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THE EFFECTS OF THE ISLAMIC REVOLUTION AND THE GULF WAR ON IRAN'S ECONOMY

BY

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ABSTRACT

The Islamic revolution, followed by the eight-year Gulf war, has caused severe disruption and extensive changes in the structure of the Iranian economy. This thesis is concerned with an analytical study of Iran's economy in the period from the Shah's western-style modernisation to the Islamic revolution and the war with Iraq. Thus, the thesis provides first, an overview of the economic development and industrialisation activity under the Shah, which gives a yardstick for understanding the post-revolutionary economy.

Secondly, the thesis examines the concept of Islamic economics as articulated by the prominent contemporary Shi'i figures that continue to influence the post-revolutionary economic policies.

Thirdly, the major part of the thesis devotes considerable attention to the study and evaluation of the post-revolutionary economy, focusing on agriculture, industry, foreign and domestic trade, Islamic banking, public finance, the oil sector and the oil war.The latter was a determining factor in the continuation of the Gulf war.

The appraisal and the overall picture of the post-revolutionary economy makes bleak reading. The negative impact of the revolution and the war has left Iran with a shattered infrastructure and a moribund industrial base. Unprecedented destruction of wealth, both in human and non-human terms, has further exacerbated the pre-revolutionary economic problems. The politico-religious government has not been able to address the country's economic ills effectively, partly owing to self-imposed constraints. A lack of active and structured economic policies has adversely affected all sectors of the economy, in particular, agriculture. While facing the daunting task of post-war reconstruction, Iran, more than ever before, is dependent on trading oil in exchange for basic commodities and consumer goods.

CONTENTS

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INTRODUCTION

The Third World has its own economic spectrum. At one extreme lie the poorest of the less-developed countries. At the other extreme are the OPEC members, both underdeveloped and rich, many with income and growth rates far higher than the former, even before the oil price shock of 1973.

Iran, a member of the OPEC, prior to the revolution of February 1979, could hardly be termed least developed. To many western observers, the country's seemingly flourishing economy was promising and its apparent political stability seemed unshakable.

The revolution took the world by surprise and its shock waves were felt regionally and globally. It ran against many theories , based on the belief that lasting political stability can be shaped in Third World countries by progress in modernisation. In reality, the very progress of modernisation, especially its rapidity, created the socio-economic conditions in which challenges to the Shah's regime grew. Economically, the country turned from an import-oriented boom to bust. Parallel with that , Iran was transformed from an apparent 'island of stability' in the Middle East into a caldron of chaos and turmoil. And, when the revolution came about, Shi'ism emerged as a motivating ideology and led Iran indirectly to a war with Iraq, which has had significant repercussions in one the most important oil regions of the world.

Since the revolution, many problems of dualistic economic development, which came to exemplify the failures of the Shah's regime, have recurred and in many cases larger in scope, partly as a result of the war. Though the Islamic regime is aware of these economic problems, is either unable to deal with them or in some cases, the self-imposed ideological constraints make any solution impossible.

This thesis is a case study of Iran's economy in the throes of modernisation and revolution while facing war with a comparatively powerful neighbour. It traces the achievements and progress, but the overall economic picture of Iran is one of a dramatic failure.

Iran differs widely from other Third World countries in population, income, natural and human resources, political system and the government's role in the economy. But, it shares some important characteristics with less developed oil-exporting countries and many lessons of the Iranian experience can be of importance to these countries, in particular to other Islamic states.

An Historical Perspective

At the beginning of the century, few foreign banks would lend money to Iran, as the risk was too high and the country had few resources to guarantee a loan.When the British-owned Imperial Bank of Persia provided three loans for the Shah between 1892 and 1911, they were raised against the security of the caviar-producing Caspian fisheries and the custom dues of the Persian Gulf ports, as only these two assets were then considered to be easy to sell and easy to seize. These humiliating foreign loans then were the price imposed on a weak government and a poor country.[1]

The role of the Shahs of the Qajar dynesty during this era was confined to selling several concessions to foreign enterprises, in an effort to stimulate utilisation of the country's national resources and at the same time, acquire much needed income for the royal coffers.

In selling such concessions, the nation sufferred both economically and emotionally. As a result, some concessions met stiff criticism and consequently were forcibly repealed. The tobacco concession, the D'Arcy oil concession, the Reuter banking concession, the Lianazov fisheries concession, the Indo-European Company's telegraph concession and various railway concessions, were among the major ones.

The range of concessions were varied. In one instance in 1890, the Shah with total disregard for the basic rights of ownership, sold the produce of all olive trees belonging to the people of the county of Gilan, to a Russian company, Kossis Theophylactos, for a period of 25 years.[2]

Although some of the concessions had the effect of introducing modern techniques into Iran, they were not integrated in any way into an overall programme for development. Indeed the concessions, almost by their nature , were directed towards the countries of the concessionaires.

After 1901, no new concessions for foreigners were effectively introduced and it was only after the establishment of the Pahlavi rule in the mid 1920s, that Iran's stagnating economy witnessed brief spurts of economic growth, though it was reversed by the effects of the Second World War.[3]

Reza Khan, on becoming the Shah, guided and shaped Iran's industrialisation, westernisation, secularism and intense nationalism. During his reign (1924-1941), Iran pursued a remarkable consistent development strategy, following the lines defined by Reza Shah, that is , to modernise Iran's economy as rapidly as its resources would permit. In practice, this meant that industrialisation, self sufficiency and integration of the national economy, were stressed.4

Under Reza Shah's leadership, a number of major national projects were initiated, though the planning was rather on an ad hoc basis. The famous trans-Iranian railway, from the Caspian sea to the Persian Gulf was not based on any cost benefit basis which might have attracted private investment. Instead this bold project (1927-1938) was financed through the imposition of a tax on tea and sugar.

While Reza Shah's etatist model of industrialisation served him well in the 1930s, it did not provide for anything more than a series of ad hoc actions taken by the various ministers, co-ordinated at the top again in an ad hoc fashion, so as to be in line with the ruler's vision.5

Economic gains in simple industrialisation in the 1930s were negated during World War Two and the national economy broke down under conditions of shortages and weakened central government. The country faced a spiral of rising prices, although during the war and in the 1940s, the level of government expenditure fell substantially. The post war recovery led Iran's economy back almost to where it started at end of the 1930s, as if Iran was caught in a 'vicious circle of poverty and stagnation'.6

The Three Decades of Economic Development

In the years immediately following the war, attempts to bring about certain structural changes within the economy failed.The first seven-year development plan adopted in 1949 became meaningless, owing to the nationalisation of the Anglo-Iranian Oil Company, which in effect, cut the flow of funds to the plan. In fact, during the 1950s, any hope of a sustained development, i.e. growth plus positive change, appeared remote.

By 1960, five years after the launch of the second development plan, the country was facing an economic crisis due to a host of problems and was compelled to implement an 'Economic Stabilisation Programme'. However, the inception of a set of reforms, later associated with other social and economic changes introduced by Mohammad Reza Shah, brought about a relatively brief success during the period of 1965 to 1973. The structural transformation of the economy altered the living standards of the majority of Iranians, though the costs of this alteration were very high and varied. For example, it caused a massive drift of people away from rural areas, which consequently compounded the agricultural stagnation in Iran.

Throughout the development activities, oil remained the backbone of the economy and development planning to a large extent was confined to an analysis of utilising oil revenues for the creation of new assets. This became more so as Iran accrued incredible wealth from the 1973 oil price rise.

The Shah envisaged Iran as being on the threshold of becoming one of the world's industrial nations. The objectives of creating a strong non-oil and export -oriented economy seemed easily achievable. Though, Iran was rich in oil wealth, it possessed a weak socio-economic infrastructure and was incapable of absorbing the enormous investment envisaged in the Fifth Plan.

By mid 1970s, the country's economy was overheated and almost out of control. There was severe inflation, marked agricultural stagnation and infrastructural bottlenecks that could not cope with the expansion of the import-oriented boom. Consequently, the government's economic policy continuously changed and finally the investments were substantially reduced. In other words, the economy went into sharp reverse after a frantic push towards growth maximisation. As the growth lacked positive changes, more and more people found themselves economically and socially useless and the wealth and the income of the country was increasingly concentrated in the hands of a few elite groups. The magnitude of the adverse changes in the economic and social structure of the country led to the political upheaval in 1978 which marked the beginning of the downfall of the Shah's regime.

Post Revolutionary Developments

In 1979 the revolutionary regime came to power and inherited a crippled economy which was closely associated with western-style modernisation, propagated by the Shah. The revolutionary leaders rejected the existing economic system and intended to reverse its course. Their goals had their roots in 'Islamic economics' or somtimes dressed up as the 'Economics of Divine Harmony'. The Islamic regime, initially attempted to replace large industrial projects with small ones and put an emphasis on self sufficiency in agriculture. It also sought to improve trade with Third World countries. All these were aimed at reducing Iran's depedency on the West. Oil production was reduced and reliance on revenue for foreign exchange was de-emphasised.

Khomeini's brand of Shi'ism led Iran indirectly to the war with Iraq in 1980 and soon the war overtook the revolution. The general mobilisation and needs of the war first hindered the achievement of the economic aims and subsequently displaced them. With prolongation of the war, the country more than ever before, became dependent on oil exports for foreign exchange to finance vital imports, such as arms and food. By 1984 the oil became a determinant factor in the Gulf war as its vulnerable infrastructure was subjected to sustained attacks by Iraq.

Scope of the Thesis

Having briefly traced the historical perspective of the economic activities in Iran and the post revolutionary developments, the presentation of this thesis will be in the following manner.

Overall, the first two chapters examine briefly the three decades of economic development prior to.the revolution. The remaining chapters analyse the profound effects of the revolution and the Gulf war on the Iranian economy. These two seemingly separate parts of the thesis are closely interconnected. There are many similarities and in order to understand the post revolutionary situation, one has to know the past. In total, the thesis is divided into seven chapters. Chapter one will focus on early governmental efforts towards economic development covering the period of 1949 -1973. The processes of development, policy formulation and implementation and the structural transformation of the Iranian economy will be discussed.

Chapter two deals with the period after the oil price shock of 1973 when oil prices quadrupled. The original and revised Fifth Plans, which aimed at complete and comprehensive industrialisation with a greater sense of urgency , will be analysed. Causes of the economic crisis and shortcomings and failures of the pre- revolution era will also be dealt with.

Chapter three gives an account of Shi'i views on economics and finance which continues to be influential on some the country's economic policies. This chapter also gives a background against which Iran's economic activities and the performance of post 1979 can be judged.

In chapter four Iran's post revolutionary economy will be discussed. This chapter is divided into five sections. Section one begins by looking at the immediate economic decline during the 1977-1979 upheaval. The second section will be a study of the agricultural sector which remains a major source of conflict between the radical and the conservative groups within the Islamic Republic. Section three deals with the industrial sector followed by section four which will shed some light on the state of domestic and foreign trade. The final section provides an appraisal of the First Development Plan of the Islamic Republic . This plan was prepared in the early and heady days of the revolution and despite parliamentary approval, it was not given financial support, in view of unending demands of the military budget.

Chapter five is an analytical study of the country's finance in the post revolution era . The chapter consists of two sections. Section one studies the proceeses and implementation of the full Islamic banking legislation in Iran, which has completely transformed the old banking system. Section two provides a study of the public finance and the budget under the constraints of the war economy.

Chapter six deals with the oil sector, the principal engine of growth of the Iranian econony. This chapter is divided into two sections.Section one discusses the evolution of the oil policy and examines productions, consumptions and exports. Section two provides an economic - military analysis of the oil war in the Persian Gulf and traces the maritime implications of the Iran - Iraq conflict.

Chapter seven is the reckoning of the thesis. Here the conclusions of the earlier chapters will be summarised. The achievements, failures and prospects of the Islamic Republic will be evalued, as it faces the daunting task of post war reconstruction.

References

1. D. Wright, *The English Among the Persians* (W. Heineman Ltd., London, 1977), p. 106.
2. M. Bahar, *Miras Khar-e Estemar* (*Inheritor of Colonialism*), (Sepehr Press, Tehran,1355, Fourteenth Edition), pp. 495 - 546.
3. J. Bharier, *Economic Development in Iran 1900 - 1970* (Oxford University Press, London,1971), p.58, p.85.
4. R.E. Looney, *Iran at the End of the Century* (D.C. Heath and Co, U.S. A, 1977), p.5.
5. H. Razavi and F. Vakil, *The Political Environment of Economic Planning in Iran* (West View Press, Inc., U.S. A, 1984), p.20.
6. See further J. Bharier, op.cit., pp.58 - 59.

1. ECONOMIC DEVELOPMENT DURING 1949-1972

As Iran began to recover from the chaos of the Second World War, attempts were made towards preparation of institutions to facilitate economic planning and channel natural resources to development projects. First a formal seven year plan was designed to guide the government specifically in its expenditure allocation throughout this period. Second a Plan Organisation was set up to oversee and control these expenditures according to predefined national objectives. Hence, Iran's economic development experience within a planning framework began. In this chapter, attempts will be made to study Iran's efforts for economic development during 1949-1972. Development policies with their undue emphsis on maximum growth and hasty industrialisation will be traced.

1.1 The First Development Plan (1949-1955)

Preparation for the First Development Plan began in 1946. In this attempt, the U.S State Department and International Bank for Reconstruction and Development (I.B.R.D.), the Morrison Knudson Construction Company and subsequently the U.S consulting firm Overseas Consultants Incoporated were chosen to help Iran. By September 1949 the plan had been prepared and the Plan Organisation had been set up. The plan was approved by the Iranian parliament in the same year.

Table 1.1 shows the planned and actual expenditure of the First Development Plan. The figures indicate a plan that did not fulfill the expected results, as only 53.6% of the planned expenditures were in fact spent and the expenditure pattern was in favour of agriculture over transport and industry. The intention of the plan was a fair even distribution of expenditure between agriculture,industry and transport.[1]

The intended sources of revenue for the plan were a combination of oil revenue, sales of government property, private participation and loans from Bank Melli Iran and I.B.R.D. (World bank).[2] Out of the total projected expenditure of 26.3 billion rials, 14.0 billion rials were to be provided by the public sector.[3]

Table 1.1- Planned and Actual Expenditure of the First Plan.(billion rials)

Sector	Estimated Expenditure	%of Total	Actual Expenditure	% of Estimated Expenditure
1. Agriculture and Irrigation	7.3	27.8	5.7	78.1
2. Transport and Communication	7.7	29.3	3.5	45.5
3. Industries and Mines	5.3	20.1	4.1	77.4
4. Social Services	6.0	22.8	0.8	13.3
5. Regional Development	-	-	-	-
6. Others	-	-	-	-
7. Total	26.3	100.0	14.0	53.6

Source: Plan Organisation, Tehran. One U.S.$ - 67.5 rials.

In the event, no loan was forthcoming from the I.B.R.D. and Bank Melli Iran could only provide only a small proportion of its own estimated loan. The oil revenues which therefore became the main source of development finance, were denied to Plan Organisation due to internal conflicts and the problems with the Anglo-Iranian Oil company, over the nationalisation of the Iranian oil industry.4

The political turmoil of the years 1951-53 overshadowed the early development efforts and in fact the First Development Plan. The implementation of the plan due to loss of oil revenue became impossible and for all practical purposes the plan was suspended.

Overall the plan achieved little. There were unexpected administrative bottlenecks, as the Plan Organisation was a new institution and much effort had to be made into building it up. Setting up an efficient planning organisation proved much more difficult than the formulators of the plan led the government to believe.

It was almost impossible to employ Irainians with suitable educational qualifications to fill sensitive planning positions and planners with experience were scarce in Western countries. Even if the political stability had allowed for a smooth running of the planning process, still a lot of energy would have been siphoned off in order to build the Plan Organisation and set up the planning process.[5]

From a structural point of view, the First Development Plan was hardly a plan. It has been criticised as deficient in both planning methodology and objectives. In fact the plan was a collection of infrastructure projects to be carried out by the newly established Plan Organisation.[6] The Plan did not take the total economy into account (possibly due to lack of data). It did not even cover the whole of the public sector and did not account the role of investment by the private sector.

The physical achievements of the plan were the establishment of six new industrial factories, some road and rail construction and a few small developments in irrigation and mechanisation in the agricultural sector.[7] The main achievments were in fact the renovation of industries established under Reza Shah's rule, plus setting up a planning machinery . In fact "what had started out as a 'big push' to attain economic self sufficiency, thus ended as a feeble puff ".[8]

The Nationalisation of the Oil Industry.

The nationalisation of Iran's oil industry during the premiership of Dr. Mohammad Mosadegh, which drained the Iranians economically and emotionally, must be understood in the context of its time.[9] In purely economic terms, the net result of the abortive nationalisation was disasterous.[10] The role of oil in the provision of the First Development Plan financing was crucial. According to the projected estimates of sources for the plan , oil revenues constituted 37.1% of the funds, yet owing to the interruption of the oil production during most of the First Development Plan, Iran' oil revenues amounted to a mere £76 million or on an average £10.8 million per year.[11] From 1944 to 1950 production of oil and royalties both were increasing dramatically, the former from 13 million long tons to 32 million , the latter from £4.46 million to £16.03 million. In 1951 with the start of political instability, the production dropped 49% to 16 million long ton with a revenue of £8.30 million.[12]

Consortium and N.I.O.C.

After the coup of 1953 resulting in the downfall of Mosadegh's government, production increased rapidly but it was not until 1957 that the 1950 level was reached.The agreement between Iran and the consortium comprising seven major oil companies (The Seven Sisters) in October 1954, provided the country with a royalty of roughly half the difference between the market value of oil and the cost of production. In other words, Iran obtained a fifty / fifty division of the consortium's profits.Officially Iran's share of the oil profits was paid in sterling, but could be transferred into other currencies at the request of the government.Part of the agreement was the disbándment of the Anglo Iranian Oil Company, particularly due to pressure from the U.S. and other international groups keen to aquire a share of the rich Iranian oil operation.

The new company ,as mentioned above,was known as the 'Consortium', comprising British Petroleum (the former A.I.O.C) with the leading share of 40% followed by Royal Dutch Shell (14%) and five major U.S oil companies, i.e. Standard Oil of New Jersey, Socany Vacuum Oil Company, Standard Oil Company of California, the Texas Oil Company and Gulf Oil Corporation, each 8% and Compagnie Francaise des Petroles with a 6% stake. The five aforementioned American companies later surrendered 1% of their shares to a group of eight independent American companies.13

The consortium, under a secret agreement, which was leaked in 1967, prepared a production plan to determine the level of oil prduction from Iranian fields, thereby balancing it against the global oil interests of the major oil companies so that any increase in production was the result of an internal agreement. This agreement made Iranian revenues entirely dependant on the level at which the consortium chose to produce.14

In the meantime, Iran formed a new corparate entity , namely the National Iranian Oil Company (N.I.O.C.) to assert it's independence and maximise its potential oil resources. N.I.O.C.'s first experience to carry out a joint exploration and production agreement which had an important catalytic effect in the creation of OPEC, was with AGIP (a subsidiary of the Italian State Oil Co, ENI). In this agreement N.I.O.C took 75% of the proceeds on discovery of oil.

In fact what Mosadegh could not acheive unilaterally,i.e full control of the oil industry, finally was gained on 29th March 1973 in an agreement whereby the consortium handed over operations and ownership to N.I.O.C.15

1.2 The Second Development Plan (1955-1962)

The Second Development Plan was drawn up with promises of generous provision of loans from the U.S. and I.R.B.D. It was also drafted on the basis of the agreement between Iran and the consortium, for it was also regognised by the Iranian planners that the oil revenue would fuel the plan.16

The plan took effect in 1956 lasting for seven years. Similar to the First Plan, the emphasis was given to infrastructual projects.

Table 1.2 - Planned and Actual Expenditure of the Second Plan. (billion rials)

	Estimated Expenditure	%of Total	Actual Expenditure	%of Estimated Expenditure
1.Agriculture and Irrigation.	18.9	23.3	17.4	92.1
2.Transport and Communication.	30.4	37.5	27.3	89.8
3. Industries and Mines.	6.7	8.3	7.0	104.4
4. Social Services.	11.7	14.4	9.3	79.5
5. Regional Development.	12.2	15.0	8.6	70.5
6. Others.	1.2	1.5	0.4	33.3
7. Total	81.1	100.0	70.0	86.3

Source: Plan Organisation. Tehran. One U.S.$ - 67.5 rials.

The total allocation of funds for the Second Plan was 81.1 billion rials with 37.5% of it earmarked for transport and 23.3% for agriculture. As shown in table 1.2, the actual expenditure was 86.3% of the planned expenditure compared with 53.6% actually spent in the First Plan.

As far as the structure of the plan was concerned, it was a set of independent projects with financial allocations, presumed to be available mainly from the oil and spent under the control of the Plan Organisation. The methodology of planning was weak and there was no use of mathamtical tools at any stage of planning levels (macro, sectoral and project levels). The lack of both statistical data and familiarity with planning methodolgy and techniques was a major limitation. It appears that it was the size rather than the composition of the projects which received the highest official consideration.[17]

The Second Plan lacked well defined objectives and specific targets of the plan were very vague. The goals of the plan were outlined as below:- Increasing production, developing exports, preparing public necessities within the country, developing agriculture and industries, discovering and exploring mines and subterranean resources, improving and completeing means of communication, improving public health, fulfilling any operations designed for the development of the country, raising the educational and living standard of the people and improving living conditions.

Given the lack of clearly defined objectives of the Second Plan, it appears that very little consideration was given to a proper balance between economic growth and social justice.[18]

Investment in the plan and the selection of projects did not follow the application of any investment criteria including any type of cost benefit analysis. Almost all of the plan's allocation for the agriculture sector went to construct three large dams, (Karaj, Sefid Rud and Dez).However , the people who actually benefitted most from these dams were the urban population. In the case of the Karaj Dam, although handled by the Agricultural Division of the Plan Organisation, it was mainly used to supply water to people in Tehran. At the same time such a large and extensive project imposed heavy demands for the management of the water, water rights' laws and arrangements, maintenence and canal work.[19]

Parallel to undertaking such large projects, the government did very little to train farmers to use better techniques, seeds, fertilizers, etc. In contrast to Iran's agricultural tradition, no serious effort was made by the government to improve or maintain the water supply, (i.e. underground irrigation water was known as 'qanats', deep wells, etc). While almost all the agricultural sector's allocation were spent on the above mentioned three dams, it did very little to provide water for agriculture, instead the dams provided water and electricity for Tehran and other large cities. It should be noted that the dams contributed an additional 93,000 million cubic metres to water storage capacity and an extra 692 mega watts to hydroelectric generating capacity.[20]

The allocations in the industrial sector were concentrated in several major projects involving the construction or modernisation of large textile, sugar and cement factories. Among them were four government owned intergrated spinning and weaving mills with a total capacity of 110 milion metres of cloth a year and two new cement plants (Loshan and Daroud Cement), providing cement requirements for the Sefid Rud and Dez dams. By the end of the plan, Iran's productive capacity of cement rose from 82,000 tons to 1.2 million tons. The textile capacity (both public and private) was raised from 60 million metres to 418 million metres and the capacity to produce sugar rose from 85,000 to 212,000 tons a year.[21]

The expenditure on transportation and communication was confined to construction of roads and extension of the railway network with little attention to feeder roads and other rual projects. This sector of the plan which absorbed the largest share of expenditure (i.e. 27.3 billion rials) was originally intended to construct or improve 10700 kilometres of roads ended actually with 5500 kilometres (2700 kilometres of paved main roads and 2800 kilomtres of secondary roads). The railway network was also extended from Shahrud to Mashad and from Mianeh to Tabriz. Also the annual combined capacity of Khorramshahr and Shahpour ports was expanded from 870,000 to 2 million tons and most of the major airports were futher equipped and expanded.[22]

In the social service sector, certain strides were made towards controlling certain diseases among them malaria, smallpox and diptheria.

Shortcomings and Problems.

Despite the achievements and problems mentioned above, especially the lack of cost benefit analysis, the Second Plan was beset by other difficulties described below in brief :

- The administrive inefficiency, especially in the area of cooperation between the Plan Organisation and other government agencies exacerbated the rather low level of achievements.[23] A contributory factor to these inefficiencies were some aspects of the Iranian culture, chiefly the Iranian individualism ,with its harmful effects upon interpersonal relations and national development. An explanation of this Iranian individualism relating to the task of development has been given by K. Mofid: "We are not attempting to suggest that Iranians are by nature uncooperative and fearful of each other; and thus, the task of 'development' is an impossible one. What we are trying to say is that the 'despotism' from 'above' has 'trickled' dowm to 'despotism' from 'below'. This has created an environment which lacks to some extent the qualities of tolerance, trust, participation, delegation and acceptance of authority and cooperation, which in our view, has made the task of 'development' much more difficult."[24]

- Another serious problem during the Second Development Plan was the recession of 1960-1962. An exchange rate devaluation brought rapid increases in government expenditures.This, together with the unprecedented expansion of credits to the private sector, produced a severe economic crisis manifested by a deteriorating balance of payments situation and rising inflation.

