supposedly afoot to bring at least half of the evaders into the tax net. Of 12,000 companies which file tax returns, only half pay tax. The rest declare losses or claim exemptions. Some 450 companies account for 50 per cent of overall corporate tax receipts. Powerful lobbies are part of the problem. The large number of landowners in Parliament has so far precluded the imposition of direct taxes on agricultural sector. The textile industry is similarly privileged. Corruption in the tax department is also regarded as a major contributing factor to low direct tax receipts. (p.20).

An important consequence of government's limited ability to collect direct tax on income is the escalation of indirect
taxes which are imposed on production/trade and on consumers of certain products. Important among these are excise tax, sales tax, taxes on international trade (import and export tariffs), and surcharges on natural gas and petroleum products. In the fiscal year 1991-92, these indirect taxes respectively comprised 15.5, 10.4, 30.2, and 7.9 per cent of the total revenues of the federal and government. In the same year, total indirect taxes amounted to 62.5 per cent of all revenues collected by federal and provincial governments while for the federal government alone the figure was 64.0 per cent (ES 1992-93, Table 8.3, p.117). These indirect taxes are not only regressive in nature, and thus burden the poor disproportionately, but they also have the additional negative effect of hampering productive activity. For these reasons, attempts to increase indirect taxes normally result in high political costs for the government, with resistance coming both from the masses of people and the organized industrial and trade lobbies.

In sum, the failure of the government to impose a direct tax on agricultural income, the narrow existing tax base, and the limited possibility of increasing indirect taxes, led to
a chronic and deep fiscal crisis throughout the decade of the eighties.\textsuperscript{92}

**Budgetary Limitations**

The narrow revenue base of the federal government puts severe limitations on its expenditures. Historically, budgetary expenditures have exceeded revenues by a considerable margin, the gap being filled with internal and external borrowing as well as deficit financing i.e., borrowing from the State Bank, which inevitably leads to inflation.

Given the inherent budgetary limitations, the pattern of allocation of available funds assumes great importance. The national budget consists of two major categories: Current expenditures and development expenditures. The former consists of defence expenditure, interest payments, subsidies, general administration, social services, etc., while the latter consists of funds earmarked for development projects, including the energy sector. For many deeply rooted reasons,

\textsuperscript{92} A very limited agricultural income tax was promulgated by the interim government of Moeen Qureshi in August of 1993. It was subsequently enacted into law by the provincial assemblies and the National Assembly elected later that year. In addition, the Benazir government that came to power after these elections increased sales tax on a number of finished and unfinished products. However, it immediately faced stiff opposition from traders and industrialists for these measures. Subsequently, the government withdrew or reduced most of these tax increases. In light of the nature of the current power bloc (discussed in chapter 8), the extent to which any government is capable of radically expanding the tax base remains in doubt.
a chronic imbalance in the allocation of funds for current and development expenditures has existed in Pakistan.

The development expenditure component of the federal budget has been under constant pressure since the beginning of the 1980s. According to Bhatia (1990, p.254), "The share of development expenditure in the aggregate total expenditure fell from 39.9 per cent in 1979-80 to 29.6 per cent in 1985-86 and 19.5 per cent in 1987-88." Similarly, according to the data given in Economic Survey 1992-93, the development expenditure as a percentage of total expenditure for each succeeding year between 1984-85 and 1992-93 is 28.3, 29.6, 23.7, 25.9, 23.9, 25.3, 25.0, 26.4, and 21.9 per cent respectively. Thus, there has been a declining trend in the allocation of funds for development purposes ever since the mid-eighties.

There were two main consequences of this decline for energy sector policy. First, certain energy related state organization were put off-budget in the interim period before decisions regarding divesting these were finally made, and second, only limited investment funds were made available for the construction of new public sector projects in the energy sector. I discuss these below.

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93 FY 1992-93 budget figures are estimates. It should be noted that the 1987-88 figure provided by Bhatia does not correspond to that given in Table 8.4 of the Economic Survey 1992-93.
Pressures to Off-Budget State Energy Enterprises

Immediate budgetary pressures led to the tendency to withdraw federal allocations from certain energy-related state-owned enterprises (SOEs) most notably the Oil and Gas Development Corporation (OGDC), Pakistan's only organization that is involved in the exploration and development of oil and gas resources. OGDC was taken off the budget in July 1989. Off-budgeting of these organizations that were receiving financial support from the federal government meant a reduction in the federal budget deficit: An important condition for the continuation of much needed foreign exchange funds under the IMF's structural adjustment program. However, it also meant that OGDC would have to face severe challenges in trying to raise funds for its highly expensive and risky activities, but which are nevertheless of great importance for national development. Recognizing this dilemma, the GOP did promise to provide OGDC 25 per cent of money that it spent on exploration from the national budget. But this designed merely as a transitory measure, and this entitlement was to be phased out over the next few years, after OGDC is fully corporatized. Furthermore, given the other changes in petroleum policy, it would have to compete with transnational oil corporations on equal footing.

These organizations were created under state sponsorship to establish a national capacity in advanced sectors of the
economy so as to lessen dependence on foreign assistance and multinationals. Off-budgeting of such organizations has put the long-term survival of this capacity at stake. The fact that such an action was taken not from the point of view of the organization concerned or the strategic national interest, but under the immediate pressure of adhering to World Bank policies and IMF conditionalities, shows that the decline in development expenditures have limited the policy options and degree of autonomy available to government leaders in recent years.

Insufficient Power Generation Expansion

"Financial constraint has been a major factor in implementing WAPDA's [Water and Power Development Authority, Pakistan's main state owned electric utility] generation expansion plans" writes the Economic Survey 1992-93 (p.50). This is so notwithstanding the fact that the power sector has been allocated the highest priority and provided with the largest outlays in the annual Public Sector Development Programmes since 1983-84 except in the 1992-93 budget estimate. The annual percentage of total PSDP allocated for power during each fiscal year of this period was 20.4, 23.9, 24.7, 27.5, 25.2, 27.7, 28.3, 26.7, 28.7, and 24.1 respectively (ES 1992-93, Table 13.2, pp.198-199).

As a result of these expenditures, the installed capacity for electricity generation more than doubled from 5,010 MW at
the beginning of July 1983 to 10,598 MW at the end of June 1992. But this was still well below what was required to meet the existing demand which was at that time estimated to be at least 2000 MW or approximately 20% more than the total installed capacity. In addition, due to the continuing expansion in demand, it is estimated that an additional 1000 MW of supply is required for each future year to avert power shortages. Econometric and sectoral forecasting model projections for end-of-decade peak demand for an assumed optimistic economic growth in country were as high as 25,000 MW (Azhar 1990, p.6)

Rising Political Costs of Power Crisis

Growing power shortfall resulted in the adoption of severe load management practices which essentially meant cutting off supplies to economically less significant consumers, such as commercial and urban residential consumers, and channelling power to industrial consumers. This practice, called load-shedding, has become a permanent feature, especially in the dry seasons, since the early eighties when it was first introduced as only a temporary measure. Azhar (1990) writes:

Depending upon whether it is a wet, average or dry year as far as river inflows into the reservoirs at Tarbela and Mangla are concerned, the total time for which a consumer has to remain without electricity can vary from
half and hour to eight hours daily for urban consumers. Rural consumers can be disconnected for days on end. For example, in 1989, the peak shortage was to the tune of 1800 MW to 2000 MW or roughly a third of the total peak demand in the country. This necessitated extensive load shedding, ranging from about four to five hours for domestic consumers in larger cities to, it is said, up to 22 hours daily in far flung rural areas. The three shift industry also had to suffer closure of one eight hour shift daily, which took its heavy toll of the national economy. (p.7).

Load shedding has been a major source of resentment against the incumbent governments since the restoration of the political process in early 1985, when the military government agreed to hold national elections albeit on a non-party basis. Nevertheless, this signified a loosening of authoritarian rule. Whereas, General Zia also legitimised his position as the President of the country through a "referendum", a civilian government emerged as a result of the elections for the first time in 8 years. Though this government functioned under the tutelage of Zia, it was far

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94 Although the main opposition political party, the Pakistan Peoples Party of Benazir Bhutto, and the coalition that it led - the Movement for the Restoration of Democracy - boycotted the polls for this reason, and only those who were by and large sympathetic to the Zia regime participated and won, nevertheless, access doors were cracked open to political pressures that began to be felt at the national policy-making level. Hitherto, this was not possible under unmitigated military rule.
more sensitive to developing power crisis in the country. Writing about the attitude of the new government regarding electricity shortage crisis Azhar (1990) notes:

... it was only in 1985, after Martial Law was lifted, that the Government took any serious note of the power shortage situation. Muhammad Khan Junejo, soon after assuming office, pronounced that elimination of load shedding would be one of his top priorities. A plan for elimination of load shedding by 1990 was prepared, which required an investment outlay for the power sector for construction of new generation (and accompanying transmission and distribution) facilities, ranging from Rs. 15 to 28 billion annually over the next five years\(^95\) (p.6).

But within 3 years, Junejo government had been dismissed by Zia. And he himself was killed in a plane crash shortly thereafter. Under pressure from the rising political tide, the interim government held parliamentary elections in which all parties took part. This election completed the process of restoration of parliamentary democratic politics. The Peoples

\(^{95}\) Explaining and assessing this plan, Azhar continues: "Under this programme, it was foreseen to add 2900 MW of additional generation facilities over the period 1986-90, i.e., an average increment of 600 MW a year. Even with the high level of commitment on the part of the Government, the actual allocations could not exceed Rs 11 billion or so during the succeeding years, with the result that the gap between supply and demand actually widened instead of steadily closing." (pp.7-8).
Party led by Benazir Bhutto won the elections by a small margin and formed the national government.

The advent of democratic government not only meant a freer access for powerful interests in the civil society to the centers of decision-making, but that the government itself was politically vulnerable to mass actions such as strikes or demonstrations and therefore had to show sensitivity especially to the demands of the urban middle and lower classes. Both load shedding and high transport fuel costs were a source of great concern to urban middle and lower classes. Higher transportation costs are particularly irksome to the lower classes in urban areas. Among the former groups, load shedding was particularly annoying to the traders/shopkeepers, a well organized and powerful group in urban centers because of their ability to fund political parties and politicians, and also because of their unique ability to create civic unrest by perpetrating a commercial shutdown (traders strike). Similarly, load shedding when it occurred in industrial areas was highly ruinous and a deep source of concern to manufacturing interests.\textsuperscript{96} What troubled them more was the lack of or difficulty in obtaining new power connections for new industrial units or for plant expansion.

\textsuperscript{96} Industrial areas are normally the last to be cut off from the grid.
And here, the industrial groups shared their plight with agricultural interests, most notably the incumbent members of the provincial and national assemblies, who have determinedly pushed for the extension of the rural electrification program to cover their respective areas. ⁹⁷

However, plans to expand the distribution network to new rural (as well as new urban) areas have not been linked to the planned growth in the supply of electricity. Expansion of the distribution network is essentially taking place in view of political considerations. ⁹⁸ The continuous expansion of the rural electrification network under the condition of supply shortages has only complicated matters. This is so because on the one hand, it has put further pressure to shed load in the existing supply areas, while on the other hand in many cases it is not possible to consistently supply power to the new areas to which the distribution network is being extended. Consequently, these remain without power for extended periods of time. In the first case people who were satisfied earlier are now dissatisfied. In the latter case, people feel disappointed as after all the poles that were erected and

⁹⁷ One sure way of obtaining the long-term loyalty of rural voters for local politicians is to demonstrate an ability to "procure" public goods from "sarkar," a reified conception of government that is nebulous, omnipotent, and above all, beyond the reach of the ordinary rural people. And electricity is among the public goods that is most valued by individuals or communities who do not have access to it.

⁹⁸ Interview with official of Ace International, consultants to WAPDA under a CIDA project, Lahore, August 1993.
power lines stringed, they still find themselves without reliable supply of electricity. Thus their hopes were raised only to be frustrated later. The result in both cases has been further dissatisfaction with the government, and this has led to increased pressure to expand power generation under whatever conditions. As pointed out earlier, the restoration of the democratic process in 1985 made the government far more sensitive to these pressures and in the wake of this, and given the revenue constraints, the government began to look towards the private sector to provide the necessary capital for the investments required for the expansion of power generation capacity. The SODS in energy sector gradually gave way to PIPS. But this may not have happened had it not been for the build up of forceful external pressures which, concomitantly, were pushing for a drastic revision of government's role in economic development. We turn now to the role played by these external forces in bringing about fundamental change in the energy policy.

External Forces and Factors

Decreased Level of Official Aid

Official bilateral aid on concessional basis from the governments of developed countries has been on the decline since the 1970s. This is mainly due to the sluggish growth and large budget deficits in the developed countries through much of the past decade and a half. However, this tendency of
decline did not uniformly affect the availability of aid in the case of each and every developing country. This was due to the differences in political and commercial interests that lending countries have vis-a-vis specific developing nations. This was certainly the case with Pakistan in the 1980-87 period, when western countries considered it to be of crucial strategic importance in opposing Soviet intervention in neighboring Afghanistan.

But, even when assistance is sufficiently available, it does not automatically mean that it is utilized for development purposes. Much of the bilateral aid is generally used for purposes other than development. According to the World Development Report 1990:

Many "aid" programs in donor countries cover an assortment of activities (including commercial and strategic initiatives) which often have, at best, a tenuous connection with development. Only about 8 percent of the U.S. aid program in 1986, for example, could be identified as "development assistance devoted to low income countries. (World Bank, 1990, p.127).

The Report goes on to mention other unhealthy aspects of bilateral aid, which are primarily motivated by the desire of donor governments to provide benefits to their own businesses. One such practice is the predominant incidence of "tied aid," which means an aid recipient is required to buy goods and
services from the businesses of the lending country often at prices much higher than the international market. Approximately two-thirds of the all aid given by OECD member countries is tied aid. Another problem with aid is that "Donors prefer to finance physical capital installations that help their own firms and exporters, and they are reluctant to support the operating ("recurrent") costs of aid-funded undertakings" (World Bank, 1990, p.128). Thus, lenders show little interest in funding the follow-up operating costs or programs and projects, such as plant maintenance and technical training, as the benefits of such expenditures do not accrue to their own businesses.

The foreign aid that Pakistan received in the 1980s must be seen through the above framework. Substantial aid monies, especially from the U.S., started to flow in the wake of Soviet invasion of Afghanistan. A substantial part of this aid was for building up the defence capability of the armed forces, while the rest was for bolstering the economy.

But even the purely economic aid was motivated by security concerns. This becomes explicit when we look at the policy rationale given for such undertakings. For example, arguing for enhanced aid for Pakistan after the Soviet invasion of Afghanistan, Christopher Van Holien wrote in the respected journal Foreign Policy (Spring, 1980, p.45) that:
"Perhaps the most compelling reason not to put Americans in Pakistan is that they would not improve country's security for Pakistan's problem is as much an internal one as an external one. A better way to enhance Pakistan's security would be to increase United States' economic assistance beyond the $200 million that Washington has offered. The country's economy is in poor health; it is plagued with high inflation, a large balance of payments deficit, and a troubled industrial sector" (quoted by Bhatia, 1990, p.302).

A large part of the aid received by Pakistan in the 80s was used for supporting balance of payments and for purchase of defense stores. Therefore, while there was an increased availability of foreign funds, there was actually a decline in the amount of foreign funds available for development projects. This decline in the availability of foreign aid is reflected in the decline in the foreign exchange component of the Public Sector Development Plans (PSDP) for the various years of the 1980-92 period. Table 6.1 presents data on the foreign exchange component of the PSDPs. PSDPs are prepared annually by the Planning Commission and provide a detailed breakdown of the annual development budget by source of origin of funds: national funds and foreign aid. However, the foreign aid funds are shown in local currency and this does not help much. Therefore, in order to obtain correct relative
trends in the availability of foreign aid for development purposes, data in this table is presented in current rupees, constant rupees, current U.S. dollars, and constant U.S. dollars. 

Table 6.1 shows that though the foreign currency component of annual PSDPs nominally increased almost two and a half times in the 1980-81 to 1992-93 period, in terms of constant 1980 rupees, the beginning and end figures are exactly the same (in the intervening years, the figures show some variation). Thus, in constant rupees, it was stagnant. But when we convert current rupees into U.S. dollars, we get

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FOREIGN FUNDS IN CURRENT RS.</th>
<th>GDP DEFLATOR BASE=100</th>
<th>PSD EXP. IN 1980 RS.</th>
<th>EXCHANGE RATE 1 US $=RS.</th>
<th>PSD EXP. IN CURRENT USD</th>
<th>CONSTANT 1987 $ DEFLATOR*</th>
<th>PSD EXP. IN 1987 USD</th>
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<tr>
<td>1980-81</td>
<td>10981</td>
<td>100</td>
<td>10981</td>
<td>9.9078</td>
<td>1108</td>
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<td>12491</td>
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<td>11421</td>
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<td>14574</td>
<td>115.14</td>
<td>13005</td>
<td>12.7063</td>
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<td>126.26</td>
<td>10812</td>
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<td>11436</td>
<td>15.1512</td>
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<td>1985-86</td>
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<td>1986-87</td>
<td>23081</td>
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<td>16198</td>
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<td>15808</td>
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<td>16047</td>
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<td>103.9</td>
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<td>7642</td>
<td>21.4453</td>
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<td>108.4</td>
<td>612</td>
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</table>

It should be pointed that although major portion of aid in 1980s was provided by the United States, not all foreign aid is in U.S. dollars. Thus converting the total figure, which also comprises other hard currencies, to U.S. dollar may have introduced a small error (positive or negative).
<table>
<thead>
<tr>
<th>Year</th>
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<th>GDP Deflator</th>
<th>Exchange Rate</th>
<th>Foreign Aid Availability</th>
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<td>1990-91</td>
<td>244.13</td>
<td>11999</td>
<td>22.4228</td>
<td>1092</td>
</tr>
<tr>
<td></td>
<td>112.9</td>
<td>968</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991-92</td>
<td>224.75</td>
<td>16529</td>
<td>24.8441</td>
<td>1495</td>
</tr>
<tr>
<td></td>
<td>1495</td>
<td>117</td>
<td>1278</td>
<td></td>
</tr>
<tr>
<td>1992-93</td>
<td>245.75</td>
<td>10981</td>
<td>25.6394</td>
<td>1053</td>
</tr>
<tr>
<td></td>
<td>1053</td>
<td>121.2</td>
<td>868</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
*1: 1990-91 to 1992-93 figures include ministries budget plus development budget of public sector corporations including those off-budgeted.
*2: 1992-93 Implicit Price GDP Deflator and exchange rate is for July-March period.

A better picture of the trend of commitments of foreign aid for the purpose of development. In U.S. dollars, the foreign aid component of PSDP shows a decline over this period. Foreign aid component of PSDPs actually declined by a little over 5%, from U.S. $1108 million in 1980-81 to 1053 million in FY 1992-93 period. And this dismal picture takes a far more somber turn when we take into consideration the inflation in the value of the U.S. dollar itself by applying the implicit price deflator using 1987 value as the base. This gives us the most accurate picture of the trend as well as the absolute foreign aid commitments to development purposes. The last column of Table 6.1 shows these amounts and from this we see that the foreign aid availability for development purposes in this period actually declined from $1546 to $868, a decline of nearly 44 per cent.100

It must be pointed out that diversion of foreign exchange resources to security oriented non-development expenditure was not the only reason for less than required availability of

100 It should be pointed out that during the same period, the population of the country increased from nearly 82 million to 120 million. The per capita foreign aid component of various development plans thus declined even more.
funds for development purposes. An equally significant constraint has been the debt burden which manifests its negative effects as decreased net aid transfers, i.e., the aid that the country actually receives as opposed to the sum of disbursed aid on paper. Net transfers are gross disbursements minus debt service and show the monies actually available for both development and non-development purposes. The trend in net transfers is evident from the following Table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Disbursements *</th>
<th>Debt Servicing **</th>
<th>Net Transfers (NT)</th>
<th>NT as % of Gross Disbursements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-61</td>
<td>342</td>
<td>17</td>
<td>325</td>
<td>95</td>
</tr>
<tr>
<td>1970-71</td>
<td>612</td>
<td>182</td>
<td>430</td>
<td>70</td>
</tr>
<tr>
<td>1980-81</td>
<td>861</td>
<td>603</td>
<td>258</td>
<td>30</td>
</tr>
<tr>
<td>1988-89</td>
<td>2487†</td>
<td>1125</td>
<td>1362</td>
<td>55</td>
</tr>
<tr>
<td>1989-90</td>
<td>2202§</td>
<td>1232</td>
<td>970</td>
<td>44</td>
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<tr>
<td>1990-91</td>
<td>2045</td>
<td>1316</td>
<td>729</td>
<td>36</td>
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<tr>
<td>1991-92</td>
<td>2366</td>
<td>1513</td>
<td>853</td>
<td>36</td>
</tr>
<tr>
<td>1992-93#</td>
<td>2241</td>
<td>1519</td>
<td>722</td>
<td>32</td>
</tr>
</tbody>
</table>

Notes:
* Excluding relief assistance for Afghan refugees.
** Excluding interest on short-term borrowing and IMF charges.
† Inclusive of IMF Structural Adjustment Fund loan.
# Estimated.
Source: ES 1992-93, p. 103. (Original source quoted is Economic Affairs Division, Ministry of Finance).
Role of the IMF

The International Monetary Fund acquired unprecedented importance in the 1980s as the Third World debt crisis escalated and began to threaten the stability of international financial system. This organization was established after World War II, essentially under American initiative and leadership, for the purpose of stabilizing and protecting the financial exchange system of the capitalist world from sudden fluctuations such as those witnessed in Europe after the end of World War I.

Since the late 1970s, the most likely source of turmoil in the international financial system has been the threat of default by third world countries on their debt service payments to the commercial banks of the advanced capitalist countries. In response to this, the IMF has assumed a special responsibility to act on behalf of international banking institutions. Indeed, it was particularly suited to play this role given its purse, its charter, and the control exercised over its agenda by the governments of great capitalist powers. Writing about the role of the IMF during the Latin American debt crisis in early 1980s, Branford and Kucinski (1988) point out:

...the IMF appeared to the banks like a godsend. The banks were delighted by the profits they made from the first rescheduling in 1982, in which the panic-stricken
Mexicans agreed to highly unfavorable conditions. But they were terrified that, in the succession of Latin American reschedulings that they began to realise was inevitable, neither they nor the governments in the industrialised countries would be able to force the Latin American nations to impose the harsh policies needed to extract the large trade surpluses necessary to finance debt-servicing payments in hard currency. During a visit to Buenos Aries, Karl Otto Poehl, IMF governor for West Germany, was quite open about this: "The IMF is our only hope. It is the only institution that can lend money and impose conditions for doing so. No government can do this, nor any bank." (p. 18).

Whenever a member developing country in not in a position to fulfil its external current account obligations, and is in danger of defaulting on debt payments, the IMF offers (a) immediate concessional financial assistance to support balance of payments, and (b) help in postponement of debt service payments through rescheduling of foreign commercial and non commercial debt. But in return, the IMF requires the developing country government to sign a "structural adjustment" agreement, which in effect provides it with a big say in the country's macroeconomic policies.

Pakistan signed the first structural adjustment agreement with the IMF in 1982, following a severe balance of payments
crunch in 1980-82 period. The conditionalities of this agreement provided the IMF with an opportunity to influence the development strategy. As Hussain (1989, p. 233) writes, "The Sixth Five Year Plan [1983-88] which was formulated by the Martial Law regime reflects the Structural Adjustment Program imposed on Pakistan’s planners as a condition for the loans given by the IMF/WB. The Sixth Plan places emphasis on resource allocation based on present comparative advantage, agriculture as the basis of achieving aggregate GNP growth targets, and concentration on agricultural exports."