As for the expansion of credit for the private sector, loans increased by 46.1% in 1957, 60.5% in 1958 and 32.4% in 1959.This was an attempt to attract a considerable amount of personal and business savings into productive capital formation. Expansion of the private sector was most noticable in urban housing and industry e.g. private sector investment in construction in Tehran rose by 85% in 1958 and 130% in 1959.[25]

- As for the inflation, the cost of living index during the first five years of the plan rose about 40% although the prices of goods and services such as food and rent rose more than average. The sharp rises in prices contributed to a loss of confidence in money and consequently people resorted to speculation in real estate, land, stocks of standardised commodities, foreign exchange and construction.[26]

- The balance of payment problem was also significant. The cumulative shortfall for 1958-61 was around $276 million and had to be financed through the running down of reserves. By the end of 1960, the country had only enough foreign exchange to finance several weeks essential imports. The main source of this mounting payments deficit was clearly the rising trade deficit which could be traced to liberalisation and consequently uncontrolled expansion of imports and the stagnant level of exports. In fact, the excess of imports over non-oil exports during 1955-1960 was 263% and for the period of 1957-1970 it amounted to 363%. [27]

From Monetary-Induced Boom to Recession and Revolt

By this time Iran was facing a serious problem. The country, comparatively rich in oil revenues and in receipt of $1278 million in foreign aid and investment by the end of 1960, was forced to embark on an 'Economic Stabilisation Programme' initiated by the IMF. As a result of this programme, (i.e. control of private sector credit, the raising of interest rates, the restriction of imports, reduction in government expenditure) the country turned into a deep recession. The more traditional sectors such as agriculture, construction and domestic trade, were seriously affected by the recession. Domestic trade, including the bazaar suffered the most because of a restriction on imports and credit control. As a result of stabilisation , there appeared to be growing discontentment among both low income urban groups (a large proportion of them were unemployed migrant construction workers) and the bazaar merchants. The administration reponse to this deteriorating situation was a set of reforms which the Shah referred to as the White Revolution, covering land reform, the sharing of factory profits with workers,emancipation of women, nationalisation of forests, the sale of shares in government owned factories to underwrite the land reform, creation of literacy corps and electoral reform.

These reforms were clearly a threat to the interests of the upper class land owners if not to the propertied middle class. Therefore, instead of relieving social and economic tensions, the reform aroused the combined wrath of landlords, clerics and bazaar merchants, especially in their joint opposition to the regime. The culmination of unrest was in bloody street battles and mass demonstrations against the regime in 1963. 28

1.3 The Third Development Plan (1962 -1967)

Following the Economic Stabilsation Programme of the early 1960s, the Third Development Plan was introduced. This was Iran's first comprehensive development plan, broadening the planning scope as a result of the main findings of the Second Plan's evaluation. The content of the plan was an investment programme for the public sector and some forecasts for the private sector with an emphasis placed on a planned growth rate specified as 6% annual growth rate of GNP or a total of between 35% and 40% in the duration of the plan period. Although the economic growth target was the main objective, there were also some secondary objectives, the most important were as follows:

- To expand employment opportunites;
- To achieve a more equal distribution of income;
- To maintain relative price stability and equilibrium in the balance of payments.29

The Third Development Plan had several revisions during its course, chiefly due to oil revenues, as it grew much faster than the 6.5% per annum originally anticipated, therefore additional resources were made available to the Plan Organisation. The original, revised and final allocations are shown in Table 1.3.

Table 1.3 - Planned and Actual Public Expenditure of the Third Plan (billion rials)

Sector	Original Plan.	% of Total	1964 Revision	% of Total	1965 Revision	% of Total	Actual	% of Original
1. Agriculture and Irrigation	30.0	21.5	45.0	22.5	49.0	21.3	47.3	158
2. Industries and Mines	16.6	11.8	21.9	11.0	27.0	11.7	17.1	103
3. Electricity and Fuel	26.1	18.7	27.0	13.5	41.5	18.0	32.0	123
4. Communcations and Telecommunications	30.0	21.5	50.0	25.0	56.0	24.3	53.8	179
5. Education	13.5	9.7	17.9	9.0	17.4	7.6	17.5	130
6. Health	10.0	7.2	13.9	7.0	13.5	5.9	13.2	132
7. Labour and Manpower	6.2	4.4	8.0	4.0	3.6	1.6	2.8	45
8. Urban Development	4.5	3.2	8.0	4.0	7.0	3.1	7.2	160
9. Other	2.8	2.0	8.3	4.0	15.0	6.5	13.7	489
10. Total Expenditure	139.7	100.0	200.0	100.0	230.0	100.0	204.6	146

Source: Plan Organisation, Tehran. One U.S. $ - 67.5 rials

As can be noted the original proposed public expenditure was 139.7 billion rials. This was subsequently increased first to 200 and finally to 230 billion rials. Private sector investment forecasts were put to 135 billion rials ($2 billion)

As far as the sectoral allocations of the public investment was concerned, agriculture, industry and services were equally emphasised . While the development stratergy called for the continued investment in agriculture and infrastructure in an attempt to lay the foundation for industrialisation, it also emphasised the need to increase industrial production. In all the Third Plan in its sectoral allocations reflected a balanced growth stategy for development. As for the sources of revenue, oil formed the main component of the Plan

Organisation income as shown in Table 1.4. 30

Table 1.4 - Planned and Actual Revenues of the Third Plan (billion rials)

Source	1964 Revision	% of Total	1965 Revision	%of Total	Actual	% of Total
1. Revenue from Oil	134	61	154	62	153	67
2.Treasury Bonds	10	5	13	5	14	6
3. Foreign Loans	17	8	61	24	21	9
4.Domestic Loans	48	22	19	8	36	2
5. Other	11	5	4	2	5	2
Total	220	100	250	100	229	100
Less Admin Expenses	4		4		5	
Less Loan Repayment	16		16		19	
Revenue for the Plan.	200		230		205	

Source: Plan Organisation, Tehran, One U.S.$ - 67.5 rials

As shown in Table 1.4 allocations of oil revenue to Plan Organisation amounted to 67% of total funds expended through the plan. Foreign loans during the Third Plan were on a modest scale. In fact it was only in the last year of the plan as the pace of domestic economic development accelerated, mainly in the industrial sector, that more demands were made on foreign loans . Only 53.3% of the total foreign loan ($518.6 million) drawn in the Third Plan was utilised by the Plan Organisation. 31

Objectives and Outcomes.

As mentioned above the primary objective of the Third Plan was to achieve 6% annual growth rate of GNP. This was surpassed by over 3% during the plan period. The real GNP increased as below :

Year	GNP (billion rials)
1962	324
1963	342
1964	376
1965	417
1966	462
1967	517

Thus the average annual growth was 9.6%. The agriculture had a growth rate of 4.5% per annum, domestic oil 13.6%, industries and mines 12.8%, manufacturing 11.8%, construction 12% and services 8%.[32] These growth rates indicate that oil and the industrial sector dominated the economy while agricullture and traditional sectors were lagging behind.

As for secondary objectives of the plan and the employment situation there was an acceleration in population growth. Between1956 and 1966 the population of Iran rose from 20.38 million (6.32 million urban and 14.06 million rural) to 27.07 million (10.56 million urban and 16.51 million rural) with the urban component of the poulation increasing faster than the rural component.[33] At the same time the sectoral distribution of the labour force changed in favour of the industrial, construction and service sectors. The employed labour force of the country in agriculture between 1956 and 1966 fell from 56.5% to 49%. In manufacturing the increase was from 13.8% to 17.5% during the same period. This upward trend also applied to construction as it rose from 5.7% to 7% for the said period.[34]

As these sectors were concentrated in the large cities, people from the rural areas were attracted to cities, especially Tehran. Between 1960 and 1970 Tehran's population increased at roughly 6% a year to reach 3.2 million. This growth rate was twice the national average. As a result, food, housing shortages, traffic jams and pollution in Tehran became major issues.[35]

Regarding the more equal distribution of income, this secondary objective was embodied in the Shah's reforms named the 'White Revolution', launched in 1963, though at this stage budgetary support for it had not been included in the Third Plan. Neither was it integrated with the plan in terms of both its developmental strategy and priorities and its financial implications, thus one of the contributary factors for the revision of the Third plan.

The Shah, after the dissolution of the landlord-dominated national assembly (the 20th Majlis) initiated the White Revolution, incorporating land reform aimed to abolish the large landowner class by reducing individual land holdings to below a ceiling of one village. All lands over this limit were redistributed to the peasants. Land reform after its second, third and fourth phase, was officially completed in September 1971. Despite the highly publicised objectives of the land reform, it did not really bring about a more equal distribution of land among the rural population. For one thing, the reform did not apply to at least one million landless peasants.[37]

In all as K. Mofid points out : " the benefits of land reform and industrialisation did not 'trickle down' as it was apparently hoped they would." In 1968, the Economic Research Department of the Bank Markazi Iran in a report regarding income distribution, points out that the income distribution curve for 1959/60 and 1965/66 shows that in 1965/66 the curve has moved further away from the line of equal distribution.[38]

As for the secondary objective of relative price stability and equilibrium in the balance of payments, both of these remained under control during the plan. Economic development during the Third Plan did not suffer from the inflationary tendencies experienced under the Second Plan and from balance of payments constraints. There were various reasons for that :

- There was a significant increase in the domestic supply of goods though there was also a rapid rise in imports, as the average annual growth for imports during 1962-1967 was 16.8%.
- During the last two years of the plan, the government followed a price stabilization policy by importing those goods such as agricultural products where shortages were pronounced.
- Many of the second plan projects began to pay dividends in the Third Plan.
- Oil revenues were increasing to meet some of the growing import bill. The total balance of trade (including the oil revenues) for 1962- 1967 was - $295.7 million.
- The government also pursued a more cautious monetary policy compared with that of the Second Plan. [39]

Attainments of the Plan

The Third Plan, in terms of its main and secondary objectives was a success. The most notable achievement of the plan was that it expanded the capacity for the productive sectors, i.e. agriculture and industry.

The actual expenditure in the public sector surpassed its initial target by 46% (Table 1.3). The expenditure called for an emphasis in the direction of infrastructure to keep pace with the progress in the productive capacity. As well as this, the public sector expenditure allowed for additional expansion in the coming Fourth Plan by providing in advance some excess capacity in the form of roads, railways, ports and power generation.

In 1966 an agreement was signed with USSR for the construction of a steel mill at Isfahan with a capacity of 600,000 tons a year, rising to 1,200,000 tons under first and second stage developments respectively. A machine building plant located at Arak was also included in the agreement with USSR . Other agreements included one with Czechoslovakia for a machine building plant in Tabriz , which was to start operation in 1968. In 1965 a tripartite agreement for the establishment of an aluminium smelting plant at Arak was signed between Iran, Pakistan and Reynolds International of the U.S.A. Another major agreement during this period was for the establishment of a tractor factory , which was signed with Romania. In all, the bilateral agreement with the Comecon countries comprised the major part of the state industrial schemes, begun during the Third Plan period.

Also the state took an active role in the development of the petrochemical industry. At the beginning of the Third Plan the country had only one fertilizer plant, near Shiraz. By the end of the Third Plan, three more and large scale petrochemical projects had been adopted under the auspecies of the National Petrochemical Company, a wholly owned subsidiary of N.I.O.C. The first was a joint venture on a 50/50 basis with Allied Chemical called the Shahpour Chemical Company, located at Bandar Shahpour at the northern end of the Persian Gulf, in keeping with its role as an export-oriented plant. The output of this large scale plant was ammonia, sulphuric acid, urea, phosphoric acid and diammonium phosphate. The second located at Abadan, was with B.F.Goodrich, on a 74/26 basis for the production of PVC, detergent and caustic soda for domestic consumption and finally an agreement with AMOCO International on a 50/50 basis, for the production of liquefied petroleum gas and sulphur for export. This project was at Kharg Island. The petrochemical plants began during the Third Plan period, laid the basis for Iran's rise for primacy in the Persian Gulf as the most rapidly developing and largest existing petrochemical producer.[40]

The above mentioned agreements and the joint venture projects accounted for the bulk of the allocations made to the industrial sector in the Fourth Plan. They also absobed the main share of public sector expenditure during the Third Plan, i.e 9.6 billion rials (56% of the total).41

The private sector, despite the recession of 1960 - 1962, responded well to the lead taken by the government, due to the opportunities which arose to service state-owned ventures and also because of enhanced volume of credit provided to private sector. Automobile developments included the Iran National 'Paykan' car in association with Rootes, later Chrysler of the U.K. A second Leyland factory was established at Tabriz for the manufacture of up to 6000 diesel engines per year, while expansion took place of the existing Leyland plant near Tehran. Arrangements were made for the creation of a Mercedes Benz diesel engine plant near Tabriz. At the same time, Citroen of France began to lay the basis of production for light cars and Rambler opened a large luxury car plant in Tehran. Deutz of West Germany contracted to set up a bus assembly plant in Tehran.

Among the many factories that came into production during the last half of the plan were the sugar beet processing plants at Neyshahpour, Kermanshah, Khoy and Isfahan. A glass factory was commissioned at Qazvin and a nylon thread plant at Tehran. Private sector investment for these diverse projects were channelled through the Industrial and Mining Development Bank of Iran, (IMDBI). The greatest achievements of the IMDBI were in steel rolling. One rolling mill, with a capacity of 65000 tons per annum was inaugurated and a second one with a capacity of 85,000 tons per year also at Ahvaz, was begun. As well as these, contracts were agreed before the end of the Third Plan for the Ahvaz Rolling and Pipe mills, a plant of 100,000 tons per year capacity.42

As for power and electricity, the construction of a national grid gave flexibility in the use of electric power for the growing industrial sector. Electric power production rose from 1,235 million K.W in 1962/63 to 4500 million K.W by the end of the Third Plan.

Transport and communication were also improved, although main roads received the highest emphasis. Between 1964-66 out of a total 21,711 million rials spent on the road projects, 16,189 million rials were spent on the major roads, representing 74.5% of the total expenditure on the road programme.43

The main north-south and western trunk roads were converted to all weather highways. Railway development was given low priority under the Third Plan until the Isfhan steel mill project agreement, which prompted the government to restart work on the long proposed line between Kashan and Kerman and to add links to steel mill and the ore and coal fields.

In all, the Third Plan was a vital turning point for the Iranian economy. Iran was the scene of many changes. Social and political reform with a strong programme of industrialisation induced profound change in the fabric of the country and set the course for still more changes to come during the Fourth Plan.

1.4 The Fourth Development Plan (1968 - 1972)

Iran's Fourth Development Plan covering the period of March 1968 to March 1973 was an improvement over previous plans in terms of its formulation and implementation. It was the most comprehensive plan formulated for the period when a sustained rise in Iran's national income was expected.The overall objectives of the plan were as follows:

- To increase the rate of economic growth by gradually increasing the relative importance of industry by raising the productivity of capital and by introducing advanced techniques of production.

- To achieve a more equitable distribution of income arising from an increase in employment and the extension of social welfare to all and expansion of development and rehabilitation activities, especially in rural areas.

- To decrease the nation's dependence on foreign countries in meeting Iran's basic requirements:

a) by accelerating the rate of growth in the agricultural sector in order to meet as far as possible, the food requirements of the population;

b) by the production of the raw materials required by industry;

c) by producing the basic industrial consumer goods domestically.

- To diversify exports by the expansion of existing markets and gaining access to new foreign markets.

-To improve administrative services by introducing basic changes in the administrative system and extend modern management techniques to all ministries and public and private organisations.

The Fourth Plan aimed to increase real GNP by 57% during the five year plan period or about 9.3% per year. Employment was to rise from 6,932,000 in 1967 to 7,898,000 in 1972, an increase of 996,000. Also it was envisaged that foreign exchange receipts during the plan would be $9448 million (in current prices), about 74% of which was to come from oil revenues and 6% from petrochemical exports. 44

The total planned investment by the public and private sector during the plan was set at 810 billion rials. The size of public sector investment was fixed at 443.5 billion rials (55% of the total) and the share of private sector amounted to 366.5 billion rials (45% of the total.) In the event, the size of the public sector programme was increased several times and eventually reached 554.6 billion rials while there was no mention of the size of the private sector outlays.45 The plan in terms of private investment was by and large 'open-ended'

Table 1.5 - Planned and Actual Expenditures of the Fourth Plan (billion rials)

Sector	Approved Credits ('Revised Version) Value	Share%	Actual Disbursements Value	Share%	Actual as % Approved Credit
1. Agriculture	46.7	8.4	41.2	8.1	88.2
2. Industry & Mines	115.6	20.8	113.1	22.3	97 .8
3. Oil & Gas	61.7	11.1	57.3	11.3	92.9
4. Water	45.3	8.2	42.0	8.3	92.7
5. Electricity	42.2	7.6	37.7	7.5	89.3
6. Transport & Communication	84.3	15.2	71.4	14.1	84.7
7. Telecommunications	46.5	8.4	38.7	7.6	83.2
8. Rural Developmenmts	10.3	1.9	9.8	1.9	95.1
9. Urban Development	9.1	1.6	8.3	1.6	91.2
10. Housing & Construction	43.0	7.8	41.6	8.2	96.7
11. Education	19.0	3.4	17.7	3.5	93.2
12. Culture	1.5	0.3	1.4	0.3	93.3
13. Tourism	3.5	0.6	3.3	0.7	94.3
14. Health	15.7	2.8	14.2	2.8	90.4
15. Social Welfare	5.7	1.0	5.1	1.0	89.5
16. Statistics & Research	1.8	0.3	1.7	0.3	94.4
17. Regional Development	2.6	0.5	2.3	0.5	88.5
18 .Total.	554.5	100.00	506.8	100.00	91.4

Source: Bank Markazi Iran . Annual Report 1972 . One U.S .$ - 67.5 rials.

As can be noted from table 1.5, the actual expenditure of the public sector ran slightly more than 91.4% of the approved credits. The Fourth Plan, unlike its predecessors, saw no excessive fluctuations in the social, political and economic variables, and the level of expenditure closely corresponded to the pattern laid down in the plan. Iran's economy at this stage was seen to be able to build upon the gains of the Third Plan.

The Fourth Plan was to give momentum to the newly gathered speed of industrialisation of the Third Plan. The data in tabe 1.5 shows that the sector of industry and mines received the highest priority, both by 20.8% allocation and 22.3% actual expenditure.Credits made avallible to agriculture, amounted to only 8.1% of the total but infrastuctrural investments remained at a high priority level, e.g. investments in oil, gas and electricity. A comparison of sectoral allocations and expenditure between the Fourth and Third Plan (Table 1.5 and Table 1.3) shows a dramatic switch in emphasis by the government to induce radical structural changes in the economy.

Sectoral Comparison of Actual Expenditure under the Third and Fourth Plan

Plans	Agriculture and Water	Industry and Mines	Electricity Gas and Fuel	Transport Communication and Telecoms
Third Plan (Table 1.3)	23.1% (Sector 1)	8.3% (Sector 2)	15.6% (Sector 3)	26.3% (Sector 4)
Fourth Plan (Table 1.4)	16.4% (Sectors 1&4)	22.3% (Sector 2)	18.8% (Sectors 3&5)	21.7% (Sectors 6&7)

This comparison indicates the shift in the direction of industrialisation. It also reflected an explicit government wish to shift the workforce into sectors more amenable to rapid growth than agriculture.[46]

Income for the Fourth Plan was drawn from its 80% share of oil revenues, which itself comprised 70% of funds at the disposal of the plan. The remaining sources were the utilization of credits of the banking system, utilization of foreign loans and others. Allowances were also made for recurrent costs of projects carried over from the previous plan and for projects begun during the Fourth Plan.[47]

Implementation, Gains and Shortfalls

In terms of perfomance, the primary objective of the plan was to achieve an annual rate of growth in GNP of 9.4%. The actual rate of growth during the plan period was 11.6 % or an overfulfilment of about 2 percentage units. With the exception of agriculture and construction, all the sectoral annual growth rate targets were either attained or surpassed. Agriculture had the lowest growth at 3.9% per annum, oil achieved 15.2%, construction 7.1% and services 14.2%, almost twice the planned rate. Industry grew at an average annual rate of 13.8% in real terms.[48]

With regard to the agricultural sector's growth, it was slightly faster than that of the population, which grew by an average of 3% per annum between 1968 - 1972. In all, during the said period, agricultural production was not sufficient to satisfy domestic needs. Imports of agricultural goods though fluctuating, were a major burden on foreign exchange reserves. Gross imports of agricultural goods amounted to 79.6 billion rials during the Fourth Plan. Iran imported meat, dairy products, pulses, vegetable shortening and wood. However, production of certain agricultural items e.g. cotton and dried fruits showed a surplus, and a certain amount was exported.

During the plan period, these exports amounted to 61.2 billion rials, therefore the trade in agricultural products (imports - exports) amounted to a 18.4 billion rials deficit. In all, the net value of imports of agricultural products which had been 1.3 billion rials at the beginning of the plan, increased to 18.4 billion rials during the plan period.[49]

Meanwhile, implementation of the second phase of land reform produced revised tendencies for the majority of the peasants and did very little towards creating the new egalitarian rural society promised in the Shah's reform programme. If anything, the second phase of the reform heightened tensions in the villages between owners and tenants. Reform also left unsolved the position of lands that were uncultivated for various reasons.[50]

Finally the relative decline of agriculture during the period under study was evident in the agricultural sector's contribution to GDP, (in constant 1959 prices) as it declined in a decade from 26.6% in 1962 to 16.1% in 1972,while the share of other sectors had continuously increased during the same period.

As noted before, industrial and infrastructure development received the highest priority, a continuity established since 1965. Government investment showed a tendency towards capital intensive industries held prominently by state controlled organisations. Private sector ventures were also encouraged and extremely generous credits were also made available to private industry mainly through the Industrial and Mining Development Bank of Iran, (17.337 bilion rials 1968-1973) and the Industrial Credit Bank,(7.664 billion rials 1968-1973). 51

The major elements of investment in heavy industry made by the Plan Organisation included iron and steel, petrochemicals and machine building, all projects begun during the Third Plan period. Metal smelting industries, of which the largest was the Isfahan steel mill (Arya Mehr Steel Mill complex) were completed during the Fourth Plan. This mill accounted for 53% of the expenditure of the Plan Organisation on industries and mines, while petrochemicals took 21%. Exploitation of Abadan, Kharg and Shapour petrochemical plants began in 1970. 52

With regard to gross domestic fixed capital formation (GDFCF), it was interesting to note that the public sector played a major role. GDFCF grew at 13% annually between 1968-1972, rising from 126 billion rials to 212 billion rials.The private sector was responsible for 43% and the public sector was responsible for 57% of investment. 53

As for the employment situation, the targets were overachieved with actual employment increasing by 1.2 million as against the planned target of 966,000. Agricultural employment however, declined by 202,000 instead of the planned increase of 226,000. Industrial and mining employment on the other hand, increased much more than its planned target, i.e. 737,000 as against the projected figure of 417,000. Lastly, the most significant increase was in the service sector which increased by 720,000 or 60% of the total increase in employment during the period. 54

With regard to the ojective of achieving a more equitable distribution of income, the result of assessment carried out for both urban and rural area by M.H.Pesaran of the Bank Markazi, show that this goal was not achieved. Between 1959/60 to 1971/72 there was increasing income inequality. The Lorenz curve during the aforementioned period moved further away from the line of perfect equality, indicating a uniform worsening of income distribution. In addition to this increasing inequality of income, during the period 1959/73 the income gap between the rural and urban areas widened substantially, which underlines some of the reasons for increased internal migration. 55

Price stability, another objective, was not fully realised. During 1968 and

1970, prices remained relatively stable, while in the final two years of the plan, prices increased at about 6% per annum. Specifically speaking, the wholesale and retail price indices rose by 7.1% and 5.5% respectively in 1971 and by 5.7% and 6.3% in 1972. In all during the Fourth Plan, the general price level was positively correlated with the overall shortage of supply, especially in the agricultural and construction sectors and with movement in world prices.56

The objective of decreasing the country's dependance on the outside world in meeting its basic needs was not achieved. Iran's non - military imports increased from $1389 million in 1968 to $2570 million in 1972, showing an increase of 85%. Primary products, intermediate and capital goods absorbed the highest share of total imports during the same period. By 1972, the final year of the plan, 62.2% of total imports were primary and intermediate goods and 24.9% were capital goods and 12.9% were consumer goods. In all between 1968 and 1972 the total imports increased by 16.6% on average every year. 57

The large share of imports allocated to intermediate and capital goods was not a coincidence. Iran was following a strategy of import substitution. Thus the increase of imports of these types of goods was justified for the purpose of building an industrial base, leading to self sufficiency and consequent savings in foreign exchange.

While an import substitution strategy was followed at the time by a number of other developing countries, Iran's strategy differed from the others. Many of the newly industrialising countries, as well as relying on primary exports and foreign loans, promoted their manufacturing exports to pay for a proportion of their imports of capital and intermediate goods, but Iran continued to rely exclusively and heavily on oil exports. Between 1963 and 1972 foreign exchange receipts from oil and gas were 76% of Iran's total export earnings and the average annual rate of growth of oil and gas revenue during the Third and Fourth Plan was 14.5% and 25% respectively. 58

In all there was a failure of attempts to diversify and modernise the non-oil sector, the agriculture of Iran being a good example. The share of manufcturing in the country's exports continuously declined from 18.8% in 1970 to 14.6% in 1972, also declining was the share of chemicals from 13.8% to 9% respectively. 59

Finally in terms of Iran's foreign exchange, the plan's forecasts were not achieved. Oil production was reaching its capacity level and foreign debt repayments were a major drain on the country's foreign exchange holdings, despite the incremental oil price adjustments between 1971 and 1973. From 1971 due to the action of the Organisation of Petroleum Exporting Countries (OPEC) there was an improvement in the unit price of crude oil exports. As a result, oil revenues increased to $2399 milion in 1972 as against $1268.4 in 1970. Iran also started to recieve revenue from gas exports to the USSR in 1970. This revenue amounted to $102.8 million between 1970 and 1972. In all Iran's oil revenues alone between 1968-1972 amounted to $7836.9 million, surpassing the projected oil revenues of $7032.2 million for the same period. Despite these revenues, nontheless the cumulative surplus on the balance of foreign exchange during the life of the Fourth Plan, was less than envisaged about $277 million as against $633 million. 60

As noted earlier, this was mostly as a result of foreign debt repayments and interest. Furthermore, both development and military costs were growing rapidly. Relative stagnation of the agricultural sector and rising income levels that produced growth for demand for food in the urban areas, compounded by increased urbanization, all aggrevated the problems. Food requirements had to be imported to meet domestic needs and this reduced the availiability of foreign exchange.

At this juncture, it should be noted that the government took various measures to improve the productivity of the agricultural sector, one being the establishment of large scale private farm units known as agri-industries or agri-business, located in virgin lands lying below the reserviours impounded by the dams built in the 1960s. These heavily mechanised and capital intensive agri-business units were mainly in Khuzestan. Since most of them were in the course of construction during the Fourth Plan, their success or failure in providing large volumes of agricultural produce was not apparent. 61

During the plan period, the government strengthened the country's defence capability as in 1968 Britain announced its intentions to withdraw its military presence from the Persian Gulf. This move, plus the growing rebellion in Dofar in Oman, brought a major shift in the government budget towards defence, thus military costs grew rapidly and contributed to drain the country's foreign exchange holdings. 62

The Fourth Plan overall was successful, although the agricultural sector was the subject of the largest shortfall. The overall growth rate was achieved with an overfulfilment of about 2%. However, in terms of other objectives, i.e. equity , less dependence on foreign countries, export diversification and price stability, the goals were not realised.

1.5 Summary and Conclusion

The abortive First Plan exacerbated the country's economic problems. In spite of continuing problems during the Scond Plan, where the economy came almost to a position of stagnation, Iran was still overwhelmingly agricultural. the Second Plan emphasised a number of large prestigious projects and lacked a coherent development strategy. Its achievments in the industrial sector was confined to the modernisation or construction of a few factories. In respect of agiculture, almost all the allocation to this sector was devoted to the construction of three large dams . During this plan, the deep recession that followed the monetary- induced boom, seriously affected the traditional sectors of the economy i.e agriculture, construction and domestic trade.

After 1963, there was a major shift of emphasis by the government to induce radical structural transformation in the economy. Iran headed for hasty industrialisation while the viable traditional sectors , in particular the agriculture was ignored. As a result, the urban component of the population grew faster than that of the rural. Rapid pseudo-modernisation from above was emphasised and an industrial structure, similar to that of the West, wrongly became the goal.

During the Third and Fourth plan, industrialisation was pursued on the basis of import substitution stategy. Emphasis was put on heavy industries such as petrochemical and metal smelting. Iran continued to rely heavily and almost exclusively on oil exports to pay for its imports. Investments were undertaken in the agricultural sector, chiefly on heavy mechanised agri-business units, which were against the traditions of the indigenous agriculture.

The Third and Fourth Plans were successful in terms of GNP growth. however, this is misleading as much of GNP growth was reflected by the expansion of the oil sector during this period. In addition, the adoption of the import substitution strategy, coupled with rising oil revenues ensured a sustained growth rate of the industrial sector. Industrialisation was sustained by excessive exploitation of the country's oil reserves.

During the Third and Fourth Plans Iran aimed for maximum growth, industrialisation and foreign technical assistance while its viable traditional sectors were undermined. The plans should have focused on better income distribution, balanced growth and economic self-reliance. In all the planning was misguided and Iran was led to the wrong direction. Iran's market could have not brought about an industrial structure like that of the West. The planning was more slanted towards the ambitions of the Shah .The population was never consulted regarding desirability of the goals or the direction that the country was aiming for.

References

1. H. Razavi and F. Vakil, *The Political Enviroment of Economic Planning in Iran* (West View Press Inc., USA,1984) p.22.
2. J. Bharier, *Economic Development in Iran 1900-1970* (Oxford University Press, London, 1971), p.89.
3. H. Razavi and F. Vakil, op.cit.,p.22.
4. K. McLachlan, *The Iranian Economy 1960 - 1976* in H.A. Amirsadeghi and R.W. Ferriers, eds., *Twentieth Century Iran* (W.Heineman Ltd., London , 1977), p.130.
5. See H. Razavi and F. Vakil, op.cit., p.22.
6. R.E. Looney,*Economic Origins of the Iranian Revolution* (Pergman Press Inc., USA, 1982), p.10.
7. J. Bharier, op.cit., p.90.
8. See Ibid.
9. Y. Armajani and T.M. Ricks, *Middle East Past and Present* (Pentice Hall, Inc., USA, 1986, second edition), p.430.
10. R. Graham, *Iran : The Illusion of Power* (Croom Helm Ltd., London, 1978), p.35.
11. J. Amuzegar and M.A.Fekrat, *Iran:Economic Development under Dualistic Condition* (The University of Chicago Press, 1971), p. 41.
12. J.Bharier, op.cit., pp.157-158.
13. J. Amuzegar, *Iran: An Economic Profile* (The Middle East Institute, Washington D.C, USA, 1977), p.52.
14. A. Sampson, *The Seven Sisters* (Hodder & Stoutghton, Coronet Edition London, 1976), pp.140-145 , pp. 184-187.
15. R.Graham, op.cit., p.36.
16. H .Razavi and F. Vakil op.cit., p.22.
17. See further Ibid., p.44.
18. K. Mofid,*Development Planning in Iran : From Monarchy to Islamic Republic* (Menas Press Ltd., Cambridgeshire, England 1987), P.44.
19. See Ibid., p.44.
20. H. Razavi and F. Vakil op.cit., p.23.
21. J. Amuzegar and M.A Fekrat op.cit., pp. 44-45.
22. See Ibid., p.44.
23. H. Razavi and F. Vakil, op.cit., p.25.
24. See for further evidence K. Mofid, op.cit., pp. 45-46.

25. R. Looney, *The Economic Origins*, op.cit., p.14.

26. See K. Mofid,op.cit., p.46.

27. See R.Looney, op.cit., p.16.

28. R. Looney, op.cit.,p.18 . Also see Y. Armajani and T.M. Ricks,op.cit., p.436.

29. H. Razavi and F. Vakil, op.cit., p.26.

30. See J. Bharier, op.cit., p.98.

31. K. McLachlan, op.cit., p.140.

32. For further evidence see figures K.Mofid,op.cit., p.51.

33. J. Bharier, op.cit., p.27.

34. K. McLachlan, op.cit., p.134 ,

35. R. Graham, op.cit., p.24.

36. H. Razavi and F. Vakil, op.cit., p.26.

37. R. Looney, *Economic Origins*, op.cit., p.54.

38. For further evidence see K. Mofid,op.cit., pp. 51-54.

39.See K. Mofid, Ibid., pp.53-56 . Also see J. Bharier, op.cit.,pp.98-99.

40.See furtherK. McLachlan, op.cit., pp.146-147.

41. K. Mofid, op.cit., p.59.

42.K. McLachlan, op.cit, p.146.

43. See further K. Mofid, op.cit, p.59.

44. Ibid.

45. See Ibid., p.60.

46. See K. McLachlan, opcit., p.148.

47. Ibid.

48. For further evidence see R. Looney, *Economic Origins*, opcit., p.26.

49. Further see K. Mofid, pp.63-64.

50.K. McLachlan, opcit., p.152.

51. Ibid., p. 150.

52. Ibid., p.152.

53. Further evidence see K. Mofid, Table 2.14, p.69.

54. R. Looney, *Economic Origins*, op.cit., p.26.

55. For further evidence see R.E.Looney, *Economic Origins*, p.248 . Also K. Mofid, pp. 72-73 and Figure 2.2.

56. Ibid., p.26.

57. For evidence of these figures see K. Mofid, op.cit., pp. 76-77.

58. R. Looney, op.cit., p.28.

59. K. Mofid, op.cit., pp. 78-79.

60. Ibid., p.80.

61. K. McLachlan, opcit., p.154.

62. R. Looney, op.cit., pp.26-27.

2. THE FIFTH DEVELOPMENT PLAN (1973 - 1977) : FROM BOOM TO BUST

The Fifth five-year Plan began on 21st March 1973. To all intent and purposes this was a continuation of the Fourth Plan. As oil prices rose in the last quarter of 1973, the plan, in operation for less than a year, was abandoned in favour of a revised version, prepared hastily and with great optimism over future oil revenues. The revised Fifth Plan in essence was similar to that of the original plan, but contained most of the projects rejected by the original plan as being uneconomical. In addition to doubling or tripling the funds for many sectors, the government allocated a vast budget for nuclear energy development and launched programmes of aid for Middle Eastern and African countries and equity investment in major industrial countries.

The Fifth Plan was basically more of an investment programme. During 1974-75 the government announced several trade and investment agreements including purchases of nuclear reactors, arms from the U.S.A. and Britain, and its intension of investment in a number of firms in Europe and the U.S.A. The Fifth Plan was to bring great changes and transform the social and economic structure of the country. The introduction to the revised Fifth Plan indicates the ambitions of the planners:-

"It is the earnest hope of all Iranians, guided by their great leader His Imperial Majesty the Shahanshah Aryamehr and inspired by his wise commands, that this plan will prove to be the spearhead of one of the country's greatest and most brilliant and significant transformations, and that its implementation will bring greater prosperity to the nation and its people and guide Iran more rapidly to the period of the Great Civilisation."[1]

In the event, the magnitude of changes in economic structure and social fabric of the country, eventually led to a politico-economic explosion.

In this chapter, an attempt will be made to briefly study the original and revised Fifth Plans. The effect of the 1973 oil price increases on the Shah's vision for Iran and the consequences of development policies and strategies that hastened the revolution will be discussed. With sudden accrual of wealth, Iran instead of redressing the economic and social inequalities of the 1960s, opted for the big - push strategy. Economic resources were allocated while no

Table 2.1 - Fifth Plan Fixed investment by Private and Public Sectors 1973-1977 (billion rials)

Sectors	Total Public Sector Fixed Investment	Total Private Sector Fixed Investment	Grand Total	Share of Total %
Agriculture	102.6	50.0	152.6	0.2
Water	109.0	4.0	113.0	4.6
Industry	175.6	326.8	502.4	20.4
Mining	44.8	5.2	50.0	3.4
Oil	190.4	139.7	230.1	9.3
Gas	84.5	47.0	131.5	5.3
Power	118.8	-	118.8	4.8
Communications	187.8	4.0	191.3	7.7
Telecomuniaction	53.4	-	53.4	2.1
Rural Development	36.0	2.5	38.8	1.5
Urban Development	61.0	-	61.0	2.5
Government Buildings	90.8	-	90.8	3.7
Housing	94.0	308.8	402.8	16.3
Education	125.9	2.6	128.5	5.2
Art and Culture	5.0	0.4	5.4	0.2
Tourisom	3.9	12.2	16.1	0.6
Health, Medical Services and Nutrition	20.0	9.2	29.2	1.1
Public Wellfare	5.5	-	5.5	0.2
Physical Training and Scouting	8.7	-	8.7	0.4
Statistics and Studies	0.7	-	0.7	0.02
Others	30.1	-	30.1	1.2
Total	1548.0	912.4	2460.4	100.0

serious attention was paid to the constraints and absorptive capacity of the country. It will be noted that the government extravagance resulted in a marked acceleration of inflation. The prices were pulled upwards as aggregate demand of the country persistently exceeded its output potential and the capacity to import goods and services.

This chapter will also focus on major causes of the economic crisis that preceded the revolution. As such, the country's absorptive capacity constraints, infrastructural bottlenecks, agricultural stagnation and shortfalls of industrialisation will be analysed.

2.1 The Original Fifth Plan

The original Fifth Plan was itself an ambitious plan. It called for a total fixed investment (private and public) of 2,460.4 billion rials, of which 62.9% was the public sector's share and the rest 37.1% was the private sector's share of investment (see table 2.1).

The largest allocation was to industry with 20.4%, followed by housing, oil, communication, agriculture and education. The projected average annual growth rate for industry and mining was set at 15%, oil 11.8%, services 11.5% and agriculture at 5.5%. The plan's projected real rate of growth for GDP was 11.4%.

The government's projected revenues during the plan was to be 3344.0 billion rials.

Table 2.2 - The Government's Original Allocation to the Fifth Plan by Sectors, 1973 - 1978 (billion rials)

Revenues		Expenditures	
1. Oil and Gas	1577.4	1. Development Expenditure	1560.0
2. Direct Taxes	350.5	2. Payment of Foreign Loans	221.7
3. Indirect Taxes	438.1	3. Payments on Domestic Credits	63.9
4. Foreign Loans	433.4	4. Current Operating Expenses	1498.4
5. Treasury Bonds and Bank Credits	364.5		
6. Other Incomes	180.1		
Total	3,344.0		3,344.0

Source: PBO, Iran's Fifth Plan

As is evident from the table 47.2% of the revenues was to come from the oil, 23.5% from direct and indirect taxes, 13% from foreign loans, 10.9% from treasury bonds and bank credits and 5.3% from other incomes i.e. incomes derived from government monopolies. The total government expenditure was set at 3344.0 billion rials, with development expenditure absorbing 1560.0 billion rials.

This plan was expected to strain domestic resources to the full , not least transport and communications where the second largest government allocation of credits was made to help expand facilities and prevent likely bottlenecks.[2] As noted earlier, events were to make a nonsense of PBO's calculations and replace this plan with the revised Fifth Plan, due to an explosion in oil price increases.

2.2 Twilight of the Economic Boom

Since the abortive nationalisation of the oil industry by Dr. Mosadegh, the government of Iran had been unable to control the rate of oil production and exports. In spite of this, oil exports and their revenues dominated the government's fiscal resources.

By the end of the Fourth Plan, greater control over the operation of the oil industry was a major government goal. Oil was by far the largest and most dynamic individual item in the country's export sector and the implementation of the development programmes was largely dependent on oil revenues.

By 1970, world demand for crude oil began to place the oil producers in a seller's market and with increased militancy within OPEC, Iran's bargaining position gradually improved in relation to the Consortium. The changed circumstances were marked in the Tehran agreement in 1971, where Iran for the first time was able to rely with confidence on oil revenues.[3] Finally on 20th March 1973, in an agreement with the Consortium, Iran took over all remaining operation and ownership of the country's oil industry.

On the outbreak of the Arab-Israeli war in October 1973, the disruption in the supply of oil from the Middle East and the use of oil as a political weapon by the Arab oil exporting countries, brought to a head the underlying instability in supply and demand for oil. As a result, the price of crude oil sharply increased.[4]

2.3 The Tehran Oil Agreement

Following the OPEC meeting in October 1973 held in Kuwait against the background of the Arab-Israeli war, the Tehran Oil Agreement was reached, in December 1973. As a result, Iran's government revenue per barrel of oil jumped from $1.85 to $7.0. By the end of 1974, this figure climbed to $10.21 per barrel. This meant that government oil revenues in 1973 rose to $4.6 billion (310.5 billion rials) as against $2.8 billion (189.9 bilion rials) in 1972. The revenue was further increased to $17.8 billion (1201.5 billion rials) in 1974. Put another way, in 1973 and 1974 Iran's oil revenues increased by 65% and 287% respectively.[5]

These huge augmentations of Iran's annual oil revenue led the Shah to feel over- confident, both at home and in international areas. He over-evaluated his own strength and lectured the industrialised world on its short-comings and made statements that came back to haunt him in later times.

In an interview on 25th December 1973, the Shah, responding to questions on the increased price of oil had this to say:-

"We are only pricing the minimum it could be priced in comparison with other sources of energy... Well, some people are going to say this is going to create chaos in the industrialised world; that it is going to be a heavy burden on the poor countries...That is true; but as to the industrialised world, they will have to tighten their belts, and they will have to work harder or eventually this help to the other countries of the world will be diminished, and this role taken up - in my opinion - by the new wealth of the oil countries."[6]

Thus in 1973 while the West was put off balance by the sudden leap in the energy import bill, the Shah outpoured confidence. He turned critical of Western society and made provocative statements, admonishing the West for waste and inefficiency.[7]

2.4 The Shah's Vision of the Future

On the eve of the Tehran Oil Agreement, the Shah was assuming the role of statesman in the international arena and Iran was rapidly becoming a regional power to be reckoned with. At home, the newly acquired revenue and the accompanying self-confidence merged together and led the Shah to give promises to Iranians, especially in the area of welfare expenditure. The Shah propagated in earnest the idea of Iran being at the threshold of the Great Civilisation, a national state of material well being, with industrialisation achieved and a full regeneration of Iran's ancient heritage. As R.E. Looney noted:-

"According to the Shah, Iranian society at the end of the century, will be one that has eliminated many of the major worries that concern the population today - the lack of financial security, limited availability of adequate educational opportunities and so on."[8]

He hoped to achieve something akin to a utopian dream with plans based on the utilisation of the vast oil revenues. All these pronouncements and promises created a high level of expectation among the population for an immediate improvement in their standard of living and the achieving of the Great Civilisation, within their own lifetimes.

Moreover and most importantly, the Shah's improved confidence led to more concentration of power and centralised decision making. This was contrary to what should have been, given the increasingly complex economy, whose efficiency requirements would have been achieved by an increasing delegation of authority at all levels. In fact the new confidence reduced such delegation as the Shah relied increasingly on his own decision making powers.[9]

2.5 The Big-Push Strategy

The sudden accrual of wealth during 1973 and 1974 subjected Iran to a financial shock. The basic constraint on Iran's development until then had been insufficient foreign exchange. As the foreign exchange constraints were removed, the possibilities for the Shah seemed limitless. The dream was announced, expectations of the population were raised and his vision of a Great Civilisation was to be fulfilled rapidly by a big-push strategy, financed by oil revenues.[10]

In March 1974, studies and preliminary findings for the big-push strategy, undertaken by PBO, were presented to the Shah, for the purpose a preliminary dialogue before the start of deliberations on the revision of the Fifth Plan. The Shah was determined to press ahead immediately however, and he dismissed the views of his technocrats and pressed for a rapid big-push in development and modernisation. In fact, the Shah in his solitary confidence had already decided how the 287% increase in oil revenues ought to be disbursed, if not in detail, at least in broad terms.

Some of the objectives of the big-push strategy were as follows:-

Electrification of the railway system, the setting up of several nuclear power plants, building oil refineries and petrochemical plants, construction of six lane super-highways from the Persian Gulf ports to Tehran, rapid development of the country's ports and last but not least, the development of an impregnable defence infrastructure.[11]

2.6 Resource Allocation

The Great Civilisation became an article of faith for the Shah as vision and reality further emerged into one.[12] He was not prepared to listen to realists. The planners knew the Shah wanted a large upwards revision of the expenditure, therefore the PBO began to work with the problems of resource allocation . A series of alternatives aimed at achieving a macrobalance was set. The focus of the PBO's attention was on how much public investment the society could productively absorb in the remaining years of the Fifth Plan. Unfortunately, within the PBO itself, there existed a division. The Planning Division was not in favour of a maximum expenditure scenario and warned against the dangers of inflation, while the Supervision and Co-ordination Division pushed for a maximum increase in development expenditures, worrying only about the allocation between sectors.

By July 1974, the PBO prepared a framework for the revision of the Fifth Plan and consequently, the special session of the Economic Council met at Gajereh (a resort near Tehran) to hear the PBO recomendations.[13] As noted before, the PBO was split on its strategy during the post 1974 period. The PBO's Planning Division presented three scenarios. They were as follows:-

- A modest 31% increase (from 1545.8 billion rials to 2031.8 billion rials) in public sector investment over original allocations due to absorptive capacity constraints. The main bottlenecks were identified as the shortage of human resources and inefficient infrastructure.
- A medium 98% increase to 3064.5 billion rials.
- A high 141% increase to 3732.8 billion rials.

The Planning Division argued that both 98% and 141% increases were above Iran's absorptive capacity and if adopted would lead to a hyperinflation. The unused funds were to be invested in markets abroad. The overall conclusion was that public investment over and above 2031.8 billion rials would subject Iran to inflation, distortions, waste and inefficiency.[14]

The Supervision and Co-ordination Division, at the same time had been asked to submit their views which presented the ministers views, i.e. a maximalist approach whereby Iran, as well as spending its new financial resources, would even opt to borrow.

Finally, the Prime Minister opted for a 2848.5 billion rial public investment. This represented an 84% increase on the original Fifth Plan allocation (see table 2.1) and 816.7 billion rials more than the recommendations of the Planning Division.[15] The result of the Gajereh meeting i.e. a redrawn blueprint, came to be known as the revised Fifth Plan (1973-1974), was presented to the Shah from 1st to 3rd August 1974 at Ramsar, a Caspian resort. At the Ramsar meeting many serious issues were pushed aside. The issue of investing in markets abroad was superficially dealt with and it was decided that 9% of the projected total resources will be invested abroad. No serious intention was paid to the problems of absorptive capacity.

In all, the constraints were ignored and the assembly agreed officially on a slightly expanded version of Gajereh spending programme. The Shah, as R. Graham pointed out, was dismissive of those who did not share his vision of Iran's future as the world's fifth industrial power by the turn of the century. In the end, those who had doubts stood silent out of fear, or in the belief that the realities of the situation would impose their own logic on the new plan. The Shah genuinely believed that the problems underlined by the head of PBO could be solved and were subordinate to the lofty objective of accelerating the occasion of a self-sustaining economy, independent of oil. The Shah told the dignitaries in Ramsar: "The Great Civilisation we promise is not a utopia either. We can reach it much sooner than we thought. We said we will reach the gates in twelve years, but in some fields, we have already crossed its frontiers".[16]

2.7 The Revised Fifth Plan

As noted before, the revised Fifth Plan did not differ from the original plan in substance. The change was that of form i.e. more money to be spent on bigger projects in a shorter time.

Qualitative objectives of the revised Fifth Plan in order of importance were:-

-To raise the living standards of all social strata in the economy and to enhance social justice by providing equal economic, political and cultural opportunities for all individuals and groups.

-To maintain a high sustained rate of economic growth, consistent with relative price stability and a more equitable distribution of national income and welfare.

-To improve the quality and size of the country's active labour force to increase productivity.

-To preserve, rehabilitate and improve the environment, especially in the overpopulated areas.

-To upgrade the level of science, technology and creativity.

-To preserve the country's cultural heritage and enhance the quality of life.[17]

In respect of quantitative allocations and priorities the plan was based on an overall growth target. The GNP in real terms was set to advance at a rate of 25.9% annually, from 1165 billion rials in 1972/73 to 3686 billion rials in 1977/78. With the population growth rate of 2.9% per annum, it was assumed that a per capita GNP growth rate of 22.3% during the plan would be achieved. The plan also called for 25.9% annual real growth rate for GDP, increasing from 1226.0 billion rials in 1972/73 to 2110.0 billion rials in 1977/78.[18]

The plan also envisaged that the government's revised projected revenues during the plan will be 8296.5 billion rials.

Table 2.3 - Projection of Government's Revised Allocations to the Fifth Plan by Sector, 1973-1978 (billion rials)

Revenues		Share%	Expenditure		Share%
1. Oil and Gas	6628.5	79.8	1. Current Expenditure	3393.3	40.9
2. Direct Taxes	547.0	6.5	(General Affairs)	(425.8)	(5.7)
3. Indirect Taxes	668.0	8.1	(Defence Affairs)	(1968.7)	(23.7)
4. Foreign Loans	150.0	1.7	(Social Affairs)	(754.0)	(9.0)
5. Treasury Bonds & Bank Credits	50.0	0.5	(Economic Affairs)	(217.8)	(2.5)
6. Other Incomes*	253.0	3.0	2. Fixed Capital Formation	2848.1	43.3
			3. Repayment of Foreign Loans	405.0	4.8
			4. Other Payments	905.0	10.5
			5. Investment Abroad	745.1	8.9
Total	8296.5	100.0		8296.5	100.0

* Includes 135 billion rials ($2 billion) revenue from investment in and loan to other countries.

Source: PBO, Iran's revised Fifth Plan

By comparing the figures in this table to those of table 2.2, we can note that the projected revenues rose from 3344.0 billion rials to 8296.5 billion rials, an increase of 148% with oil and gas revenues, contributing the highest augmentation. Gas and oil revenues were increased from 1577.4 billion rials to 6628.5 billion rials, a rise of over 320%. Current expenditures were also raised by 126% to 3393.3 billion rials as against 1498.4 billion rials. The development expenditures were increased from 1560.0 billion rials to 3368.8 billion rials, an increase of almost 116%.

Table 2.4 gives the Plan's total projected fixed capital formation by the public and private sectors. As can be noted, the total fixed investment was envisaged at 4698.8 billion rials. The public sector's fixed investment which was supposed to be 2848.1 billion rials (table 2.3) was increased to 3118.57 billion rials, thus 66.4% of the total investment. The private sectors share amounted to 1580.23 billion rials representing 33.6% of the total investment. General affairs was allocated 8.1%. Social affairs, with the principal objective of improving material welfare and quality of life in Iran, were to have a share of 27.4%. The economic affairs sector, covering the care of material development in various segments of the economy, represented 64.5% of the total allocations. Also the comparison of public and private investment between table 2.4 and 2.1 shows that the total investment was raised by 91% from 2460.4 billion rials to 4698.8 billion rials.