In 1988 the GOP was once again constrained to obtain IMF loans to bolster its dwindling foreign exchange reserves. It signed another 3-year structural agreement with the IMF. One of the conditions of this agreement was that the budget deficit in each fiscal year of the agreement period was not to exceed 4.8% of GDP. However, the government could not keep the budget deficit down to agreed levels: The then Prime Minister blamed high debt service payments for this (EIU 2/1992, p. 12). Though the original agreement was for a 3-year term, it had to be extended to four years "because of government’s failure in 1990 to meet certain agreed conditions" (EIU 1/1993, p.24).

In 1993, a year after the previous agreement ran out, Pakistan was once again having serious trouble with its external current account. Consequently, another agreement
with the IMF was reached that provided balance of payments support. This agreement is currently in force and shall continue on till 1996.

**IMF conditionalities and emergence of deregulation and privatization policies.**

Although the specifics differ from country to country, the set of "structural adjustment" conditionalities that the IMF imposes on the governments of developing countries consist in (So, 1990; Branford and Kucinski, 1988; Hussain, 1989):

1. Commitment to bring down the budget deficit to an agreed percentage of the GDP, the target being normally less than 5 per cent.
2. Devaluation of national currency.
3. Commitment to dismantle State Organized Development Strategy, i.e., deregulation and privatization policies.
4. Regular policy dialogue on national budget and development plans.

As Branford and Kuicinski (1988) explain, the purpose of the first two conditions is to reduce the current account deficit by increasing exports and decreasing imports. The first condition, reduction in budget deficit, does this by controlling consumer demand through massive reduction of government spending. Low level of consumer demand decreases the demand for imports, improves the balance of payments position, and hence assures debt service payments. It is for
this reason that the IMF absolutely insists on keeping the budget deficit to a minimum possible size.

Out of the four major categories of Pakistan's budget, debt service, defense spending, social spending, and development spending, it is the last which various recent governments have found the easiest to cut or cap. Reduction of government spending on development ultimately means that it has to withdraw from economic activities or at least restrict the role of the public sector. The emergence of the policies of deregulation and privatization in the energy sector in the mid-80s must be seen in this light.

The second conditionality directly affects both the level of exports and imports, and hence the balance of payments. Currency devaluation makes exports cheaper in the international market and imports more expensive in the

101 It is not possible to stop or reduce external debt service payments, the largest item in budget, unilaterally without incurring the wrath of the entire world capitalist order. Defense spending, the second largest item, is determined by the powerful military, and it is simply not possible for civilian authorities to alter it. Social spending is the smallest item in the budget. Cuts in it cannot yield much. Furthermore, social spending cuts usually evoke anti-government sentiment and therefore are politically expensive. The final category, the development budget, has no real lobby to protect it, and is therefore the most likely first victim of spending cuts. For example, an interesting episode took place soon after the federal government announced its 1992-93 budget. As EIU writes, "Capital spending, under the Public Sector Development Programme (PSDP), was put at PRs74.1 bn in the budget speech - compared with the revised 1991/92 estimate of PRs64 bn - but had been reduced within hours to PRs67.6 bn, lower, in real terms, than in 1991/92." (EIU 2/1992, p.27, emphasis added). It was certainly immediate and acute IMF pressure that led to a swift government retreat. EIU further writes: "There was considerable criticism of the government when it emerged that early spending cuts were being made on the capital rather than current account, particularly given the steady decline in development outlays, in relative terms, over the years."
domestic market. It's main effect is an increase in the level of export demand. Products are thus channelled away from the domestic market to the international market, and this increases a country's export earnings.

A concomitant effect of devaluation is that it restricts imports as well. This happens because of the resulting higher prices of imported goods leads to a drop in their demand.

Increase in exports relative to imports brought about by the above methods does result in greater availability of hard currency. This decreases pressure on a country's balance of payments account as the hard currency is used for debt servicing and non-factor services payments (shipping costs, insurance, etc.).\(^\text{102}\) However for countries like Pakistan, which has traditionally relied on imports for procuring substantial quantities of its capital goods and industrial raw-materials, it also results in another problem. As in the case of Pakistan's energy sector, almost all of the capital goods and three-fourths of petroleum are imported in hard currency, higher prices of imported goods mean an escalation in the cost of new plants as well as in the cost of production of all goods including power. This makes the setting up of new projects in the public sector much more expensive. It is

\[^{102}\text{In the next chapter, we discuss the nature of Pakistan's foreign trade in greater detail, especially from the standpoint of its ability and potential for financing development.}\]
not surprising therefore, that given the IMF pressure to reduce government spending, the government ultimately made a policy decision not to invest in any more new thermal power plants (deregulation) and also sell the ones that it owned to the private sector (privatization).

The third and fourth conditionalities, which are interlinked, have acquired a greater importance to the IMF in recent years. With the end of superpower military and political competition in third world countries, and the creation of essentially a unipolar world led by the United States and its allies in Western Europe, foreign economic aid does not anymore has its previous strategic importance. Consequently, the IMF and the World Bank (as we shall see below) do not have to show the previous restraint and sensitivity to political considerations in their dealings with the governments of developing countries. The IMF is now in a much freer position vis-a-vis the developing countries to lay down their macroeconomic policies. And in doing so, it naturally gives priority to one of its core missions, that is, to promote private foreign investments in the developing world. The current emphasis on dismantling the public sector enterprises through privatization and encouraging foreign private investments through the particular type of deregulation of the economy that is being encouraged, is part of this strategic approach.
IMF's influence over other lenders.

The IMF and the World Bank play a dominant role in the formulating country lending policies which are then followed by other multilateral and bilateral lenders, of which the Asian Development Bank is the most significant in the case of Pakistan.\(^\text{103}\)

IMF's influence and leverage over policy matters is not restricted to its direct, bilateral policy dialogue with the GOP. The IMF also has the capability to influence domestic policies of Pakistan, whether these be social, political, or economic, through the enormous influence it commands over other lending bodies, especially the Aid-to-Pakistan Consortium. This body is a group of bilateral and multilateral lenders which meets annually in Paris, usually in spring, to determine the level of assistance to Pakistan for the upcoming fiscal year. The annual meetings are also attended by observers from a number of non-Consortium countries and financial institutions. For instance, the

\(^{103}\) In recent years, the ADB has become the largest single lender to Pakistan. The World Bank Annual Report for 1992 states that "The Bank's relationship with the Asian Development Bank continues to be close. Contacts between the two vice presidencies in the Bank, for South Asia and for East Asia and Pacific, and their counterparts in the AsDB were consolidated soon after the Bank's December 1991 organizational changes. A new area of cooperation between the two institutions concerns initial economic work and analyses on Cambodia. During fiscal 1992, the Bank provided the AsDB with information on the design and implementation of policy-based lending - a field entered into only recently by the AsDB. By mutual agreement, cofinancing by the AsDB for Bank projects usually consists of parallel financing of separate projects within a sector rather than cofinancing a single project. (p.101)
Consortium meeting held on April 23-24, 1992, was attended by the representatives of the governments of Belgium, Canada, France, Germany, Italy, Japan, The Netherlands, Norway, Sweden, Switzerland, Britain, and the United States. Multilateral lending organizations who are regular members of the Consortium that were in attendance were the Asian Development Bank, the Commission of the European Communities, IFC, IPAD, IMF, the World Bank, and IDA. Non-consortium members were: United Nations represented by UNDP, UNCF, UNESCO, ILO and UNHCR. In addition, observers from Australia, the Islamic Development Bank, the Kuwait Fund for Arab Economic Development, OECD, Saudi Arabia and WFP also participated in the meeting (Pakistan Yearbook, 1992-93, p.547).

This group represents almost the entire spectrum of lending governments and institutions. The IMF and the World Bank are the leading players within this group, and it is their analysis and recommendations that holds sway over the other parties: The latter customarily look up to the former to provide pertinent information, analysis, and lending policy directions. Further, important bilateral donors have boosted the position of the IMF and the World Bank vis-a-vis developing country government by enacting "cross-conditionalities" in their aid own programs. As Moore and Robinson (1994) write:
By far the most important policy conditionalities were economic: by the end of the 1980s, most Third World had come to accept some combination of the economic liberalization and structural adjustment packages long promoted by major donors: the World Bank and the International Monetary Fund. In the economic policy sphere, "cross-conditionality" had also become the rule: individual bilateral aid donors made continuing aid conditional on the existence of economic policy agreements between individual recipient countries and the International Monetary Fund and/or the World Bank. (p.144).

The IMF and the World Bank have thus acquired a dominant role in the formulating the lending policies regarding a developing country. These lending policies are also adhered to by a wide variety of other multilateral and bilateral lenders.

Developing country governments, if they choose to depend on foreign borrowing to support the balance of payments and economic development, cannot afford to annoy these two institutions, as they conjointly have the capacity to erect an international financial blockade against the wayward developing country with devastating consequences. For this reason, the top leadership of any developing nation has to make sure that clear assurances are given to the IMF/World...
Bank regarding policy intentions. We see precisely this dynamic in the following report of the EIU, after the appointment of a caretaker government in Pakistan led by Mr. Moeen Qureshi in the summer of 1993:

A September 26 meeting in Washington of representatives of the Aid to Pakistan Consortium, chaired by the World Bank's managing director, Ernest Stern, and the IMF's deputy managing director, Richard Erb, also gave an enthusiastic reception to the caretakers' reforms. Mr Qureshi said in an interview that he had asked the higher level consortium meeting to "convey that there is a responsible team of economic managers who will promise the right things and also execute these without delay". Pakistan's reputation for economic management was "not very good", he said, adding that it "suffers from a lack credibility". But while the donors applauded the caretakers' success in addressing long standing problems, they stressed the importance of sustained and effective implementation of the programme by the next government, making it clear that pledges for financial assistance would only be forthcoming if there was satisfactory progress in this regard.

On November 11 agreement was reached on the terms of a three-year adjustment programme. As a result the approval of some $1bn in soft loans from IMF's Enhanced Structural
Adjustment Facility and Extended Fund Facility for a medium term (1993/94-1996/96 [sic]) reform programme had been expected during a meeting of the Fund's decision making board scheduled for late November. However, approval was put off until the board's next meeting in February. The ostensible reason given by Fund officials was that Pakistan was still drawing down its stand-by loan. In fact, it was understood, the fund wanted to wait and see whether the new government [that came to power as a result of Oct. 1993 elections] was genuinely committed to the terms of the adjustment programme [that had been agreed earlier with the Qureshi government]. (4/1993, p.30, emphasis added).

The newly elected Peoples Party government led by Benazir Bhutto wasted no time to reassure the IMF regarding its policy intentions. In fact, the new government ordered a wholesale review of policies so that it could purge out policy elements inherited from the Nawaz Sharif period who had developed a discordant relationship with the IMF. The EIU (4/1993) writes:

One of Ms Bhutto's first acts was to set up task forces to formulate economic policy in such areas as inflation, privatization and foreign trade. She is under great pressure not to deviate from the Qureshi government's package, which was in fact the first tranche of
structural adjustment measures worked out with the IMF and the World Bank under its three-year programme. The IMF's decision to wait until February before seeking its board's approval of $1bn in soft loans under the Enhanced Structural Adjustment Facility (ESAF) and the Extended Fund Facility (EFF) was a clear signal that it is prepared to hold the new government to the agreed programme. (p.11).

Thus we see that the IMF is not only the central player in the economic policy arena, but is also the one that has the longest "teeth" to dictate policies that are in line with its objectives. Ever since the early 1980s, it has been putting sharp and consistent pressure on GOP to re-align its economy according to neo-liberal principles. The macroeconomic policy changes that ensued, have had a great impact on the energy sector. Hesitatingly but consistently,

104 It should be pointed out that the obtrusive role of the IMF and the social pain caused by the implementation its conditionalities, naturally causes resentment among the masses of the people who have to bear the brunt of structural adjustment program. The resentment is paralleled by vociferous critics of the more informed sections of people. Nationalistically inclined politicians and political parties also seem determined to make political hay out of it. IMF's relations with Pakistan, like its relationship with other developing countries facing similar pressures, are therefore not without friction, as was evident in the latter part of Mr. Nawaz Sharif's 1990-93 tenure in office. Mr. Sharif had run afoul of the IMF due to his spending policies and reluctance to follow its strictures on the budget deficit. It is believed by Mr. Sharif's sympathizers that the dismissal of his government in April 1993 had a lot to do with the IMF's dissatisfaction with the fiscal policies he had come to embrace. Therefore, we can not assume that future governments will be as much responsive to IMF's pressure as was the interim government of Moeen Qureshi, or the current government of Benazir Bhutto appears to be.
the GOP has been withdrawing from its previous pivotal role and responsibility for energy sector development. The one exception is the hydel subsector.

**Changes in World Bank Energy Sector Policies**

Unlike the IMF that deals mainly with macroeconomic policies, the World Bank's primary focus is on sector level policies in developing countries. Energy sector policies espoused by the World Bank went through a major shift in the 1980s. This is most clearly evident from the fact that whereas in the early 1980s the World Bank was routinely financing public sector energy projects, by the late 1980's and early 1990s, its emphasis had shifted to the sector-wide deregulation and privatization of the very same public sector energy institutions that it had helped to create over the past three decades (World Bank, 1993).

Up until the 1980s, the World Bank supported SODS in the energy sector of all developing countries. Its recent policy document on the energy sector writes: "The Bank's lending in the power sector has operated in the framework of state ownership and public control of a power monopolist. This approach helps capture economies of scale in small power systems and provides financing in the absence of capital markets. Prior to the mid-1970s, this approach was generally satisfactory in most developing countries, in an environment
of low inflation and low debt levels, . . . (World Bank, 1993, p.34).

From the inception of its lending programs to developing countries and through fiscal 1991, about 15% of the Bank's total cumulative lending was for energy development. About 7% of the entire investments by developing countries on energy in the 1980s came from Bank resources, while it also helped raise cofinancing from commercial sources for energy projects (World Bank, 1993). However, as a result of recent profound changes in the Bank's policy regarding energy sector development (and macro-level development strategy in general), it is no longer interested in lending money for direct expansion of public sector energy resources. Recognizing this, the World Bank's policy paper on energy states:

Today, however, the Bank is no longer a significant financier for power sectors in developing countries, except for the lowest-income countries eligible for International Development Association (IDA) credits, which accounted for 8 percent of total Bank power lending for fiscal 1992 and for about 2 percent of the total foreign exchange requirements in developing-country power sectors. Outside of most IDA countries, the Bank is becoming less involved in the direct transfer of significant amounts of resources, and more involved in helping developing countries organize themselves to
mobilize the resources they need to meet large investment requirements. (World Bank, 1993, p.55).

For Pakistan, which had largely come to depend on concessional funds from the World Bank group for energy development, especially its power subsector, reduction in the availability of such assistance has had a serious effect on the course of events and the options available to policymakers. In the first two fiscal years of this decade, foreign borrowing on average were slated to finance 52 percent of the total public sector expenditures on power development whereas in the succeeding two years, the average foreign financing was budgeted at only 32 percent of the total (PSDP 1990-91, 1991-92, 1992-93, 1993-94).

The shift in emphasis of World Bank's lending to Pakistan's energy sector in the 1980-1993 period is quite clear. While through much of the 1980s, the World Bank's energy sector lending assistance was in support of what it called the government's "core energy-investment program" by the beginning of the 1990s this was no longer the case. By then, the World Bank had essentially withdrawn from direct lending to the public sector energy development projects, except in the case of on-going or previously committed funds for some projects or, and

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105 The core investment plan was incorporated in the five-year plans and respective annual development plans.
this is the Bank's current lending emphasis, for the purpose of restructuring and adjustment of the energy sector and to facilitate and support private investments. The Bank was now using the power of its purse as a lever to bring about the changes that it desired, that is, deregulation and privatization of existing public sector enterprises. For example, EIU stated in the spring of 1992, that:

With foreign creditors increasingly making loans for the energy sector conditional on the beneficiary companies becoming more privately oriented, the government is now actively examining the privatisation of major utilities, including WAPDA, SNGPL, and SSGC. These utilities were initially excluded from the scope of the privatisation programme owing to their perceived strategic importance. (2/1992, p.33).

In the case of SNGPL and SSGC, the World Bank and the ADB have laid out specific guidelines for the government to follow if it continues to want to receive funding. "The World Bank and ADB have made the disbursement of loans earmarked for SNGPL and SSGC conditional on the sale of 51% of their equity by mid-1993 and their full privatization by 1995" (EIU 2/1992, p.34) and that the State controlled shareholdings could not exceed 40% and the GOP must sell at least 20% shares to a foreign corporation. Novacorp of Canada, Sofregaz of France, and British Gas were in the bidding for this share (EIU
And when the first hurried attempt by GOP to privatize SNGPL through the stock market went badly, it put a major planned development project into serious jeopardy, or at least a needless delay, with consequences that are bound to rumble through the economy for an extended period of time: As a result of poor takeup of shares, writes EIU, "The government was also obliged to seek an extension of the World Bank deadline for the sale of shares to a foreign concern. The unenthusiastic response has thrown in doubt SNGPL's plans, costed at $855 mn. to increase its production capacity from 500 mcfd to 800 mcfd. The Bank's provision of $230 mn is conditional on the realisation of a series of agreed steps towards full privatisation including the sale of shares to an overseas partner" (4/1992, p. 33).

Similarly, when faced with resistance from different quarters to its policy recommendation to privatize WAPDA, Pakistan's main power utility:

"The WB is reported to have threatened to stop lending to Wapda unless meaningful moves were made to render it more commercial. The Bank is offering $100 mn to help "restructure" the authority and has promised to mobilise other donors as the privatisation process takes shape. It is also strongly advocating increased tariffs as a way of generating local counterpart funding to foreign credits. Wapda officials say the disinvestment process, which
could take six years, will involve the sale of the distribution network, regional electricity boards and Wapda's thermal power stations." (EIU 2:1992, p. 34).

Thus, it is clear that given the new World Bank policy guidelines, which other multilateral and bilateral lenders have come to embrace, there is no reason to expect that funding for public sector energy development would be available at past levels. Severe reduction in the availability of funds from this major source has compelled policy-makers to seek capital from commercial sources but more importantly, to open up this sector to private investors.

World Bank's New Role in Energy Sector

The World Bank's withdrawal from direct financing of public sector energy development does not mean that it has become less active in this sector. Quite the contrary. As mentioned above, the Bank is very actively pursuing a host of measures which it thinks are necessary for improving the energy picture in developing countries. A policy paper that enunciates the World Bank's current role in the power sector development of borrowing countries puts forward five guiding principles that are to determine its strategy towards each country. These are:

1. "A requirement for all power lending will be explicit country movement toward the establishment of a legal framework and regulatory processes satisfactory to the
Bank. To this end, in conjunction with other economy-wide initiatives, this requires countries to set up transparent regulatory processes that are clearly independent of power suppliers and that avoid government interference in day-to-day power company operations (whether the company is privately or publicly owned). The regulatory framework should establish a sound basis for open discussion of power-sector economic, financial, environmental, and service policies. The Bank must be satisfied that there is meaningful progress towards this objective." (World Bank, 1993, pp. 59-60, emphasis added).

2. "In some of the least developed countries, where there are weak public and private sectors, a relative lack of market forces, and undeveloped capital markets, an early step in bringing about power-sector reform and increasing sector-management efficiency will be to bring local, developed-country, or more advanced developing-country electric power services into the sector. (World Bank, 1993, p 68).

4. "The Bank will focus lending for electrical power on those countries with a clear commitment to improving sector performance in line with the above principles."

The meaning of this principle is made clear when this policy paper adds that "Commitment must be judged on a country-by-country basis around the themes of significant progress toward needed reform and no more business as usual. (World Bank, 1993, p.72).

5. "To encourage private investment in the power sector, the Bank will use some of its financial resources to support programs that facilitate the involvement of private sector." (World Bank, 1993, p.75).

In the case of Pakistan, these principles have been translated into four main country policy thrusts of the World Bank. First, the Bank has strongly emphasized the necessity to dismantle the public sector in a two step process, which consists in first corporatization, and then privatization of existing public sector corporations in both the power and the oil and gas sectors. In line with this, it has told the government of Pakistan to begin the process of divestment of the two power utilities, WAPDA and KESC, and the three public sector oil and gas companies, namely, OGDC, SNGPL and SSGC. To bring this about, the Bank has been providing loans to the government for technical assistance and consultants in such areas as policy reform and development of methods and
procedures for privatization. And as we have seen above, future lending of Bank funds has been made conditional on the completion of the sector's structural adjustment that is satisfactory to the Bank.

The second thrust of the Bank has been to force the Pakistan government to raise the price of power, petroleum products, and gas so as to bring them at par or even higher than the world prices of similar products. Along with the conditionality to make the Pakistan currency fully convertible, which process will be completed by the summer of 1994, the purpose of this policy thrust is to make investments in the energy sector lucrative enough so as to attract international private investors.

The third thrust of the Bank has been to make the Pakistan government dismantle all barriers to private investment in the energy sector for both domestic and international investors. According to the Bank, it is important that there are no barriers that are discriminatory to foreign energy corporations, as it is the large foreign energy corporations that the Bank really expects will play a leading role in the development and production of energy products.

The fourth and final policy thrust of the World Bank has been to set up a revolving fund to help provide assistance to the private sector energy investors. This fund, called the
Private Sector Energy Development Fund, was set up with a $600 million World Bank loan and is administered by the National Finance Development Corporation, a government owned development finance institution. The main beneficiary of this fund so far is Hubco, a consortium of international investors which is in the process of setting up a 1,292 mw thermal powerplant on build-own-operate (BOO) basis near Karachi.

The above policy thrusts of the World Bank have been instrumental in determining the shape and direction of energy policies of Pakistan in recent years. Unlike in the past, the Bank is becoming very assertive, promising "no more business as usual" in the pursuit of its policy objectives. This means that it would no more tolerate the non-observance of the performance covenants and other terms as it did, more or less, in the past and that it intends to use its full financial and organizational leverage in order to obtain complete compliance with the agreed conditionalities (World Bank, 1993, p.74). Therefore, for the Pakistani government, which has come to depend increasingly on external loans to finance its development outlays, debt service payments, and balance of payment deficits, it has become all but impossible not to adopt the policy measures suggested by the World Bank in the energy sector in recent years.

Penetration of State Energy Agencies by Foreign Lenders
The extraordinary ability of multi- and bilateral lenders to influence policy choices in the energy sector is a result of the direct access to the lower, functional levels of government that they have acquired. This has been so especially since the early eighties, when Pakistan signed the first of the structural adjustment agreements with the IMF. The unhampered access of lending agencies to influence the functional units of the State, whether these be involved in policy making process such as the Planning Commission or in policy implementation such as WAPDA, SNGPL, etc., is mainly through an informal process which has slowly emerged over a period of time.

Officially, the lending agencies like the World Bank are required to deal with the Economic Affairs Division of the Ministry of Finance and Economic Affairs. But, in words of a World Bank official interviewed by the author, the Economic Affairs Division "is just a mail box." Real business actually occurs directly between the lenders and the functional agencies, as mentioned above, and there are four main mechanisms through which the former are able to exercise influence over the latter. These are:

1. Through the provision of technical assistance, especially assistance to beef up the structural adjustment process.

106 Interview with an official of the Energy and Infrastructure Operations, Country Department III, South Asian Region, IBRD.
Lending agencies hire consultants to advise government departments or organizations on policy matters and how to bring about desired changes. For instance, when Energy International Resources was hired to devise a privatization plan for WAPDA, it gave it an opportunity to have direct access to the latter's bureaus and personnel, and work with them closely.