With referance to table 2.5, total government expenditure during the plan was envisaged to be 6241.35 billion rials comprising funds for general affairs 13.3%, defence affairs 31.5%, social affairs 21.0% and economic affairs 34.2%. As can be noted, defence affairs absorbed a large proportion of the total allocation.

A comparison between the government's allocation to social and economic affairs (revised plan) and the original plan shows that the programmes relating to these two headings had increased significantly. In the area of social affairs, housing allocations increased by 177%, public health by 104%, rural and urban development by over 73% and 47% respectively. In the economic field allocations to electricity increased by nearly 353%, oil by 154%, transport and communications by 113% and gas by nearly 76%. All these increased allocations were indicative of an attempt based on the big - push strategy of development and industrialisation aimed at making Iran the fifth industrialised nation by the turn of the century. As a result great emphasis was put on

Table 2.4: Fifth Plan Fixed Capital Formation by Private and Public Sectors, 1973-1977 (billion rials)

Sectors	Public Sector	Private Sector	Total	Share %
General Affairs	380.56	-	380.56	8.1
Social Affairs	591.52	694.85	1286.37	27.4
Education	126.77	4.80	131.57	
Health	42.05	3.65	45.70	
Urban Development	73.50	-	73.50	
Rural Development	60.00	-	60.00	
Housing	240.00	685.00	925.00	
Environment	6.10	-	6.10	
Regional Development	10.00	-	10.00	
Social Welfare	9.00	-	9.00	
Physical Education	15.00	0.40	15.40	
Economic Affairs	2146.49	885.38	3031.87	64.5
Agriculture and Natural Resources	176.85	132.50	309.25	
Water Resources	162.24	4.00	166.24	
Electricity	310.5	-	310.5	
Industry	277.14	503.00	780.14	
Oil	535.90	87.80	623.70	
Gas	120.00	47.50	167.50	
Mining	61.80	4.50	66.30	
Transportation & communication	402.20	90.00	492.20	
Post & Telecomunication	91.30	-	91.30	
Tourism	8.46	16.18	24.64	
Commerce	0.10	-	0.10	
Grand Total	3118.57	1580.23	4698.80	100.0

Source: PBO, Iran's Required Fifth Plan, 1973-1977

Table 2.5: Projected Distribution of Government Funds During the Fifth Plan, Revised, 1973-1977 (billion rials)

Sectors	Current allocation for the maintenance of the operational status quo.	Development funds (fixed and non-fixed)	Total	Share of Total %	GrowthRates over the Original Fifth plan %
General Affairs	402.90	430.42	833.32	13.3	
Defence Affairs	1968.70	-	1968.70	31.5	
Social Affairs	369.12	940.96	1310.08	21.0	
Education	216.80	334.44	551.24	8.8	36.0
Culture and Arts	11.10	20.60	31.70	0.5	100.0
Health	76.63	161.11	263.74	3.8	104.3
Urban Development	1.40	263.74	50.00	0.8	47.0
Rural Development	4.60	48.0	66.40	1.0	73.6
Housing	-	230.00	230.00	3.7	177.0
Environment	2.00	11.85	13.85	0.2	-
Regional Development	-	16.40	16.40	0.3	166.6
Social Wellfare	50.44	30.56	81.00	1.3	50.0
Physical Education	6.15	26.60	32.75	0.5	6.4
Economic Affairs	131.85	1997.40	2129.25	34.2	
Agriculture & Natural Resource	72.40	296.74	369.44	5.9	36.2
Water Resources	3.50	161.24	164.74	2.6	48.6
Electricity	2.07	247.83	249.90	4.0	353.7
Industry	11.00	357.09	368.09	5.9	89.7
Oil	-	333.00	333.00	5.3	154.1
Gas	-	51.00	51.00	0.8	75.8
Mining	2.00	63.36	65.36	1.0	38.3
Transport & Communication	25.60	400.00	425.60	6.8	113.0
Post and Telecommunication	11.90	73.00	84.90	1.4	44.0
Tourism	1.08	12.42	13.50	0.2	44.4
Commerce	2.00	1.72	3.72	0.06	
Grand Total	2872.57	3368.75	6241.35	100.00	213.0

Source: Iranian Fifth Plan, 1973-1977, revised.

industrialisation based on achieving diversification in exports. In fact Iran's industrial development during the Fifth Plan was regarded as the basic measure in preparing the groundwork of an advanced economy, to pave the way towards the Great Civilisation.[19]

2.8 Inflationary Pressures

The Iranian economy has had relatively low rates of inflation. In the final year of the Fourth Plan (1971-1972) prices increased at about 6% per annum, a result of growing inflationary pressures. However, owing to the increased government expenditures explained earlier, the inflation rates for the Fifth Plan were all in excess of 10% ammuonting to as much as 25% in 1977.

Specifically speaking, in 1973 retail and wholesale prices increased 11.2% and 13.1% respectively, a much higher increase to that of 1972. Though the economy was subject to inflation, the government, against the advice of PBO, embarked on a massive public sector expenditure.[20]

Table 2.6 illustrated the extraordinary change in Iran's financial position during the course of one year.

Table 2.6 - The Budget Transition based on Actual Expenditures on Revenues 1973/74, 1974/75 (billion rials).

	1973/74	1974/75	Change %
Revenues	459.0	1390.5	203
1. Oil and Gas	310.5	1201.5	287
2. Others	148.5	189.0	27
Expenditure	479.3	1140.8	138
1. Current	317.3	729.3	130
(Defence) *	(128.3)	(371.3)	(189)
2. Capital	162.0	344.3	113
3. Advance Payments	-	67.5	-
Deficit/Surplus	-20.3	249.7	

* R. Graham, Iran: The Illusion of Power, p.84. Conversion based on $1.00 = 67.5 rials

Source: H. Razavi and F. Vakil, The Political Environment of Economic Planning in Iran, 1971-1983 ,P.79.

As can be seen, oil and gas revenues increased by 287% and expenditure by 138%. More significantly is the jump in defence spending which increased by 189% almost keeping pace with the increase in total revenues.

The unprecedented increase in government expenditures, almost 140%, inevitably led to a corresponding expansion of liquidity which resulted in a rapid increase in general demand. As R. E. Looney notes that in a situation like this, unless the rate of growth of the supply of goods escalates to accommodate the demand, inflation results.[21]

While supply of goods from both foreign and domestic sources was increasing rapidly in Iran, yet it was not meeting the speed of demand. In fact as a result of the government's fiscal actions, all producers in Iran were encouraged to make the most of their means of production. At the same time, the traders were also responding quickly to increased imports, to balance supply with demand.

As a result, the demands for means of production and for primary and intermediate goods increased while at the same time, the available infrastructural facilities were used to its maximum capacity. However, due to a general shortage of skilled workers and limitations of infrastrucure capacity in certain key areas, the supply of domestic goods could not match the rate of demand. Thus inflationary pressure mounted, while at the same time an acceleration in the world inflation, due to oil price increases, in effect increased import prices.[22]

Although from the outset of the revised plan it was recognised that the plan would trigger a powerful inflation, the government could not understand the seriousness of the inflation. As H. Razavi and F. Vakil point out, the government, top echelon bureaucrats and policymakers did not, could not or would not conceive the potential social disequilibrium to be generated by strong inflationary pressures.[23]

In August 1974, Bank Markazi in its annual report complained of inflationary pressures in a boom atmosphere. The IMF Mission, which visited Iran in late 1974, was particularly concerned by this problem. The Iranian response was: "The government is willing to pay this price (higher investment costs) in order to make use of the opportunity of accelerated development which has been provided by the increase in oil revenues. The authorities believe that sufficient domestic productive capacity should be established in certain major areas and the longer the expansion of these basic industrial sectors is postponed, the more costly their development would be."[24]

The IMF mission advised Iranian authorities to reduce the planned level of the government's domestic expenditure to avoid serious inflation but this advice was ignored.[25]

The mood was that of big spending and the reality was that the Shah wanted increased spending in line with his vision of the future for Iran and the chief economic policy makers were giving way. Quantitatively speaking, as a result of government policy, the money supply increased by 61% between 1973 and 1974 as against 27.8% in the previous year.

Table 2.7 - Money Supply and Banking System Assets (billion rials)

	1972	1973	1974	1975	1976	1977	1978
1. Foreign Bank Assets	93.5	166.4	543.9	554.0	724.6	898.8	882.5
(Foreign Exchange)	(80.0)	(152.7)	(528.6)	(536.7)	(705.2)	(872.4)	(836.2)
2. Loans and Credits to Private Sector	364.7	494.2	704.6	1092.5	1516.6	1868.8	2199.0
3. Public Sector Liabilities to Banking System	221.4	298.4	445.9	624.8	960.2	1038.8	1435.5
4. Public Sector Deposit with Banking System	132.1	209.9	384.3	521.9	837.6	700.9	781.5
MoneySupply	158.7	202.7	372.2	446.5	611.2	790.5	1236.5
(growth)	(27.8)	(61.0)	(36.4)	(37.0)	(29.4)	(56.4)	
Quasi Money	240.7	313.1	482.9	669.0	982.3	1306.5	1342.1

Source: K. Mofid, Development Planning in Iran, Menas Press Ltd., 1987, p.116.

However, in 1974/75 as there was a fiscal surplus (table 2.6), there was no need to increase money supplies.

In 1974, because of increased public expenditure, retail and wholesale prices increased to 15.5% and 16.9% respectively. (See table 2.8.)

Table 2.8 - Annual Rate of Price Increases in the Iranian Economy 1973-1977.%

Year	Retail Prices	Wholesale Prices
1973	11.2	13.1
1974	15.5	16.9
1975	9.9	5.3
1976	16.6	13.5
1977	25.1	14.1

Source: K. Mofid, Development Planning in Iran, Menas Press Ltd.,1987, p. 113.

The greatest inflationary pressures were recorded for construction and the housing sector. Rapid increases in incomes and the increasing migration from rural to urban areas, had a major effect in creating shortages, not only in available living quarters but construction materials as well. The result was a sharp increase in the price of land, building materials and wages for construction workers. In turn, the acceleration of inflation in the construction and housing sectors spilled over to other sectors and increased inflationary pressures in all other activities of the economy.26

In 1974 the highest recorded price increase was for building materials, 22.1%, followed by home produced and consumed goods, 15.7%, and imported goods, 11.0%. What this suggests, as K. Mofid noted, is that inflation in Iran at that time,was mostly due to the monetisation of foreign exchange inflows and structural rigidities rather than to imported inflation.27

Although the problem of inflation in Iran was aggravated by the feed back effect of the oil prices, (a jump in the international inflation rates) it would be a mistake to suggest that domestic inflation was due to purely international factors. Most studies on the subject show that in general, international price increases contributed no more than 25% to domestic inflation, therefore leaving a substantial portion to be accounted for by domestic factors.28 However, despite the inflationary pressures, the 'big' spending continued as can be noted in table 2.9.

Table 2.9 - Actual Budget Receipts and Expenditure (billion rials)

	1975/76	1976/77	1977/78
1. General Budget			
Taxes	259.2	296.3	397.6
Oil and Gas	1193.4	1314.9	1314.2
Domestic Loans	-	-	143.1
Foreign Loans	5.4	77.0	95.2
Others	273.4	109.4	143.8
Sub Total	1731.4	1797.6	2093.9
State Enterprise	483.3	1042.9	1107.7
2. Total State Receipt	2214.7	2840.5	3201.6
3. Total Expenditure	2214.7	3019.3	3319.0
4. Gross Deficit	-	(178.8)	(117.4)

Source: H. Razavi and F. Vakil, The Political Environment of Economic Planning in Iran, 1971 - 1973, p. 91.

While Iran's expenditure continued to rise rapidly at an increasing rate, the oil revenues were not increasing at the projected rate. Comparing table 2.9 with 2.6, it shows the trend of the budget from a small deficit of 20.3 billion rials in 1973/74, to a 249.7 billion rials surplus in 1974/75, to a gross deficit of 178.8 billion rials in 1976/77. In other words, the government's anticipation of a much higher oil price after 1973/74, did not materialise, therefore resulting in a shortfall in revenues. The revised plan had envisaged a total oil revenue of 6628.5 billion rials during the plan (table 2.3) while from tables 2.6 and 2.9 the actual oil revenues were 5334.5 billion rials, i.e. a deduction of 19.5% during the plan period.

The overestimation of oil revenues in the revised Fifth Plan as H. Razavi and F. Vakil noted, was related to the optimistic and confident mood following the 1973 Tehran Oil Agreement. None of the policy makers had bothered to forecast a possible recession or carry out a careful analysis of the impact of rising oil prices in the Western economies. No one anticipated what the anomalies of the oil market could do to the carefully laden development plan of an oil exporter. The government in pursuit of its domestic target, regardless of social costs assumed the necessity of oil in the revised Fifth Plan.The 6628.5 billion rials figure in that plan was based on steadily increasing output and price assumptions.[29]

2.9 Iran's Economy Adrift

By early 1975, the Iranian economy was almost out of control. Government spending was increasing to an unprecedented level and the money supply was still increasing. Contrary to the government's expectations oil revenues were not increasing. In 1975/76, oil sales fell by about 7% and there was more or less no change between 1976/77 and 1977/78 (tables 2.6 and 2.9). Oil prices agreed on at successive OPEC meetings increased but at a rate less than those anticipated in the plan. The agreed prices were as follows; Vienna, September 1975 10%;Bali, May 1976, price freeze; Doha, September 1976, 10% for Iran and others, 5% for United Arab Emirates (UAE) and Saudi Arabia; Stockholm, July 1977, 5% for Saudi Arabia and UAE, others price freeze; and Caracas, December 1977, price freeze for 1978.[30]

With expenditure outpacing the oil revenues, the government had to turn to international money markets for survival. In 1975/76 it borrowed 5.4 billion rials and this increased to 77.0 in 1976/77 and 95.1 billion rials in 1977/78.

Financing the deficit not only resulted in a 25.1% and 14.1% lincrease in retail and wholesale prices respectively in 1977, but also resulted in an increase in public expenditure and a nearly 30% increase in money supply between 1976 and 1977, (table 2.7).

Despite the promises and lectures of the Shah and other policy makers, the 1976/77 budget figures were a shock to both domestic and international investors. As the prospects of the international oil market in terms of oil revenues for Iran dimmed, the government tried to maintain the development programme, refusing to slow its target rates of growth throughout much of 1976, but finally the Shah's vision gave way to grim realities. The conclusion was slower growth and tighter control on government spending. The Shah, in an interview in 1976, abruptly reversed the course. The politics of plenty of money was abandoned. Instead, he told the government to economise in all areas, finish the projects now underway and leave the rest of the Fifth Plan objectives for the Sixth Plan. In fact by late 1976, for all practical purposes, the revised Fifth Plan was no longer followed and worries of future problems led to the early preperation of the Sixth Plan. Two weeks after the aforementioned interview, the Shah announced the creation of an Imperial Commission to investigate wastage, delays and corruption in the administration of development projects. This was the first attempt by the Shah to find out what was going on in the almost out of control economy.[31]

2.10 Absorptive Capacity

Iran's absorptive capacity is taken here as the ability of its domestic economy to absorb the resources at an acceptable rate of return within a given period. In most developing countries, the factors hindering acceleration of growth are lack of managerial and entrepreneural skills, insufficient financial capital, shortage of skilled workers, resistance to social change and so on. In Iran, where to some extent the problem of inadequate financial capital had been solved, the incremental capital output ratio (ICOR) should provide a good measurement of its absorptive capacity, given the other constraints.

Since the absorptive capacity constraints are expected to be binding, simply adding to capital through physical investment, will reduce the productivity of that capital. Therefore, the ICOR will rise,indicating the decline in additional aggregate output generated by the marginal change in capital stock. Thus an increase in the ICOR could imply a lack of absorptive capacity.[32]

Table 2.10- Incremental Capital Output Ratio, 1959-1972 (billion rials at 1959 prices)

Year	ICOR	Year	ICOR
1959	3.53	1970	1.59
1960	5.50	1971	1.61
1961	3.67	1972	1.34
1962	1.72	1973	2.48
1963	1.62	1974	9.22
1964	1.54	1975	2.22
1965	1.87	1976	11.17
1966	1.69	1977	-2.33
1967	2.05	1978	0.93
1968	2.38	1979	-
1969	1.94		

Source: K. Mofid, Development Planning in Iran, 1987, p.133.

As can be noted from table 2.10, the ICOR in 1960 was 5.50 rials, i.e. for every extra rial output produced, 5.5 rials of additional capital was needed. This figure fell to 1.69 rials in 1966. Between the Fourth Plan (1968-1972) the ICORs were quite good, falling to 1.34 rials in 1972. In all, the ICOR on average during the Fourth Plan was 1.77 rials compared with 2.69 rials between 1959-1967.

In 1974 the ICOR figure rose to 9.22 rials as against 2.48 rials in 1973. In 1977 ICOR was - 2.33, indicative of the sheer magnitude of waste at that time. This negative return on investment could have been decreased by a reduction in the size of investment, yet financial resources were applied in great quantities during this time.

In 1978 the ICOR was 0.93 rials. This however, does not mean that the absorptive capacity had increased. This was owing to a fall of investment in 1978 to 858 billion rials, compares with 1114 billion rials in 1976, i.e. a 23% decrease. As a result of the revolution in Iran and increased oil prices, the GNP increased by 28.3% in 1979 as to that of 1978. In all the low ICOR was the result of high GNP and low investment.[33]

To sum it all up, there were several underlying causes for the fall in investment productivity. They were diminishing returns on investment stemming from high rates of growth, infrastructural bottlenecks, waste, problems in implementing aspects of land reforms, the destructive effects of inflation and price control on labour motivation, planning implementation inadequacies, political, socio-cultural and institutional restrications.[34]

2.11 Infrastructural Bottlenecks

The problems of infrastructural bottlenecks in Iran was the result of a boom in expenditure after 1973, which developed a sudden increase in demand. As a result, greater pressure was put on the already strained infrastructure and problems appeared in production, ports, power, transportation and the like. Firms relying on inputs such as electrical power, were forced to operate at less than full capacity due to an energy shortage. After 1973, Tehran and other urban centres had to face a forced programme of blackouts as the power generating capacity was insufficient to meet the demand.

At one point, the foreign contractors working on the Reza Shah Dam were blamed for not delivering the required power to the national grid. Yet the blame in people's minds remained squarely placed on the government.[35] However, it is fair to say that the government was aware of the importance of the need to increase electricity production in order to absorb high investment rates efficiently. As a result, by the end of 1977, the electricity production by the Ministry of Energy increased to 15,755 million MWH, representing an increase of 129% over 1972 production. Though this was a significant achievment, it was not obviously a good enough one, given Iran's aspirations and its pace of development during that period. The government failed to increase production to the projected level, despite all the attempts and efforts (the projected level for 1972 by Ministry of Energy was 32,800 million MWH).[36]

Unlike many of the governments mistakes, the power failures could not be hidden behind a bureaucratic curtain of silence and were the most visible signs of an economic strategy that had gone bankrupt. Power shortage had a devastating effect on industry. According to the Imperial Commission's committee on Industry, a watchdog responsible to the Shah, the country's sole aluminium plant, Arak Aluminium, experienced interruptions in its electricity supply 760 times for a total of 33,000 minutes between March 1976 and March 1977. As a result, the company had lost millions as well as disrupting the production schedule of its major buyers.[37]

The problem of port capacity was also another case of infrastructure bottleneck. At the begining of the Fifth Plan, port capacity was 3.8 million metric tons and the plan envisaged a 9.8 million metric tons capacity by 1978. The plan revision increased requirements to 29 million tons by the end of the same year. In the words of H. Razavi and F. Vakil, the time lag in delivery of the expanded capacity was not even taken into account when the spending plans were made. It was simply assumed that the inclusion of a sufficient budget for the port expansion would suffice.[38]

The boom in expenditure stimulated imports and the pressure on port infrastructure was catastrophic on the southern ports of Iran. Insufficient and poorly maintained port handling equipment, inadequate provision against humidity and scorching summer temperatures, shortage of skilled workers, insufficient berthing space, limited wharehousing compounded by elephantine bureaucracy, brought chaos to the ports. By mid 1975 there were 200 ships waiting to unload their cargoes at Khorramshahr. Some ships had to wait 160 days or more before entering harbour. At Khorramshahr 12,000 tons were being loaded per day but only 9,000 tons were being removed every day. At the most congested point, in September and October 1975, there were one million tons of goods piled up on the jetties and around the port.

To overcome the congestion, an emergency programme was launched by the government. As a result, 2,000 trucks and 6,000 trailers were purchased, though it was no immediate relief as there was a shortage of Iranian drivers. As a further emergency measure, the government decided to employ 800 South Korean and Pakistani drivers.[39]

The delays in the ports affected the construction sites and other projects. There was a built in delay of six months on the start up of virtually every project. There was also an increase in the price of land. Land values were changing, not even monthly but weekly. The rises were phenomenal, especially in Tehran. A side effect of this dramatic rise was higher rents and consequently a demand for higher wages, as housing became the major elements in living costs.

Due to the shortage of manpower, there was a massive inflow of expatriates of all nationalities from the West, India, Pakistan, Phillippines, Bangaldesh, and Sri Lanka. Finally, to work on the increasingly depopulated agricultural lands, there were Afghanis. Apart from the social repercussions of such a massive inflow of expatriates, there were also economic repercussion. Some expatriates were paid well above the Iranians of the same skill, as an incentive to work in Iran. Added to this, expatriates increased the strain in an already dire housing situation and thus contributed to a runaway black market in housing.[40]

In sum, given Iran's insatiable demand for goods, infrastructural bottlenecks frustrated the needs of the market place by adding costs to already expensive goods and services, contributing to inflationary pressures, loss of production, delays, waste, disruption and the like. While some of the costs could be measured, others were difficult to quantify. Cross cultural difficulties between expatriates and Iranians led to an increasing number of problems. The Iranian middle classes were resentful of the expatriates because they could not share the same pattern of life and privileges, though their skills were no less in most cases. The resentment of the lower classes stemmed from the expatriates values and attitudes which clashed with those of the Iranians. Clashes and cultural hostility contributed to alienation with modernisation and development programmes. In addition, in a working environment, cross-cultural problems led to losses in output and money. They manifested themselves in higher rates of labour turnover and a reduction in the production and thus the output of the workers.

2.12 Agricultural Stagnation

The agricultural sector had been the weak point in all development plans. Despite considerable investment, it persistently failed to provide the growth demanded of it. This failure led to changes in policy that followed the break up of the big estates through the land reform. In the early 1960s, small scale farming, based on the traditional Iranian village was encouraged.

As this policy put a large proportion of the country's arable land into inefficient small holdings, it was reversed and official finance and encouragement began to be centred on large scale co-operatives and agri-business.

The change in agricultural policy created a good deal of uncertainty about the direction of agriculture and consequently affected the confidence of the farming community. This was reflected in poor performance of agriculture. For example in 1963 and 1978, the share of agriculture in both the total and the non-oil GNP fell. There was a very high rate of migration from the rural area into towns and the relative output per worker was much lower than that of industry and services. Throughout that period, the average annual rate of growth of agricultural output was between 2.5% and 3%. Against this, the consumption of foodstuff was increasing significantly.[41]

Despite substantial outlays by the state and the private sector for the agricultural sector, the co-operatives and the agri-business (the modern sector) performed extremely badly and the peasant agriculture (the traditional sector) was starved of funds and pushed around by state officials that could not compensate so well for the failure of the modern sector.

As a result, little was achieved in the way of increasing the income of farmers and the income gap between the urban and rural areas widened. In 1976 the urban output per capita of $1830 was about seven times the agricultural output of $251, not including oil revenues, which were spent in the urban areas by the state.[42]

The land reform which was intended to distribute the land among the majority of peasant households, was reversed for the sake of creating farm corporations and agri-businesses. At the same time, the growth and sharp increase of the oil revenues encouraged the government to pursue its strategy of urban industrial expansion. The state was no longer dependent on the agricultural surplus as a source of finance, food and exports as the oil revenues more than compensated for all the agricultural contributions.

In all, there was a sharp decline in agricultural overall importance in the economy. The government showed no interest in the developing agricultural sector as a whole. Instead, it diverted state credits and capital to agri-business and farm corporations. The combination and interaction of these policies resulted in zero growth of agricultural productivity, mainly due to the modern agricultural sector in spite of grants and credit privileges.

Poverty and insecurity amoung the peasantry led to an increased migration to towns and cities, turning the majority of peasants into urban wage labour. Meanwhile, the difference in urban and rural wage levels increased substantially. Higher incomes in urban areas stimulated demand for foodstuffs, leading to a marked increase in imports to offset the shortfall in agricultural production.

The government resorted to subsidies for imported foodstuffs from 1974, so the amount the consumer paid for basic commodities was reduced. This reduced price coupled with higher incomes, stimulated demand even further, resulting in a growing food deficit which could not be relieved by imports, and which led to a higher rate of food inflation. As Katouzian notes, in a word, it was a case of total and unmitigated failure.[43]

2.13 The Shortfalls of Industrialisation

Intense industrialisation in Iran began in the late 1950s and continued throughout 1960s and 1970s prior to the start of disturbances in Iran. Before the 1950s the country's economy was dominated by oil and agriculture.

The dramatic shift in the direction of industrialisation came during the Fouth Development Plan when the government induced radical structural changes in the economy, providing the conditions for the workforce to be shifted from the agricultural sector into the industrial sector.

The Shah was commited to industrialisation and as a result the government's energy was devoted to industrialisation with harmful disregard for agriculture. The culmination of devotion to industrialisation finally manifested itself in the Great Civilisation propagated by the Shah, whereby the goal of industrialisation was supposed to be achieved fully. In the event, Iran never reached that status and the reasons are varied and complex. There are economic, socio-political, cultural, historical, internal and external reasons. Here, an attempt will be made to briefly outline some of the serious shortfalls.

1. The adaptation of import substitution strategy for development in the

early1960s was a mistaken strategy for Iran's development. Iran heavily and exclusively relied on oil revenues as a means of providing the foreign exhange for development. Unlike ordinary developing countries, Iran did not promote the exports of its goods to pay for proportion of its imports of capital and intermediate goods. This would have not been possible in other developing countries similar to Iran in productivity and efficiency but with no oil revenues.[44] As a result, drawbacks such as skilled labour shortages, lack of socio-economic infrastructure, inefficiency, low productivity, the high degree of wastage and so on were brushed aside.

2. Lack of correspondance between the imported technology and Iran's indigenous endowments. Technologies developed in the developed countries quite naturally directed towards solving their own problems by methods suited to their circumstances and resource endowments, which differ significantly to that of a developing country. This is not to say that the transfer of technology from advanced to developing countries is doomed to failure. Problems arise, however, when technology is imported with no serious attempt being made to provide a hospital environment for its efficient use or instead of 'suitable' technology 'modern' or 'advanced' technology is used. That is, 'modern' or 'advanced' nearly always mean more capital intensive and less labour intensive.[45]

Clearly there exists major differences in the physical, cultural, religious, historical and socio-political aspects of Iran and Iranians, to those of the countries providing technology. Thus the problem of unsuitable technology may well have arisen in the case of Iran.

3. In order to encourage the import of capital and intermediate goods and assist the rapid expansion of the manufacturing sector, the exchange rate was kept artificially overvalued. The unfavourable exchange policies towards exports as well as high inflation rates in Iran, led to a continuous decline in the index of competitiveness (real exchange rate). The index of competitiveness fell from 113 in 1972 to 48.2 in 1978.[46]

4. Cultural problems can be identified as another important reason. Attitues and values have profound economic implications that cannot be ignored. Fatalism (taqdir), bazaar mentality (i.e. quick profit), the traditional attitude towards time (e.g. God willing, tommorow for distorting the sense of urgency), nepotism, despotism all affect economic performance, commercial relationships and the attempts at industrialisation in many adverse ways.[47]

5. An inefficient state machine without a proper planning apparatus marked by widespread corruption and an inability to implement social and economic reforms.[48]

6. Superpower politics as a contributing factor deprived Iran of an opportunity to build strong and coherent socio-political and economic institutions which are vital for a successful drive towards development and modernisation. For example the CIA-inspired coup against Dr. Mosadegh in 1953 disrupted an indigenous process of development, leading to further underdevelopment of institutions with their harmful consequences on the development process.[49]

All these factors demonstrate the inefficiencies derived from the underdeveloped institutions in Iran, which themselves are the result of economic and socio-political shortfalls, caused both internally and externally.

References

1. Plan and Budget Organisation (PBO), *Iran's Fifth Development Plan* 1973-1978, revision version, May 1975
2. K. McLachlan, *The Iranian Economy* 1960-1976 in H. A. Amirsadeghi and R. W. Ferriers, eds, *Twentieth Century Iran* (Heineman, London 1977), p.165.
3. During the Tehran oil agreement on 14 Feb 1971 between representatives of the Persian Gulf producers and the international companies under a complex agreement, for the first time the producers were to be compensated for loss of purchasing power through inflation and dollar fluctuations. In money terms it meant a 30% per barrel increase over a five year period to 50 cents. See R. Graham, *Iran : The Illusion Of Power* (Croom Helm, Ltd. , London, 1978), p. 36
4. K. Mclachlan, op.cit., p.156.
5. See H. Razavi and F. Vakil, *The Political Environment of Economic Planning in Iran* (West View Press,Inc. , USA, 1984), p.124.
6. R. Graham, op. cit., p.15.
7. Ibid.
8. R. E. Looney, *Iran at the End of the Century* (D. C. Heath & Co. , USA, 1977), p.124.
9. H. Razavi and F. Vakil, op.cit., p. 64-65.
10 Ibid., pp. 56-57.
11. For further reading on PBO findings see H. Razavi & F. Vakil, op.cit., pp. 69-70.
12. See Shah's comments at Ramsar meeting, H. Razavi and F. Vakil, op. cit., p. 71.
13. The highest policy making body in the government sectors was Council of Ministers and Economic Council, comprising of 20 ministers, five ministers of state with its chairman, the Prime Minister. See R. E. Looney, *Iran at the End of the Century,* op.cit., pp. 52-53.
14. H. Razavi and F. Vakil, op.cit., p. 68-72.
15. Ibid., p. 72.
16. R. Graham,op.cit., pp. 79-80.
17. J. Amuzegar, *Iran: An Economic Pofile* (the Middle East Institute, Washington D. C. , USA 1977), op.cit., p. 167.

18. K. Mofid, *Development Planning in Iran* (Menas Press Ltd., Cambridgeshire, 1987), p.100.

19. For evidence see K. Mofid, op.cit., p.109 and table 2.5.

20. K. Mofid, op.cit., p. 113.

21. R. E. Looney, *Iran at the End of the Century*, op.cit., p. 34.

22. R. E. Looney, *Economic Origins of the Iranian Revolution* (Pergman Press, Inc., USA, 1982), P.143.

23. H. Razavi and F. Vakil, op.cit., p. 80.

24. R. Graham, op.cit., p. 85.

25. Ibid.

26. R. E. Looney, *Economic Origins*, op.cit., p. 143.

27. K. Mofid, op.cit., p. 115.

28. R. E. Looney, *Economic Origins*, op.cit., p.142.

29. H. Razavi and F. Vakil, op.cit., p. 90.

30. Ibid., pp. 90-91.

31. R. Graham, op.cit., p. 103.

32. See K. Mofid, op.cit., p. 132. Also see R. E. Looney, *Economic origins*, p. 123.

33. K. Moffid, op.cit., p.134.

34. See further K. Mofid, op.cit., p.126 also R. E. Lonney, *Economic Origins*, p.140.

35. H. Razavi and F. Vakil, op.cit., p. 94.

36. For evidence see K. Mofid, op. cit.

37. R. E. Looney, *Economic Origins*, op.cit., p. 129.

38. H. Razavi and F. Vakil, op.cit., p. 84.

39. See further R. Graham, op.cit., p. 88.

40. R. E. Looney, *Iran at the End of the Century*, p. 36. Also see H. Razavi and F. Vakil, op.cit., pp. 85-86.

41. H. Katouzian, *The Political Economy of Iran*, 1926-1979, (The Macmillan Press Ltd., 1981) pp. 304-305.

42. Ibid., p. 307-308.

43. See further Ibid., pp. 308.

44. K. Mofid, op.cit., p.172.

45. H. Singer and J. A. Ansani, *Rich ansd Poor Countries* (George Allen and Unwin Publications Ltd., London, 1982), Third edition, pp. 50-51.

46. K. Mofid, op.cit., p.123.

47. Ibid., p.175.

48 F. Halliday, *Iran: Dictatorship and Development*, (Penguin, Middlesex, England, 1979), p. 286.

49. See further K. Mofid, op.cit., p.176.

3. SHI'I ISLAMIC ECONOMICS

The 1979 Iranian revolution overthrew the monarchy and after some turmoil replaced it with an Islamic Republic. The revolution caused severe disruption and extensive changes in the structure of the Iranian economy. The Shi'i revolutionaries who seized power, had their own ideological baggage for transforming society politically, socially and economically. The direction of this transformation was suggested in advance in the literature on Islamic Economics and writings concerned with economic systems, values, goals and policies of an Islamic society.

After the revolution, as a result of the ideology, internal disorder, revolutionary fervour of the people and the pressure from the militant clerics, many developments in respect of the economy occured. Measures were taken to efface the planning machinery and the economic activities of the old regime. The moral dimension of economic activities took precedence over its material dimension. The Islamic government adopted measures to spread economic opportunities in favour of the poor in an effort to improve their lot, though these had only limited impact.

More significantly, the government took over large sectors of the economy through nationalisation and expropriation, including banking, insurance, major industries, large-scale agriculture and construction, and an important part of foreign trade. In addition, it also involved itself with the domestic distribution of goods. As a result, the economic role of the state increased with all the accompanying problems of a deteriorating economy, started towards the end of the Shah's rule and expedited by the revolution and the war with Iraq. Below, we will attempt to:

- Study analytically the Islamic concept of economics and contemporary economic thought, especially those of lay and clerical Shi'i figures that continue to be influential on Iranian clerics seeking justification for Islamic economic policies and state intervention in the economy.
- Briefly compare the Islamic doctrinal disputes and disagreements of the leading Shi'i figures on economic matters.

3.1 The Totality of Islam

Brief remarks about the Islamic religion may serve as background to the topics under discussion. Islam, from a fundamentalist point of view, is not merely a religion in the common meaning of the word, confining itself to the private life of man. It is perceived as a complete way of life, catering for all the fields of human existence. Islamic guidance through the Qur'an supplemented by the Sunnat (way) and Hadiths (traditions) permeates all walks of life - individual and social, material and moral, economic and political, legal and cultural, national and international. 1

The purpose of human existence in Islam is to serve God, both inwardly and outwardly. That is, inwardly acknowledging God and submitting to his supremacy and will, and outwardly complying with God's teachings pertaining to ritual and non-ritual activities. Divine ritual guidance is to be accepted and taken at face value and leaves little room for choice or modification. This covers the observance of the sacrosanct 'Five Pillars' of Islam which are the affirmation of the faith, prayer, fasting, alms giving and pilgrimage to Mecca, called the Haj. The non-ritual devine guidance covers the domestic, socials, political, judicial and economic areas of human activities.

The purpose of Islamic guidance is to provide man with a range of choices to satisfy his physical and psychological needs, through progressive processes. In the particular area of economics, this is to be achieved with a set of basic values that define the area of permissible economic activities with general guidelines, injunctions and the laws (Sharia or Fiqh). The economic values are not to be violated and within the set limits, man is free and even urged to use his intellectual and physical endowments for the betterment of his life and that of his society. 2

In brief, Islam is a total and unified way of life, both religious and secular. It is a spiritual and human totality.

3.2 The Islamic Concept of Economics

The Islamic concept of economics is closely related to and is part of the Islamic concept of life. It is a framework for motivated but free human action which must respect specific ordananances pertaining to economic life and take into account the spiritual and material needs of the individual and his society in a balanced and harmonised way.

One of the relevant values that delineates the economic framework prescribed in Islam is complete commitment to God, the creator and provider of all ecological resources. Wealth is a favour from God, which should be sensibly treated, not abused, destroyed or wasted, or laid idle. 3

In Islam, the economic pursuits are not independent of the spiritual objectives and they should not be separated from the religious content and become purely materialistic. Emphasising this issue and the idea of value judgement in economics, in the words of a leading contemporary Shi'i cleric, "If man is taken to be an instrument of production and distribution, and he exists solely to satisfy needs and attain food and shelter - totally preoccupied with satisfying these needs - only then can there exist, independent from man, a place for imaginary theories of economics and their application." 4

3.3 Nonscarcity

According to Islamic beliefs, resources are given in abundance and scarcity is caused by human limitation. The economic problem, in the Islamic cultural milieu, is not scarcity of commodities, nor lack of efficient organisation of the means and sources of production and distribution, rather the problem lies with human greed. 5

Man is encouraged to develop greater knowledge and skills, and should endeavour to explore, discover and exploit the resources in moderation for his own best interest. God could have made all our needs easily accessible in unlimited abundance, but without the economic challenges man would be idle, dull and given to criminality. 6

Some of the Qur'anic 'A'yehs' in respect of resources are as below:-

"Lo! We have created everything by measure."7 "And if God were to enlarge the provision for his servants they would surely rebel in the earth, but he sends down by measure as he wills. Lo! He is informed, a sear of his bondmen".8

Given the abundance of resources, Islam attributes scarcity to social rather than physical factors. The remedy to scarcity is through eliminating human greed and elevating the human soul, calling for satisfaction of human wants in moderation, social justice and mutual responsibilities.

However, in Shi'i Islamic Economics, the role of economics and the call for social justice is seen in a different light. Economics, as defined by Bani Sadr is to challenge the social factors causing scarcity and regulate the activities of production, distribution and consumption in order to bring about human freedom from the fusion of power. 9

In this way, Islamic economics rejects classical and Marxist economics, both of which are based on the premise of scarcity of physical resources.

3.4 The Theoretical Structure

Scarcity forces upon most communities the necessity of making choices. That is, how to allocate scarce resources to the production of various goods and services to satisfy people, and how to distribute these goods and services among them. To overcome these problems a society has to choose ways and means of regulating its economic life through what is known as the economic system.

Shi'i Islamic economics claims to have an economic system within the framework of an Islamic life, but to describe, define and develop such a system, there ought to be a series of theoretical constructs describing and predicting the outcome of the system. Shi'i Islamic economics lacks a framework in respect of theory, method, sources, historical experience and current practice. In fact it claims not to be a science of existing reality but an ideology and a universal vision which would establish a completely different framework for economic activity and social relations. In the words of a contemporary Shi'i faqih (jurist) and leading writer of Shi'i political economy, "Islamic economics is not a science of political economy. It is a revolution [a revolutionary ideology] for changing the corrupt reality." In fact, there is no major past or present example of Shi'i Islamic political economy. As H. Katouzian states, this is sometimes used as an explanation of why a science of Shi'i Islamic economics does not exist. Ayatollah S.M.B. Sadr explains:

"Islamic economics has not yet been applied or experienced in the real world, therefore Muslim scholars have no contemporary experience of Islamic economic."11 "It will be impossible for Islamic economics to reveal itself in its true sense unless it is applied to the real world, passes through all its vicissitudes and systematically studies all the events and experiences which it comes across." 12

As for the lack of general economic theory based on Islamic philosophy, some attempts have been made in recent years by a few traditional Muslim scholars and Western-educated Muslim economists, with no satisfactory results yet. Rather there has been merely the modification of western economic logic and methods in order to Islamise western economic theory by introducing a few out of context verses from the Qur'an and quotations from the Hadith. These scholars,while rejecting Marxism analysis on the pretext that it is Godless, nevertheless showed respect for capitialistic analysis on the grounds of being at least monothestic in its world view. Nevertheless it needs to be humanised and Islamised. It is this thinking that has diverted the attention of Muslim scholars from appropiate solutions to economic problems of Muslim societies.[13]

3.5 Islam, Socialism and capitalism

Islam has some affinities with both socialism and capitalism but it departs from each in certain basic ingredients if its own. In Islam, people are created equal and no one may claim inherent merit over another, though they are created with different capacities and diverse capabilities and talents. Consequently people are bound to attain different degrees of success in material awards and earnings. Islam does not approve of a completly equality in the distribution of wealth and it is the man's duty to accept his fortune, not to despair or to be resentful, although he should struggle as hard as he can for his best interest. [14]

This description resembles a free-market system, but according to Abdul-Rauf the individual's possessiveness and his concern for satisfying personal needs have to harmonise with obligation to society. [15]

The Islamic welfare economy is not based upon increasing the aggregate welfare of the community througth encouragement of the individual to maximise his or her own interests and to be indiffrent to the interests of others. Instead it is based upon the bond of universal brotherhood in which the individual, in seeking to benefit himself, avoids malevolence towards another. Every Muslim is obligated to pay the prescribed alms to help the poorer section of society. Usury and earning without effort is prohibited. [16]

This new description may sound like a socialist system. By combining this description with the one mentioned above resembling the feature of a free market, we may be inclined to believe that Islam offers an economic system similiar to that of the mixed economies in which elements of a free market system and socialism interact to bring about a system more equitable than capitalism and more efficient than socialsm. However, it is not possible to arrive at an answer so easily. Islamic principles with respect of scarcity, property, ownership,production,distribution,trade and its strong concept of social justice based on divine revelation, do not accord with those of contemporary economics in the West. [17]

Shia Islam refutes the systems of economic thought prevelant in world at large especially that of Marxism. Leading Shi'i clerics such as S.M.B. Sadr and

S.M.Taleqani, have devoted part of their economic works describing and refuting both capitlisiam and Marxism, espcially the latter. 18 Taleqani depicted capitialism as grasping and exploitative. He described it as a system under which "the capitialist are free to suck the workers dry and then cast aside their empty shells without taking any responsibilty". 19 Marxism apart from being Godless,was described as a system "basing itself on a revolutionary class ideology, is inseparable from class dominance and the denial of indivdual freedom and independence". 20

However, the greater pre-occupation in Shi'i economic works is with the refutation of Marxism, with reference to the superiority of the Islamic approach to economic questions.This is an attempt to depict Islam as a religion committed to social justice, the equitable distribution of wealth and the cause of the deprived classes. Thus Islam is used as an instrument for social and economic reform and it is suggesting to the younger generations attracted to socialism or Marxism, that Islam could serve as a vehicle for social transformation.

As explained by H.Katouzian, the political oppositions in the domain of Shi'ism, to which many Shi'i religious leaders and intellectuals have belonged, oppose their social system, which is usually believed (though wrongly) to be capitialist.Hence Marxism appears to be the main alternative, and Shi'i Islamic writers develop a dual attitude towards it. On the one hand, they argue their own case through refutation of Marxism and on the other hand they try to interpret Islamic laws and traditions so they seem less revolutionary than Marxist ideals. In fact, even the attacks on capitialist economics, which is not regarded as a serious rival, seem to be part of the attempt to prove to Marxists that Shi'ism is not a capitalist system. 21

3.6 Ownership

In Islam, the absolute ownership of everything belongs to God alone. Man is God's vicegerent on earth and he must follow the command and the will of the divine owner.

Based on this principle, which is derived from the Qur'anic text and echoed in the world of Islam in respect of ownership, man is neither the abolute owner, nor the possessor of the earth and its resources.

As stated by S.M.Taleqani, man does not have the right to possess as much as he desires or to obtain the material wealth in any way he may choose.God is the sole creator and owner, therefore the ownership is limited, borrowed, conditional and entrusted.As vicegerency belongs to all people, therefore each individual is a guardian of the public trust and his ownership should be limited for public welfare. 22

According to Bani Sadr, the principle of sole ownership has two aspects, namely prescriptive (ijabi) and preventive (salbi). The prescriptive aspect is that in benefitting from what belongs to God, all men are equal, and there can be no discrimination among them. As a result, the relationship which had existed between God and all men in the early days of free human living(that is before the emergence of power centres) will once again emerge. The preventive aspect is explicit, namely that everything is God's and no one else's. No authority whether governmental, religious or scientific, may use ownership as a basis of power and become an idol. 23 The only known basis in Islam for property ownership is (human) labour. That is, Islam only recognises relative (not absolute) property ownership on the basis of labour and its fruits. 24

While Sadr and Taleqani both describe labour in general as the sole foundation of wealth in Islam, yet Sadr's view regarding prescriptive and preventive aspects of ownership differs significantly from those of Bani Sadr. 25 According to Sadr, the real meaning of preventive aspect of the above principles is in its "negation of personal ownership and private rights concerning those natural riches and raw materials which are acquired without use of the labour". 26 However by application of human labour to natural resources, the right of ownership can be acquired especially if this is carried out with the permission of an Islamic government. In fact this is what Sadr then describes as the prescriptive aspect of the principle. 27

In brief, Bani Sadr, Sadr and Taleqani all emphasise that private ownership of wealth and property in Islam is relative as God owns whatsoever is in the earth and in the heavens. 28 Bani Sadr sees this as perpetual until the Day of Judgement. Sadr qualifies ownership as not an intrinsic right but that of God's vicegerency, so that man can deal with affairs concerning the earth's wealth. Taleqani says the power of possession is that of God, and emphasises ownership as being limited, due to the limitation of human power and authority.

3.7 Classification of Property Ownership

According to Sadr Islam provides three kinds of ownership namely state, public and private ownership.The diffrences between state and public ownership is that "although from the social point of view, they are similiar, in one of them, i.e.

public ownership, the owner is the people, and in the other, it is the authority and the apparatus which has been commissioned by God to take charge of the people's affairs." 30

As explained by H.Katouzian, in practice there are two aspects to this distinction between public and state property , i.e. descriptive and functional. The descriptive difference is laid down by Islamic laws and traditions, for example, virgin lands and mines belongs to the state, whereas the public revenues from land cultivation are common property or wealth. The functional difference is that while public wealth must be spent only on social services, state property and income may be used directly by the state or assigned to needy people for investment in productive activites. However, it is difficult to make much operational sense out of these distinctions which may lose their meaning if applied to any contemporary society. In fact they are entirely due to political and theological classifications at the time of the Islamic conquest.31

According to Sadr, private ownership is a 'priority right of use', a special relationship between the individual and property which denies others the use of it. As for land, the right of use is conditional. For example, cultivation brings right to ownership, but such a right is limited to the length and duration of cultivation and under a variety of circumstances, the right could be withdrawn. "Private ownership of land is not absolute and is limited in duration, in the sense that if the owner fails to carry out his responsibilities in developing and cultivating the land, his rights lapse and he may no longer dispose of the land; for this action diminishes society's capacity to produce, and results in the deprivation of others."32

Moreover, all uncultivated land (mavat), especially those close to habitable places with potential and value for cultivation belong to God and then to the Prophet and the Imam. With the Imam's permission, (as he is not present, the permission of the leader of the Shi'i Islamic state) provided the land is cultivated, a limited right of ownership for the cultivator remains and is conditional as explained above. 33

As indicated before, private ownership is conditional and is defined in very narrow terms, as a result private property, income and wealth are not absolute, that is, they can not be held and disposed of with complete freedom. For example, tax on both capital and income must be paid (Zekat and Khoms). The Islamic ban on hoarding, waste and overconsumption are to be taken literally. Violation of these principles or the misuse of wealth could also lead to a loss of ownership rights. Individual property could be limited in order to maintain social equilibrium and to ensure each member of the community a decent standard of living.

As for inheritance and succession, Sadr and Bani Sadr both emphasise that a person cannot dispose of more than one third of his property by testamentory directions, the rest of the inheritance must be divided among prescribed heirs in specified shares. In fact Sadr claims that the free will for one third of the estate is an 'expedient', which it is advisable not to practice. 34 According to Bani Sadr, with the distribution of inheritance, however considerable it may be, the concentration of wealth througth inheritance will be avoided.35 However, he does not explain the share of female heirs, which is generally one half of that of a male in the same degree.

Though the share of inheritance may be a factor inhibiting the concentration of private wealth and property, it does not leave a permitted mechanism for the perpetuation of wealth, property and associated privileges.

3.8 Labour, Wage and Profit

As mentioned earlier, both Sadr and Bani Sadr believe that the whole produce of labour belongs to the labourer alone. In connection with this abstract principle, Sadr attacks capitalist economics for putting the means of production at the same level as labour and claiming a share of the product for it too. 36 However, it should be noted that capitalist economics does not put the means of prodution but their owners at the same level as labour and as private property is legitimate, therefore it allocates a share of the output or income to owners. 37

Sadr and Bani Sadr both point out that the means of production are a kind of 'embodied labour', the use of which results in their depreciation. Sadr states "productive labour can take the means of production from someone else and in return pay a reward (ojrat) consistent with its services to its owner. Likewise land can be rented out against a certain sum and used for productive purposes". 38

Considering the above, there seems to be little diffrence between a capitalist economics and the viewpoints of Sadr and Bani Sadr in these respects. Capitalist economics describes the return to the factors of production as rewards for their services and it makes no difference whether the whole produce or income is owned by the worker,who is then required to pay a share of it for the services of private property and the rest of output (or income) is paid to the worker. 39

As for profit, according to Sadr, it is justified for a merchant on the grounds of the costs (including his own labour time) incurred by him in his trade. But it is common that a part of the merchant's income is a pure return on the use of his capital. If this was not to be allowed, then consistency would require the Islamic society to compensate the trader whenever he makes a net loss, similar to the manager of a state firm who would receive his salary even if the firm loses in a given year. Alternatively, if a merchant was restricted to earn no more than the value of his financial and labour costs, then nothing would prevent the traders from transferring their capital to the ownership of urban or rural property and enjoy its rent (as is clear from Sadr's discussion) as private property and income are allowed in Shi'i Islamic economics. 40

3.9 Riba, Interest and Money

Riba is explicitly prohibited in the Qur'an and Islamic sects,be they Shia or Sunni, seem to be on their surest ground on the subject of riba. The word in Arabic means to grow or to inflate and it refers to those transactions in which capital automatically increases without any productive labour. Taleqani states that "because usurious transactions at the dawn of Islam were strictly in the form of money lending, it is assumed that the prohibition of usury only applies to revenue gained through money lending . The traditionalists in Islam who were also the interpreters of the Qur'an extended prohibition of usury to some other transactions. Examples of such transactions are those in which a certain amount of a specific measurable commodity is loaned to be returned with an additional amount." 41

Therefore usury is not limited to lending money in exchange of money with interest. Rather, it applies to any prepaid transaction (Salafi) either of money or goods. Both Sadr and Bani Sadr emphsise the prohibition of riba and assume that it is the same as modern interest charged on financial loans.This however, is debatable. It has been argued that excessive interest is usually believed to consitute usury but the argument makes little sense. Economically, excessive rates of interest at a given time or place may be regarded as normal at another, and theologically the prohibition is total and categorical and leaves no room for argument about specific rates.