2. Commissioning and funding of studies which analyze a particular subsector or problem. For example, there is an ADB arranged and funded study that is currently underway as regards the gas pricing policy. Almost invariably, studies arranged by lending agencies are the only information and analysis available to officials and they end up taking policy decisions based on the findings and conclusions of such studies.

3. Covenants are signed into loan agreements that require functional units of government to implement specific measures or fulfill specific criteria in the design and implementation of a program that has been funded by lending agencies. An example would be the very detailed criteria which WAPDA is required to follow in its rural electrification program. Lending agency officials monitor the performance in such cases
and have opportunities to influence the actions of government agencies at the field level.\footnote{Interview with an official of the Energy Wing, Ministry of Planning, Islamabad. August 1993.}

4. Through face to face contact between lending agency officials and key officials of the government. An example of this was provided by a CIDA official interviewed by the author in Islamabad: CIDA had funded a program for the Oil and Gas Training Institute (OGTI) of the GOP. One of the conditions of funding the program was that the General Manager of OGTI be himself in charge of the program. However, this did not occur. Eventually, CIDA got in touch with other lending agencies "and tried to get a coalition of donors together" to put pressure on "somebody high up". After this, the Canadian High Commissioner met with the ministry's Secretary and the desired result was achieved.

A full discussion of this interesting and important topic is beyond the scope of this dissertation. For our purpose, it shall suffice to make note of two things:

1. That in the energy policy arena, emergent inter-organizational links and mechanisms exist through which foreign lending agencies are able to affect policy formulation and implementation at the micro-level.

2. The fact that the highest-level political and military leadership, which have most certainly been aware of this and
yet have, over the years allowed this to develop and continue, indicates that there has been a persisting "alliance" type relationship between Pakistan's ruling elites (and governing blocs) on the one hand, and the core institutions of metropolitan capitalism on the other, the various sites of which are the agencies and bureaus of the State in Pakistan.

Conclusion

As we have seen above, with increasing political pressure coming from different directions, the GOP--unable to make the kind of investments in the energy public sector on the strength of its own revenues-- had little choice but to adopt the strategy that the World Bank had been recommending for the energy sector. Behind the WB stood the IMF recommending the same course of action and which, through various macroeconomic conditionality agreements signed with GOP since the early 1980s, had already acquired leverage over Pakistan's economic and development policies. Similarly, the ADB, which follows the lead of the IMF/World Bank in policy matters, and which is currently the largest multilateral lender to the Government of Pakistan, put pressure on the latter to abandon SODS in the energy sector and adopt policies that would lessen and eventually relieve it of the burden of responsibility of developing and distributing the country's energy resources.
Chapter - VII
THE CONTEXT AND CONSTRAINTS OF ECONOMY

Introduction

In this chapter, I discuss two dimensions of the macroeconomic environment that have a direct bearing on the energy sector. The first is the specific elements in the structure of Pakistan's economy that have constrained and limited the balanced development of the energy sector. Policy directions adopted by the government since the mid-eighties will be explained with reference to these factors. The second dimension relates to the potential of the present economic structure to sustain the additional burden of hard currency obligations which the current policy of inducing foreign investments will create.

The real policy options that are available to energy planners in Pakistan are circumscribed by the availability or lack thereof of local and hard currency capital resources. This is a pivotal problem and it is related to the overall national economic performance, that is to factors outside the energy sector. It is not that the energy planners in Pakistan are not aware of the solutions to the energy problem at a technical level as is putatively believed. Study after study, undertaken by the governmental authorities or consultants to foreign creditor institutions or international organizations have shown what needs to be done in order to enhance the
availability of energy. Similarly, interviews of officials connected with different aspects of energy policy arena, conducted by the author for this study, reveal that there is a high degree of awareness among them regarding what needs to be done at the technical level. This is not to suggest that there is a consensus on policy measures pertaining to technical aspects: Far from it. The point here is that it is not possible to grasp the real forces that shape the energy problem and policies, unless one moves beyond the technical level at which much of the energy policy analysis has been done (see for example Azhar, 1991; Riaz, 1984), notwithstanding the absolutely necessary contributions of such discussions. In other words, to truly appreciate the forces that shape energy policy it is imperative that the context and constraints of Pakistan's economic structure be brought into view.

I argue below, that the prodding and pressures of the IMF and the World Bank notwithstanding, the key factor why deregulation and privatization policies were adopted in the mid-eighties was the perception among policy-makers that foreign private investments were their only recourse to acquire the amount of capital necessary to expand energy

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108 Interview with an official of Acres International, an energy consulting organization hired by Canadian International Development Agency to assist WAPDA in the development of in-house planning capacity, Lahore, August 1993.
production. This impasse was a result of several factors. First, the lack of adequate investments in increasing generating capacity during the Fifth Plan (1978-83), meant that large enough investments had to be made not only to clear the backlog of previous unmet demand but also to adequately meet current demand growth (Azhar 1991): This could only be achieved by mobilizing enormous capital resources. Second, Pakistan's economy had failed to produce the required capital and technological resources, despite the fairly impressive annual GDP growth rate of 6 per cent during the 1980s. Third, the traditional sources of official multilateral and bilateral aid which had financed the energy sector's expansion in the past to a large extent, were on the decline.

In the first section, I explain that it is the effects of the peculiar structural features created by the dynamics of past dependent development that have precluded or limited the possibility of (a) internal generation of capital resources required for adequate energy sector development, and (b) development of capital goods industries that could

\[ \text{109} \] Commercial energy projects require a substantial outlay of capital resources, both in domestic currency and foreign exchange. For example, the estimated cost of the 300 MW Chashma Nuclear powerplant that is now under construction is Rs. 16818 million (U.S.$ 655.9 m., at March 1993 rate of exchange) out of which Rs. 9965 million (US$. 388.6 m.) is to be in foreign currency (FGPSDP 92-93 rev. p. 45). The 600 MW combined cycle Guddu thermal powerplant is estimated to cost Rs. 4459 million (U.S.$ 173.9 million) out of which Rs. 2750 (US$. 107.2 m.) is to be covered by foreign aid (FGPSDP 92-93 rev. p. 184). Similarly, the 1450 MW Ghazi Barotha hydel powerplant that was approved by the government in December 1993 is estimated to cost US$ 2.25 billion (PTOW, Jan. 21, 1994, p.5).
indigenously provide the machinery and equipment needed for the development of the energy sector.\textsuperscript{110} I will do this by analyzing the performance of the strategic variables of the economy over the last 15 years.

In the second section, I address the question of whether Pakistan's current economic structure has the capacity to sustain the new demand for foreign exchange that will ensue as a consequence of the current policies. This demand for hard currency will result from repatriation of profits earned by their foreign-owned energy enterprises, commercial debt obligations, technical fees, etc.

Economic Context in which Current Energy Policies Developed

In this section I analyze the trends and tendencies of the economy's strategic variables. First I discuss the trend in savings rate which basically determines the relative availability of investible funds. Second, I analyze the nature and level of the country's investments. Third, I look into the relative composition of the national economic structure, and analyze tendencies therein. It is necessary to examine the evolution of the relative position of various

\textsuperscript{110} These are not produced domestically as neither the private sector nor the public sector has ventured into the manufacture of energy production equipment until now. However, certain initiatives are currently underway to indigenize power generation equipment at the state-owned Heavy Mechanical Complex at Taxila (ESa, p. 23). Recently, the Pakistan Atomic Energy Commission chairman Dr. Ashfaq Ahmand also put forward a proposal for the indigenous manufacture of thermal powerplant equipment by his organization.
sectors of the economy since the early 1980s, when the neo-liberal policies were put in place, in order to ascertain the impact of these policies on the development of basic branches of production. Finally, I discuss the nature and character of the technological capacity of the country as it has evolved through the process of dependent development. The tendency in the development of the heavy industrial sector will indicate whether the technological foundations of the country's capacity to produce energy generating machinery are being created or not.

**Strategic Variables**

Analyzing the performance of the economy in the 1976-77 to 1985-86 period, Hussain (1989) writes: "We discover that the strategic variables and sectors through which growth is sustained over time seem to show a declining trend: For example, the growth rate of fixed investment, the domestic savings rate, the growth rate in the value of exports, and finally the weight of the commodity producing sectors in the economy" (pp. 164-65). The first three strategic variables are of particular interest to us and are discussed below. The growth in the value of exports will be analyzed in reference to the trends in the value of imports and balance of payments.

Analysis of these strategic variables will reveal how the economy is really faring notwithstanding the relatively impressive GNP growth rate of around 6% that Pakistan has been
experiencing since the 1960s. Strong performance of the strategic variables is equated with robustness of the economy while a weak or faltering performance indicates its fragility (Hussain, 1989). Trends in the strategic variables can thus be used as an evaluative criteria of the performance of development policy strategies at the macro level. For example, if after incurring a heavy external debt burden, the strategic variables do not show a positive response, then the debt service is likely to become a constraint on future growth as domestic economic resources will be increasingly diverted from needed development projects to service the debt. In addition, further borrowing may be required for the purpose of paying obligations to creditor institutions (foreign governments, commercial banks, multilateral financial institutions), a phenomenon which we call the debt trap. Conversely, positive response in these variables would indicate structural changes in the economy—a move away from low-value added to a high-value added economy. This would also result in the creation of a strong export capacity. Debt service obligation in this case could be fulfilled without their becoming a constraint on future development.

Savings

Whether one chooses to use Domestic Savings Rate as a more reliable measure of the national savings effort (Bhatia, 1990; Hussain, 1989; Ahmed and Amjad, 1984) or the National
Savings Rate as Naqvi and Sarmand (1984) have argued, the fact remains that there is almost a unanimity of view amongst various authors that "the level of national savings is considerably lower than required for a respectable growth effort" (SBPAR 1990-91, emphasis added). In my view, it is the Domestic Savings Rate that is a more robust measure of the national savings effort as opposed to the National Savings Rate. This is because the National Savings Rate includes the remittances (income) of workers employed abroad and thus does not exclusively represent domestic economic performance, whether income or savings. The magnitude of these remittances which "rose from a modest amount of Rs. 617 million in 1973-74 to the staggering figure of Rs. 39595 million in 1983-84 and touched the peak of Rs. 41359 million in 1985-86 forming 7.5% of that year's GDP," (Bhatia, 1990, p. 251) produces an exaggerated picture of savings as while "the remittances from abroad do form a part of national income but cannot be regarded as savings because a large part of these enters the consumption channel and only a fraction of these may be available for capital formation" (Bhatia, 1990, p.252-3). The author correctly notes that "In Development Economics, the concern is really with investible funds and it is the domestic savings that provide the surest base for providing investible funds to the economy." (p. 253).
Table-7.1 presents data on both National Savings and Domestic Savings. It also shows data on Foreign and National Savings of Pakistan as a percentage of GNP for the 1980-92 period. In addition, it provides data on Domestic Savings Rate of Pakistan and five other developing countries for the purpose of comparison. Domestic Savings Rate is shown as a percentage of GDP of respective countries.

The average annual Domestic Savings Rate of Pakistan during the 1980s was close to 9 per cent. This is considered to be extremely low for the purpose of meeting the investment needs of a developing country. Through the first seven years of this decade, the annual Domestic Savings Rate was actually lower than the decade average. It is only towards the end of 1980s that it shows a slightly upward though erratic trend reaching 12% in 1991-92. Although data for 92-93 and 93-94 are not available at the time of writing, one can reasonably expect that Domestic Savings would decline in both these years due to the damage caused by the floods in 1992-93 and the ensuing economic
Table 7.1
Investments and Savings Rates

<table>
<thead>
<tr>
<th>TOTAL INVESTMENT AS % OF GNP (MARKET PRICE)</th>
<th>AVG. 1970s</th>
<th>AVG. 1980s</th>
<th>80-81</th>
<th>81-82</th>
<th>82-83</th>
<th>83-84</th>
<th>84-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
<th>89-90</th>
<th>90-91</th>
<th>91-92#</th>
<th>92-93*</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Change in Stock</td>
<td>1.04</td>
<td>2.09</td>
<td>1.49</td>
<td>2.25</td>
<td>1.86</td>
<td>1.86</td>
<td>1.62</td>
<td>1.56</td>
<td>1.56</td>
<td>1.57</td>
<td>1.51</td>
<td>1.53</td>
<td>1.53</td>
<td>1.53</td>
<td>1.53</td>
</tr>
<tr>
<td>c. National Savings</td>
<td>3.85</td>
<td>3.87</td>
<td>3.85</td>
<td>3.86</td>
<td>3.87</td>
<td>3.75</td>
<td>6.7</td>
<td>8.76</td>
<td>12.28</td>
<td>10.56</td>
<td>11.57</td>
<td>11.64</td>
<td>11.54</td>
<td>12.0</td>
<td>12.4</td>
</tr>
<tr>
<td>d. Foreign Savings</td>
<td>7.8</td>
<td>7.2</td>
<td>7.18</td>
<td>6.68</td>
<td>6.63</td>
<td>6.84</td>
<td>7.02</td>
<td>7.19</td>
<td>7.26</td>
<td>7.35</td>
<td>8.04</td>
<td>8.56</td>
<td>8.73</td>
<td>8.69</td>
<td>9.72</td>
</tr>
<tr>
<td>DOMESTIC SAVINGS RATE AS % OF GDP.</td>
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<tr>
<td>Pakistani</td>
<td>8.937</td>
<td>8.85</td>
<td>8.53</td>
<td>8.06</td>
<td>8.37</td>
<td>7.85</td>
<td>6.7</td>
<td>8.76</td>
<td>12.28</td>
<td>10.56</td>
<td>11.57</td>
<td>11.54</td>
<td>12.0</td>
<td>12.4</td>
<td>12.9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>33.017</td>
<td>32.92</td>
<td>28.8</td>
<td>28.58</td>
<td>32.12</td>
<td>32.71</td>
<td>32.06</td>
<td>37.3</td>
<td>36.33</td>
<td>33.86</td>
<td>32.28</td>
<td>30.0</td>
<td>30.0</td>
<td>29.8</td>
<td>30.0</td>
</tr>
<tr>
<td>Turkey</td>
<td>18.905</td>
<td>14.07</td>
<td>18.85</td>
<td>17.31</td>
<td>15.26</td>
<td>15.31</td>
<td>17.79</td>
<td>21.47</td>
<td>23.36</td>
<td>26.11</td>
<td>21.72</td>
<td>18.3</td>
<td>17.6</td>
<td>17.3</td>
<td>17.6</td>
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<tr>
<td>South Korea</td>
<td>31.13</td>
<td>24.29</td>
<td>24.48</td>
<td>28.01</td>
<td>28.28</td>
<td>29.95</td>
<td>30.54</td>
<td>34.84</td>
<td>37.29</td>
<td>38.34</td>
<td>37.29</td>
<td>36.68</td>
<td>36.0</td>
<td>36.0</td>
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<tr>
<td>Thailand</td>
<td>22.958</td>
<td>20.21</td>
<td>20.1</td>
<td>21.37</td>
<td>21.35</td>
<td>20.58</td>
<td>21.21</td>
<td>23.89</td>
<td>24.51</td>
<td>27.31</td>
<td>29.15</td>
<td>33.57</td>
<td>32.0</td>
<td>32.0</td>
<td>32.0</td>
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<tr>
<td>FIXED INVESTMENT AS % OF GDP</td>
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</tr>
<tr>
<td>Pakistani</td>
<td>18.245</td>
<td>10.2</td>
<td>17.1</td>
<td>18.64</td>
<td>18.95</td>
<td>18.5</td>
<td>18.5</td>
<td>17.05</td>
<td>17.48</td>
<td>16.48</td>
<td>17.3</td>
<td>17.01</td>
<td>17.01</td>
<td>17.01</td>
<td>17.01</td>
</tr>
<tr>
<td>Malaysia</td>
<td>30.435</td>
<td>31.08</td>
<td>36.03</td>
<td>36.35</td>
<td>36.05</td>
<td>31.92</td>
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<td>26.35</td>
<td>22.96</td>
<td>24.13</td>
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<td>32.71</td>
<td>32.71</td>
<td>32.71</td>
<td>32.71</td>
</tr>
<tr>
<td>South Korea</td>
<td>29.12</td>
<td>32.14</td>
<td>27.98</td>
<td>28.37</td>
<td>29.25</td>
<td>28.91</td>
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<td>37.33</td>
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<tr>
<td>Thailand</td>
<td>24.899</td>
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<td>24</td>
<td>24.51</td>
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<td>31.48</td>
<td>35.55</td>
<td>35.55</td>
<td>35.55</td>
<td>35.55</td>
</tr>
</tbody>
</table>

Notes:
1. Figures in rows a through f are from Economic Survey (Government of Pakistan) 92-93.
2. Domestic Savings and Fixed Investment as % GDP for countries are from World Tables 1992 (IBRD) except for 1991 which is from World Development Report #3. Calendar years are equated with the first given fiscal year of Economic Survey 92-93 data.
3. Changes in Stock have been calculated by subtracting Gross Fixed Capital Formation (ES 92-93, Table 2.6, p. 41) which is the same as Fixed Investment, from Total Investment.
4. Revised
5. Provisional.
contraction, as well as the political crisis that gripped the country through much of 1993. Revised figures for 1992-93 show that GDP rose by only 3%, much lower than the previous year's growth rate of over 7 per cent.

The National Savings Rate also shows a flat trend throughout the eighties though with characteristic erraticness caused by the quality of harvests and the fluctuations in workers' remittances from abroad. In the first year of the decade, it was 13.98 per cent; in the last year it had declined slightly to 13.61 per cent. But then, in the first three years of the nineties, it shows a small but steady increase from 13.86% in 1990-91 to 14.49% in 91-92 to 15.24% in 92-93. However, as mentioned above, this trend is not likely to continue for the next two years due to flood damage and political crisis in 1992 and 1993 respectively. Importantly, however, the continuing decline in workers' remittances that began after the mid-eighties is likely to persist in the future, exerting a downward pressure on the National Savings Rate: Total workers remittances declined massively from U.S.$ 2595.31 million in 1985-86 to $1467.48 million in 1991-92, a decline of almost 43.5%.

The dismally low level of Pakistan's Domestic Savings Rate is thrown into sharper relief once we compare it to that of other oil-importing developing countries (see Table-7.1). The 1980s average annual Domestic Savings Rate of India was
almost two and a quarter times that of Pakistan. Similarly, Malaysia's Domestic Savings Rate was 3.7 times, Turkey's 2.1 times, South Korea's 3.5 times, and Thailand's 2.5 times that of Pakistan's.

The abnormally low level of savings rate in Pakistan is a key structural constraint that not only limits the possibility of rapid and sustained economic growth but it also forces the country to borrow money externally to meet its minimum investment needs. Throughout the 1970s, Foreign Savings\textsuperscript{111} contributed 47\% of the average annual Total Investments. In the 1980s, the average annual contribution of Foreign Savings was down to 26\% but once again we see an upward trend in the late 80s and early 90s. The relative decline in the contribution of Foreign Savings in the 1980s was not because National Savings were increasingly replacing the former as the source of investments: The trend in National Savings has been almost flat throughout the eighties. Rather, it was due to the reduced availability of foreign funds for investment purposes.

Another way to look at the relative performance of Pakistan's economy is to compare its ratio of Domestic

\textsuperscript{111} This category consists of all foreign currency funds that are available to the government for budgetary purposes in each year. The word "Savings" wrongly gives the impression that these funds have been earned; in fact, "foreign savings" consist entirely in loans and other aid obtained by the government.
Savings/GDP to Fixed Investment/GDP with the other developing countries shown in Table-7.1. This shows us how much of the economic growth of each country is financed by internal surplus or conversely, how much of a country's growth is dependent on external capital. Once again, Pakistan's performance is by far the worst: In its case, Domestic Savings financed only 55% of the Fixed Investments on the average in 1980s. The average annual figures for India, Malaysia, Turkey, South Korea and Thailand are 98%, 108%, 90%, 106% and 92% respectively.

Investments

Table-7.1 also presents data on Pakistan's investment picture for the 1980-92 period. It shows Total Investment, Fixed Investment, and whether investments were made in the public or private domains, and the sources of Total Investment. Figures that show details of Pakistan's investment picture are percentages of GNP at market prices.

The trends of both Total Investment and Fixed Investment remain more or less flat through the 1980s. As compared to the previous decade, it is clear that there was no progress at all in the performance of these key variables of development: While the average annual Total Investment increased barely from 17.41% in 1970s to 17.47% in the 1980s, Fixed Investment actually declined slightly from 16.37% to 15.38% over the same periods. The decline in Fixed Investment certainly outweighs 298
the slight increase in Total Investment as the latter includes Changes in Stock which is prone to fluctuations given demand conditions. It is the performance of Fixed Investment that tells us more precisely what direction the economy is moving in. Notwithstanding the decline in average annual Fixed Investment in the 1980s, there is a slight upward trend in the early 1990s. Whether this trend continues into the future or not remains to be seen. However, the current trend in rate of investments remains well below what is necessary for sustained growth. According to a report prepared by the World Bank for the 1993 Aid-to-Pakistan Consortium meeting, the "Total Investment... needs to increase from its current level of 18-19% of GDP to 23-24% by the end of the decade to maintain annual growth of 6-7% and address the country's monumental development needs." (EIU 2:1993, p.30).

Table-7.1 also presents a comparison of Pakistan's Fixed Investment as percentage of GDP with five other developing countries. As can be seen from this Table, the rate of Fixed Investment in Pakistan was the lowest throughout the 1980s. Indeed, it was lower by a margin of 20% as compared with the next lowest rate in the group, that of India. In 1990-91, the last year for which data are given, the rate of Fixed Investments of India, Malaysia, Turkey, South Korea, and Thailand exceeded that of Pakistan by 20, 92, 27, 119, and 109 per cent respectively.
Analysis of the trend in the type of Fixed Investment reveals that despite consistent government policy since the coup d'etat of 1977 to give lucrative incentives to the private sector, its share in Fixed Investment is almost the same in the 1980s (7.28%) as compared to the 1970s (7.20%).

The overall trend in the Investment rates in the 1980s reveals a picture of deep economic stagnation. In the first half of the decade, when the current energy strategy was formulated, fixed investment rate was actually in decline. In such circumstance, the idea of wooing foreign investors to rescue the economy certainly appeared quite compelling.

Structure of the Economy

The poor performance of savings and investment have resulted in the perpetuation of an economic structure that can only be characterized as underdeveloped in the sense that the bulk of national production continues to be of low value-added consumer goods and services. This can be seen from Table-7.2 which presents data on the sectoral composition of GDP over the period 1982-93.

112 However, it must be noted that by the end of 1980s, the private sector had overtaken the public sector, by a slight margin, as the major contributor to Fixed Investment. This trend has been continuing into the 1990s. In 90-91, private sector's share of Fixed Investment was 51.35%, in 91-92 it was 52.89%, while in 92-93 it is estimated to have declined slightly to 52.25%.
A striking fact that is revealed is that there was actually a negative, though small shift, in the relative contribution of commodity\textsuperscript{113} and non-commodity producing sectors over the last 11 year period for which data are available. The contribution of commodity producing sectors declined from 52.2\% in 1982-83 to 51.1\% in 1992-93 while that of the non-commodity producing sectors increased from 47.8\% in 1982-83 to 48.9\% in 1992-93. This picture is just the reverse of what one would expect in the case of an third world country that is forging ahead in economic development (Bhatia, 1990). In other words, it shows that in terms of structural change, Pakistan’s economy was in a state of deep and chronic stagnation throughout the eighties and early nineties.