Alternatively, it could be argued that in the social and historical context of prohibition, riba refers to charges paid for borrowing money to finance goods for consumption rather than trade and prodution. Though this is a more persuasive argument, it is not totally convincing for those who see riba and interest as indentical. 42

Writers on Islamic law and Islamic economics have worked out a great body of literature on usury, based on economic conditions as they existed at time of the rise of Islam. The majority of these writers including Shi'is agree that prohibition of riba means that the borrower must return to the lender the exact equivalent of the loan when it falls due. On the basis of this meaning, in today's world, the law of riba is not applicabable, especially to cases where inflation results in a fall in the purchasing power of money.

However, certain modern scholars without hedging round the issue, disagree with the traditional definition of riba. Yusef Ali from Pakistan has this to say about the matter: "The definition I would accept would be: Undue profit made, not in the way of legitimate trade, out of loans of gold and silver, and necessary articles of food, such as wheat, barley, dates and salt. My definition would include profiteering of all kinds, but exclude economic credit, the creature of modern banking and finance." 43

As for money, both Sadr and Bani Sadr claim that holding excessive money is prohibited by Shi'i tradition. Sadr, on explaining the functions of money, (a medium of exchange, a measure of value) describes its secondary role as a means of storing values but adds that holding excessive money leads to disequilibrium in supply and demand of goods. "The recent role of money as a means of storing and saving [idle cash] , which is encouraged in capitalist economics, is a dangerous factor, as this will cause disequilibrium in total supply and demand of goods, whereas in the era of direct exchange of goods [barter], there existed an equilibrium, as producer either produced merely for a self consumption, or in exchange for other goods, again for personal needs." 44

However, after further elaboration, he seems to believe that in all circumstances it is better to spend than save. He also appeals to the moral principles of Islam and cities from the Sixth Shi'i Imam that extra wealth given by God is for spending and not for storing.

Bani Sadr goes further and speaks of limits to wealth and cities from the Imam (presumably the First Shi'i Imam) saying that "it would be impossible for anyone to accumulate more than 20,000 dirhams (silver coins) through permitted activities ". 45 On another occasion he quotes from the Sixth

Shi'i Imam that "no one has ever managed to accumulate 10,000 dirhams by permitted activities " and he adds that one dirham is equal to one toman (ten rials). 46

While the authenticity of the related Traditions is doubtful, they are also contradictory as the earlier tradition puts the limits of wealth at twice the later one. The claim that a dirham is equal to one contemporary toman is doubtful. Because the purchasing power of money (not its nominal value) is the relevant datum, therefore it may have been less in the Sixth Imam's time than in the First Imam's and definitely much less now. Thus the relative significance of the above figures is open to doubt and if any wealth (not income) more than 10,000 or 20,000 tomans were to be forbidden, then most Iranians e.g. traders, civil servants, religious leaders and so on , would have to be described as sinful and corrupt. 47

As for limits of liquid cash, according to Bani Sadr, the First Imam is said to have put the limit at 4000 dirhams, whereas the limit set by the Fifth Imam is to be 2000 dirham. 48

As explained above, the changes in the purchasing power of money are ignored and it is overlooked that with an increase in total wealth, the aggerate stock of money also increases, resulting in higher levels of cash holdings by most members of society. 49

It should be noted that the Qur'an prohibits collecting and storing gold and silver as quoted by Sadr, Bani Sadr and Teleqani. It is directed against hoarding of treasure and not against wealth. As Sadr and Taleqani point out, Islam prohibits the hoarding of cash, the idleness and its withdrawal from the flow of production. 50

However, if Bani Sadr's personal cash limits of 2000 or 4000 dirhams applied to Iran, the people would constantly spend their money (liquid assets) on goods and property (real assets) which would have inflationary consequences, perhaps necessitating state intervention. 51

3.10 Partnership in Investment and Trade

According to Taleqani, capital profiteering, as a major goal in the West, has already underminded and corrupted its institutions, contributing to deprivation of freedom and the exhaustion of the mental and physical resources of the workers, wage earners and others who belong to capitalist society. He states that Islam with its deep rooted spiritual teachings and through its injunctions and laws, secures freedom for workers and wage earners while bridling the greed of the owners of the capital. "Wage earners are free and can earn equal and balanced conditions or share in the profits or in the principle capital. The employer, whether a private capitalist or the state, cannot singly determine the amount of work or the workers' shares in the profit or wages". He adds :Islamic jurisprudence provides this very freedom of action and equality of rights in partnership through ordinances regulating mozaraba, mozara'a, mosaqat, ja'ala and ijarah. 52

3.10.1 Mozaraba

It is a contract between a worker and an investor, whereby the two parties agree to share in the resulting profit and the loss absorbed by the investor's capital. An example of it might be a venture where a person lends his money to another for the purpose of a given business investment without his partnership. Hence the 'sleeping partner', according to a prior contract with the 'active partner' will pay him a mutually agreed share of the profits; but he must bear all the losses if the business fails. This arrangement, known as mozaraba is described by Sadr and Taleqani. In fact Sadr praises its justice and morality : because the 'sleeping partner is not involved in the business (or does not work for it), he has to bear all the losses. 53 However, closer examination of this rule reveals that there is not much that is especially just or moral in it. In spite of the assertion of Taleqani, it is difficult to agree that there exists 'equal and balanced conditions' for wage earners. Firstly if the 'sleeping partner' provides the whole of the capital and 'active partner' purely runs the business, (the only example given by Sadr) then it is equivalent to a owner of capital employing a worker in order to use his capital in a business of his own choice, and pay a share of the firm's proceeds as his wages by mutual consent. However, if the business failed, the capitalist has to bear all the losses without having to pay a wage to the worker.Compare this to a capitalist economy, where the capitalist whether a 'sleeping partner' or a active one, has to pay the wages of workers even if he made a net loss.

Moreover, the wage rates often must be at or above the legally enforced minimum wage and negotiated not by mutual consent between the capitalist and the individual worker, but by collective bargaining, which is likely to increase the workers share in the firms income. In Mozaraba, if a bank as a 'sleeping partner' provides only a part, say 60 per cent of the capital, then the rule must mean that the bank should pay a mutually agreed percentage of the 60 percent share of the profit to the active partner, who fully shares his own 40 per cent share of the loss. Hence the arrangement could be that if the venture is profitable, the bank with 60 per cent of the capital gets 40 per cent of the profit. If however the venture is a loss making one, the bank would be liable for 60 per cent of the loss. This is not more, but less just than similar contracts and institutional relationships in a capitalist economy.

3.10.2 Mozara'a

This is temporary share cropping contract between the owner of a piece of land and the worker. The land owner should provide irrigation, fertilizer and other means as well as seed. Both sides share the crop by mutual consent. According to Sadr, if the land owner does not provide the seed the contract is called Mokhabra.

3.10.3 Other Contracts

Mosaqat is an irrrigation contract similar to Mozara's whereby the worker in such a contract shares in the profit. Ja'ala is a unilateral contract with a promise to the doer of a job, with no time limit specified (e.g. whoever drains this land will share in the profit). Finally Ijarah (of a person) is a contract to carry out a job within a fixed period.

As can be seen, these arrangements discussed by Sadr and Taleqani, for employment and partnership are not confined to trade and other urban activities; they extend to agriculture and production too. The implications of these, especially Mozara'a and Mosaqat are the same as the previous case, therefore it does not call for a separate analysis.

3.11 Economic Role of the Islamic State and the Imam

The Islamic state on Shi'i lines is vested with wide and varied economic powers by Sadr, Bani Sadr and Taleqani. It owns, organises, spends 'public' and 'state' properties and revenues, imposes taxes on the private sector, lends money and property to 'needy people' for them to invest and it can nationalise the private sector.

Sadr has envisioned this major role for the state , partly as an engine for economic development and partly as a means of limiting private enterprise. A state itself would undertake the major industrial and economic projects that in capitalist societies are carried out by private enterprise and large private concentrations of wealth , simply would not exist. Hence Sadr states: "Private capital for the most part will lack the means and power to achieve in commerce and industry a size and strength that threatens the social equilibrium ... therefore private economic activity will remain within reasonable limits ... and will not create class differences. As a result, the creation of large industrial enterprises will fall within the sphere, authority and activity of the government."[54]

Given the wide ranging powers, the mechanism through which programmes of social and economic reforms could be carried out, is the leader of the Shi'i Islamic state. Sadr refers to the leader as 'the Vali-ye Amr' (Guardian of the Cause) while Taleqani and Bani Sadr use the term 'Imam'.

The authority, legitimacy and authenticity of the Shi'i religious leadership is based on and part of the doctrine of the Imamate, that forms the heart of the political theory of the Shi'is. Although historically the Shi'i leadership had no claim to government (as opposed to political participation), following Ayatollah Khomeini's innovative argument in his 'Valayat-e Faqih (the purported authority of the jurisprudent) alternatively titled 'Hokumat-e-Islami' (Islamic government) the claim to rule was emphasised. That is, jurisprudents were given the licence to rule in the Twelfth Imam's place (the Qa'em or Mahdi) during his occultation and shall continue until the realisation of the 'perfect society' which will coincide with the reappearance of Mahdi. [55]

According to Bani Sadr, citing Ali Shariati, after the inception of the first Islamic state, it will take twelve generations to reach the perfect Islamic society, the universal Kingdom of the Twelfth Imam. This is a society in which all divisions, vindictiveness, self seeking, coercion, domination, alienation and inequality disappear from experience: "It is the world of equality and economic oneness [as opposed to division]". [56]

However in 'the period of purgatory' (before the realisation of the perfect society), the Imam has been vested with discretionary power by Sadr, though he cannot tamper with those acts that expressly required or specified such as daily prayer and he can not suspend the Islamic law on inheritance or riba. This is a sphere of primary religious rulings where no flexibility is allowed, however, there are a whole category of actions whose performance is merely recommended or considered neither good nor bad. Here in the 'sphere of discretionary law', the Imam has been given considerable authority and can issue secondary rulings to regulate human affairs. 57

On the basis of this, the Imam can regulate relations between men, society and material resources in keeping with the requirements of the time and changing concepts of human needs.

Taleqani, like Sadr who vested ultimate leadership and the rule of the Islamic state in Imam, states: "the ruler in his executive capacity, just as he controls public resources, exercises complete supervision over production and distribution and manages public and governmental revenues, he is also charged with securing the lives of individuals". 58

Bani Sadr envisages a role for the Imam, but in contrast to Sadr does not emphasise his authority relating to discretionary rulings and guards against the concentration of power in the hands of any authority. He is concerned that the Imamate is not alienated from itself and turned into a coercive state. 59 However he depicts the Imam as the 'continuous repository of the concensus of the community', the administrator of the common property of both present and future generations and the 'executive representative of God'. 60 Bani Sadr remains equivocal in this question and contradicts himself.

3.12 Conclusion

Shi'i Islamic economics lacks a general theoretical framework and an integerated network of proposals for economic action. The proposed economic system by Sadr is more of a value system with generalised moralism which defines the boundaries of the free area of economic activites - at best it is a moral framework for economics. According to Muslims, the Qur'an is God's words revealed to prophet Mohammad by the angel Gabriel. If one is to believe that, there would be little room left to argue that the Qur'an is nothing but a set of a normative statements that is perpectual, timeless and should be taken at face value. However, the time-bound statements which are historically specific and subject to debate are the Hadith and Sunnat. These and Qur'anic verses serve as the main sources and references of Shi'i contemporary writings. There being no theoretical framework, no major historical experience and no systematic method, the writings of Sadr, Bani Sadr and Taleqani on the subject of economics tend to combine abstract norms and values with assertions on what will happen once the Shi'i economic system is put into operation. It is a combination of elements of both idealism and pragmatism. While the idealism in Shi'i Islamic economics tends to ignore or underemphasise major problems without a clear programme for their aleviation, the element of pragmatism tends to ignore doctrinal difficulties by means of ad hoc interpretation. For example, the discretionary power of the Imam on matters which are neither good nor bad (neutral) is unclear especially if such rulings contradict the precedence set by the prophet and the twelve Sinless Shi'i Imams. In fact Khomeini used his power to override even the percepts of the Qur'an. "Our government is a branch of Mohammads absolute vice-regency ... It takes precendence over all religious practices such as prayer, fasting or Haj ... I openly say that government can stop any religious law if it feels it is correct to do so... The government can unilaterally abrogate its contracts with and obligations towards the public whenever such contracts are against the country and Islam ... " 61

Shi'i Islamic economics is part of the growing effort to demonstrate that Shi'i Islam contains all the ideas necessary to build a just polity in reaction against the move of many intellectuals towards western liberal or communist ideology. As explained by Khomeini, the Muslim world is confronted with a crisis of fundamental identity, a persuasvive alienation in which is rooted the Muslim world's apparent political, military, scientific, and moral debilitation. 62

Shi'i Islamic Economics as part of its effort tries to portray Islam as a third road between capitalism and socialism, though capitalist economics is not a major rival. The greater preoccupation is with Marxism. It is refuted to be Godless, usurps the individual's liberty, denies him the chance to exercise his initiative, kills his incentive to work hard for personal gain and deprives him of much of his dignity.

Shi'i economics combines traditional Islamic doctrines and practices with elements of modern radical ideologies. It permits private property in trade and agriculture but unlike the laissez-faire capitalism, property does not belong to individuals but to God and the individual rights are protected as usufruct rights. It identifies riba with interest though it is debatable in theory and may be inconsistent with other Islamic principles in practice. It emphasises limits to cash holdings, meaning that personal wealth above certain limits must be held in non-monetary forms such as property and consumption goods, while overlooking the fact that a legal limit to cash holding could be highly inflationary if economic resources are fully utilised, or if there existed supply shortages and technological constraints.There are clear signs that in the proposed Shi'i economic system, the economic activity of the private sector will remain within reasonable limits and the state will undertake major industrial and economic projects.

Because of the nature of the Islamic state, the Imam (the leader of Shi'i Islamic state) and his government will be the 'executive representative of God on earth'. Shi'i Islamic economics has a multitude of unsolved problems both of a doctrinal and a practical nature. In the words of H. Katouzian "Ideologies and social programmes can only hope to achieve their declared objectives so long as the social and economic base does not run against them. In the case of Iran, no ideology can succeed in realising its social and moral values unless its application begins by an attack on the foundation of Iranian despotism". 63

References

1. G. H. Jansen, *Militant Islam* (Pan Books Ltd, London , 1979), p.17.
2. M. Abdul-Rauf, *The Islamic Doctrine of Economics and Contemporary Economic Thought* (American Enterprise Institute, Washington,1979), pp. 3-4.
3. Ibid., p.4.
4. S.M.Taleqani, *Islam and Ownership* (Mazda Publishers, Kentucky, USA,1983), p.18.
5. M. Abdul-Rauf, op.cit., p.18.
6 .Ibid., p.4.
7. *The Qur'an,* Text and Explanatory Translation by Marmaduke Pickthall (Salehi Publications, Tehran, Iran), 54:59.
8. Ibid., 42:27.
9. A. H. Bani Sadr, *Eqtesad-e Towhidi* (The Economics of Divine Harmony), 1357 (1978), pp.4-5.
10. S.M.B. Sadr, *Iqtisaduna* (Persian trans, Eqtesad-e Ma), Entesharat-e Eslami (Islamic Press), (Tehran, vol.1) , p.367. see further S.M.B.Sadr, Eqtesad-e Ma, vol.2, pp.15-27. Also see H. Katouzian, Shi'ism and Islamic Economics: Sadr and Bani Sadr, in Nikkie R. Keddie, ed., *Religion and Politics in Iran* (New Haven, Yale Universty Press, 1983), pp. 145-46.
11. S.M.B. Sadr, *Eqtesad-e Ma vol.1,* p.369.
12. See further Ibid., p.371.
13. A. Jabbari, in S. M. Taleqani, *Islam and Ownership,* op.cit., pp. XVI-XVII.
14. M. Zafrulla Khan, *Islam: Its Meaning for Modem Man* (Routhledge and Kegan Paul, London, 1980), p.151.
15. M. Abdul-Rauf, op.cit., p.5.
16. Ibid., p.7.
17. For further reading see S. M. Taleqani, *Society and Economics in Islam* (Mizan Press, Berkeley, USA, 1982), pp. 25-59.
18. See S.M.B. Sadr, op.cit., vol.1 and S. M. Taleqani, *Islam and Ownership,* pp. 34-72.
19. S. M. Taleqani, *Society and Economicis in Islam,* op.cit., p.46.
20. See further Ibid., p.48.
21. H. Katouzian, op.cit., p.147
22. S. M.Taleqani, *Islam and Ownership,* op.cit., pp. 88-91.
23. A. H. Bani Sadr, op.cit., p.114.

24. Ibid., p.117.

25. S. M. Taleqani, *Society and Economics in Islam,* op.cit., p.28.

26. S.M.B. Sadr, op.cit., vol.2, p.134.

27. Ibid., p.137.

28. *The Qur'an* , 4:126.

29. S.M.B. Sadr, op.cit., vol.2, p.31.

30. Ibid., pp. 60-61, p.83.

31. H. Katouzian, op.cit., p.151. Also see S. M. Taleqani, I*slam and Ownership,* pp. 92-93.

32. S.M.B. Sadr, op.cit., vol. 2, p.98.

33. S. M. Taleqani, *Islam and Ownership,* op.cit., p.92.

34. Ibid., pp. 177-79.

35. A. H. Bani Sadr , op.cit., p.151.

36. S.M.B. Sadr, op.cit., vol.2, p.217.

37. H. Katouzian, op.cit., p.152.

38. S.M.B. Sadr, op.cit., vol.2, p.204, p.217.

39. H. Katouzian, op.cit., p.153.

40. Ibid., pp. 153-54.

41. S.M.Taleqani, *Islam and Ownership,* op.cit., p.107.

42. H. Katouzian, op.cit., pp. 154-55.

43. M. Nazir Ali, *Islam: A Christian Perspective* (Paternoster Press, Exeter, UK, 1983), p.132.

44. S.M.B. Sadr, op.cit., vol 2, pp. 256-57, p.258.

45. A. H. Bani Sadr, op.cit., p.132.

46. A. H. Bani Sadr, op.cit., p.207.

47.See further H. Katouzian, op.cit., p.158.

48. A. H. Bani Sadr, op.cit., p.203.

49. H. Katouzian, op.cit., p.158.

50. S.M.B. Sadr, op.cit., vol.2, p.254. Also see S. M. Taleqani, *Islam and Ownership*, op.cit., p.108.

51. H. Katouzian, op.cit., p.159.

52. S. M. Taleqani, *Islam and Ownership,* op.cit., p.144.

53. S.M.B. Sadr, op.cit., vol. 2, p.p 207-208, pp. 209 -216. Also see S. M.Taleqani. *Islam and Ownership*, op.cit., p.156.

54. S.M.B. Sadr, op.cit., vol.2, p.310.

55. For further reading see Y. Armajani and T. M. Ricks, *Middle East Past and*

Present, op.cit., pp. 80-83 and Gregory Rose, The Thought of Khomeini in Nikkie R. Keddie, ed. *Religion and Politics in Iran,* op.cit., p.159.

56. See A. H. Bani Sadr, op.cit., p.257 and p.319. Also see H. Katouzian, op.cit., p.159.

57. All human acts according to five fold division are as religiously required, recommended, indifferent, reprehensible or prohibited. The Imam on the basis of secondary ruling can prohibit of require any act or measure not expressly required or prohibited in Islam. Therefore any time he prohibits an indifferent act, then it is prohibited and any time he recommends its implementation it is required. See S.M.B. Sadr, op.cit., vol.2, p.316.

58. S.M. Taleqani, I*slam and Ownership*, op.cit., p.153.

59. A.H. Bani Sadr, op.cit., p.264.

60. Ibid., p.263.

61. *The Economist,* Jan 16,1988, p.55.

62. Gregory Rose,The Thought of Khomeini, *Religion and Politics in Iran*, op.cit., p.167.

63. H. Katouzian, op.cit., p.165.

4.THE POST REVOLUTIONARY ECONOMY

4.1 Introduction

The fact that the Islamic regime in Iran is facing serious economic problems can hardly be disputed. Iran's economy which had stagnated during the last few years of the Pahlavi rule, was almost out of control from 1975. The upheaval of the revolutionary movement of 1977 - 1979 exacerbated the longer standing economic problems. This resulted in structural disintegration following the ousting of the Shah.

Having seized power, the revolutionaries were confronted with staggering economic problems. Far-reaching solutions were required to reverse the course of economic chaos, but divisions and the struggle for power in the predominantly Islamic movement prevented the shaping of any coherent economic policy. All the economic measures that were taken from Bazargan's provisional government onwards, were aimed to stave off the complete collapse of the economy. Indeed Bazargan's main task as defined by the decree of appointment drawn up by the Revolutionary Council and signed by Khomeini, was to get the government administration and the economy, paralysed by a year of strikes and disorder, moving again in order to prepare the ground for the Islamic Republic.

However, Bazargan's efforts and vision of drawing up long term plans for changes in the government administration and the economy were challenged from several directions: the fervour of revolution in the street; by a rapidly developing 'parallel government' of revolutionary committees, courts and guards backed by the secret Revolutionary Council; and by an abundance of political parties and movements advocating various radical policies.

Despite the desire and imperative need for sweeping changes in the economy of the country, neither Bazargan nor Bani Sadr were able to implement their own economic programmes, mainly because of the political chaos and divisions within the regime itself. Furthermore, Iran was haunted by the spirit of the Islamic tradition, including the values and principles on economic matters. The interpretation of these principles and the application of Islamic economics on Shi'i lines was widely disputed. The writings of Bani Sadr, Taleqani, Sadr and similar works were influential on clerics seeking justification for economic measures. For instance they played a significant role in undercutting the legitimacy of private property. However, these writings left a host of complex and unsolved problems, both of a doctrinal and a practical nature as discussed in the previous chapter. The doctrinal disputes of clerics in the Islamic Republic on various economic matters such as land, has manifested itself in a set of debilitating failures. These include the inability of the Islamic Republic to agree over basic economic guidelines for sectoral priority or policy linking sectoral activity together. The leadership suffered from an overwhelming lack of experience to temper the dominance of religious dogmatism with a sense of the practical. As a result, the Islamic government could not easily decide which development path to follow, as there was much internal conflict with its interpretation of Islam. It strongly refuted a 'Godless' Marxist type of economics but it did not tolerate the speculation inherent in the free market approach, while readaptation of the Shah's policy was unacceptable.

All paths seemed to promise elements of a solution but the Islamic government had not yet made a definite choice. Apparantly, the government was committed to a development path on the basis of Islamic principles with all the accompanying unsolved problems. The delay and hesitation compounded with internal rift and continuing struggle for political power and the war had catastrophic effects on Iran's economy. Indeed the causes of many problems are not connected with the conflict between Iran and Iraq as is often asserted.

4.2 The Immediate Economic Decline (1977-1979)

During the months leading to the fall of the Shah, despite the fears about the ambiguity of the nature of an Islamic government, there was considerable speculation about what Islam would mean for the economy. Ayatollah Shariatmadari tried to lessen fears in January 1979 by saying that not all interest was usury and the international banks with their interest rates would be welcome by the future government. But Bani Sadr, then an aide to Khomeini, issued an economic programme that called for radical measure by abolishing all interest, nationalising banks, cancelling all international debts owed by Iran, establishing worker's committees to run all public enterprises, (eg the banks, the oil industry, the media), lowering oil production, raising oil prices and introducing high taxes on imported industrial goods to stimulate domestic industry.[1]

The period of the revolutionary movement of 1977-1979 was characterised by conflicting currents and growing economic disruption that went hand in hand with demonstrations, riots and political agitation by secular and religious groups. Central to the deterioration of the country's economy was the strike by oil workers, which led to a drop in oil production from 6 million barrels per day in January 1978 to a mere 250,000 barrels per day one year later.[2] The chain effect of this on imports, exports, government revenues and industry were profound and longstanding. Although the intelligentsia sparked off the revolution, its shock troops were made up mainly from the industrial working class in Tehran and other major cities, comprising both employed and unemployed workers inspired by a profound religious fervour - the form of revolution and its pacing owed much to the tradition of Shi'i religious protest, while the causes and its timing were economic, socio-political, cultural and historical.

As a result of this changed attitude, the workforce acquired a new sense of political involvement and independence. In practice, this meant a considerable breakdown of work discipline and the alienation of technical and managerial staff. By January 1979, various worker's committees were set up in the oil fields, at airports, on the shop floor, in firms, in agricultural co-operatives and at many other places.

Perhaps one of the most interesting expressions of Islamic economics during the revolution was the co-operative organisations set up to support the strikes as well as feeding the poor and organising relief. In cities, particularly Tehran, bazaaris and the religious network developed an organisalton to subsidise food and support people who had no income, either because they were impoverished or on strike. Most important, the critical stike by oil workers was supported by such nationwide co-operative organisalton, fuelled by revolutionary enthusiasm.

By February 1979 when Bazargan was charged to lead the provisional government, the treasury was nearly empty. There was an equivalent of $700 million remaining in the government's account with the Central Bank, and the $47 billion budget for 1979/1980, drawn up before the fall of the Shah, projected a deficit of over $15 billion.[3]

As a result of the economic chaos, the banking system was near collapse. Depositors and capitalists withdrew funds from the banks on a massive scale, mainly to transfer to accounts abroad. The flight of capital had begun in the period leading up to the revolution, and continued after the overthrow of the

Shah. Within five months from September 1978 until January 1979, the outflow of bank deposits reach $4 billion. Banks resorted to rationing withdrawals among their customers and were kept afloat only by the injection of credit from the Central Bank. The banks that had extended substantial loans to contractors, industrialists, businessmen and major shareholders of industries who had already left Iran, had little expectation of these loans being repaid.