Within the commodity producing sectors, the share of agriculture declined considerably relative to non-agricultural production. It declined by 4.9 percentage points of GDP as opposed to a gain of 3.9 points by rest of

\textsuperscript{113} GOP official publications use the term "commodity producing sector" to mean goods producing sectors of the economy, including agriculture and industry. "Commodity producing" is distinguished from "non-commodity" producing, which consists of the service sector, including costs incurred on state institutions. I have retained the GOP term, awkward as it is, simply to avoid any confusion in data.
### TABLE-7.2

**Structure of Economy**

<table>
<thead>
<tr>
<th>% of GDP (Real)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOURCE:</strong> ES 92-93, TABLE 2.4, P.35.</td>
</tr>
</tbody>
</table>

**YEAR**

<table>
<thead>
<tr>
<th></th>
<th>1982-83</th>
<th>83-84</th>
<th>84-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
<th>89-90</th>
<th>90-91</th>
<th>91-92R</th>
<th>92-93P</th>
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</thead>
<tbody>
<tr>
<td><strong>COMMODITY PRODUCING SECTORS</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>a. Agriculture</td>
<td>29.3</td>
<td>26.9</td>
<td>27.4</td>
<td>27.3</td>
<td>26.6</td>
<td>25.7</td>
<td>26.2</td>
<td>25.8</td>
<td>25.7</td>
<td>26.2</td>
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<tr>
<td>b. Manufacturing</td>
<td>16</td>
<td>16.6</td>
<td>16.5</td>
<td>16.7</td>
<td>17</td>
<td>17.8</td>
<td>17.4</td>
<td>17.6</td>
<td>17.7</td>
<td>17.8</td>
<td>18.3</td>
</tr>
<tr>
<td>c. Mining</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
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<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
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<tr>
<td>d. Construction</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
<td>4.4</td>
<td>4.3</td>
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<td>4.1</td>
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<td>4.2</td>
</tr>
<tr>
<td>e. Electricity &amp; Gas Distribution</td>
<td>2.3</td>
<td>2.5</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.8</td>
<td>3</td>
<td>3.3</td>
<td>3.5</td>
<td>3.5</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Sub-Total of GDP (Real)</strong></td>
<td>52.2</td>
<td>50.4</td>
<td>50.8</td>
<td>51</td>
<td>51</td>
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<td>51.3</td>
<td>51.6</td>
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<tr>
<td><strong>SERVICES SECTOR</strong></td>
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</tr>
<tr>
<td>a. Wholesale &amp; Retail Trade</td>
<td>15.8</td>
<td>15.7</td>
<td>16.1</td>
<td>16.2</td>
<td>16.2</td>
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<td>16.5</td>
<td>16.4</td>
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<tr>
<td>b. Transport, Storage &amp; Communications</td>
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<td>10.2</td>
<td>10.2</td>
<td>10</td>
<td>10.2</td>
<td>10.2</td>
<td>9.3</td>
<td>9.5</td>
<td>9.6</td>
<td>9.7</td>
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</tr>
<tr>
<td>c. Finance &amp; Insurance</td>
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<td>2.9</td>
<td>2.7</td>
<td>2.6</td>
<td>2.5</td>
<td>2.5</td>
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<td>2.2</td>
<td>2.1</td>
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</tr>
<tr>
<td>d. Dwellings Ownership</td>
<td>4.5</td>
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<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.4</td>
<td>5.4</td>
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</tr>
<tr>
<td>e. Public Adm. &amp; Defence</td>
<td>7.5</td>
<td>7.8</td>
<td>7.4</td>
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<td>7.3</td>
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<td>7.1</td>
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<tr>
<td>f. Services</td>
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<td>7.6</td>
<td>7.6</td>
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<tr>
<td><strong>Sub-Total of GDP (Real)</strong></td>
<td>47.8</td>
<td>49.6</td>
<td>49.2</td>
<td>49</td>
<td>49</td>
<td>49.1</td>
<td>48.7</td>
<td>48.7</td>
<td>48.4</td>
<td>47.9</td>
<td>48.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Notes:**
- R. Revised
- P. Provisional
the commodity producing sectors which means that the services sector gained one percentage point. The decline in the share of agriculture in GDP is by itself not a bad thing. What makes it bad is that the decline is not fully compensated by an increase in the share of other commodity producing sectors.

While the GDP share of the manufacturing sector (inclusive of small, medium, and large scale units) shows an increase of 2.3 percentage points in the 1982-93 period, (a growth rate of 12.7% over the entire period, or 1.16% per year), the share of construction remained stagnant at 4.2 per cent. The share of mining increased slightly from 0.4 to 0.5% but has been stagnant since 1985-86. It should be noted that petroleum and coal development come under this category. Only electricity and gas distribution sectors, which were entirely in the public sector during this period, showed an impressive gain and that too since 1986-87. The share of this sector increased from 2.3% of GDP in 1982-83 to 3.8% in 1992-93. However, this increase fell far short of what was required to meet the growing energy demand as I noted earlier.

On the other hand, the size of Pakistan's services sector is abnormally large and this has diverted scarce resources from investment in the more important commodity producing
sectors of the economy. On the implications of the growth trend in service sector and its relationship to the rest of the economy, Bhatia (1990) correctly points out:

The most interesting feature of economic development of Pakistan is however the astounding growth of the "service" or "tertiary" sector of the economy. If we include "construction" in the service sector because most of it represents house construction, which is a durable item of consumption, we find that whereas the service sector accounted for 39 per cent of gross national product in 1949-50, its share in 1975-76 had risen to more than half of the gross domestic product and in 1985-86 it stood at 54.6 per cent. It appears that what Pakistan was building really was a consumer rather than an industrial society. Development in the case of Pakistan meant expansion of military and civilian forces, trade and transport, banking and insurance, electricity and gas distribution, and several types of personal

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114 The trend in the overgrowth of the services sector began as a reaction to the policies adopted by Z. A. Bhutto's regime that reversed previous policy of favoring the industrial sector over the agricultural sector. His government's attempt to divert resources into the development of heavy industry instead of consumer goods industry as had been the case previously, was also responsible for this trend. Further, the fact that he used the mechanism of nationalization of large industrial and financial institutions to bring this, about deeply wounded the industrial class. The latter chose to either take their capital out of the country or invest in speculative service sector activities, mostly trade, real estate, and transportation, that promised high returns with minimum risk. This resulted in the overgrowth of the services sector (Adams and Iqbal, 1987; Bhatia, 1990).
services like teaching, law, medicine, etc. In the development process, the emphasis was thus shifting from commodity production to service production. The growth experience of developed countries is that tertiary sector expands rapidly after industrialization has reached an advanced stage. In the case of Pakistan, the intermediate stage between predominance of agriculture and expansion of tertiary sector was circumvented by passing directly from agriculture to services production as the predominant sector of the national economy. (p.296).

Growth in the service sector relative to commodity producing sector is, in itself, not necessarily a bad symptom. A closer examination of the service sector is necessary to make a judgement about its usefulness to economic development. As a matter of fact, certain segments of the service sector, such as computer software, engineering design, research, higher education etc., etc., can be correctly categorized as a part of the capital goods sector of an economy. However, in the case of Pakistan, the service sector consists largely of unproductive activities such as real estate, military expenditures, public administration expenditures, etc.

Low Level of Development of Heavy Industry

Another significant characteristic of Pakistan’s economic structure is the low level of development of heavy industrial base within its manufacturing sector. Historically,
industrialization in Pakistan has been based on the strategy of import substitution (Andruss and Mohammed, 1966; Adams and Iqbal, 1987; Bhatia, 1990). Import substitution led to the development of consumer industries whose profitability was guaranteed by protective tariffs and regulations. Given such opportunities, the private sector, both foreign and domestic, refrained from investing in basic industries. Industrialization and industrial production until when the Z.A. Bhutto regime came to power was almost entirely consumer goods oriented and was based on imported capital goods that utilized imported industrial raw materials to supply the domestic market. The State fully supported this industrialization process by providing cheap foreign exchange, protection, credits, and artificially creating terms of trade between agriculture and industry that were deliberately biased in favor of urban consumers and industry (Adams and Iqbal, 1987; Bhatia, 1990).

The Bhutto regime (1971–77) broke from the past policies and recognized the need to develop a heavy industrial base. Recognizing the short-term view and profit motives of the private sector, the Bhutto government planned for the development of basic industries in the public sector. It diverted credit and other resources from the private to the public sector and initiated the development of many heavy industrial projects that included Pakistan's first steel mill,
heavy mechanical and electrical manufacturing complexes, etc. However, the regime itself was relatively short-lived compared to the long gestation period of heavy industrial projects. It was overthrown by Army General Zia-ul-Haq in July of 1977 in wake of civil turmoil that followed the elections in March of 1977. Once it became stable, the military government started denationalization and encouraged private sector investment while de-emphasizing the public sector. While it continued with the heavy industrial projects initiated under Bhutto and saw these to completion, it did not undertake any major ones on its own. The period of SODS had essentially come to an end, although the Zia regime continued to follow it for the first few unsure years of its rule. Once again Pakistan's industrialization came to be characterized by consumer goods orientation. The de-emphasis of the capital goods sector is manifest from structure of imports shown in Table-7.3. From this table we can see the trend in the import of industrial raw-materials for capital goods industry. The share of such imports declined from 8% to 5%
of total imports in the 1980-81 to 92-93 (July-March period). Given that there was only a small increase in overall imports during this period (in constant 1987 dollars), one can only conclude that the basic industry of Pakistan is essentially stagnant. This is corroborated by the Pakistan Year Book 1992-93, which records on the basis of the draft report of the Eighth Plan Private Investments Working Group’s review of the performance of the Seventh Plan that, "There is no discernible move towards import-substitution of capital goods, a desired directional change of the Seventh Plan" (p.477). It was this same tendency in the Sixth Plan period (1983-88) that led Hussain (1988) to conclude that:

If we are to embark upon an industrialization drive and to achieve an indigenous technological capability we must establish a heavy industrial base in our country. This means developing a machine manufacturing capability; and the establishment of a heavy chemicals, electronics and metallurgical industry. The development of technologies suited to our factor endowments requires an institutional linkage between domestic machine production and science research. Finally, the development of energy production whether through a rapid development of dams on the upper Indus river and/or nuclear technology is essential. (p.77).
There are serious implications of the current lopsided production structure for future growth of the economy in general, and the energy sector in particular. The overdevelopment of the services sector and the undernourishment of the commodity producing sector, especially its heavy manufacturing component, means that while on the one hand the demand for commercial energy would be high, on the other hand the technical and financial resources required to adequately develop new generation capacity to meet growing demand would not be available domestically to the same extent. Furthermore, as we discuss below, stagnation in the commodity producing sectors means that there would be little or no change in the nature of exports to the world markets: Pakistan's mix of exports, which consist predominantly of low value-added agricultural raw-materials and semi-manufactured goods, have changed little over the preceding decade. It is due to a weak production structure such that even it's manufactured exports mainly consist relatively low-value added goods: apparel, leather products, etc. These products face a highly competitive international market.

Potential of Economy to Sustain Current Energy Policies

In this second section, I address the question of whether Pakistan's current economic structure has the capacity to sustain the new demand for foreign exchange that will ensue as a consequence of the current policies. The demand for foreign
exchange will result from repatriation of profits earned by foreign-owned energy enterprises, private commercial debt obligations, etc. In order to investigate this crucial question, I analyze the trends in the composition of Pakistan's external trade, and the factors and constraints that have shaped these. Of particular interest in this case is the trend in high value-added exports which could potentially generate sufficient foreign exchange to meet the demand created by foreign investors in the energy sector. An analysis of the terms of trade is also necessary to give an informed answer to the above questions. In addition, I will analyze the tendencies in the outflow of capital from the economy. This will indicate whether capital accumulation occurs within the economy or not.

Foreign Trade Relations

As Adams and Iqbal (1987) note, "Official policy has consistently stressed the role of exports in the industrialization and overall development of the nation. Exports are crucial in bringing in foreign exchange, raising employment, and generating income. Export earnings are needed for the import of capital goods, industrial and farm inputs, and some food and consumer items. Pakistan's external debt must be serviced" (pp.1-2). In addition, the performance of the export sector is crucial to sustaining current energy policies as only through greatly increasing the level of
exports would the country be able to earn the hard currency required to repatriate profits and service the debt of foreign owned energy enterprises.

The IMF and the World Bank have strongly emphasized the need to increase exports especially since the early 1980s, when many third world countries began to face severe difficulties in keeping up with interest payments on their external debt. They recommend the adoption of a strategic policy package that came to be called the strategy of "export-led industrialization" (ELI). South Korea and Taiwan are pointed out as examples of success of ELI and advocated as models for other developing countries to emulate. Though Pakistan has been pursuing the policy recommendations of the IMF and the World Bank regarding its foreign trade, the results that it has seen so far are less than successful from the point of view of creating resources for national development. Pakistan's imports have consistently exceeded its exports, and the resultant deficit has been regularly financed through external borrowing. However, in recent years it has succeeded in containing the growth trend of the trade balance. But, as I shall explain below, this has been achieved not by a relative growth in exports, but by a deliberate policy to restrict imports. In the short run, this means a decrease in national economic activity and creation of inflationary pressures. But constraining imports also means an
easing of pressure on the balance of payments and a relatively enhanced ability to meet debt service.

Table-7.3 presents data on various aspects of Pakistan's external trade over the 1980-81 to 1991-92 period. To put matters into perspective, it also shows the share of export earnings that has been utilized to finance two perennial expenditures, petroleum imports and debt service obligations, thus showing the amount/percentage of export earnings that are left over to finance all other imports.

One of the more striking features of Pakistan's external trade is the turn around in the upward trend of the merchandise trade deficit starting in 1985-86. In terms of current dollars, the merchandise trade deficit increased from $2764 million in 1980-81 to $3552 million in 1984-85, an increase of 28.5%. And then, it drops to $2236 million in 1991-92, decreasing by 37%. In terms of constant 1987 dollars, the decline in merchandise trade deficit of Pakistan is even more significant: Thus while it increased slightly from $3855 million in 1980-81 to $3903 million in 1984-85, it then plummets by approximately 100% to $1911 million in 1991-92. This is indeed a remarkable decline, and per se, of great significance in terms of our analysis.

Based on this data, it would be tempting to (erroneously) conclude that, ceteris paribus, this trend would continue in the future and in a few years create surpluses in the trade
balance that would meet the financing needs of energy projects among others. But is the declining real merchandise trade deficit really an economic success story, indicating that the trade imbalance constraint has been broken, as it is often portrayed by official economists, politicians in power, and those belonging to the international financial institutions? Not so at all.

What actually caused this decline becomes evident when one analyzes the underlying forces that are at work in the area of Pakistan's external economic relations. The picture that is revealed shows that just the reverse is likely to be true in the future as I explain below.

In explaining the decline in the trade balance that we have discussed above, it is important to see whether this decline is being driven by relative increases in exports vis-a-vis imports or the other way around. If the trade balance is declining due to surge in exports, then no one can quarrel with it. But, on the other hand if the decline is a result of restrained imports, then a number of implications arise none of which can be thought of as having accelerating effects on the development process. However, from the point of view of the IMF and other creditors, this is of paramount significance as reduced trade deficits ensures that a developing country has an enhanced capacity of paying back its debt service obligation and does not default (Branford and Kucinski, 1988).
In constant 1987 dollars, Pakistan's exports increased by 68.6% in the 1980-81 to 1991-92 period, giving an average annual increase of 5.7%. In the same period, the imports increased by 12.9% giving an annual growth rate of only 1.07%. But if we look at the first half of the last decade and compare it with the period that follows, an interesting picture emerges. During the 1980-81 to 1984-85 period the exports actually declined from $3591 million to $2678 million, giving an annual decline of 5%. In the same period, imports decreased from $7137 million to $6550 million, giving an annual decline of 8.2 per cent. While both exports and imports declined in this period, the latter fell more sharply, thus playing the determining role in the reduction of the overall merchandise deficit. And then during the 1985-86 to 1991-92 period, exports surged by an average annual rate of 13.6 percent while imports increased by annual average rate of only 3.9%. It is therefore by restraining the growth in imports that Pakistan was able to narrow down the trade balance after the mid-eighties and this was primarily a result of the policies embodied in the IMF/World Bank inspired Sixth Five-Year Development Plan (1983-88). And this is not surprising at all as Branford and Kucinski (1988) show by their analysis of IMF's relationship with Latin American countries in the 1980s that is equally applicable to countries
like Pakistan with a similar balance of payments situation. They write:

... IMF policies, which are formulated with the basic objective of producing dollars for debt-servicing, unleash a series of unpleasant economic forces on the domestic economy which become extremely difficult to control. Though experience has varied from Latin American country to Latin American country, the basic mechanism in each has been similar. In its adjustment programme, the IMF insists on two parallel lines of action, both geared to slashing the current account deficit. Firstly, it insists on a reduction of consumer demand, as this demand feeds imports either directly through increased demand for imported consumer goods or indirectly through additional demand for imported machinery or raw materials so that domestic production can be increased. In practice, this means a big reduction in government spending, which inevitably leads to recession. And secondly, local production has to be channelled away from the domestic market into exports. In practice, this means the devaluation of the local currency, so that locally produced goods become cheaper on the world market.

... Throughout Latin America, the most effective policy for reducing the current account deficit was the
reduction in imports, which was precisely the measure with the most harmful impact on the local economy. (p. 19).

While all governments throughout Pakistan's history have encouraged exports, it was only in the 1980s that these were given a pivotal importance in the development strategy. This was partly a result of the experience of Pacific rim countries that were successful in boosting their exports in the 1970s. But more directly, it has been due to the mounting burden of serving the external debt. However, in Pakistan's case, the balance of payments problem was mitigated to some extent in the first half of 1980s by the substantial foreign exchange remittances of its nationals working abroad. The significance of these remittance can be judged from the fact that thrice during the first half of 1980s, these either outstripped or were nearly the same as merchandise exports. But then, in the second half of the eighties these began to decline, once again exposing the chronic fragility of Pakistan's external sector. In constant 1987 dollars, workers remittances dropped by 52% in 1985-86 to 1991-92 period, declining from $2736 million to $1313 million (see Table-7.3).

The declining trend in foreign earnings derived from Pakistani workers put additional pressure on the policy-makers regarding the need to increase exports. But the potential for the expansion of exports not only depends upon a host of
factors in the external markets but also crucially depend upon
the structure of the domestic economy. We shall briefly
consider each of these aspects below.

External Constraints on Export Growth

Adams and Iqbal (1987) inform us that the external
factors on which the export performance of a country depends
are: (a) level of world demand that depends upon the state of
the global economy and the state of the particular markets to
which a country mainly exports; (b) the commercial policies of
the developed countries; (c) relative price competitiveness as
compared with other countries supplying similar goods; and (d)
the turbulence in exchange rates between currencies.

Level of world demand.

While the level of world demand, which is mainly
influenced by the state of economies of the G-7 countries,
grew unevenly and rather sluggishly through much of the 1970s
and 1980s, in terms of the specific markets "Pakistan’s
direction of exports has shifted from the United Kingdom and
United States, which have proved to be static markets for most
of Pakistan’s exports, to the Middle East, Japan, and at
times, the People’s Republic of China, which have been growing
markets" (p.55). This shift in market orientation therefore
helped to maintain a growing demand for Pakistan’s export
products. However, these new and growing markets attracted
Pakistan’s traditional exports of cotton and yarn rather than
the products of high value-added industries. This is discussed in greater detail below.

Commercial policies of advanced countries.

As regards the commercial policies of developed countries, I find the overall analysis of Adams and Iqbal (1982) to be accurate and substantially applicable even today. After examining and evaluating the commercial policies of developed countries in the seventies and early eighties they write:

Over the past decade, notwithstanding attempts at liberalization of tariff and non-tariff restrictions, protectionist practices have increased. These practices include restrictions on imports of both agricultural and labor-intensive manufactures in which developing countries are usually perceived to have inherent comparative advantage. Tariff reduction agreements among industrial countries, such as those devised during the Kennedy and Tokyo rounds of multilateral trade negotiations, have been much less for products such as textiles, clothing, leather products, and footwear, all of which are important to Pakistan. On the other hand, raw materials and semi-manufactures have received greater concessions. Consequently, the problem of tariff escalation by stage of processing has increased, thus heightening rather than reducing effective protection in
developed countries on products of special interest to Pakistan. Moreover, the incidence of non-tariff barriers has increased sharply and has been frequently higher in sectors where developing countries have a comparative advantage. These include administrative regulations, voluntary export restraints, variable import levies, complex health and labeling requirements, and quotas. (p. 55-56).

Although the recently concluded Uruguay round and the creation of a new regulatory framework of world trade will alter the past practices to some extent, substantial changes in the trade relations between advanced and developing countries are not likely to occur.

Price competitiveness and currency devaluations.

The last two external factors mentioned by Adams and Iqbal, that is, price competitiveness and exchange rate turbulence are in practice very much linked for developing countries. Though in theory, competitiveness of a country’s products in the world market depends upon the comparative advantage it has over other countries in terms of its natural endowments, its productivity, labor costs, and availability of infrastructure, in practice all of these factors are slow and difficult to change. Therefore, most developing countries are forced to adopt the IMF/World Bank condition of devaluation of national currency to make their products
cheaper, and hence increase their share of the world market. Continuous and periodic currency devaluations have thus become a permanent feature for many developing countries including Pakistan.

However, notwithstanding the deficit reducing effect of devaluation which given absolute importance by the IMF, there are four major problems associated with this feature. First, recurrent devaluations create uncertainty in the minds of the trading community often hampering or disrupting normal trade. It is a common practice that before an expected devaluation, traders and businesses try to benefit or cut their losses by various means such as hoarding or artificially increasing prices. This results in a yet unascertained loss to national economy.

Second, devaluation increases the price of imports in terms of local currency. This effect results in the creation of economy-wide inflationary pressures. This happens because in recent years, between 80 to 87 percent of Pakistan’s imports have consisted of capital goods and industrial raw materials (see Table 7.3). Increases in the prices of these inputs results in the triggering of inflationary tendency that affects all sectors of the economy, including agriculture, which is increasingly using imported industrial outputs like fertilizers, pesticides, farm machinery, etc.
Third, devaluation increases the foreign debt burden in terms of local currency. This results in the increased expenditure of budgetary resources for debt payment, which inevitable results in decreased availability of resources for development expenditure.

But the fourth problem, and which is often not investigated, is perhaps the most grave. It is that devaluation has a domino effect: When one country devalues its currency to expand its exports, other countries that are in competition with it follow suit. The result is, that the market advantage gained through devaluation by the first country is eroded in a short period of time. This happens in the following manner.

In the short-run, devaluation results in the drop of wholesale prices in export markets for the commodities of the country that devalues its currency. But it does not affect the retail price, as the percentage of total demand that is met by each country’s exports is normally quite small. It is the wholesalers and retail traders in export markets who benefit in the short-run as their profit margins increase. Now they can buy at lowered price and sell at the previously established retail price. Thus, an incentive is created on the part of wholesalers to push for products of the country that devalued, resulting in an expansion of its market share relative to other exporting countries.
In the long-run however, as other exporting countries follow suit and devalue their currencies, the retail price in export markets tends to fall and any short-run advantages that the first few countries to devalue may have gained are wiped out. Now, instead, all of them face a relatively lower price for their export product, due to the interaction of new supply and demand conditions.

To restate, the damage caused by rise in import prices and local currency equivalence of foreign debt is permanent, while the advantages that accrue from lowered export prices are fleeting. But far more deleterious to Pakistan, and competing developing countries, is the tendency of decreasing long-term prices of its export goods that inevitably results from the dynamics of devaluation. It occurs due to the fact that although the movement in price of a single third world country’s products does not affect its world market price, because it supplies only a fraction of the world demand, the concurrent devaluations by other countries supplying the same products generates downward pressures on the long-term world market prices of their exports. This results in the tendency of terms of trade of the products of developing countries to be adversely affected as we note in Pakistan’s case below.

**Structure of Exports**

The lopsided structure of Pakistan’s economy limits what it can export. It’s exports are overwhelmingly composed of
low value-added agricultural and manufactured goods. As such goods are also produced by many other countries, they face tough international competition. In addition, Pakistani exports also face the hurdle of numerous import restrictions imposed by developed countries. Further, the commonly adopted strategy of devaluation contributes to adverse terms of trade for such products. When we look at the performance of Pakistan's export trade from this perspective, the serious structural limitations of the potential for current exports to act as the "engine of growth" become obvious along with the long-term predicament in which the country finds itself inspite of the efforts made to improve the situation.

From Table-7.3 we see a remarkable development in the overall structure of Pakistan's exports during the last decade and beginning years of this one: The share of primary commodities and semi-manufactured goods, the lowest in value-addition, declined from 55% of the total exports in 1980-81 to 36% in the July 1992-March 1993. The reverse side of this development is that the share of manufactured goods increased from 45% of total exports to 64% in the same period. By itself, this fact could justifiably be used as cause enough for euphoria by the proponents of structural adjustment and neo-liberalism. However, any reason to celebrate vanishes quickly when we look behind appearances and consider the
tendencies of the terms of trade as a whole and for each category.

Terms of Trade

Looking at the terms of trade shows how much of value a given quantity of product commands in terms of the products that it is exchanged for. In assessing the terms of trade, products are grouped into categories according to their characteristics, for example, industrial products, agricultural products, etc. Usually these categories are further divided into sub-categories, for example, chemicals, live-stock, food, etc. When the terms of trade of a given category of products deteriorate in relation to the product category with which it is being exchanged, the same quantity of the first product obtains less quantity of the product for which it is exchanged. In order to maintain or enhance the buying power of its export earnings, the terms of trade of a country's products must either remain stable or improve. Conversely, if the terms of trade are deteriorating, then a country must export more of its products to exchange for the same amount of what it imports. This results in the transfer of value to the country with which it is trading. In the case of developing countries, the tendency of the terms of trade to fall increases the merchandise trade deficit given a constant level of exports and imports. Per se, this tendency operates in a reverse direction as regards a development strategy that
is founded on the expectation that enhanced exports earnings can pay for the costs of the required imported capital goods, expertise, etc. In other words, deteriorating terms of trade over time induce tendencies for: (a) making external debt more difficult to pay off; (b) accumulation of debt over time; (c) progressive enlargement of annual debt service payments that eat up a larger chunk of export earnings; and finally (d) decreased ability of exports to finance imports. Thus despite increased exports achieved through diversion of economic resources from domestic to external markets, the payoff in real earnings is less and less. All these tendencies are clearly evident in the case of Pakistan.

Pakistan's overall terms of trade for all groups declined by slightly over 20% in the 1980-81 to 1992-93 (July-March) period as is seen in Table-7.3. Consequently, Pakistan had to sell 20% more of its export products in 1992-93 to be able to import the same amount of products that it imported in 1980-81. For a developing country, this is indeed an enormous handicap. Even more disturbing is the fact that not only did the terms of trade for agricultural and other raw materials deteriorate, the terms of trade for manufactured goods also declined and declined more than that of raw-materials. Thus we see from Table-7.3 that while the terms of trade of "Crude materials," (which include all inedible raw-materials such as cotton, leather, minerals except for petroleum, etc.)
deteriorated by nearly 25% in the 1980-81 to 1992-93 (July-March) period, over the same period the terms of trade for manufactured goods deteriorated by slightly over 28%.

The reason for this rather surprise development is the nature of Pakistan's manufactured exports and imports. Pakistan's manufactured exports mainly consist of low-value added yarn (28.5%), garments (25.2%), cotton cloth (19.9%), synthetic textiles (10.16%), leather and products (6.8%), and carpets (5.57%). But its manufactured imports consist largely of higher value-added capital and consumer goods. The reasons for the decline in terms of trade for Pakistan's manufactures are basically the same as those that affect the terms of its agricultural exports. Even light engineering goods are subject to the same dynamics.

The structural composition of Pakistan's exports and the trends in its terms of trade preempt the possibility that in the medium-term future, export earnings could meet the hard currency requirements of even the current level of imports. The annual deficit in the merchandise trade balance remains well over $2 billion in nominal dollars despite efforts to

115 These percentages show the share of each product as a share of total manufactured exports for 1991-92.

116 As we can see from Table-4, industrial raw material imports form a substantial part of total imports. The price of such materials is generally high due to the motives underlying parent-subsidiary relationships in foreign private sector, tied loans, and the limited number of suppliers of such materials (oligopolistic structure) in the international market from which these can be obtained.
curtail imports. Given the enormous increase in deficit of the non-factor services account, (from $272 million in 1980-81 to $1632 million in 1991-92) and the simultaneous decline in workers remittances (from 1982-83 peak of $2886 million to $1467 million), one cannot reasonably expect that the export sector, including remittance of expatriate workers, can be the source of meeting the new and additional hard currency obligations that the current energy policies have

117 In terms of constant 1987 dollars, the merchandise trade balance shows a considerable and consistent decline in the 1987-92, the preceding five years for which data is shown. This was also the period of sustained IMF pressure as Pakistan government has been acting under structural adjustment conditionalities since 1988. In constant 1987 dollars, the merchandise trade balance declined from $2557 million in FY 1987-88 to $1911 million in 1991-92, a decline of slightly over 25 per cent. But as we have stated elsewhere, this decline was driven by restraining the growth in imports, approximately 85% of which consist of capital goods and industrial raw materials, at a time of relative rise in growth rate of exports. In the same period, the growth rate of imports was 11.2% while the rate of growth of exports was 32.5 percent.

118 The non-factor service account segment of the current account balance of a country consists of service payments proper such as freight charges paid to foreign carriers, insurance, travel and tourism, etc., as well as interest (commercial and official) and dividend payments, which are service payments incurred on loan or equity capital and ought to belong to the capital account. As Branford and Kucinski explain (1988), this situation is itself a result of the accounting system imposed by the IMF and is designed to protect the interests of the banks and financial institutions of the developed world rather than the needs of the LDCs. Discussing IMF's format of balance of payments account they write that "The IMF assumption that no changes can be introduced into the world financial market is built into its methodology. What is important in the conventional balance of payments analysis is that the two accounts balance, that any deficit in one of the items is covered by a surplus elsewhere. . . First of all, the organization of this balance is not rational. Payments of interests and dividends, which are capital items, are not included in the capital account, as one would expect, but are found together with freight, insurance, and foreign travel, in the service section of the current account. There is a very simple reason for this anomaly (though not one that is often mentioned): it helps to prevent a country placing restrictions on remittances of profits and interest. In the agreement that it signs with the IMF, a country commits itself to not placing restrictions on service payments." (pp. 14-15).
created (see Chapter-V). This becomes even more apparent when we consider the percentage of export earnings that just debt service and oil imports together have consumed in the past: Over the twelve year period for which the data is given in Table-7.3, it has varied from a high of 99.7 percent in 1981-82 to a low of nearly 43% in 1991-92. Inevitably, the obligations created by the new energy policy shall have to be discharged by incurring additional foreign debt.

**External Debt Trap**

After many developing countries acquired independence the post-Second World War period, their national leaders were anxious to improve the lot of their people through rapid economic development. The original purpose of external borrowing was thus to give boost to the national economy to overcome the adverse effects of colonialism. Bhatia (1990) describes the early economic development philosophy which pretty much equated economic development with industrialization:

In light of the European experience, it was concluded hastily by the economists in the developed and underdeveloped countries alike, that the cause of poverty of the latter lay in their lack of industrialization and that economic development of a country simply meant its industrialization. Rapid industrialization, however, required a much higher rate of investments than the
current rate of domestic savings would permit; it also needed a sufficient export surplus in agricultural products, raw materials and minerals for importing capital goods and technology needed for setting up the proposed industries. Foreign aid was conceived to fill up the two-fold gap between investment and saving on the one hand and imports and exports on the other during the process of industrialization, until the recipient country reached the stage of self-sustained growth which, following Rostow, came to be described as the "take-off" point. This fitted into economic logic so perfectly that it soon became part of the conventional economic wisdom. (pp. 177-78)

A crucial element of the conventional wisdom was the assumption that developing countries would be able to pay off borrowed external capital through enhanced exports. As Bhatia writes further: "The trade deficit was financed in the earlier phases of development by foreign aid in the hope that as development proceeded and incomes rose, not only would the country's capacity to save increase, and the initial gap between investments and domestic savings be bridged, but also that a sufficient level of export surplus be created to discharge the debt obligations incurred earlier. This hope was never realized. (1990, p. 186)."
This hope was never realized because the domestic and international conditions under which economic growth was attempted precluded such a possibility in most Third World countries. Only two relatively small countries, South Korea and Taiwan, both of whom were of great strategic importance to the United States during the Cold War, achieved the stage of self-sustaining accumulation of capital, or dynamic development.\textsuperscript{119} However, most of the rest of the Third World is either experiencing dependent development or even underdevelopment. In both these cases, instead of self-sustaining accumulation of capital, there is the phenomenon of negative accumulation of hard currency capital which appears in the form of external debt.

The external debt shows a tendency to accumulate and grow because of the simultaneous operation of two contradictory tendencies: diminished real capacity of the export sector to finance imports and the increased need for hard currency to finance development projects and pay for necessary consumer imports (food commodities, etc.). The first tendency is a result of declining terms of trade of primary commodities, the structure of north-south trade,

\textsuperscript{119} The other two countries that are said to have achieved dynamic development--Hong Kong and Singapore--are essentially city-states that have benefitted from their unique location and as repositories of transnational capital looking for tax shelters. These became financial centers for surpluses generated elsewhere, which however triggered general development in these cities.
devaluations, and protectionism in developed countries. The second tendency is a result of the process of dependent development: The requirement of importing capital goods, industrial raw-materials, high-tech items, etc., from developed countries as well as for payment of debt service, profit repatriation, and other commercial charges to them. It is for this reason that a larger and larger share of new debt is being immediately used for debt service payments.

As Table-7.4 shows, in the last ten year period, debt service accounted annually, on the average, for nearly 60% of new loan disbursements. Further, the ratio of debt service to disbursement would have been much higher had it not been for the inclusion of two large Structural Adjustment Fund loans from the IMF acquired in 1988-89 and 1989-90 respectively. Similarly, debt service has averaged over 25% of total exports and 2.65% of the GNP in the last ten year period for which data are currently available. While there has been some improvement in the debt service/exports ratio in the past several years, the debt service/GNP ratio has deteriorated. The debt service as percentage of GNP was the highest in the latest data year (1991-92) in the 34 year period for which data has been presented.

Thus, one of the most significant structural feature of the economy of Pakistan is that it is stuck in a "debt trap."
Table 7.4
External Debt and Debt Service (US $m). Source ES 1992-3, Table 11.3, p.175

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL DEBT</th>
<th>DISBURSEMENTS</th>
<th>DEBT SERVICEa</th>
<th>NET DISB.</th>
<th>DEBT SERV. % DISBUR.</th>
<th>DEBT SERV. % EXPORTS</th>
<th>DEBT SERV. % GNP</th>
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<td>17</td>
<td>325</td>
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<td>Service</td>
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**AVERAGE 1982-92**

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<th>Disbursements</th>
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<th>Repayment</th>
<th>Service</th>
<th>Repay</th>
<th>Total</th>
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<td>761.4</td>
<td>59.03</td>
<td>25.83</td>
<td>2.65</td>
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</table>

a: Excludes interest on short-term borrowing and IMF charges.
b: Disbursements include IMF (SAF) loan.

In technical terms, debt trap can be defined as a situation in which a country is forced to borrow capital in hard currency from official and commercial sources in the developed world, in order to meet its current account obligations. In simpler terms, it means that a country has to borrow hard currency loans in order to pay the interest and principal currently due on previous loans: This becomes a repetitive cycle in which both the debt service payments as well as the total debt escalate rapidly, resulting in structural distortions in the country’s economy among which are: (a) drain of hard currency resources earned through exports leading to low levels of domestic savings and investments; (b) pressures to export agricultural raw-material or semi-processed goods (as these are most easily exportable commodities) instead of full value
added goods; and (c) continuous devaluation of the national currency fueling inflation, and which cumulatively results in adverse terms of trade for export commodities of developing countries, etc., etc. Debt trap is at the heart of dependency relationships as Hussain (1988) explains:

The World Bank and IMF prescription of concentrating on agricultural production and agricultural exports results in a situation where while our capacity to serve our debts is maintained, our requirement for fresh loans continues to increase rapidly. This happens because while agricultural goods can easily be translated into foreign exchange yet since agricultural exports suffer from declining terms of trade the growth of foreign exchange earnings is slowed down and hence the requirement of fresh loans continues to rise. Thus for example Pakistan’s terms of trade have declined from an index of 108 in 1977 to 89 in 1986. Our loan requirement has increased from 0.2 million dollars annually during the first plan period to over 2000 million dollars in the 6th plan period. This is a situation which is tailor-made for a bank but for an independent country constitutes a debt trap. (p. 75).
Table-7.4 shows the development of Pakistan's external debt picture over the 1959-60 to 1992-93 period. Columns 2, 3, 4, and 5 provide data on accumulated external debt, annual disbursements, annual debt service, and net annual disbursements respectively. Graphic presentation of this data appears in Figure 7.1. The next three columns of Table-7.4 show the trends in relationship of Pakistan's external debt service (principal plus interest) to various economic variables and these are depicted in Figure 7.2.

As we can see from these data, Pakistan's accumulated external debt has been rising steeply and steadily since the mid-sixties. Within this overall upward trend, we can see two sharp upward phases that are particularly jarring: The first phase starts in 1974-75 and ends around 1980-81, and

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\(^{120}\) Pakistan's fiscal year begins on July 1st and ends on June 30th.
FIG-7.1 DEBT DISBURS. & DEBT SERVICE
SOURCE: ECONOMIC SURVEY 92-93, P.175
the second phase starts in 1984-85 and is still continuing.

First Steep Rise in Accumulated Debt

The first steep upward phase can be explained by the 1973 oil crisis and the sudden and large increases in the oil import bill of Pakistan. In 1973 the net import bill for oil and its products was $50 million. By 1979 it had risen dramatically to $540 million - a more than 10 fold increase over 1973. As Ebinger (1981) writes:

"The rise in the price of oil had both direct and indirect effects on the Pakistani economy. It would be misleading to blame the deterioration in Pakistan's current account position solely on the increase in the price of oil. Still its deficit rose from $131 million in 1972-73 to a peak of $1,187 in 1974-75. It dropped to $1,051 million in 1976-77 and to $752 million in 1979-80" (p. 14).

The other factors which Ebinger alludes to are (a) the short-term economic dislocation caused by the civil war of 1971 and the eventual separation of Bangladesh, and (b) the rather enduring structural problems of Pakistan's economy which are the result of the type of development strategy that have been adopted by all governments throughout its history, except for, arguably, the Zulfiqar Ali Bhutto's government (Bhatia, 1990; Hussain, 1989).
Second Steep Rise in Accumulated Debt

The second steep rise in accumulated debt which starts in 1984-85 and which is still continuing has resulted in almost the doubling of debt over the last 9 years for which data are available (see Table-7.4 and Figure 7.1). Pakistan's total accumulated foreign debt increased from US$ 9,732 million to US$ 18,423 million. This sharp upward trend can only be attributed to the underlying structural problems that can be seen in the performance of the strategic variables of the economy that we have discussed above.

The increase in accumulated external debt has led to ballooning of debt service payments especially since the early 1980s. Debt service payments increased more than three-fold from $491 million in 1981-82 to $1519 million in 1992-93 (see Table-7.4). Annual debt service payments as a percentage of disbursements of official aid, have steadily climbed from nearly 45% in 1981-82 (after rescheduling of debt in 1980-81 in which year it stood at 62%) to a high mark in of 78.7% in 1986-87 and then declined to 65% in 1992-93. This decline was the result of structural adjustment loans which the IMF has provided since 1988. Even more importantly, debt service payments rose from around 2 percent of GNP in early the early 1980s to around 3 percent in early 1990s. Even though debt service as a
percentage of exports remains high (between 22 and 25% in the 1988-93 period), it did decline from nearly 30% in the mid-eighties (Table-7.4).

The debt service has thus not only become an unbearable burden but it can also be considered to be a major hurdle in the way of future economic growth. This problem manifests itself in the practice of incurring further external debt to make debt service payments on loans acquired in the past in order to prevent national insolvency, rather than for initiating new development projects or meeting other national needs. As Pakistan’s export sector does not have the strategic potential of meeting the hard currency obligations that the current energy policies will create, the country would be forced to borrow further in order to meet its commitments. This means that the vicious cycle of dependency would be reinforced.

Countries experiencing dependent development are forced to borrow additional foreign capital to meet their current account imbalances in order to avoid being appraised insolvent.

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121 Concluding his analysis of the historical evolution of this dynamic, Hussain (1989) writes: "Thus, not only had the volume of aid increased dramatically but also the terms on which it was received became increasingly harder. The result was that debt servicing alone by the end of the sixties constituted a crippling burden. While debt service as a proportion of commodity export earnings was 4.2 percent in 1960-61, by 1971-72 it had become 34.5 percent. Clearly, such a magnitude of export earnings could not be spent on debt servicing if vital food and industrial inputs were to be maintained. Thus by the end of the sixties, economic survival began to depend on getting more aid to pay back past debts. This pattern of aid dependence continues to this day." (p. 222)
by the international financial institutions and banks led by the IMF. The threat and dangers of being declared insolvent are very real and immediate for many such countries.\footnote{122} Being declared insolvent would make it very difficult for a country to raise credit in the international market and thus could lead to suspension or reduction in important imports such as oil or food grains. Without doubt, such disruptions in economy would translate into political crisis and perhaps the removal of the incumbent government.

\footnote{122}{It may be said that one of the features that distinguishes dependent development type of dependency from that of underdevelopment is that countries in the former category are able to meet their current account obligations through exports and external borrowing, while the countries in the latter category have great difficulty in servicing debt and persistently face the possibility of defaulting.}
Chapter - VIII
CURRENT POLICY EFFECTS, ANALYSIS, AND POLICY RECOMMENDATIONS

Introduction

This chapter consists of three sections. In the first section, I present a model to explain and elaborate the effects of current energy policy. In the second section, I provide a plausible explanation regarding the raison d'etre of current policies. In doing this, I analyze and explicate Pakistani society's socio-political architecture in terms of the theoretical framework presented in Chapter III. In the final section, I present policy recommendations that purport to create self-sustaining growth in the field of energy, and ameliorate the negative consequences of dependency relationship on Pakistan's economy as a whole.

Effects of Current Energy Policies on Dependency: A Model

We are now in a position to develop an overall model that depicts the long term on-going effects of deregulation and privatization in the energy sector on the national economy within the context of dependent development. Such a model is presented in Figure 8.1 and is discussed below.

At the outset, I would like to clarify three points. First, dependency is a complex phenomenon that is driven by the underlying tendencies of the dynamics and logic of global expansion of capitalism.
FIGURE - B.1
MODEL OF ENERGY SECTOR AND POLICY DYNAMICS WITHIN THE CONTEXT OF DEPENDENCY
Second, dependency does not manifest itself uniformly in all third world countries. Rather, its particular form of expression is a function of numerous conditions (internal as well as external). In the current historical juncture, the effects of the global expansion of metropolitan capitalism can be distinguished and classified into three sub-types of dependency: (a) dynamic development, as exhibited by certain countries of the Pacific Rim, also known as the semi-periphery, as these regions act as "transmission belts" for the core countries (Wallerstien, 1979, 1984); (b) dependent development, characterized by externally instigated and supported growth in certain sectors that is sustained by traditional low-valued added exports. Pakistan, and many Asian and Latin American countries fall in this category; and (c) underdevelopment, characterized by traditional agricultural or raw-material exports and imports of consumer goods, resulting in stagnation or impoverishment of economy. Much of Sub-Saharan Africa exhibits this form of dependency.

Third, the model that I present in Figure 8.1 pertains to dependency of the dependent development type. It shows the nature of external economic exchanges of Pakistan, and situates the intended actions called for by current energy

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123 These conditions can be, by nature, economic, political-strategic, sociological, historical, geographic, religious-ideological, etc.
policies, as well as their sequential effects, within this particular context of dependency.

In this model, I have assigned different shapes to represent particular conditions or phenomenon. The polygon represents the core capitalist countries. The three types of dependency relations are shown by (a) tilted parallelogram representing dependency characterized by dynamic development, (b) the rectangle representing dependency characterized by dependent development, (c) and the triangle representing dependency characterized by underdevelopment. The circle represents global or international phenomena. As our concern is with dependency characterized by dependent development, most of the actions or effects shown are rectangular shapes. The recent policy changes/effects flowing from deregulation and privatization are depicted by bold, dark lines while previous linkages are shown by narrow lines. Broken lines represent loose influence linkages. Two directional-arrow lines represent mutual, interrelated effects, and single directional arrows shows tendencies rather than simply cause-effect relations.

Global Expansion of Capitalism

The starting point in this model of recursive relationships is the dynamics of global expansion of
The logic of the expansion of metropolitan capitalism plays out at a global level. Its tendencies manifest themselves as multifarious economic orders, imperatives, constraints, opportunities, and autonomies that characterize the economic as well as the political relations between countries and regions situated in the two major analytical categories. These are (a) Core (developed capitalist countries) and (b) Periphery (dependent capitalist countries). In the model, I have sorted the category "Periphery" into three sub-categories according to the nature of dependency that characterizes them, as already mentioned above. These are: (a) the semi-periphery, characterized by dependency of the dynamic development type; (b) the periphery, characterized by dependency of dependent development type; and (c) the outer-periphery, characterized by dependency of the underdevelopment type.

124 The foundations, molding, and shaping of these dynamics are a product of the historical evolution of relations in the last three to four centuries. I do not discuss the historical dimension as it does not concern us directly here. What we are more concerned with is the contemporary dynamics of global capitalism.

125 In the sense of "colonial economic order" or "new economic order", etc.

126 Immanuel Wallerstein popularized the term "semi-periphery", Cardoso first applied the term "dependent development", while A.G.Frank gave currency to the term "underdevelopment". The term "outer-periphery" is mine, and so is the categorization of the phenomenon of dependency into the three subcategories used here. The notion that "dependency" is a phenomena that is created by or results from the operation of hidden, underlying tendencies or laws of capitalist dynamics is also mine, as far as I know. In my view, this notion successfully links the separate epistemological and analytical categories of dependency and modes of
Although the model depicts all of the above categories and their inter-relationships for the sake of providing the whole picture, it is only the dynamics of dependent development characteristic of peripheral capitalist economy that are elaborated. Following the model, dependent development ensues in two major tendencies: Capital shortages and technology imports. Capital shortage leads to external borrowing and elicitation of private foreign investments. Both external borrowing and private foreign investments are leveraged by the IMF and the World Bank, the two primary institutions of metropolitan capitalism. External borrowing is influenced by the lending policies of these institutions, and this plus the imposed conditionalities affects the development and makeup of the energy public sector. In the recent past, this has occurred both through the decreased availability of long-term foreign currency loans\textsuperscript{127} for the public sector as well as the specific project conditions. Similarly, the conditions of deregulation and privatization has given a push to the energy private sector while it is simultaneously shrinking the public sector.