Revolutionary upheaval left many projects in the private and public sector half completed. Lay-offs and closedowns left 2.5 million men and women out of work,nearly one million of them construciton workers, employed by private contractors involved in government projects. Many of the contractors not paid by the government were not paying their workers.[4] In industry, a chaotic situation prevailed, exacerbated by the flight of capital and expertise. Those managers and owners who stayed behind were under seige by workers' committees, if not arrested or jailed.

As for agricultural land, it became the focus of bitter confrontation. The land seizure was started by peasants, the provisional government, the Revolutionary Council and its organisations and the landlords. While some clerics protested against land seizure, the Mojahedin interpretation of Qur'anic verses on the spoils of war (Sureh Anfal) prevailed. This gave support for collective property in pursuit of a classless society (jamma'e towhidi). It was applied to mines, forests and other national resources. Yet the Mojahedin were condemned as Marxists illegitimately manipulating Islamic principles.[5]

The immediate result of the revolution was a further decline of the economy, the collapse of industrial output and the fall in agricultural production. This meant shortfalls in consumption necessitating further imports and ever more reliance on oil exports to pay for them.

In the face of staggering economic problems in all sectors, Bazargan's government attempted to restore order in the factories and agricultural sector, start up production, reduce unemployment and prevent the flight of capital. It also, as a revolutionary government, had to respond to the expectations of the masses in overturning the old order in the interests of the underprivileged by the redistribution of wealth.

However, out of the conflicting cross currents of the revolution, emerged a series of officially sanctioned measures and unauthorised actions, of decrees issued by the government and the revolutionary Council, and of ad hoc orders issued by revolutionary courts and judges that eventually saw the transfer of a sizeable part of the private sector to the control of the state.[6]

4.3 AGRICULTURE

On the eve of the revolution with the breakdown of law and order, land seizures began to take place in the countryside. The reasons were economic, political and doctrinal. Nearly half of the people lived off the land, many near subsistence level. Agricultural land also remained an important source of wealth.

The land question exercised a powerful hold on Islamic fundamentalists and the political movements of the centre and the left. It also featured prominently in Islamic jurisprudence. There existed a large body of laws appertaining to land ownership, land taxes, share-cropping and so on. This meant that any policy on land involved intimate matters of Islamic law.

During the first year of the revolution, agricultural land became the scene of bitter struggle and violent confrontation. The seizures were initiated by revolutionary organisations, landlords, the large majority of subsistence-level farmers and a mass of landless rural workers. During this period, governmental organisations acted with little consistency as no clear direction emerged from Tehran. Khomeini himself remained silent on the land issue and Premier Bazargan emphasized the need to restore order. Finally in late 1979 the provisional government secured the approval of the Revolutionary Council for a Law of the Transfer and Revival of Land, which was limited in scope and only endorsed the distribution of land already owned by the government or which had been confiscated from members of the former regime.[7]

4.3.1 Land Reform Policies

Radical land distribution policies and debates emerged within days of Bazargan's resignation. The Revolutionary Council considered a new land reform measure which called for a sweeping land distribution. The advocates of radical economic policies sought legal justification for this measure by referring to the articles of the Islamic Constitution on social and economic justice. Some people, for example Ayatollah Beheshti, a member of the Revolutionary Council, gave these constitutional principles a broad application and pressed for the break up of large holdings. He claimed "in agriculture, grounds for share cropping or leasing arrangements simply would not exist, since each person would own the tools of his own labour."[8]

The law approved by the Revolutionary Council in April 1980, limited land owners directly cultivating their land to three times the acreage that in each district was considered sufficient for the maintenance of one peasant family. Absentee land-owners who had no other source of income were limited to twice this amount. Since seven hectares was regarded as an average subsistence holding, this meant the breakup of middle-sized and even small enterprises. The compensation of landlords was vague and depended on their outstanding religious dues and debts to the government. Mechanised farms were to be retained as units and transferred to a group of farmers on a co-operative basis.

The law aroused a great deal of excitement as well as chaos in many villages, as some revolutionary organisations and semi-official committees began to distribute land before instructions arrived from Tehran. The manner of implementation was certainly causing a drop in production. However, the law met stiff opposition from land owners and prominent clerics. Land owners were supported by bazaaris for whom land reform appeared as part of a broader attack on other forms of property. They argued their case on the basis of the legitimacy of private ownership by stating that the denial of ownership and violation of property right of the people is not in accordance with any of the principles of Islam.[9]

Similarly, prominent clerics voiced their criticism in legal opinions in response to questions put ot them by the members of the public. Ayatollahs Golpayegani and Rohani, as well as jurists on the 'Council of Guardians' declared the law to be in violation of Islamic tenets. Khomeini, faced with the traditional alliance of the orthodox clerics, bazaaris and landlords and having himself some reservations about the doctrinal aspects of the law, suspended the articles of the law dealing with private property.[10] However, the havoc caused in the villages by the implementation of the law was not removed by its suspension. On the contrary, uncertainty over the government's policy regarding land and ownership interfered with cultivation, causing a catastrophic drop in production.

4.3.2 Impasse over Land Reform

The suspension of the land reform law put the government and parliament in a dilemma. They both lacked the authority to act or pursue this matter any further. The suspension of the law arose from Khomeini's authority as the 'faqih' and the guardian of the community.[11] He exercised his authority in a situation where overriding necessity required extraordinary decisions to be made. In fact, the exercise of this special power lies within the sphere of 'secondary rulings' which S.M.B Sadr in his book (Iqtisaduna: Our Economics) described as the 'discretionary sphere' of the law, discussed in the previous chapter.

The impasse was broken and finally Khomeini referred the land distribution issue to parliament to decide; he avoided taking a public stand. In effect he delegated part of this authority to parliament to exercise 'velayat' (the governance), to investigate the problem situation in which the interests of the community required a special law.[12]

As a result, new bills were tabled before parliament and consequently the new land reform law was approved in December 1982. This law represented a triumph for the advocates of Islamic orthodoxy. It retained the previously established upper limits on land holding (two and three times the size of an average family farm) for absentee landlords and landlords actively engaged in agriculture but obliged the owners merely to lease the excess to the local peasants (not their own children) under share cropping, rental or partnership arrangements. This law, the result of four years debate and struggle over the land question, was vetoed by the 'Council of Guardians' in January 1983 for violating Islamic and constitutional principles.

The search for a way out of this impasse led to the passage of a compromise bill in 1985, which gives peasants and squatters a right to settled land but also allows land owners who escaped the redistribution of land after the revolution to keep their estates. Despite some progress on land reform, the authorities have yet to produce a workable land policy for land disputes affecting eight hundred thousand hectares; one sixth of the prime agricultural land.[13]

To sum up, since the revolution land reform turned into political fight between two powerful groups both citing Islam and the constitutional principles in their defence. The radicals attempted to fashion out of the doctrines of S.M.B Sadr and others the weapon for further redistribution of land to enhance Islamic social justice while traditionalists, including the landlords, backed by the bazaaris and having the'Council of Guardians' on their side, favoured a strong private sector and opposed it as contravening Islamic property rights. As a result, land reform bills were proposed, passed, revoked or vetoed several times. Khomeini's position on land reform remained equivocal until January 1988 when he seemed to be in favour of more reform.[14] Out of this chaos, the government emerged with its presence in the villages fairly enhanced. The government retained control of the majority of the agribusinesses and agricultural projects launched under the Shah. The Foundation of the Disinherited came into possession of one hundred thousand hectares of agricultural land, confiscated from members of the former regime.[15] Each of the land reform measures approved gave the agriucltural officials extensive authority to dictate the type of crops to be planted, thereby intervening in the agricultural decisions of the individual farmers.

4.3.3 Land Utilisation

One thing that the Islamic and the Imperial regimes agreed on was the crucial importance of agriculture. The currect Iranian regimes reckoned agriculture should be the 'axis of the country's development.'[16] Despite the official priority status, the agricultural sector has been the weakest link and slowest growing sector in the economy. In revolutionary Iran, farmers are little better off.

Iran is by no means a natural garden. Its physical geography, climate and topography have perhaps their greatest impact on agriculture. The country has a surface area of 165 million hectares, of which 30 per cent is classified as cultivable with only 16.2 million hectares (about 10 per cent) under arable crops in any one year, including associated fallow lands. Irrigated land, counting for less than one quarter of the cultivated area (4 million hectares), now produces 80 per cent of non-livestock food output.[17] Yet the main traditional but sophisticated irrigation system, subterranean tunnels, (qanats) enabled the country to grow enough food to feed itself with output to spare until the 1970 s. Agricultural stagnation, discussed in chapter two, made Iran a net importer of farm products in 1974 and within a decade it became one of the largest food importers in the developing world. Under the Islamic regime, Iran buys more than a quarter of its basic food abroad. The long standing problem of farming in Iran is serious and embarrasing for the Islamic government that says it believes in self sufficiency and wholesome peasant values.

4.3.4 Agricultural Output

Agricultural output has undergone severe trials since the revolution. Production has not kept pace with population growth rate and may be even falling in absolute terms.

Table 4.1 - Agricultural Output Index (1979-1981 = 100)

Year	1980	1981	1982	1983	1984	1985
Index	95.72	110.00	113.32	110.52	109.98	107.73
%Change	1.5	14.9	3.0	-2.5	-0.1	-2.7

Source: FAO Production Year Book; EIU Country Profile 1987-1988

Productivity suffered during the upheaval of the revolution, followed by the uncertainty surrounding government land reform discussed earlier. One of the main obstacles to increasing productivity has been the large-scale migration of rural population to towns where wages are three times higher than those paid in rural areas. The government's policy of heavily subsidising food supplies has expedited rural depopulation. This has been further exacerbated by the fact that a disproportionate number of volunteers for the war came from rural areas. In 1986 for the first time on record, the absolute size of rural population declined as against urban communities.

4.3.5 War and Production

The Iranian agricultural sector as well as coping with the after effects of the revolution and the impasse over land reforms, at the same time had to face the major preoccupation with the war since 1980. The movement of the people to the war front and the bombings have reinforced the internal migration and the displacement of the labour force. Rural migration to towns has affected as many as 5 million people since 1980. This, coupled with persistently high levels of unemployment - put by official Iranian sources at more than three million in 1986 - have caused congestion in the urban areas and major economic and social problems including provision of food for an increasing urban population. As a result, a very serious reduction in agricultural production and an increased dependency on the outside world for food supplies can be noted.

The production of many major items during 1979-1985 had mostly fallen or had increased insignificantly. It should be emphasised that during the same period the population has grown at the rate of 3.7 - 3.8 per cent per annum,i.e. from 38.1 million in 1980 to 46.2 million in 1985. In addition there is the presence of more than 1 million Afgahn refugees in the country.

Table 4.2 - Production of Principle Crop and Livestock Items

	Wheat	Rice	Corn	Suar Beets	Cotton	Bovine Meat	Mutton and Lamb	Poultry	Cows Milk	Sheep Milk	Butter and Cheese
Annual growth rate% 1979-85	0.6	-4.2	-2.2	-2.3	-5.2	0.7	0.3	2.2	1.2	0.7	1.2
Annual growth rate % 1973-77	4.6	1.2	21.8	-3.7	-3.1	12.7	2.7	17.2	5.0	4.0	5.0

Source: K. Mofid, Development Planning in Iran, Menas Press, 1987, pp. 121-122 & K. Mofid, the Economic Consequence of Iran/Iraq War (paper presented in July 1987).

4.3.6 Food Imports

The failure to increase agricultural output, to keep pace with population growth, has led to increased food imports. During the 1979/1985 period, the value of agricultural imports has increased. Food imports were second in importance after imports directly destined for the war.

Table 4.3 -Food Imports

Year	1977/ 1978	1978/ 1979	1979/ 1980	1980/ 1981	1981/ 1982	1982/ 1983	1983/ 1984	1984/ 1985	1985/ 1986	1 986/ 1987	1987/ 1988
Value £m	1,534	1,031	1,518	1,541	2,161	2,164	2,368	na	na	na	3800*
% of Total	10.5	9.9	15.7	14.2	15.9	18.2	13.0				

Source: Foreign Trade Statistics of Iran; EIU Country Profile 1986-87, 1988-89
 * : Estimate

Since 1982, more than $2 billion each year has been spent on the import of foodstuffs. High volume food imports has remained important for the regime,despite the pressing foreign exchange crisis following the collapse of the oil price in 1986. Food imports for the first eight months of 1987 was $2.5 billion and for the whole year to March 1988 it was estimated to be $3.8 billion the highest level so far.[18] Nevertheless, the combination of low domestic output and the limitation of the ability of the regime to afford food imports, produced severe shortages during the war. The government subsidised key food items and controlled their distribution through rationing. A two-tier market operated in the country, in which official prices applied for second grade produce but quality items were sold on the black market for inflated prices.

4.3.7 Problems and Government Measures

The Islamic regime recognises the crucial importance of the agricultural sector. It inherited a sector from the Shah that was neither progressive nor aimed at solving the food problem in Iran. The current regime, due to insufficient money to invest in agriculture - investment in real terms has fallen markedly since the revolution - has put the emphasis on the intensification of agriculture. This policy which means the improvement of farming on existing lands, has been embodied in the Jihad Sazandegi (Construction Crusade), most of whom are strong on enthusiasm but poor on technical competence and tact in handling the farmers. In fact, this organisation has combined the roles of three agencies of the Shah's White Revolution, the Literacy, Health and Agricultural Extension Corps, which dispatched young men of military age to provide simple welfare and development services in the provinces as an alternative to their doing national service.

The Jihad has added an emphasis on construction, particularly in building roads. Its efforts have been backed by the governemnt's extension of electricity to large numbers of villages. In addition, the Jihad has a political role i.e. to instil revolutionary Islamic teaching into the farmers, though not without breeding resentment.

To stimulate farm output, the government has increased support prices for grains and other crops in an effort to encourage farmers. This policy has been particularly successful as the uncertainty surrounding land reform has tended to encourage the cultivation of annual crops, yeilding a quick return at the expense of high-value perennial crops. The government's need to reduce imports in 1986, due to a severe shortage of foreign exchange, has meant that priority was given to trim meat imports and as a result, two million hectares of unused pasture is being turned over to fodder cultivation.

One area of success for the government has been in wheat production. The reason lies in the combination of governement policies, i.e. propaganda encouraging the cultivation of strategic crops, the direction of credits to wheat and the increase in the governemnt's wheat buying price. According to the Islamic government, 7.5 million tonnes of wheat was harvested in 1986/1987, about 7 per cent more that the previous year. Such pronouncements have however, tended to overstate actual output in the past, although production is still thought to be above that achieved prior to the revolution (5.517 and 5.526 million tonnes in 1977/1978 and 1978/1979 respectively).[19]

So far the Islamic government has concentrated on increasing output from rain-fed areas. As for the irrigated land, lack of resources had impeded its extension through building dams and irrigation schemes as the old regime did. The current regime is only with difficulty, able to maintain the existing water supplies as reservoirs accumulate silt and canals and 'qanats' become blocked. With the governement's recent change in the direction of energy policy, giving greater priority to hydroelectric power generation, an increase in irrigated land through efficient water utilisation can be expected.[20]

The situation has not been encouraging in respect of agricultural inputs. Distribution of seed, fertilizer and machinery has been haphazard. Scientific support provided for farmers by young volunteers of the Jihad is limited. In general, the quality of inputs is low and the country appears to have gained little from the new crop varieties or mechanisation. So far, it has been the traditional skills that have kept the sector buoyant.

4.3.8 Organisational Implication and Likely Prospects

In early 1987, the Majlis began a debate on a proposal for merging the Ministry of Agriculture with the Jihad Sazandegi. The merger proposal faced resistance , especially from the organisations themselves. Though the outcome of the proposal is not yet clear, but if implemented, the absorption of the Ministry by the Jihad, would represent the triumph of the revolutionary organisation over the former managing instutution responsible for agriculture.Yet the effects of a sudden increase in Jihad's staff, mainly by established white collar bureacrats of the old school, could cost it the loss of its revolutionary identity.

The Ministry of Agriculture, since the revolution, has altogether been lacking in real strength as its various ministers have failed to impress their own stamp on the sector. This had been partly because of the existence of the Jihad and partly because the Ministry had neither the financial nor the armed strength with which to enforce its views.

In most areas, the Ministry and the Jihad operate in rivalry and often in conflict. In fact, the two organisations hold conflicting views on almost every aspect of agricultural policies. Among the areas of difference is the belief in the Jihad that further land reform is needed to revolutionise the countryside. Jihad also desires to establish an active, day to day involvement in the management of farming. The Ministry however, having years of unfortunate experience with land reform and the excessive interference in farming activities behind it, looks to a more advisory and technical role leaving farmers to run their own affairs. On strategic and ideological grounds, therefore, the two sides are far apart.

Though the proposal of the merger remains under debate, with the result of the third majlis election in April 1988, heavily weighted in favour of the radicals, the likelihood of the merger with Jihad as the leading partner prevails. If this comes about, more radical execution of land distribution would be one inevitable policy for the Jihad. At the same time, a parternalistic and autocratic structure would arise from Jihad policies, leaving no role for private land owner development, nor an independant function for the peasant farmers.

If the original land reform favoured by the Jihad were to be resurrected, the agricultural sector would become dominated by collective farming organisations. While some farmers might benefit from this form of organisation, in total farming would decline under uncomprehending political management in which farming would be less important than ideology.

4.3.9 Conclusion

The agricultural sector has remained a source of conflict between the radicals and conservative groups in the Islamic regime. Khomeini reserved his personal judgement on these matters. The more powerful voices among the religious leadership, except the 'Council of Guardians', have been silent and the search for a way out of the impasse over land reform has not resulted in a workable policy.

The agricultural sector has not been able to provide the necessary food requirements for the population and Iran's dependancy on external food supplies has increased. Overall, in the agricultural sector, the assessment is dismal due to its poor performance in recent years. The revolution in Iran inherited a sector which was debilitated and its structure was neither progressive nor directed to solving the food problems. However, despite the Islamic regime's concern with the fortunes of the farmers and with the agricultural sector as a source of self-sufficiency, the allotment of human and material resources to agriculture has been sprace and patchy, so the sector has continued to suffer a further decline. Agricultural work almost stopped in most areas of Khuzestan and Kurdestan. The Gulf war has added another dimension to this decline. Indicators of the continuing deterioration in this sector is the high urban drift among the rural population and the mounting food imports.

As for the role of agriculture in the overall economy, it provides little material that is the base of industrial activity and the industry provides little hardware essential for increasing the productive capacity inagriculture.

The revolution overthrew a regime that was unwilling to permit the formation of sources of power outside its direct control. This character of the old regime, more than anything else, compromised every one of its economic initiatives, including land reform and farm corporations. For the Islamic regime to do likewise through Jihad and its radicalism, would be to repeat history.

4.4 THE INDUSTRIAL SECTOR

4.4.1 Initial Attempts to Revive Industry

After the revolution, one of the major problems in the industrial sector and the cities was that of getting people back to work. The provisional government took several immediate steps to improve the situation and to permit private enterprises to resume operations. Bazargan authorised the payment of about 85 million dollars (6,000 million rials) in outstanding claims to contractors working for the government and promised 212 million dollars (15,000 million rials) for loans to allow industries to meet thier obligations. This sum, seemingly large, was hardly adequate. The government established a fund of over 141 million dollars (10,000 million rials) for short term loans to certain categories of unemployed wage earners. Importers were granted deferred payments from customs charges and the government mandated a three to six month interest free extension on overdue private sector promissory notes.[21]

Despite these initial steps to restore confidence in industry, the flight of capital from the country and the loss of further cadres in the technical and management field continued. Establishment of workers' committees in a number of firms and enterprises, lack of imported spare parts and raw materials, continuing insecurity and actions against the business community, gave little encouragement for remaining entrepreneurs and skilled workers to participate in an industrial revival and the prospects for this sector seemed extremely bleak.

As a result, the government moved to appoint supervisors to such major private industrial enterprises as the Iran National Automobile Company in Tehran and the Shahriyar Pipe and Rolling Mills Complex at Ahvaz in the South. Once the government began to provide supervisors and funding for industrial enterprises, further state intervention became virtually inevitable.

On 14 June 1973, the Revolutionary Council approved a measure, the Law for the Appointment of the Managers, authorising the government to appoint managers to all enterprises which had shut down, were incapable of continuing operations or whose managers were absent. Consequently, government-appointed managers began to appear at dozens of industrial enterprises and firms. These managers initially worked with managing boards comprising of government representatives and representatives of workers' committees who, in many instances, were in effective control of their enterprises. In due course, the right of signature, financial control and the power to appoint boards of directors were transferred to government appointees. In fact, effective control of enterprises was shifted to the state, even before nationalisation.[22]

4.4.2 Expropriation and Nationalisationof Private Industry

On 5 July 1979, the Revolutionary Council approved the most sweeping nationalisation measures of the revolution. The Law for the Protection and Expansion of Iranian Industry provided the basis for nationalisation in three broad categories:

1. Heavy industries, including automobile assembly, chemicals, shipbuilding, aircraft manufacture, mining and metals.
2. Industries owned by fifty named individuals and one family who had allegedly acquired their wealth illegally through influence with the Pahlavi regime.
3. Industries in economic difficulties whose liabilties exceeded their net assets.

In effect, after five months in power, following the nationalisation of private banks and insurance companies, the government acquired ownership of the largest part of Iran's private industry. This took place in a deeply confused political situation within the country when some authorities were mainly preoccupied with establishing political control within the framework of the new constitution.

Among industries nationalised were car and truck assembly plants including the Iran National Automobile Company, with 12,000 workers; the Shahriyar Pipe and Rolling Mills Complex; the Behshahr Industrial group with 13,500 employees; pharmaceutical plants, oil refineries, tyre plants, glass, brick and tile factories. Also the government acquired a broad range of consumer goods industries such as the Melli Shoe Company, a complex of 26 factories with 10,000 employees and a turnover of $450 million per year before the revolution. In addition, the government nationalised department stores, a supermarket chain, home furniture and carpet manufacturers, wine and soft drink manufacturing plants, vegetable oil industries and producers of textiles, clothing and synthetic fibres.[23]

The list of industrialists whose property had been sequested was haphazard. The criteria for including or excluding some industrialists from nationalisation were difficult to discern, however the motivation for the takeover of the modern private sector industry was largely punitive, with the Revolutionary Council eager to seek revenge on the people, often talented entrepreneurs, deemed to have benefitted from the Shah's rule. The Bazargan government, under pressure from the Revolutionary Council for nationalisation, made a virtue of the action, claimed that the abandonment of industry by its former owners and the bleak state of the private sector demanded action to restore confidence and production.[24]

In the months that followed, further legislation was approved to close loopholes in the law. In August 1980, parliament authorised the government to decide the fate of small shareholders in nationalised and expropriated enterprises. These shareholders became subject to nationalisation or saw their shares virtually written off as having no value. Further measures led to the nationalisation of specific areas of economic activitiy such as pharmaceutical industries, cold stores, warehousing and transport companies.

Although expropriation slowed down considerably in the second year of the revolution, nationalisation and takeovers continued as late as mid 1982 as the government began to clarify the status of industries, trading companies and businesses, particularly in cases where it had already assumed management control or where major shareholders fled Iran. In 1982, the shares of absentee owners of a number of medium-sized industries that had escaped expropriation were taken over by the government. At the same time, many construction and engineering consulting firms were reorganised with absentee owners losing their rights of ownership.[25]

It should be noted that much of the expropriation took place in a quasi-legal framework or without any authority. The actual legislation usually followed the property seizures to legalise it. The Foundation for the Disinherited backed by the revolutionary guards and Islamic judges were particularly active in such seizures, (at present this organization is the largest revolutionary corporation in Iran). However, some industrial enterprises survived the wave of expropriation and remained in the hands of their owners for many months due to strong finances, good labour relations, a tradition of religious philanthropy, good local reputation and a workable arrangement with local clerical leaders. Yazdbaf, a textile factory with 2,000 employees in the city of Yazd, initially remained in the hands of their owners though later changed over to a foundation, operating under its former managers and relatively free from government control.

In the end, even large industrialists who survived the early expropriations later left the country. Only small industries remained in private hands. Factories and enterprises during the revolutionary upheavals experienced waves of employee militancy and changes in management, sometimes matching changes in the composition of those who controlled the government. As Bazargan was replaced by Bani Sadr who was in turn replaced by Raja'i, so too at the factory level management passed to more radical elements in line with Islamic fundamentalists. Leadership of the militant forces in manufacturing enterprises came primarily from middle-level managers, technical staff and skilled workers.

At the end of 1982 when nationalisation and expropriation subsided, the Iran National Industries Organisation, established to administer the nationalised industries, was controlling 500-600 enterprises with over 150,000 workers. The Foundation for the Disinherited also managing another section of the industry, had 90,000 employees followed by the Ministry of Commerce and the Ministry of Finance and Economy, each acquiring various responsibilities.

The major impact of these revolutionary policies was the destruction of the old industrial elite and increasd government control over industry. With the flight of the old industrial bourgeoisie, new opportunities were created. Some of the smaller factories flourished, taking advantage of the general shortages and the decline of the large industrial enterprises. As a result, a new privileged business elite emerged, benefitting from links with powerful clerics and government officials close to the administration.