\textsuperscript{127} These loans could be concessional, that is, given at better terms than commercial loans, or non-concessional, that is, at terms approximating contemporary commercial lending.
Technology

Under dependent development, turn-key technology imports are a regular feature both in the public and private energy sectors. In many cases, energy sector loans are tied, and hence Pakistan is obliged to buy equipment and machinery from foreign sources. Such technology imports do not result in the transfer of technology with the result that an indigenous technical capacity to produce energy generating plant and equipment is not created as shown in the model. Further, the low level of capital accumulation, which is reflected in the low domestic savings rate, makes it difficult, if it does not actually preclude the possibility of the development of heavy industries.\textsuperscript{128} We see this in the flat rate of growth of heavy industry as was discussed earlier in this chapter.

Outflow of Surplus

The public and private energy sectors differ with each other from the standpoint of the type of surplus flow channels

\textsuperscript{128} This is true for the private sector. The State can, however, develop heavy industries through the public sector as has been attempted in many third world countries. It can do this by forcing capital accumulation through adopting multifarious policy alternatives. The purpose of deregulation and privatization policies is precisely to prevent the State from playing such a role. In the case of countries like Pakistan that are in dependent development mode of dependency, as well as those in the underdevelopment mode of dependency, as the domestic private sector is incapable of taking over the erstwhile role of the State, we can have only two possibilities: First, that the foreign private sector invests in heavy industry; but this is not likely for many reasons. Second, the country gives up the strategy of developing its indigenous heavy industrial sector and relies permanently on the import of capital goods. Much of this line of reasoning is also applicable to high-value added consumer goods industry as well.
associated with each. There are two main differences in their surplus flow channels. In the case of the former, part of the surplus is retained domestically while the rest flows out as debt service on foreign loans. The part that is retained domestically goes towards national capital accumulation and is used for the partial self-financing of new energy projects. In addition, as public sector loans are mostly sourced from official or multilateral sources, the debt service burden is relatively less as compared to loans obtained from commercial banks. In addition, Nevertheless, the debt service payments results in the outflow of part of the generated surplus.

In the case of foreign private investments, there is a larger outflow of surplus as on the one hand, most of the loan capital is acquired from commercial sources that have higher interest rates, while on the other hand, there is an additional outflow in the form of repatriation of profits on the equity of investors. And if the project is 100 per cent foreign owned, then the entire generated surplus can be expected to flow out of the country, especially in light of the current energy policies that have made all income from foreign investments tax-free (see Chapter IV). Both in the case of the power and petroleum subsectors, to the extent government policies allow foreign equity ratio relative to domestic equity, it is to the same extent that generated surplus shall flow out, unless the government policy mandates
reinvestment of at least a part of the profits in the domestic economy: But there are no such requirements in the existing policy.

The increased outflow of surplus in hard currency leads to two major interrelated deleterious effects. First, it reduces the overall level of capital accumulation in the economy. Second, it leads to enhanced pressure to export the most exportable commodities in order to earn hard currency.

Low Level of Capital Accumulation

A low level of capital accumulation affects the economy in many ways. For instance, and as I have already mentioned above, one of the causes of non-development of advanced, indigenous technological capacity is lack of availability of capital resources, which itself is a result of low domestic savings rate. These are merely the outward symptoms, the underlying cause which is the low level of capital accumulation.

In yet more fundamental manner in which the effects of low level of capital accumulation come to surface is the fact that as the outflow of surplus, which causes it, occurs in hard currency, the country is unable to retain a substantial part of the foreign exchange that it earns through its exports (see earlier discussion in this chapter). The ensuing shortage of hard currency capital makes the country dependent
on external sources for it, resulting in the perpetuation of the structural features of peripheral capitalism.

Enhanced Exports of Traditional Goods

The second effect of increased outflow of surplus in hard currency also recreates the structural features of peripheral capitalism. The increased need to earn hard currency leads to policies to enhance the export of traditional agricultural and low-value added products that can be readily produced and exported as we saw in the previous chapter. In effect, foreign investments in energy, which are being eagerly solicited and are a desired aim of the current energy policy, would result in the reinforcement of the traditional pattern of foreign economic exchange, a telltale characteristic of dependent development.

Rupee Devaluations

It is for the purpose of enhancing Pakistan’s export revenue that the IMF, on numerous occasions since 1980, has successfully put pressure on the government to devalue the Rupee. But as we saw earlier, though devaluation may result in a short-term boost in exports, a number of other factors and tendencies eventually have the effect of depressing the terms of trade. The result is a strategic stagnation in export earnings as the country exports more to earn the same or less as it did previously. Thus another structural feature of dependency is reproduced.
Furthermore, the need to enhance traditional exports means that additional internal resources have to be channeled into agriculture instead of other activities. As we saw in the discussion of the structure of Pakistan's economy, the portion of GDP being contributed by industry, especially heavy industry, not only remains pathetically low, its rate of growth in the 1987-92 period was essentially flat. Now, in such circumstances if additional resources are devoted to the agricultural sector to expand the exports of its products, the industrial growth of the country is bound to be hampered. The diversion of additional internal resources to agricultural sector instead of industry, results in relative stagnation or slower growth of industry which inevitably leads to a weak demand for industrial plant and equipment. Not only the growth of the capital goods sector is thus harmed, but so is technological improvisation and innovation. This impedes the development of a modern technological base that is crucial for successful competition in high-value added commodities in international markets.

To conclude, it is quite obvious that through various effects and surplus flow channels that the current energy policies would create, dependency linkages would be intensified and reinforced. These policies may result in the production of more megawatts, which appears to be the sole consideration of policymakers, but this would come at the cost
of continued and intensified dependency which would have serious consequences for overall national economic development and the well-being of the people of the country. Quite simply, these policies are not in the best interests of the nation.

But why have the various governments in the recent past, as well as the present incumbents and opposition leaders, continued to advocate and support such policies in the energy sector? What is the basis of the "basic national consensus" on the policy of privatization and deregulation, which the current President continues to proclaim? In spite of the accumulating evidence of the effects of dependent development, why do the country's ruling elites continue on this path?

In order to answer the above questions, one has to move onto another, more abstract level of analysis which I identified as Level II in the analytical schema presented in the chapter on methodology (Chapter II). This has become necessary because the positing of the above questions has introduced the possibility of the existence of non-congruence between the interests of the ruling classes and the national interest. Therefore, in the next section, I shall present an analysis of the class basis of policy in Pakistan. This would necessarily bring into the discussion the nature and role of the State, the class composition of the ruling bloc, and the
identification of the "governing bloc", a concept that I introduced in Chapter III.

Analysis of the Raison d'etre of Current Policy: The Socio-Political Context and Constraints

There are a number of available theoretical frameworks or models that an analyst can use to plausibly account for the energy policy phenomena that we have discussed in the previous chapters. For example, Thomas R. Dye (1992), in his well received book Understanding Public Policy identifies and reviews nine models of policy analysis: institutional model, process model, group model, elite model, rational model, incremental model, game theory model, public choice model, and systems model. Perrow (1986) presents a model of organizational behavior based on analysis of power relationships that can be easily adapted to policy analysis as well. Van Horn, et al., tender six "images" of the policy process, namely, board-room politics, bureaucratic politics, cloakroom politics, chief executive politics, courtroom politics, and living room politics, that can be employed to render a plausible account of the policy phenomena. Similarly, other authors have used different models and frames.

Commonly, policy analysts use one or the other of the above models or frameworks. However, some analysts use what is generally termed as an "eclectic approach." In this
approach, several models or frames are simultaneously employed either as a "multi-level analysis" composite analysis or simply as different "windows" or "lenses" which furnishes a multi-faceted account of a policy problematic. The approach that I follow in providing an explanation of why current energy policy directions have been adopted by policy-makers over alternative courses of action, belongs to the eclectic species of policy analysis. Although a number of themes and concepts of this approach are apparently similar to some of the models mentioned above, especially the institutional, elite, group, power, and board-room politics models, I locate my model in the political economy perspective of policy analysis. In this perspective, fundamental emphasis is placed on the problematic of the translation of dominant class or classes interests into governing strategies that become the determinant of overall policy directions.

The concepts of hegemony and power bloc as propounded by Poulantzas (1973, 1975) are useful in informing and elucidating the relationship between dominant classes, political power, and the State. Based on this conceptual foundation, I have developed and used the concept of the "governing bloc" to understand policy formulation in specific sectors at specific time periods.

To reiterate, the political economy perspective as employed here, informs us as to how the dominant classes are
able to utilize the powers they possess in civil society to advantageously shape key policy outputs and strategic public management stances of the State. I have chosen this theoretical perspective to present the following brief analysis as I believe that it provides the most plausible account of the energy policy formulation dynamics in Pakistan. For a detailed discussion of this theoretical framework, please refer to Chapter III.

**Dominant Social Classes**

It is the unique structural features and dynamics of peripheral capitalist economy, inclusive of the type of its dependency relationship, that provides the conditions for the existence of specific dominant classes. To specify these classes, I shall therefore begin the analysis by delineating the specific characteristics of peripheral capitalism.

One of the clearest analyses of the unique structural features of peripheral capitalism is presented by Hamza Alavi in his article "The Structure of Peripheral Capitalism" (1982). Alavi compares the structural features of core capitalist economy (as capitalist mode of production) and

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129 Although my main focus shall be on the classes that comprise the power bloc, or the dominant classes, rather than on the subaltern ones, it is fully recognized that without a consideration of the latter's interaction with the former, one cannot understand either the politics or policies that ensue (Barlas, forthcoming).
peripheral capitalism. After noting similarities in the "free" nature of labor (i.e., free from non-economic compulsions and without ownership of the means of production) and the employment of economic means of extraction of surplus value between core and peripheral capitalism, Alavi points out that peripheral capitalism differs from core capitalism in two major respects, viz, in its conditions or imperatives of "generalized commodity production" and "extended reproduction of surplus value".

130 It is important to note that in the case of peripheral capitalism, these two interrelated aspects of labor should be viewed as a dominant tendency rather than an established fact. There are other forms of labor that still co-exist with free labor in Pakistan. These forms can be seen in serf-like position of the Haris in parts of Sindh, the tribal form of labor in parts of Baluchistan which is based on traditional collectivity and appropriation of common produce by the tribal chiefs, and even the slave-like labor in conditions as varied as the coal mines in Baluchistan and brick kilns around even major cities like Lahore. Similarly, sharecropping type of agricultural labor is widespread throughout the country. In addition, there are a large number of "free workers," especially women and children, who work as domestic servants on terms of personal subordination to their employers, without any agreed working hours—quite slave-like in form if not in substance. As a matter of fact, in empirical terms, "free labor" as we know it in the advanced capitalist countries, is still a minority in the total working force.

However, two points must be kept in mind here. First, that these other forms of labor, (or modes of production) are totally subsumed under capitalism, peripheral locally, and thereby also core capitalism (Wallerstein, 1982) and that those who employ these forms of labor, are a part of the overall nexus of production and exchange in peripheral capitalism. They are at the beck and call of the "structural imperatives" (Alavi's term) of peripheral capitalism, and the short-term expansion or contraction of such forms of labor is dependent upon it. It is for this reason that we can speak of peripheral capitalism as an integrated system of diverse forms of labor and production, rather than as chimera of feudal and capitalist modes, or as dual economy. Peripheral capitalism articulates as a single entity in the last instance, though like all other generalized social entities, it is replete with different, opposing tendencies or contradictions.

The second point that must be kept in mind, is that there is a secular tendency in the expansion of "free labor" in peripheral capitalism, a tendency that is being driven by the dynamics of the globalization of manufacturing capitalism and industrialization of agriculture.
of capital." In this matter, it will be best to quote him in detail. He explains that:

In the first case, the major impact of colonial capital on precapitalist societies, in the course of their transformation into peripheral capitalist societies, was to break down their self-sufficiency and to generate in them commodity production intended for sale, both locally and in international markets. By the same token, it drew these societies into the ambit of colonial trade, as markets for metropolitan production. This is generalized commodity production, but generalized commodity production with specific characteristics that distinguish it from that in metropolitan societies. This difference constitutes one of the elements of the structural specificity of peripheral capitalism. In noncolonized, metropolitan, countries generalized commodity production was an "integrated" process of development, in industry as well as agriculture and--especially in the case of the former--the production of capital goods as well as consumers' goods. That was not the case in peripheral capitalism, which brought about a disarticulated form of generalized commodity production, as contrasted with the integrated form in metropolitan capitalism. It must be emphasized that by this distinction we do not mean autarkic development. The point is about the character of
production in different branches of metropolitan economies and those of peripheral capitalist societies, which make the latter dependent on its links with the metropolitan economies. The circuit of generalized commodity production in peripheral capitalist societies is not internally complete, as in the case of metropolitan capitalism. For then [sic] that circuit is completed only by virtue of their links with the metropolitan economy, by production for export, and as markets for colonial imports. The structural condition of generalized commodity production in peripheral capitalism is satisfied only by virtue of the link with the metropolis. (pp. 180-181, emphasis added).

From the above we can deduce two pre-condition of generalized production of commodities in peripheral capitalism and the phenomenon of dependent development that it generates. These are (a) non-production of the means of production in peripheral capitalism, and (b) a peculiar pattern of trade with core capitalism through which capital goods are acquired from the latter in exchange for the consumer or raw-material commodities.

The second major respect (structural condition) in which peripheral capitalism differs from metropolitan capitalism is in the process of "extended reproduction of capital." As Alavi (1982) points out, this is:
a concept in Marxist theory of capitalist development that refers to the fact that not only is the capital used up in production replaced from the proceeds, but also that the "surplus value" that is extracted from the worker contributes to the accumulation of capital and thereby to a constant enlargement of the capacity to produce. In the case of peripheral capitalist societies, insofar as the surplus value generated in them is appropriated by metropolitan capitalism, this leads to a growth of productive powers not in the peripheral capitalist society but in the metropolis. The condition of capitalist development is thus satisfied but in a manner that is specific to peripheral capitalism. . . the structure of peripheral capitalism and the dynamics of its development are, by virtue of these differences, quite distinct from those of metropolitan capitalism (p. 181, emphasis added).

It should be pointed out that though Alavi very correctly points to a crucial structural condition of peripheral capitalism, he nevertheless underemphasizes an equally important aspect which has decisive implications both for theory and what actually occurs in reality. It is that only a part of the surplus generated in peripheral economies is appropriated by the agents of metropolitan capital. The rest of it is appropriated by an indigenous dominant class or
classes, whether these be engaged in trade, agricultural production, or industry. It is important to recognize this for this is the material basis for the "development" part of the phenomenon of dependent development engendered by peripheral capitalism, and separates our analysis from the thesis of "underdevelopment" as enunciated, for instance, in the early work of A.G. Frank.

Hegemony of Capitalism

The above theoretical analysis of peripheral capitalism posits the existence of a capitalist class that is internally hegemonic, but which at the same time is externally dependent or subordinate. We say that it is internally hegemonic or dominant not only in the sense that it is the direct organizer of production and thus recipient of surplus value, i.e., because it is dominant over free labor, but more so in the sense that it also succeeds in subsuming other forms (or modes\textsuperscript{131}) of production under its own, by either absorbing their output and/or providing them with necessary commodities through the production or circulation spheres. By doing this,

\textsuperscript{131} I prefer to use the term forms of production to describe non-capitalist modes of production that have persisted after the introduction of the latter, in order to avoid being trapped by singular mode v. multiple mode controversy. The problem with singular mode rendering, especially in its capitalist world system formulation by Wallerstein, is that it obfuscates reality in peripheral societies. On the other hand, the multiple mode postulation de-emphasizes the now existing organic links between apparently different modes. Thus, the former rendering results in glossing over differences at the level of phenomenon by its over-emphasis on structure, while the latter obfuscates an understanding of structure by over-emphasizing phenomenal differences.

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and this is more important from our viewpoint, it also establishes a strategic political superiority over the "fundamental" classes of the other forms of production.

Subordinated Landowning Class

The landowning class consists of two significant fractions: The fraction of capitalist farmers and the fraction of landowners that are still engaged in feudal forms of production. The former fraction is growing rapidly, while the latter is shrinking, as more and more landowners convert to modern methods of agriculture. However, what is important is that both produce for the domestic as well as the international market.

It is the production for the international markets, that mainly consists in export of two crops—cotton and rice—that not only creates a commonality of interests among the two fractions of the landowning class, but also makes it strategically necessary and important for the industrial class to cater to their needs. For without their exports, the industrial class cannot either acquire the capital goods that it needs, nor gain access to the international capital resources (for it needs export earnings of the agricultural sector to pay the debt service on foreign loans as it unable to generate sufficient hard currency through its own exports).

Transnational capitalist class
Any listing of dominant classes in peripheral societies such as Pakistan would remain incomplete without taking into account the role and effects of the transnational capitalist class. Therefore, it is necessary to allocate to the transnational class a social and political role that is parallel to the indigenous dominant classes. In this regard, Alavi (1982b) is quite correct in pointing out that foreign capital has a structural presence in peripheral capitalist societies. As he writes:

".. . foreign capital--metropolitan bourgeoisie on its own--has a structural presence in postcolonial societies and their state apparatus--its hand is not removed with independence any more that it is absent in those countries that have not been subjected to direct colonial control. In fact, the metropolitan bourgeoisie is represented in peripheral societies and the state doubly. It is represented in the first instance through its own local presence, organization, and resources. But this direct presence is greatly reinforced through the mediation on its behalf of the respective metropolitan states in their dealings with states in peripheral capitalist societies. It cannot be therefore regarded as external to these societies. (p. 298).

In addition to the above aspects of the structural presence of metropolitan capital in peripheral societies, we
must add a new one that clearly emerged in the 1980s. This is the increasingly prominent role that the twin frontal institutions of metropolitan capital—the IMF and World Bank—have come to play in the politics and policies of peripheral societies.

**Interests of Dominant Classes Vis-a-Vis Energy Policy**

Here, I will describe and delineate the interests that various dominant classes have in terms of the many aspects of energy development. It is primarily the pull and push exerted by dominant classes in the protection and enhancement of their respective interests which sets the stage for defining the means and ends of energy policy.

**Policy Interests of Landowning Class**

Both the hegemonic capitalist class and the subordinate landowning class have a common interest in expanding commercial energy supplies, although it is of far greater importance to the former. However, they do not necessarily share the same interests regarding the strategy of expansion of supplies. Per se, for the landowning class, it does not matter whether the expansion occurs through the public or private sector or through imports. Their interest mainly lies in the expansion of the power distribution grid to rural areas and that hydrocarbon-based farm inputs (fertilizers, diesel, etc.) are inexpensively available. In this sense, they have no problem “piggy-backing” on the current energy policy agenda
of the capitalist class, as they had no problem in accepting the earlier public sector energy development strategy. Incidentally, this attests to their subordinate status vis-a-vis the dominant class in the energy policy arena.

Policy Interests of Capitalist Class

The paramount interest of the capitalist class, especially its industrial fraction, is to ensure that adequate and reliable supply of energy products is available to industry. This is a necessary condition of modern economic activity, and at this level, the capitalist class’s main concern is with energy’s supply rather than with the production-side organization of this sector.

But at another level, as the energy sector provides opportunities for potentially lucrative investments, it is in the direct interests of the capitalist class that its expansion is undertaken by the private sector. For this reason, since its political resurgence in the early eighties, it has had a direct interest in seeing that the expansion occurs through setting up of new projects in the private sector (deregulation). Similarly, it also has had an interest in the privatization of existing public sector production units, as it sees an opportunity to acquire these cheaply from the State.

Insofar as the domestic industrial class is technologically ill-equipped and does not possess sufficient
capital resources, it can set up new plants or profitably run the privatized ones, only through collaboration with metropolitan corporations. It is thus in the class interest of domestic investors to push for policies that encourage foreign investment in the energy sector. They are more than satisfied, in the present circumstances, to take only a part of the revenues produced by energy generation plants, and allow the rest to be repatriated to mother countries by the metropolitan corporations. The long-term negative consequences to the national interests of such arrangements are of little concern to the domestic industrial class, as their private interests are upper most in their minds.

Policy Interests of Transnational Investors

Transnational class interests are of two types and are expressed at two levels: The institutional level and the level of individual corporations. The former consists in official contacts between the Pakistani state (political and administrative) and the states of metropolitan countries, the IMF, the World Bank, Asian Development Bank, etc. In their contacts, these states/institutions push for the general interests of the metropolitan capitalist class, which consist in:

1. Creating attractive and secure conditions for foreign private capital. This entails three imperatives: First, foreign investors have to make sure that government policies
do not threaten the security of their capital investments and profits. Second, the international financial institutions have to make sure that debt service on their loans is promptly made. And third, that they are not excluded from future market and investment opportunities as the domestic industrialist class grows in strength.

2. Development of basic infrastructure, primarily energy, which they see as a major bottleneck for profitable investments in Pakistan. It is for this reason that both the World Bank and the Asian Development Bank (who coordinate their lending activities as we saw in Chapter VII) have shown tremendous interest in facilitating private energy investments in Pakistan.

Individual metropolitan corporations on the other hand, are primarily concerned in obtaining the most profitable terms for their investments, from both the State and domestic collaborating parties. They therefore, push for policies, through various means at their disposal, that enable and assure them the largest possible return on their investments.

**Power Bloc**

It should be clear from discussion in Chapter III that the dominant classes can not directly translate their interests into policies of the State. Class interests, in their unmitigated form, are two steps removed from the
formulation of concrete policies. The first step is the constitution of the power bloc wherein interests represented by various components of the power bloc are transformed into common stances, agendas, and strategies. The second step involves the translation of power bloc agendas into specific policies and programs and navigating these measures through the governing bloc. Here, I shall discuss the dynamics of the power bloc. In the next section, issues related to the governing bloc will be discussed.

The manner in which power blocs are constituted and function depend upon the institutional structure as well as practices of the State. Pakistan's institutional structure is basically that of Westminster-type parliamentary system that has been modified to suit the requirements of a federal framework. In terms of practice of state power, however, Pakistan exhibits certain unique features in the relationship of the armed forces to polity. In Pakistan's case, one has to give due importance to the role of the armed forces in constituting and dismantling power blocs through most of its history.

The constitution of the power bloc occurs through a complex, multifaceted process which involves two distinct processes: (a) "negotiations" among the different components of the bloc, (b) compromises with the articulated or unarticulated agenda of the subaltern classes (Barlas,
forthcoming, especially Chapter Two). Through the first process, the power bloc develops a shared understanding of what is politically desirable, possible, and sustainable, and what constitutes satisfactory solutions to the problems that they face collectively or as separate components. The second process, that is, compromises between the power bloc and the demands or anticipated pressures of subaltern groups are necessary to maintain the political hegemony of the former over the latter. The nature and amplitude of these compromises depends upon the political strength or weakness of each group vis-a-vis the others. In brief, at this stage the economic interests of the dominant classes are distilled into political ideas and strategies.

It is important to keep in mind that this process allows for a substantial degree of autonomy and free play due to the fact that here we are not dealing with classes as a whole but rather as these are represented and or fragmented into particular, concrete groups, etc. This has significant implications for the internal dynamics of the power bloc. To illustrate, the domestic industrial class supports and is represented in both the major political parties in Pakistan: The Peoples Party and the Muslim League of Mr. Nawaz Sharif. Therefore, the metropolitan class has a choice of aligning with one or the other in the short run, and also to switch sides when their interests dictate. Similarly, the domestic
components of a power bloc do not face a monolithic metropolitan class but rather fragmented groups from various countries, and in recent years, new groups from semi-peripheral countries which are now also in a position to satisfy the requirements of the domestic industrial class. It is possible for them, individually or collectively, to align with one or the other of the metropolitan groups. In other words, they can change their external allies as happened during the Nawaz Sharif government (1990-93), when the domestic industrial class switched from traditional western and Japanese partners to the semi-peripheral Pacific Rim countries, especially South Korea. With the advent of the current Bhutto government at the end of 1993, this pattern appears to have been reversed to its more traditional form.

However, in identifying the power bloc as a structural and strategic determinant of policy directions, I would like to clarify two additional points. First, a power bloc always has a temporal dimension: It is not a permanent social entity. Power blocs emerge through historical processes and are subject to change, even radical change. Secondly, and this follows from the first, the existence of a power bloc does not mean that their is complete internal harmony. Quite the contrary. Power blocs usually have internal tensions and frictions due to the fact that these are coalitions of class fractions with both common and divergent interests. But
despite these internal conflicts, they recognize that, given a historical juncture, they are better off being a part of the power bloc rather than outside it. In the end, their fundamental interests determine this choice.

History of Power Blocs in Pakistan

Two fundamental realities that Pakistan inherited at the time of de-colonization shaped the future course of events. The first reality was that territories that came to constitute Pakistan (formerly the West Wing of the country) were part of the hinterland or periphery of the British India. There was no industry to speak of, and thus no industrial class. These areas produced agricultural commodities that were either consumed in other parts of British India or were exported to international markets. Agriculture was backward, organized along feudal forms. The colonial policy of extracting the highest feasible level of surplus through various cash taxes and charges, left the peasantry living essentially hand-to-mouth, while it provided just enough cash to the landlords to indulge in modern luxury consumption.

The second fundamental reality that Pakistan inherited at the time of de-colonization was the colonial State itself. It is important to understand the nature of this State in order to grasp its later role. The colonial state was designed to perform three basic roles: (a) to create the pre-conditions for production and transportation of agricultural goods from...
the periphery to the colonial and metropolitan centers, and of industrial consumer goods in the opposite direction: hence, the State's role in extending and improving canal irrigation system, construction of roads, management of railways, etc.; (b) to extract surplus: hence, the creation of its pervasive revenue collection system; and (c) to maintain reliable and strict control over the population in order to make the above two possible and ensure colonial rule: hence, the particular form of its administrative structure (that combined the functions of police, prosecutor, judge, and mayor in the office of the deputy commissioner, the linchpin of the colonial administrative machinery), an efficient police and army, and a widespread postal and telegraph network. The colonial state held complete sway over civil society. Its control over the economic life can be positively compared to the merchantilist states of Europe of the 16th through 18th centuries, in the sense that all economic activity (guild production, commerce, etc.) in the latter case had to be explicitly sanctioned by the State.\textsuperscript{132} Such was also the case with the British colonial State in India.

\textsuperscript{132} The institution and pervasive use of the notorious "No Objection Certificate" or NOC as it is known in common parlance, symbolizes the merchantilist nature of this colonial State. This administrative artifact, in essence forbids citizens to take part in most economic activities, unless a NOC is obtained from a duly authorized officer of the State. Similarly, the requirement of various licenses, permits, and "exemptions", etc., for the purpose of engaging in economic activity provided the colonial state with the necessary mechanisms to mould the economy to serve the interests of British imperialism.
It was this centralized, top-down, State that was inherited, essentially intact, by the newly independent Pakistan. It did not go through any kind of revolutionary process of reconstitution due to the nature of the independence movement. The only changes that occurred at that time were that of personnel. Many British officers, and all Hindu and Sikh officers and other personnel who migrated to India were replaced by Muslim officers and men who migrated in the opposite direction. However, many of the latter were infused with a strong nationalist spirit of building a new country. Migration also brought a sprinkling of muslim industrialists and small numbers of rich traders from the more developed regions of British India.

Initial Power Bloc (1947-58)

A large landowning class pre-dominantly represented in the post-Independence Muslim League was the hegemonic class during this period (Barlas, forthcoming; Gardezi, 1983). Lacking a popular power base, the Muslim League aligned itself with the bureaucracy to constitute the first power bloc. However, due to its social and political basis in the feudal class, the power bloc was unable to provide strategic leadership or create viable hegemonic projects. It therefore remained in crisis through much of its existence, and towards the later years of its existence, it had to rely more and more
on the armed forces to mediate its internal conflicts (Hassan, 1986; Jalal, 1990).

As mentioned above, during this early period, the capitalist class was weak and subordinate to the large landowning class (Barlas, forthcoming; Jalal, 1990). The weakness of the capitalist class, especially its industrial fraction, and the low level of capital accumulation in the economy on the one hand, and the presence of the administrative mechanisms of a centralized, colonial-mercantilist State on the other, afforded a unique opportunity for collaboration between the two. Under the circumstances, the State initiated the first steps in the task of organizing the economy of the new nation. But it could only do so within the limitations of its mercantilist institutional structure and class interests of the prevailing power bloc.\footnote{133} Given its economic weakness and subordinate political position in the power bloc, the incipient industrial class willingly accepted an intrusive role of the state in the economy. As a matter of fact, it saw fruitful opportunities in aligning itself with the State and using its mercantilist orientation to further its own interests (Adams and Iqbal, 1987).

\footnote{133}This provides an explanation as to why various governments in the past have lacked the political will to attempt or implement serious land reforms--an important condition for development--in Pakistan.
The Ayub Power Bloc (1958-71)

The coup d'état of 1958 created the first viable power bloc in the country. The previous power bloc was dismantled and a new one constituted. In the new bloc, the armed forces were the dominant party, at least until 1962. The next important component was the bureaucracy, which over the lifetime of the bloc, actually acquired a dominant status, displacing the armed forces. The industrial class gradually grew in importance, while the landowning class lost its previous dominant status in the power bloc, although it was still the hegemonic social class. In addition, one must also note the increasing influence of the United States, especially over economic strategy and external policy of the country (Hassan, 1986).

The story of how an industrial class developed under the aegis of the State has been well documented (see for example, Andrus and Mohammad, 1966; Adams and Iqbal, 1987; Bhatia, 1990). What I would like to emphasize is the fact that the industrial or capitalist class was able to acquire hegemonic status by virtue of making industrial development the central agenda of the nation. And in this process, the post-colonial State became a unique site for the incubation of the hegemonic project.

The State, in order to facilitate this, undertook three measures. First, it gave central importance to national
economic planning, by virtue of which it created numerous programs and institutions to channel domestic and foreign funds into private investments, besides undertaking certain public sector projects. Second, through its economic and trade policies, it favored the industrial class by protecting it from external competition, arranging for it favorable terms of trade between agriculture and industry, and providing it with cheap foreign exchange (Adams and Iqbal, 1987). Third, in response to the problem of a low level of capital accumulation, it acquired large sums of foreign capital and made it available to industrial investors.

All these measures nourished and nurtured a domestic industrial class, and provided it with the possibility of becoming hegemonic. But the very nature of the process through which it emerged and gained strength, also predisposed the industrial class to play a specific role in the division of labor in the world capitalist system, and thereby subordinate itself to metropolitan capital.

The economic strategies of the Ayub power bloc resulted in three tendencies which eventually led to its dislocation. These were: (a) increasing concentration of wealth in the hands of a small group of capitalists; (b) growing income inequalities between the dominant and subaltern classes; and (c) growing regional inequalities. New political movements and sentiments representing the interests of those who did not
benefit from the polices of the Ayub period emerged. The regional protest was mainly articulated and championed by the Awami League based in the eastern wing, while in the western wing, the Peoples party succeeding in subsuming the disparate voices of class protest. The Ayub power bloc, unable to maintain its legitimacy or control, passed the reins of government to the armed forces.

This armed forces sought to diffuse the crisis through compromising with the increasingly powerful opposition forces. It acceded to the demand of the regionalists to break up the artefact of "one unit" that gave political advantage to the western wing vis-a-vis the more populated easter wing, and it agreed to hold elections on the "one man, one vote" principle, instead of the two tier "basic democracy" system instituted by the Ayub bloc (Hashemi, 1983; Jalal, 1990).

However, these compromises could not rescue the power bloc in face of the new, emboldened and uncompromising stance of the Awami League, which resulted from its massive victory in the eastern wing in the 1970 elections. The People's Party, which swept the elections in the western wing was similarly uncompromisingly in either accepting the Awami League's Six Point Plan as the constitutional basis of the country, or in accepting the status of an opposition party. The crisis continued until it boiled over into a civil war and military intervention by India. This led to two historic
results: the breakaway of the eastern wing as the new country of Bangladesh, and the reconstitution of the power bloc in the western wing (current Pakistan).

The Popular-Nationalist Power Bloc (1972-77)

The People’s Party that Bhutto led into power after the defeat of the military in the Bangladesh war was greatly infused with elements of the subaltern classes. Its main base of political support was the industrial working classes, the urban lower and middle classes, and the rural landless and small peasant classes. The massive support that it commanded, as shown the results of the 1970 elections, gave it the political muscle to radically alter the strategies of the previous power bloc and to constitute a drastically different power bloc.

To begin with, the new power bloc was mainly based on the institutionalized alliance of middle and lower classes that the ideology and political base of the Peoples Party embodied. The military had withdrawn from the political arena in the wake of the 1971 disaster. The bureaucracy, a pillar of the previous bloc, was temporarily subdued through severe measures. The interests of the capitalist class, which had benefitted greatly during the Ayub bloc, were excluded from the agenda. Not only were their interests no longer articulated through government policy, they also faced serious reverses due to the nationalization of their industrial and
financial assets. On the other hand, though their interests were initially not represented in the power bloc, the landowning class was reassured by the rather meek and ineffectual land reforms announced in 1972.

The social and political strategy of the power bloc allowed for a certain degree of redistribution of income from the dominant to the subaltern classes. The national economic strategy was based on allocating to the public sector the leading role in the economy, especially in the development of heavy industry infrastructure. Consequently, strategic and policy measures were taken to channel available investment funds to the heavy industrial sector instead of private industry. These measures formed part of the effort to lessen dependence on metropolitan countries. An important consequence of these strategies was augmentation of the role of the State in civil society.

The strategic thrust of the power bloc alienated the capitalist class which responded by active and consistent hostility to the regime. This manifested itself in a severe decrease in private investment and the transfer of funds abroad. The urban middle and lower classes who suffered from the ensuing economic crisis, lost their original sympathy for the power bloc. In similar vein, poorly thought out policies of nationalizing rice-husking and cotton-ginning factories in later years, earned the opposition of the important but
largely aloof rural middlemen and small industrialists classes (Adams and Iqbal 1987).

The diminished power the capitalist class in society and the alienation of the rural and urban middle classes, coupled with Bhutto’s unwillingness to substantively empower the subaltern classes, led to the effect of the rise in influence of the landowning classes. They had not only not suffered any serious damage due to weak land reforms but had benefitted greatly from the regime’s strategy of making the terms of trade between agriculture and industry favorable to the agriculture. In the later years, as the Bhutto regime’s popular political base eroded, it saw in the large landowners a viable opportunity to extend its diminishing support base. Clearly, in the final years of the Bhutto power bloc, the landowning classes had acquired an important position within party politics and the government (Hassan, 1986).

Zia Dictatorship: Reformulation of the Ayub Bloc (1977-85)

General Zia’s coup of July 1977 resulted in the dismantling of the popular-nationalist power bloc. It was replaced by a bloc in which the armed forces, especially the Army, held the dominant position and the higher civil service the subordinate position (Hashemi, 1983). Later, groups that enjoyed the support of the capitalist class and articulated their interests, were incorporated into the power bloc and were given a certain modicum of political power.
After an initial period of ambiguity, the new regime settled into a strategic course that was in sharp contrast to that of the previous bloc. The Zia dictatorship provided protection and support to the capitalist class. Organized labor was particularly targeted for criticism and repression. Trade unions were banned, and so was the Peoples Party.

The Zia dictatorship brought a measure of stability to the higher civil service and restored to it many of the perks and privileges that had been taken away by the previous power bloc. It provided encouragement and support to the anti-Bhutto conservative political groups that formed the Pakistan National Alliance, and used these to oppose the political power of the rank and file Peoples Party. Though such groups were brought into government, they were never more than a token: Zia’s regime was transparently military’s exercise of political power. However, the regime did enjoy the enthusiastic support of the capitalist class (including, most importantly, the urban merchants, traders, and shopkeepers), while the urban middle classes were generally split in their loyalties. The urban and rural lower classes overwhelmingly remained loyal to the ideals of the previous power bloc.


The crucial social result of the Zia dictatorship has been the re-establishment of the hegemonic status of the capitalist class. The current power bloc, which inevitably
developed as a result of the strategic direction of the Zia dictatorship, reflects this hegemony of the capitalist class in civil society.

The current power bloc in Pakistan emerged in the mid-1980s and consists of: (a) alternatively, either of the two main political parties, the Pakistan Peoples Party or the Muslim League, both of which represent industrial class and subordinated class of landowners at the political level; (b) network of transnational corporations and international financial institutions backed by western metropolitan governments, mainly the United States, whenever the former find it necessary to evoke their support in dealing with other components of the power bloc; and (c) two segments of the State, the higher central bureaucracy (Civil Service of Pakistan) and the military.

Energy Policy Governing Bloc

As mentioned previously, the second stage in the translation of dominant class interests occurs at the level of the policy governing bloc. Here, the common understanding or strategies which are hammered out at the political stage are distilled into concrete polices, programs, and actions. Following our definition of the policy governing bloc, we can identify four elements as constituting the current energy policy governing bloc in Pakistan. These are (a) the Cabinet Committee on Energy (CCE) which comprises the political
officials of the party in government and is headed by the Prime Minister, (b) the relevant bureaus and concerned organizations such as the Directorate of Petroleum Concessions, the Energy Wing of the Planning Commission, WAPDA, etc., (c) officials of multilateral lending institutions such as the World Bank, ADB, as well as concerned bilateral donor agencies such as USAID, Japanese Overseas Development Agency, etc., and (d) representatives of private energy organizations, such as Union Texas Petroleum, AES Corporation, etc. It may be noted here that the military has no direct way of participating in the energy policy governing bloc. Whatever influence it exercises at this level therefore occurs indirectly through its influence in and over the power bloc. The object of analysis at this level is the internal dynamics of the policy governing bloc. The problematic can be stated in terms of micro-management of government bureaus by power bloc components to ensure that the operational output of a vast array of government agencies and organizations conforms to the policy strategies of the former. For, it can by no means be taken for granted that government bureaus and their personnel have preference for the same policies that are favored by the power bloc. To bring about this conformity remains an on-going burden of the power bloc as a whole, and its various components separately. In the latter case, each component shapes the policy/program output of relevant
government bureaus in different ways, corresponding to the special leverage that it possesses.

In addition, one must also look at the ability and general disposition of the government bureaucrats to mount resistance against the policy preferences of the power bloc. As I show below, both the positional limitations and social background of top bureaucrats predispose them to acquiesce in policies preferred by the power bloc. Thus, the governing bloc problematic consists in two parameters. One is the puissance of the power bloc to control energy related government agencies. And the other is the willingness and ability of top agency officials to follow or resist power bloc energy strategies. In the following, I shall expand and illustrate this problematic by giving some examples.

The Prime Minister and the Cabinet Committee on Energy (CCE)

The prime minister, who heads both the CCE and the less important Technical Committee on Energy, has been taking important policy decisions and sanctioning or pushing through preferred energy projects without proper consultation with energy bureaus. Since the mid-eighties, both Nawaz Sharif and Benazir Bhutto have used their political power to push for deregulation and privatization of the energy sector, going over the heads of the officials of government agencies which are part of the energy policy governing bloc.
The latest major change in energy policy that occurred in March of 1994 is clearly indicative of the role of the prime minister. Soon after becoming the prime minister in October of 1993, Benazir Bhutto ordered the creation of a Task Force on energy. This Task Force reported its recommendations in late February, and without much national debate or debate in the parliament, these recommendations were authorized in March to become government policy by the prime minister. Similarly, the decision not to encourage power plants less than 100 MW capacity was taken by the prime minister. This gives an advantage to foreign investors in competition with domestic investors. The former prefer to set up larger plants. Most of the domestic investors who do not have the capital resources to set up larger plants are thus effectively locked out of these opportunities.

The leading role which the prime minister has come to play in the energy governing bloc is also evident from other examples. For instance, in recent months, the government has signed a number of contracts or memoranda of understanding with foreign investors for the building of energy projects. The first set of contracts, totalling $3.5 billion, were signed in September 1994 when a group of U.S energy corporation executives were led by Energy Secretary Hazel O'Leary on a visit to Pakistan. This delegation sorted out matters directly with the prime minister. It is reported that
even the minister for power who has stressed the development of indigenous hydel capacity was more or less left out of the loop.\textsuperscript{134}

A MOU for even a larger project, totalling US $7.5 billion, was signed with a Hong Kong based company in October 1994. Once again, the prime minister was involved in bringing this about and presided over the signing ceremony (PTOE Oct 8-14, 1994).

**International Financial Institutions and Donors**

As it was explained in Chapter VII, these players influence the plans of government bureaus directly by the following:

1. Informing the Energy Wing and the Planning Commission as to which projects the donors would be willing to provide funds for. For example, while the World Bank refused to provide funds for the Lakhra coal-based thermal project that the planning commission wanted to construct in the public sector, made it known that it was willing to provide loans and guarantees for the private sector Hubco power plant based on imported fuel oil.

\textsuperscript{134} This information was provided to the author by a business man involved in setting up a private energy project and who was close to this delegation.
2. Establishing and monitoring the criteria for expenditure of loan money that has been approved. The prime example is the case of funds provided for the rural electrification program. **Foreign Oil Companies**

In recent years, foreign oil companies have come to play an important role in policy formulation in the oil and gas subsector. For example, the oil exploration policy announced in November 1991 was formulated on the basis of comprehensive dialogue between the Ministry of Petroleum and Natural Resources and the representatives of foreign oil corporations.\(^\text{135}\)

The Ministry has continued such discussions on a regular basis, which take place in both formal and informal settings. Such contacts provide significant opportunities for foreign oil companies to influence petroleum policy in both the formulation and implementation stages. **Bureaucratic Agencies**

Privileged, powerful, and pervasive the officialdom maybe, it cannot be thought of as some kind of "proxy" class. Yet, it is necessary to consider its class affiliations and institutional limitations, in order to delimit its relative autonomy vis-a-vis the power bloc.

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\(^{135}\) Interview with an official of the Ministry conducted in August 1993.
Class affiliations of high officials.

The vast majority of officer level (Grade 17 and above) personnel in the bureaucracy are from the propertied middle and upper segments of society. They hail from both urban and rural areas. There is also a sizeable percentage which hails from the large landowning class. The class origins of their higher echelon personnel expectedly predispose them to be sympathetic to the interests of the hegemonic industrial class and other subordinate component classes of the power bloc. However, as Poulantzas (1973) and others have pointed out, state functionaries are also likely to acquire institutional loyalties separate from that of which they have to the class of their origin. The life time employment of these personnel in the various institutions and bureaus of the state, as well as the recurrent training and indoctrination, develops in them an spirit de corps that transcends their immediate class loyalties. In addition, as they are not the immediate beneficiaries of business agreements with the metropolitan investing class, they can potentially uphold policy postures

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136 Alavi (1982b, p. 300) writes on this that "It is not surprising, therefore, that despite commitments, in some cases at the highest levels, to programs such as land reform, these have failed to be implemented effectively, for the class that is affected is directly represented within the state apparatus by virtue of the class origins of its officials, and is able thereby to undermine the implementation of measures directed against itself." It is this unique ability of the bureaucracy for mounting a tenacious rear-guard action on behalf of the dominant classes, that is, during the phase of implementation of policies that it could not prevent from being adopted, that is the source of its real power and has historically brought it notoriety.

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that do not entirely favor the latter. For these reasons, as well as the fact that a increasing percentage of the personnel stem from the middle classes, their loyalties are detached and relatively autonomous from the latter. It is therefore quite probable that officials may disagree with the policies advocated by the components of the power bloc and use the powers of their office and state bureaus and organizations to oppose them. It is therefore necessary for the hegemonic class to assert its interests at the level of the governing bloc. This is done both through the navigation of advantageous policies through the decision-making process by the power bloc as well as the exertion of direct influence through "connections" with the bureaucracy. As a matter of fact, this is exactly what appears to have happened within the power policy governing bloc: WAPDA’s and other officials of various related bureaus, at least in the earlier years, were able to rigorously and to some extent successfully oppose the deregulation and privatization of the power sector. The renewed proposals to develop the hydroelectric potential of the Indus river system, which is estimated at around 50,000 MW of power, also point out to serious opposition to the current power sector policies. Similarly, the Pakistan Atomic Energy Commission’s proposals to develop nuclear power through the indigenous manufacture (with technical assistance from China) of nuclear powerplants, as well as thermal plants in
collaboration with the indigenous Heavy Mechanical Complex facilities (nearly 60 percent of the equipment in nuclear and thermal plants is similar), also reflects the strong opposition from state functionaries and institutions to the current policies.

Quantum of Autonomy.

The question therefore is, how far can the state personnel and their institutions go towards opposing the power bloc within the policy governing bloc assuming that they do decide to do so. In other words, what are the limits of their autonomy vis-a-vis the power bloc? How autonomous are they really in determining policy stances?

There are several factors that preclude the personnel and bureaus in the energy policy governing bloc from playing a role of sustained opposition to the policies advocated by the power bloc. Some of these which were discovered during the course of this study are enumerated below.

1. Recalcitrant officials can be transferred to other bureaus and replaced by more pliable ones. The Prime Minister’s secretariat has the powers to do so.

2. Over the last few years, there has been a gradual shrinkage of the scope of decision-making powers of some bureaus due to the promulgation of more specific policies. A prime example of this is the near elimination of the negotiating authority of the Private Power Cell under the new policy. Under the
previous policy, the officials of the Private Power Cell had the authority to negotiate the tariff at which the GOP agreed to purchase power on long-term basis from prospective private producers. The new policy, by fixing a pre-determined minimum (much higher) tariff, and certain other incentives, has essentially taken away those powers from the bureaucrats that they could potentially use to get a more profitable deal for the country137 (see Chapter IV for detail).

3. The limited or non-existent in-house research capacity forces officials to rely on the research and information of the parties regarding whom they are supposed make decisions, or with whom they have to negotiate, or regulate. I discussed this issue in Chapter VI to show the penetration of international institutions at the functional levels of GOP.

4. The fragmented organizational setup of the departments concerned with energy policy formulation and implementation

137 Now, it is another matter if bureaucrats use the discretionary powers at their disposal to wring out kickbacks from investors. This is perhaps a common practice. However, at least in the case under discussion, it was not the charges of corruption in the Private Power Cell that led to the reduction in scope of decision-making authority. Rather, it was the continuous complaints of the foreign investors that they were being given the "run around". But this "run around" in essence was really the struggle over the attempts by foreign investors to negotiate up the tariff rate, while the Cell officials tried to negotiate them down. Certainly, there must have been other reasons for "run around" compliant. Bureaucratic culture in Pakistan is extremely self-righteous and complacent. Their practices are ossified. Management renovation is an anathema. But these are the problems that must be addressed instead of finding short-sighted solutions that solve the problems faced by powerful interests. Such patch-work methods only serve to intensify the original problem by causing further centralization of decision-making, a heavier top-down bureaucracy.
severely limits the ability and possibility of the emergence of strong dissention or opposition to the power bloc policies. A good example of this is the constitutionally sanctioned joint jurisdiction of the federal and provincial governments over energy resources. As a result of this, the proper development of the hydel potential of the Indus river system has been foiled by the continuous bickering between provincial and the federal governments and politicians over the geographical spread of the benefits and costs. WAPDA and the Ministry of Water and Power, who have strongly and consistently advocated Kalabagh Dam, a major hydro-electric project on Indus, have not been able to deal with the politically motivated opposition from Sindh and Frontier provinces. Had Kalabagh Dam been constructed in the early 1980's as planned, it would have been supplying an additional 3,600 MW or more of power by now. This would have certainly averted the build up of pressure in the early 1990s to generate power at any cost that led to the present form of sub-optimal deregulation and privatization policies. While most bureaucrats are in favor of Kalabagh Dam, they have failed to exert the required pressure due to fragmentation of jurisdiction over energy between the federal and provincial governments. Similarly, the lack of a single energy ministry vitiates the capacity of energy bureaucrats to take a strong independent stance over policy matters.
5. The process of corporatization, whatever its other merits may be, has distanced public sector organizations from the energy policy governing bloc. Instead of being "insiders", the officials of these organizations have become or are fast becoming "outsiders". This has affected the relative strength of the state officials within the governing bloc vis-a-vis the other parties.

The above factors militate against any official or group of officials or state organs from opposing the policies advocated by the representatives of the power bloc. The output of the energy policy governing bloc therefore represents the policy preference of the power bloc, in spite of the fact that at the individual level, officials may be opposed to these.

The Power Bloc and the Fate of Renewable Energy

This underlying dynamic of the energy policy governing bloc also plausibly explains the fate of the attempts to push for the development of small renewable energy projects, especially in the rural areas. In a country in which electricity is available to a little more than 40% of the population, and gas even to a much lesser degree, where large numbers of the poor live in remote rural areas, and which faces ecological disaster as a result of deforestation caused by the predominant use of firewood for fuel, one could rationally expect that the energy policy would give a priority
to the development of alternative energy resources, such as biogas, small hydel, and solar thermal, etc. But, besides the feeble initiatives undertaken by the Zulfiqar Ali Bhutto's regime two decades ago, no serious attempt has been made to establish a sound footing for development such resources. As a matter of fact, the bureau responsible for the development of renewable energy resources, called the Directorate of New and Renewable Energy Resources, stopped receiving budgetary allocations except for the salaries of a skeleton staff in 1989.¹³⁸ Some of the solar energy projects that it was managing have been forced onto WAPDA which was unwilling to accept this totally different mission. It is interesting to note that the importance of such resources is not lost on officials of the energy governing bloc. For example, the Chief of the Energy Wing, who is the second most senior official of this bureau, stated in an interview when asked about the biogas plants:

... In my village, there is a biogas plant that has been operating excellently for the last twelve years. There is absolutely no problem with it, except that we sometimes have too much gas pressure. I don't know why these plants have not been utilized more. At every opportunity that I get, at every meeting where this is

¹³⁸ Interview with an official of the directorate, Islamabad, August 1993.
discussed, I support the development of biogas facilities. I do it now, in the past, and will do it in the future.\footnote{This official mentioned the lack of proper maintenance of other such plants as the main cause of their failure. The question is why were these plants poorly maintained. The reason has to do with the poor program design (lack of community participation) and the lack of sufficient resources assigned for upkeep purposes. A country that has shown its maintenance skills by keeping operational its fleet of advanced F-16 fighter bombers after four years of American arms embargo, surely does not lack either the skilled personnel or the technology to maintain biogas plants that are essentially based on 19th century engineering.}

What has happened in the area of renewable energy is illustrative of the limited capacity of state officials and bureaus to influence the output of the energy policy governing bloc. The reason for the lack of serious development of renewable energy resources is that it has no support from the power bloc. Renewable energy projects may alleviate poverty in rural areas by providing opportunities to the poor peasants or avert deforestation, but it has little to offer to either the hegemonic industrial class or the metropolitan investors. Their control of the energy policy governing bloc has assured that government revenues or foreign capital flows are not spent on such projects. The question posed at the end of the previous chapter can also be answered with essentially similar logic. The fact that current energy policies are reinforcing dependency relationships is of little concern to the power bloc. Their control of the energy policy governing bloc makes sure that alternative policies are excluded.
Conclusions and Policy Recommendations

General Conclusion

Although there has been considerable increase in the consumption of commercial energy in Pakistan since Independence in 1947, per capital consumption still remains substantially below the world average. Thus, while there was a twenty-fold increase in consumption of commercial energy in the 1950 to 1990 period, from 1.4 million Tons of Oil Equivalent (TOE) to 28.8 million TOE, in the beginning of 1992 the per capita primary commercial energy consumption in Pakistan was still about one-half the average of developing countries, one-seventh of the world average and one-twentieth of the average of developed countries (Raza, Khan, and Jalal, 1992). Currently, only about 45% of the population has access to electricity and even the present customers cannot be supplied with power regularly. This is because the peak system demand is about 20% more than supply during almost the entire first half of each year (Ghulam Mustapha Khar, Minster of Water and Power, PTOE, February 25, 1994, p.4). Given the close and positive relationship between energy consumption and economic growth (Riaz, 1984), low levels of per capita energy consumption is actually a manifestation of Pakistan's relative state of socio-economic underdevelopment. If Pakistan is to achieve the current average living standards in the world at some future time, the supply and consumption of energy would
have to be increased seven times the present level, assuming the population remains constant. But as this assumption is unrealistic, the supply of energy would have to increase by even more. Such a calculation would indeed show the true dimensions of the "energy gap" and hence the long-term challenge involved in overcoming it, as opposed to the putative calculations which identify the gap as the difference between current supply and demand or their projections into the future based on the past rates of growth which, as compared to the standard of living basis mentioned above, characteristically understates the size of the real gap.\textsuperscript{140}

\textsuperscript{140} The way the power shortage problem has been structured is wrong: planners and policymakers view the power shortage gap in a linear sense, that is, as a rule existing peak supply is compared to existing peak demand to arrive at a shortage gap figure which is then used as an "input" or a reference point for policy formulation. By this method, the magnitude of future demand and hence energy gap given the supply scenario, is derived by projecting the historical rate of growth of demand into future after taking into consideration certain external variables. But the problem is that the past demand and the its rate of growth had, in the first place, been directly determined by availability of energy supply conditions and would have certainly been different had supply conditions been different. It is for this reason that ever since the problem of power shortages emerged in early 1980s, each and all pronouncements of government leaders predicting the end of loadshedding by the end of this or that period have proven to be incorrect. It is not that they have been outrightly lying to the public, as some of the harsher critics hold: Simply, that the method they have followed and continue to follow to determine or "structure" the energy shortage problem is methodologically incorrect and, so therefore are their conclusions. In the gas sector however, the Planning Commission seems to have recognized this problem and has offered an appropriate solution: "There is a large unsatisfied demand for gas in the country. Demand projections based on existing consumption data underestimate the actual demand. Therefore, future plans for gas consumption should be supply driven instead of demand driven." (Seventh Plan, Ch.25, p.202). Similarly, Azhar (1991) has also drawn attention to this problematic.
Nevertheless, in spite of the appallingly low level of energy consumption and the fact that "the unique geological and geographical setting of Pakistan has endowed it a wealth of both fossil as well as renewable energy resources" (HDIP, 1993), Pakistan has historically failed to meet its energy needs. First and foremost, this is a case of policy failure: In other words, those responsible for formulating and implementing energy policy have failed to respond to the challenge in its full dimensions, resulting in chronic shortages of energy with serious consequences. Lack of adequate and reliable supplies of energy, especially power, is hampering the country's economic growth as it constrains productive investments.

This energy policy failure can only be fully understood and appreciated by including into analysis the changing dynamics of dependent development. From the 1950s onwards, the GOP has depended on foreign technological and capital resources for the development of both the power and petroleum sectors. From the 1950s up until the middle of the 1980s, this dependent development took place under a set of global conditions that were radically different from those which began to emerge in the beginning of the 1980s and were well-established by the end of the decade. Two among these, in my
view, are of paramount importance: The Cold War and the economic performance in the core capitalist economies.

In the 1950s, the heightening Cold War and the general expansionary growth in the core capitalist economies, especially the United States, made increased aid flows both politically necessary and financially possible. Aid monies, both bilateral and multilateral, poured into the coffers of the governments of developing countries, especially those that were considered to have relatively greater strategic value and which were willing to oblige the western powers in their anti-communist crusade: Pakistan was one them. Pakistan's energy policies in this period were designed under the influence of this fundamental condition. As a result of the flow of bilateral and multilateral aid to the GOP, the energy public sector came into existence and developed over the years. To emphasize, in the case of Pakistan, the energy public sector developed as a result of the influence of the political and economic dynamics of world capitalism and does not represent any attempt on the part of the state to chart out a relatively autonomous course of development. The energy public sector not only embodies the genesis of dependent development but also its results: debt trap, lack of development of energy
capital goods sector, etc.\textsuperscript{141} Moreover, the same factors and processes that helped the development of the public sector in energy, i.e., dependency on foreign resources, also preempted the pursuit of alternative energy policies that could have strategized the creation of an independent energy base primarily through the development of technological, financial, and institutional capacities appropriate for the exploitation and harnessing of the diverse indigenous energy resources.

The fiscal crisis that emerged in the 1970s and escalated through the 1980s in the core countries—a result of economic slow-down on the one hand, and internal policies that embodied compromises made between dominant and dominated classes on the other—negatively affected their ability to sustain the previous levels of official aid. Under the new conditions, it became politically burdensome for ruling governments to uphold foreign aid policies. Further, the necessity and importance of foreign aid as a political lever decreased through the 1980s as the erstwhile Soviet Union became embroiled in severe internal and external problems. In the early 1980s, it underwent a rapid succession of leaders resulting in strategic paralysis. The intervention in Afghanistan took a heavy

\textsuperscript{141} The only exception to this is that part of the public sector that was created with the assistance of China and erstwhile Soviet Union. Both these countries have provided such type of assistance (interest free loans, barter aid, supply of capital goods technology, etc.) which did not result in dependend development. As a matter of fact, such aid has contributed to mitigation of the negative effects of Pakistan's dependency on world capitalist core.
economic toll, affected internal stability, and caused serious political difficulties abroad. Later in the decade, these tensions boiled into a full blown political and economic chaos. The weakened Soviet Union retreated quickly from the international arena. The Cold War wound down in the latter half of the 1980s. After the breakup of the Soviet Union, Russia subordinated itself to the capitalist core (under U.S. hegemony), bringing an end to post-War bipolarism.

The changes in the internal circumstances of the capitalist core countries in conjunction with the global politico-military reshuffling have created new possibilities for the articulation of the world capitalist system. In the new conditions, the purpose of official concessionary aid has been lost. It is no more required for either the expansion of markets for the goods and investment capital of core countries, and in tandem, the protection of the "free world" third world countries from the threat of socialist "takeover." Instead, private capital is now encouraged to go alone and find opportunities for itself, while the core states have stepped back. But they have guaranteed to secure the general legal and social conditions for international capital. The shifts in the general World Bank policies, and specifically those pertaining to the energy sector, reflect this dynamic quite clearly.
This study has revealed that official development aid to Pakistan has been on the decline through the 1980s. With the drying up of official aid, the public sector has lost its main prop. Private foreign capital is fast becoming the main source of both capital and technology for Pakistan. The energy public sector has been most severely affected by this trend. The policy changes that have been put in place since the middle of 1980s, have been in response to, and reflect the changed nature of dependency. Given the current trends, private foreign capital investments (both direct and portfolio) will increasingly become the central instrument of dependent development. This shift in the circumstances of dependent development is likely to intensify dependency in the case of Pakistan, as it has been shown in this study.

At the sector level, policy makers have faced and continue to face certain key issues and options. Among these are: (a) whether or not to develop the technological infrastructure to domestically produce the means of production required in the energy industry; (b) whether to import energy or develop indigenous primary energy resources, and in the case of the latter, which domestic source ought to be given priority; (c) whether or not to allow foreign investors to play a leading role in the sector; (d) how to price energy products; (e) what to do about unproductive luxury energy consumption, etc, etc. As many of these issues are inter-
linked, these can only be approached within a policy framework that is integrated, long-term, sector wide and strategic in outlook (Riaz, 1984; Azhar, 1991). A disjointed and fragmentary approach would inevitably lead to inadequate or incorrect solutions that may contribute to the creation of additional problems: Unfortunately, looking at Pakistan's energy picture, the conclusion is inevitable that such continues to be the case. Ad hocism in policy has compounded previous failures to a point where it now appears that the restoration of equilibrium between energy and economy can only be conceived in an invisible distant future. And under the circumstances of energy crunch, governments in their bid to hang on to power are more likely to take a short-term view to temporarily alleviate the situation by finding short-cut solutions that provide illusory hopes to the electorate. Thus, while government leaders fight their political fires, they have little incentive to pay serious attention to policies and strategies that would indeed resolve the problem of energy shortages as these necessitate, on the one hand, sustained financial and political investments in the short to medium run, while on the other hand, only promise political dividends in the future, when current incumbents or party may not be in power to benefit politically. As a result, further policy mistakes continue to be made from the point of view of the national interest (but not necessarily from the point of
view of the interests of incumbent governments or the interests of the ruling classes as we saw in the previous chapter).

**Specific Conclusions**

There are a number of specific conclusions that I have come to during the course of this study. These are enumerated below.

1. The concept of the policy governing bloc which was introduced in Chapter II and used throughout the study, but more explicitly in this chapter, proved to very helpful in explaining various policy phenomena in the energy sector. In this chapter, this concept was fruitfully used to provide a plausible explanation of what has been and what has not been occurring in the energy policy arena. Yet, because of the limited scope of the present study, it has been used only partially. For example, the connections between various policy governing blocs were not explored at all, although without a certain kind of coordination between these, the articulation of the peripheral capitalist mode of production, and the hence the reproduction of the existing social formation (society) would not be possible. Further application and theoretical refinement of this concept is called for.

2. The changes in energy policy which different (ostensibly politically opposed) governments have been bringing about since the mid-eighties have: (a) encouraged, supported, and
helped private foreign investors at the expense of the public sector; (b) reduced the national share in the exploitation of its natural resources by giving foreign petroleum companies more favorable concession and mining agreements; and (c) increased (or shall increase in the near future) the pressure on foreign exchange reserves by allowing (i) fully tax-free business, (ii) full repatriation of profits, (iii) payment of debt service obligations on private investment loans, (iv) increased fuel oil imports for private sector projects, and (iv) reduced national share in petroleum sector. The increased hard currency obligations incurred by private development of power shall have to be offset by increasing exports of traditional products, barring the unlikely discovery of oil in such vast amounts that exportable surpluses would result (currently, domestic production meets only 20% of oil needs).

3. The shift in development strategy that occurred in the early 1980's of which the changes in energy policy were a part, were a result of the acquisition of dominance of the current power bloc (please see Chapter VI and VIII). We also saw that an explicit ideological shift occurred in early 1980's which underpinned the new development strategy.

4. The IMF and the World Bank have played a crucial role in bringing about the shifts in domestic policy agenda. These two institutions, lead bilateral aid donors as well as other
financial institutions in their dealings with the government of Pakistan. Besides playing a determining role at macroeconomic level through "conditionalities" and "cross-conditionalities" (i.e., at the level of the power bloc), they also influence the energy policy governing bloc through their involvement at the functional or implementation levels of relevant government departments and organizations.

5. The current policies stand to intensify dependency because of Pakistan's economic structure which determines its position in the international division of labor between countries created by the articulation of capitalism at the global level. The pressure on foreign reserves shall unleash or intensify tendencies that are the core causes of Pakistan's current state of dependent development: It will result in the increased exports of agricultural goods, devaluation, fall in the terms of trade, negative trade balances, low levels of capital accumulation, foreign borrowing, increased debt and debt service, etc. Though the current policies will succeed in augmenting energy supplies, especially of electricity, these will become very expensive. The lower and middle classes would suffer dis-proportionately while the poor would not be able to afford electricity at all. In addition, higher electricity and gas prices would increase the price of industrial and agricultural goods across the board, causing structural inflation. This will inevitably cause a decrease
in the real earnings and living standard of the working and poor classes. For these reasons, the current policies are not in the long-term national interest.

6. The reason why policies incongruent with the national interest are in place is because the power bloc have been successful in establishing its dominance in the energy policy governing bloc. This is evident from the changes in energy policy that have occurred, especially since the beginning of the 1990s (please see Chapters IV and VI). At the same time, the power bloc has been able to avert challenges to its policies from the dominated classes or anti-power bloc groups by holding out the promise that its polices would solve the energy crisis that the country has been facing since the beginning of the eighties. In other words, the power bloc has been successful in building its hegemony over other classes by using the energy crisis as a focal point in constructing a hegemonic project of increased energy supplies that promises deliverance to the whole nation.

Policy Recommendations

Based on the findings of this study, the following recommendations in changing the current policy directions are made.
Energy Resources Development Fund

Taxes collected from various public and private sector energy enterprises must be deposited in a separate Energy Development Fund (EDF). The core purpose of this Fund should be to finance research, development, and production of energy technologies, plant, and equipment that are being currently imported. Two organizations should be set up and financed through the EDF:

1. A public sector engineering organization that would design and produce thermal power plants by coordinating its activities with the private sector and other public sector organizations such as the Heavy Mechanical Complex and Pakistan Atomic Energy Commission.

2. An autonomous technical consultancy organization comprised of highly skilled personnel to serve the needs of the energy sector as a whole. Such an organization should be allowed to employ qualified foreign technical personnel for training or consultancy purposes. It would also enter into contracts with the private sector consulting organizations on need basis. Existing public sector organizations like the Hydrocarbon Development Institute of Pakistan, research sections within WAPDA, and such bureaus within other organizations should be used as building blocks for the new organization. This consulting organization should have separate areas that would deal with hydrocarbon, hydel, and renewable energy sources.
Alternatively, separate consulting organizations could be created along the same lines.

**Foreign Investments in Oil and Gas**

1. The policy of giving more than fifty percent of the production share to foreign oil companies should be abandoned. The previous practice of retention by the government of at least 50% production share should be restored. Or else, restrictions should be imposed on how much revenue a foreign company could transfer out of the country as profits and how much they shall be obligated to reinvest in additional exploration and development. This would reduce the outflow of surplus and guarantee a higher level of accumulation in the economy.

**Oil and Gas Development Corporation (OGDC)**

1. The OGDC should not be fully privatized. The GOP must retain majority share in it, selling off between 30 to 40 percent to private investors. OGDC shares should be sold only to domestic investors.

2. The OGDC should be turned into a fully independent corporation that should run its affairs free of any governmental political interference. Performance targets for the OGDC should be set mutually between OGDC and the Energy Wing of the Planning Commission or the proposed future Ministry of Energy.
3. OGDC should retain its own revenue. An independent regulatory authority should set the prices of its products according to a transparent criteria that takes into consideration its operational and development expenditure requirements.

4. A vigorous plan for oil exploration should be launched financed partially by OGDC revenues and partially by budgetary allocations or Energy Development Fund.

5. All consumer taxes collected on petroleum products, natural gas, and electricity must be deposited in the Energy Development Fund. This would form a guaranteed financial resource for development of energy resources and prevent the use of these revenues for non-productive governmental expenditures.

Gas Transmission and Distribution

1. Both SNGPL and SSGC should be privatized but most of their shares must be sold to domestic investors and institutions. A gradual, installment process for the sale of shares will be necessary keeping in view the absorptive capacity of the domestic financial markets.

Privatization will create an incentive to enhance the operational efficiency of these organizations. Minimizing foreign ownership of shares will prevent the unnecessary outflow of surplus. But allowing a certain degree of foreign participation will provide the flexibility to raise hard
currency that may be necessary to update or install gas plants, compressors, pipelines, etc.

2. An independent but strong regulatory authority should be created that would determine the consumer prices and expansion of supply network according to national priorities. It should be mandatory for all stakeholders to have permanent representation in the regulatory authority's decision-making board.

Private Power

1. All new thermal power plants must be based on indigenously produced low calorific gas, coal, or fuel oil. This would result in a rational development of national resources. In addition, large hard currency sums will not have to be spent on the import of powerplant fuels.

2. Private power plants tax exempt status should be rescinded. They must be required to pay corporate income taxes like other business. However, no duties should be imposed on the import of required capital goods.

3. Corporate taxes collected from the private power sector should be deposited in the Energy Development Fund.

4. Foreign investors in the power sector should be allowed to convert no more than 50 per cent of their total income directly into foreign exchange. With the remaining 50 per cent, they may purchase value-added goods from the domestic
market, export these and retain the proceeds. Or else, they could invest the remaining 50% in the domestic economy.

5. After firm commitments/contracts for the installation of 5000 MW new generating capacity, no further foreign investments should be allowed in the power sector on current policy terms. Allowing this capacity, although it is not in the best long-term national interest, is perhaps the only way in which power supplies can be quickly augmented under the present circumstances.

Public Sector - WAPDA

1. WAPDA's distribution network should be fully privatized.
2. An independent regulatory authority that would regulate the consumer price of electricity and the expansion of the distribution network according to national priorities should be created. The regulatory authority should be in place before the distribution network is privatized.
3. Only those of WAPDA's powerplants should be offered for sale to the private sector which require major capital expenditures on renovation and technical upgrading within the next five years.
4. WAPDA must be allowed a price for the power that it produces from its thermal plants which would fully meet its operational and depreciation costs. In addition the price must also include a profit which should be earmarked for the setting up of new power plants. The method of Long Range
Marginal Costs to determine the price of electricity should be adopted (Azhar 1991)

5. All of WAPDA's new plants should be based on domestic energy resources especially hydel and coal.

6. The difference between the low price of WAPDA's hydel power production and the price of its thermal power should be deposited in the Energy Development Fund.

Renewable and Small Scale Energy Development

1. National priority should be given to the development of biogas, solar thermal/electric, wind, and small hydel plants. A separate organization should be created which should be given the mission to provide alternative energy to rural and remote villages. This organization should be funded through Energy Development Fund and must have control over the technical and financial resources required for such projects, as well as the task of organizing community financial and management participation. The purpose should be the creation of locally sustainable alternative energy plants once the initial costs are partially met through the Energy Development Fund. The various departments and bureaus that have been engaged in the development of alternative energy technologies should be amalgamated and reformed under such an organization.

If Pakistan's policy makers were to follow the above policy directions in a resolute and sustained manner, not only would the country be freed of the problem of energy shortages,
but that the energy sector would also develop in ways that would help to counteract the negative tendencies created by the dependency relationship.

Federal Jurisdiction Over Energy Resources

Energy should be made into a federal subject. Energy planning can only be rationally done at national scale. The current setup in which jurisdiction over energy resources is shared between the federal and provincial governments causes needless delays or obstacles in rational exploitation of these resources. It leads to unnecessary contention between provinces and makes crucial energy projects an object of political exploitation by opportunist politicians. The fate of Kalabagh dam is a case in point. To avert such a fiasco in the future, all energy resources of the country should be brought under clear federal jurisdiction. Necessary amendments to the Constitution should be made for this purpose.

However, in order to protect the interests of all regions, a standing watchdog committee of the Senate should be constituted. This committee shall oversee the activities of the Energy Ministry to ensure fairness and equality in the distribution of costs and benefits of energy among various regions.
Creation of Separate Ministry of Energy

All the functions that are now being performed under various ministries and government departments must be consolidated under a single Ministry of Energy. These would include the Power section of the current Ministry of Water and Power, the Petroleum and Coal sections of the Ministry of Petroleum and Natural Resources, the power section of the Pakistan Atomic Energy Commission, etc. The functions of the current Energy Wing should be made a part of the new ministry. It should be given the mission to design short, medium, and long-term energy development plans. It must act as a staff organization under the Minister of Energy.

Bringing all energy related agencies within a single ministry will have the likely effect of enhancing communication and coordination between various bureaus. This shall facilitate integrated sector-wide planning activities. Having a single budget would also facilitate internal reallocation of funds between energy enterprises whenever needed. On the whole, this would strengthen the institutional capacity of the energy sector in operations, planning, research and development, and negotiating favorable agreements with foreign companies.
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