4.4.3 Confusion and Resuscitation in Industry

Nationalisation and expropriation of much private industry, compounded by administrative incompetence and the political need of the Islamic regime to reject the Shah's industrial policies and the Western connections, rapidly eroded the ailing industrial base of the country.

By mid 1980 the modern sector was running at no more than 50 per cent capacity at best.[26] Increasing problems with imports and internal distribution added to difficulties arising from rising wage rates and worker discipline. Those plants in operation were heavily subsidised by the state as a means of maintaining employment. The depressed level of output from industry since the revolution was well illustrated by the Central Bank indicating that the attempt to revitalise industry resulted in an increase of only 0.2 per cent in output in the period March to June 1980.[27]

A flicker of industrial revival became apparent in August 1980, when the government financial allocations to the industrial sector began to come through in the form of investments in new plant under a $8 million programme.[28] However, this flicker was extinguished in September 1980 with the outbreak of the war which posed even greater problems for industry. The very area in the South West, the site of the bulk of the Iranian basic industry, especially that of hydrocarbon related, became the worst hit area as the war got under way.

Almost three years after the revolution, there was no clear policy either towards the modern industry left by the Shah or creation of new plant. The industries remaining in production in the aftermath of revolution and nationalisation were in serious diffiiculties. By 1981, stringency in allocation of import credits by the government reduced the flow of raw materials, spare parts and other imports. In general, confusion prevailed as to the future of the industrial sector. Despite Iraq's attack on Abadan, Ahvaz and Bandar Shahpour (now Bandar Khomeini) attempts were made to resuscitate the massive petrochemical complex at Bandar Khomeini, while the official industrial strategy elsewhere dictated that only small scale, traditional or bazaar related industries should be promoted.

4.4.4 Renewed Industrial Activity

Despite the official policies that favoured the growth of agricultural activities, industry made a recovery. In the light of the upturn in oil revenues in 1982 and the abatement of nationalisation and expropriation, industrial production began to pick up. Initially in its early phase, the recovery affected mainly small scale industrial units. A combination of pressure to reduce unemployment, to make good deficits in imported goods through improved domestic output, to meet the insatiable needs of the domestic market and the war, forced the government to breathe some new life into industry. Encouragement was given to the private sector to increase its role and in particular, the Foundation for the Disinherited was given the signal to divest itself of many industrial plants seized from those members of the former regime.[29]

According to the Ministry of Heavy Industry, in the last quarter of 1984, the

Iranian government industrial agencies concluded 494 agreements for new plants (not including the re-opening of existing plants) with private investors. These projects ranged from workshops employing four people to a construction machinery factory eventually employing nine hundred.[30]

The government also concentrated on those major projects in steel, copper, petrochemicals, electric power generation, port, railway and road development and auto assembly that it had inherited from the previous regime. Having control of the major part of the industrial sector, the government also seized the opportunity to enlarge heavy manufacturing industries with a series of projects to underpin renewed industrial activity.

One of the most significant projects were led by proposals for a new 3.2 million tons per year steel plant, 'Mobarakeh Steelworks', for Esfahan, which was already a centre for ferros metallurgy. The plant being built by Kobe Steel of Japan and to be paid for in oil exports, was expected to be in production in 1988, will take its iron ore stock from a mining complex at Kerman. Another major plant was proposed for the aluminium industry, to make Iran self sufficient in aluminium. This will consist of a smelter at Arak and there are also plans for a further smelter in Bandar Abbas.[31]

4.4.5 Reactivation of the Shah's Nuclear Power Plans

Surprisingly the industrial development policies of the Shah have been reconsidered in recent proposals for an extension of the energy sector. The Shah's programme for the construction of nuclear power stations in conjunction with the UK, the USA, West Germany and France was abandoned after the revolution as part of the initial attempts towards conservation and restricted economic growth. Now, however, the programme is to be restarted and attempts are to be made for the completion of two 1300 MW nuclear power units at Bushehr, previously undertaken by Kraftwerk Union (KWU) of West Germany. The costs of the scheme are very considerable and perhaps beyond Iran's means at the present time. In any case, the fundamentalists within the Islamic regime, always highly critical of the Shah's nuclear development programme, have stated that the Islamic Republic will abandon all such schemes. Iran's current eagerness in respect of nuclear energy is thought to arise from a mixture of ambition by individuals within the government and by some elements in the military that Iran should keep pace or overtake Iraq and its other neighbours in this area of potential weapons technology. Argentina will be supplying enriched uranium to the small nuclear research plant at Tehran, via the International Atomic Energy Agency.[32]

4.4.6 Petrochemical Industry

The other critical area of state involvement in industrial development is in the field of petrochemicals. In fact there has been a rush into new petrochemical ventures. Technipetrol of Italy will be involved in engineering and material procurement programme for the proposed Arak linear low density polyethylene plant. The contract is worth some $60 million and is in addition to the $93 million ethylene unit being supplied by Technipetrol to the same complex. It is expected that the $1.5 billion complex will ultimately contain chloride, polyvinyl chloride, vinyl acetate and acetic acid units. The Esfahan petrochemical plant is expected to be expanded with a construction of a 100,000 tons per year high density polyethylene unit using naphtha feedstock from the nearby refinery. Plans are also being proposed for new petrochemical works at Bandar Abbas in return for crude oil for potential winners of the construction.

The aim of the government, apart from the general expansion of the economy, is to increase self sufficiency from the inland petrochemical plants to replace imports. The export of petrochemical units have a low priority as Iran will find itself operating in an overstacked market and in direct competition with Saudi petrochemicals from Yanbu and Jubail.

As for the massive petrochemical complex created at Bandar Khomeini, progress in this area has been impeded by the inability of the authorities to bring the plant into production in the face of Iraqi air attacks and the reluctance of the Japanese partners to keep up their involvement. In July 1987 it was reported that Mitsui, the principal collaborator at Bandar Khomeini was seeking an official end of the $3 billion project.[33]

4.4.7 Mining

The Islamic government began to promote private sector investment in mining during 1982/1983 but no significant result was achieved. Recent developments have been concentrated on the iron and coal deposits needed for the steel industry. As for copper mining in Sar Cheshmeh, where exploration revealed one of the world's largest deposits of copper, the revolution brought difficulties in recruiting foreign partners at the site. Moreover, the recession in the world copper market rather damaged the prospects of the Sar Cheshmeh scheme.

However, it continues to run on a smaller scale than originally envisaged and copper exports are negligible. Copper production in 1981 was 2,000 tons, increasing to 43,000 tons in 1982. In 1983, 1984 and 1985 the production was 65,000 , 60,000 and 60,000 respectively.34

4.4.8 Electric Power

Iran is suffering from chronic shortages of electric power as a result of the war, failure in power station maintenance, over exploitation and the inability to complete major power schemes in hand. Peak period demand has led to breakdowns and severe problems for industry. Prolonged power cuts are quite common. However, attempts have been made by the Ministry of Energy to help to solve the problem. Contracts for two new 1,000 MW power stations at Siabisheh in the Alborz north of Tehran and in Gilan costing $500 million and $800 million respectively, were expected to be awarded in January 1988. This in addition to the power station in Fars province for which a contract of $175 million was awareded to Brown Boveri of West Germany. Also Kraftwerk Union of West Germany had been involved in supplying two generators for a gas turbine station at Rey near Tehran, under a contract confirmed in April 1986. The new power stations are part of the long term solutions to Iran's power supply problem since they would not be in operation before the mid 1990's.35

Table 4.4 - Production of Electric Power ('ooo MWH)

	1979/80	1980/81	1981/82	1982/83	1983/84
Ministry of Energy	19,441	19,880	22,406	26,323	30,509
Private Sector	2,468	2,500	2,500	2,500	2,500
Total	21,909	22,380	24,906	28,823	33,000

Source: EIU. Country Profile. Iran. 1987-1988. p. 34 : Ministry of Engergy

As can be seen from the table above, private sector stations contribute a small proportion of the total production. The increased production of the state managed stations has been due to expansion of the conventional steam plants.

In 1983/1984 steam plants contributed 49 per cent of the total electricity as against 21 per cent from gas, 19 per cent from hydro and a small residue from diesel sets.

4.4.9 Housing and Construction

The construction boom in Iran slowed down in 1977 and came to a total halt during the revolution, with contractors abandoning half finished projects. Despite a general pick up in economic conditions in 1983, construction remained in a recession. Construction starts were down by 21% in 1981/1982 and 24% in 1982/1983 but rose sharply by 97 % in the boom year of 1983/1984 which can be seen in the table below.

Table 4.5 - Private Sector Construction Starts in Urban Areas (No. of structures)

	1978/79	1979/80	1980/81a	1981/82a	1982/83	1983/84
Tehran	14,664	45,400	33,788	19,077	10,256	15,468
Large cities	36,725	51,514	59,975	43,298	28,920	68,937
Towns	64,371	65,649	91,310	75,149	65,549	121,833
Total	115,750	162,563	185,073	137,524	104,725	205,833

Source: Central Bank of Iran. 'a' excludes data from some areas affected by the war

Housing in Iran, like other sectors, suffered from the general disorder of the revolution. In June 1979 the Revolutionary Council nationalised virtually all 'movat' (land in urban areas without a history of development). This was followed by an extension of the above measure in April 1982, whereby all categories of unutilised urban land, including 'bayer' (land if even currently unutilised, was at one time put to productive use) were nationliased. By early 1983 these measures gave the government control over 20 million square metres of privately owned urban land and another 200 million square metres was earmarked for nationalisation.

After the revolution, there were five years of conflicting, ill-considered and poorly administered housing policies resulting in a substantial amount of urban land being transferred to the public sector. A large amount of housing was expropriated either by legislation or the action of the revolutionary organisations. Some of these were used to house lower income families, war refugees and some to meet the needs of state related organisations.

Several attempts were made by the government to deal with the severe housing shortages. In 1983 the government eased control over housing transactions and started to distribute nationalised land to potential home owners generally at prevailing market prices. As a result, the unavailability of land as a major impediment was removed. This boosted construction starts, as can be seen from the above table.

The government itself launched no major housing programmes and was unable to complete half finished projects inherited after the revolution, though recently a law has been passed giving the state the rights to complete any housing scheme abandoned by contractors. State inaugurated construction in recent years has been concerned largely with the war needs. However, private sector housing has been more buoyant under pressure from enormously increasing urban population. The Islamic government, like its predecessor, has been no more successful in stemming the flood of migrants from villages to towns or in meeting the demand for construction materials. As a result, housing costs are high and for the mass of people, housing remains inadequate and expensive.[36]

4.4.10 The Handicraft Industry

The handicraft industry, as one of Iran's ancient and cherished assets, continues to show remarkable resilience. Carpet production faltered slightly during the revolution but recovered later, only to face severe international competition from new or expanding traditional producers of hand woven rugs and carpets. However, Iran's high grade silk rugs and wollen carpets retain a strong market abroad. The Islamic government has been active in promoting the country's carpet production to support the export trade. Carpet exports were valued at $67 million in 1982/1983 accounting for 24% of non-oil exports, though exports normally run at higher levels. In 1981/1982 it was $149.4 million predecing a peak of $425.1 million in 1980/1981. Metalware, ceramics, jewellery and other more prosaic crafts all survived, making the traditional sector a major employer within industry as a whole.[37]

4.4.11 Performance

Steel, petrochemical and mining remain the three basic industries although the manufacture of machine tools, automobiles, construction materials, pharmaceuticals, textiles and food processing are also important. Since 1982 growth has been achieved, though due to the Gulf war, it has been confined mainly to the strategic industries where an increase in output has been a top government priority.

Table 4.6 - Industry and Mining (constant 1974/75 price)

	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Growrth Rates %	-15.2	-9.2	1.6	2.7	10.5	15.6
Shares in GDP %	15.7	14.8	20.2	20.2	19.4	20.0

Source: EIU. Country Profile. 1987-88: Central Bank of Iran

Production indices by output and by value for manufactured goods excluding oil refining were as below:

Table 4.7 - Production Indices. by Output (1974/75 = 100)

	Relative Weight	1979/80	1980/81	1981/82	1982/83	1983/84
Food,Beverages and Tobaco	21.5	117.2	105.4	105.7	110.8	123.8
Textiles, Clothing and Leather	15.80	162.8	172.5	211.1	226.2	282.8
Wood Products	0.54	219.9	210.2	249.1	328.8	398.2
Paper and Cardboard	1.67	135.2	96.0	110.9	149.3	184.8
Chemicals	15.32	118.8	98.3	104.4	122.9	152.5
Non-Metal Mining Products (except oil and coal)	9.10	177.7	181.7	203.7	233.6	254.1
Basic Metal	10.51	104.8	83.4	73.8	120.0	158.0
Machinery and Equipment	24.81	118.8	113.4	143.5	161.5	222.2
Other Manufacturing Industries	0.66	58.7	29.4	30.1	39.2	42.1
General Index	100.00	129.7	121.5	137.5	157.1	195.2

Source: EIU. Country Profile. 1987-88: Central Bank of Iran

Table 4.8 - Production Indices, by Value (1977/78=100)

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Agriculture	100.00	100.02	108.89	108.95	106.78	121.39	119.50
Industry	100.00	84.82	76.80	68.39	66.38	86.85	89.00
Oil	100.00	105.37	71.28	85.80	62.53	118.66	120.00

Source: H. Gurdon, Iran: The Continuing Struggle for Power, Menas Press, 1984; Central Bank of Iran

The impact of political upheavals can be seen in a 15.2 per cent fall in growth rates in 1978/1979. Continuing uncertainty after the revolution followed by nationalisation and expropriation in industry compounded by the start of the war contributed to poor performance in 1979/1980, 1980/1981 and 1981/1982. In the face of increased oil revenues in 1982 and renewed industrial activity, a modest recovery was achieved in 1982/1983.

As for the industry's share in GDP (Table 4.6) its role bas been only enhanced due to the poor showing of oil. The share of oil and gas in GDP betwen 1978/1979 and 1983/1984 fell from 30.9 per cent to 15.5 per cent.[38] Though industry has made strides and in percentage terms the perfomance appears significant and encouraging, the base for which this is measured is extremely low and are misleading.

A truer picture of the state of the Iranian economy is given by production indices rather than by industry shares in GDP or its growth rates. As can be seen from table 4.8, by 1983/1984 the industry was still only producing at 89 per cent of its 1977/1978 level. The oil sector however, although growing by 20 per cent overall, had a staggering 100 per cent growth rate by value from 1981/1982 to 1983/1984. This increased revenue was one of the contributing factors to resuscitate industry.

4.4.12 Conclusion

To sum up, since the nationalisation and seizures, the industrial sector has suffered from the war, including the destruction of Iran's major ports. This has introduced bottlenecks to the nation's disrtibution network. Abadan and Khorramshahr have been destroyed and Bandar Khomeini, because of its close proximity to the war front, has been virtually unusable.

Most Iranian industries are over-manned. Some are still short of spare parts or semi-finished goods that they import to assemble, while others lack capital. Industrial ministries, especially the Ministry of Industries, which has most dealing with the private sector, have been trying to sell or give some of their plants back to the private sector. 39 The reasons are partly political, though since 1982 following the abatement of expropriation, the Islamic goverment has been showing a growing Islamic respect for private property.

Despite the encouragement given to the private sector, there is not much confidence in the future of the economy while the country's acute shortage of foreign exchange, due to reduced oil income, continues. Investors in the private sector undertaking new projects, under present circumstances, must either provide the money from their own resources or prove to the appropriate ministry by one means or another, that their project will earn back its foreign investment when it is operational.

Having rejected the Shah's industrial policy as unsoundly based, the leaders of the revolution in the early days demanded a self sufficient Iranian industry independent of the involvement of foreigners either as suppliers or investors. However, with the abatement of revolutionary fervour, it was soon realised that these ideas were neither pratical nor desirable. Although there is still no detailed or coherent industrial policies, the rhetoric of industrial self sufficiency continues by the fundamentalists. Foreign investments, without any great fuss being made offficially, is encouraged in Iran, though it is seen as 'foreign involvement' in a sense of foreign companies being suppliers, contractors and sources of expertise in design and maintenance. In this respect Japan, Germany and Italy have responded well to these new openings.

The government continues with the industrial structure inherited from the Shah. Old projects are being continued or restarted, often on a smaller scale than previously envisaged and the same intermediate goods are being imported to supply the old assembly plants. Even attempts are being made to reactivate the Shah's nuclear power plans, though under present financial circumstances, resuscitation of some projects seems beyond reach. In addition some proposals result in criticism from the more conservative elements in the regime. Parallel to this, some older industrial schemes have either closed down or ceased to produce at economic rates. Iraqi air attacks in some cases either demolished or damaged plants, having serious adverse effects. An example of this is the Bandar Khomeini petrochemical complex. Iraqi air attacks and a dispute over payment with Mitsui, together with the changed international market for petrochemical goods, has meant that the plant has virtually been abandoned.

The government has also moved rapidly towards funding new industries which offer prospects of foreign exchange savings (import substitution schemes) though in some cases at an enormous cost. There has been growing criticism in Iran for the allocation of funds from a very limited development budget to major showpiece industrial projects, in particular to the new petrochemical scheme in Arak. It is claimed in Terhran that the nine major industrial schemes undertaken for the 'first decade' of the revolutionary era will have absorbed some $ 2.2 billion by February 1989. 40 In general, the new element in the industrial policy is an emphasis on easier technology and construction which the Iranians can manage with their own resources and on building intermediate industries to supply the assembly plants. However, in present circumstances, Iran is short of foreign exchange and most new projects remain at the planning stage, despite a policy of pushing ahead with industrial development. The new industrial policies may however have a wide practical expression once the Islamic Republic decides on the direction of its economy in the post- war era.

4.5 DOMESTIC AND FOREIGN TRADE

Iran's trade system still retains some of its traditional features, in particular the bazaar and the wide selection of independent small shops and vendors. The bazaar, for a long time, has been the main centre of urban life in Iran. Its strength comes from its unique combination of productive and commercial activity with religious and social functions. It provides a communal centre with a life of its own with its own values, norms and social relationships. The bazaar is a complex, inward looking and highly conservatie unity.

The role of the bazaar, however, is firstly based on its financial strength as a commercial centre. During the 1970s before the success of the Islamic Revolution, it controlled over two thirds of domestic wholesale trade and accounted for one third of all imports. The bazaaris profited handsomely from the economic boom of the 1970s, yet they provided valuable support to the revolutionary movement in Iran. In the run-up to the revolution, some leading Tehran bazaaris contributed generously to the clerical cause, helped to organise protest marches and used their influence to keep the bazaar closed at the height of anti-Shah demonstrations.

The bazaaris, as devout Moslems, always provided funds for the clerics and subsidised religious activities. The alliance between clerics and bazaaris had historical roots, but it was further reinforced in the 1970s as bazaaris, despite their new found wealth, harboured grievances against the economic policies of the Shah. These policies were seen as attempts to reduce the power of the bazaar through the creation of a modern banking system and a distribution system for essential raw materials and foodstuffs. The pace of implementation peaked in 1976. The bazaaris also resented the emergence of a new industrial and entrepreneurial elite who constituted the modern sector of the economy. Although some of the new industrial families emerged from the bazaar and there existed economic links between the industrialists and bazaaris, the two groups tended to drift apart.

The government's attention and emphasis on industralisation and its association with the modern sector of the economy, relegated the bazaaris to seconday status and added to their sense of exclusion. Furthermore, by the mid 1970s the major industrial families developed a powerful grip over the economy by combining interests in industry with those of banking, insurance and trade. As a result, the role of the traditional merchants was increasingly threatened by these powerful industrialists who developed trading companies alongside major industrial enterprises and even established their own retail network and outlets.

The backing of the revolution by the bazaaris was mainly due to their loss of status, competition from domestic industries and the excessive concentration of economic power in the hands of a few. They attached little importance to the hostility of radical elements to wealth in the Islamic movement. They could not conceive that in the eyes of the poor, they too could appear as the privileged material beneficiaries of the Shah's economic policies. Rather, they believed that an Islamic government would respect private property, free them from government restrictions and controls, provide them with greater business opportunities and tax them more lightly. The bazaaris hardly foresaw that private commerce would be threatened by the revolutionary tide.[41]

4.5.1 Partial Nationalisation of Foreign Trade

In the revolutionary coalition, despite the clerical and lay figures friendly to the bazaar, there were also elements who, though less hostile to trade than industry, were determined to bring foreign trade under government control. These elements propagated measures to regulate profit and pursued policies beneficial to the poorer classes. Also, they emphasised reliance on morality as a vehicle for economic prosperity. As a result, in May 1980, the Revolutionary Council under presssure from the radicals, approved a measure which partially nationalised foreign trade. The measure empowered the government to establish a government monopoly over several categories of goods including wood, paper, metals, machinery, essential foods, textiles and jute. In addition, twelve procurement and distribution centres were established to import these items, preferably from Muslim and Third World countries, and distribute them for domestic use.[42]

The centres allowed private traders to import but only under licence. Importers were required to deliver 30 per cent of each consignment to the government and were permitted to sell their products at specified margins of profit. Within a short period nearly 40 per cent of import trade was passing through these centres. The government distributed directly the goods over which it established a monopoly and to control prices, it expanded the network of state-operated co-operative stores, thereby involving itself extensively in the distribution of domestic goods.

4.5.2 Reinforcing Factors

The fate of private trade after the revolution reflects the shifting balance of forces between conservative and radical groups of the Islamic movement. However, external events compounded by Islamic radicalism, reinforced the trends of nationalisation. Iran's assets were frozen by the USA in November 1979, which denied the country access to its valuable foreign exchange holdings. The war with Iraq also disrupted trade, interrupted oil exports, imposed heavy costs and helped deplete foreign exchange reserves. With the outbreak of the war, the government imposed rationing on essential items and by the end of 1981 foreign exchange reserves fell so severely that further trade restriction became necessary. By this time, several agencies were involved in the import, distribution and pricing of goods. The Foundation for Economic Mobilisation, a revolutionary body establishd following the outbeak of the war, proposed to create a network of wholesale and retail centres and to take over the distribution of almost all consumer goods.[43]

In the meantime, pressure mounted in the Majlis from the radicals for a complete nationalisation of foreign trade. The failure of the government to check inflation led to a serious deficit in the budget and sharp price rises. These resulted in a sustained attack by the radicals on the merchant classes for undermining Islamic morality, believed to be essential for economic propserity. As stated in the Manifesto of Islamic Republic Party, the economy is to 'draw and contribute to morality and morality must at no time be neglected'. The same Manifesto concluded: 'when the fight against profits is successful then internal inflation is likely to be eliminated, although external inflation in the West will always continue'.[44] Furthermore, merchants were criticised by some radials for having a stranglehold on the economy, conducting most of their trade with major capitalist countries and using trade as means of transferring national assets abroad.[45]

4.5.3 Objections to Total Nationalisation

Against the background of the aforementioned reinforcing factors, radicals made attempts to totally control trade by the state, as enshrined in the new Islamic Constitution. In May 1982, the Council of Guardians vetoed the Foreign Trade Nationalisation Law as being in violation of Islamic law and the dictates of common sense. In April 1984, the Majlis approved a revised version of the said law, requiring the government, over a four year period, to take control of all essential goods, leaving some 80 per cent of import trade in the hands of the state. As the Council of Guardians raised objection to this formulation, the Majlis revised the billl, seeking to establish a state foreign trade monopoly through government control of foreign exchange.[46]

As indicated above, the extension of state control over the economy met with resistance. Opposition developed mainly from the bazaaris, the religious community and the bureaucracy. The bazaaris and the middle classes saw the nationalisation law as a threat to their own property and business interests. Also pragmatic officials in the bureaucracy were persuaded that the government lacked the capacity to carry out the tasks of thousands of importers, wholesalers, shopkeepers, agents, entrepreneurs and industrailists.

However, nationalisation of trade is not entirely a lost dream of the radicals and it is inevitable that further attempts will be made to extend state control. The dispute over nationalisation of trade like other sectors, can partly be explained in terms of a struggle between the conservatives and the radicals in the Islamic regime. It is a complex dispute involving disagreement over Islamic doctrine, over the role of the government and over the capacity of the state as against a mixed economy to serve as the engine for economic development.

4.5.4 Foreign Trade and the Private Sector

Despite the unsuccessful attempts at nationalisation, external trade has been largely controlled by the state and many goods are bought through state agencies who check volumes and qualities of imports and implement government edicts on trade. State procurement agencies also exist mainly for industrial input procurement and much distribution, especially consumer goods, with ration books, is in the hands of the state. The result has been growing resentment among the bazaaris.

Against this background in August 1984 Khomeini himself intervened in this vexing matter and supported the bazaaris demand for greater participation in foreign trade. Though he emphasised a greater popular involvement in the running of the economy, he also argued that the state should supervise trade. Although Khomeini's wishes were unlikely to be ignored, but the state did not give a greater share to the private sector in trade as it ran against the provision of the constitution.47

Table 4.9 - Current Account, 1977/78 - 1983/84 ($ million)

Exports	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Oil Sector	20,713.5	17,867.2	19,315.7	11,607.2	12,455.5	20,049.8	20,456. 8
Gas	191.2	248.5	70.5	243.3	-	-	-
Goods	523.8	417.1	442.9	628.1	414.2	285.1	290.6
Services	4,161.6	4,204.8	2,829.3	1,735.4	1,450.6	1,120.9	1,334.6
	25,590.1	22,737.6	22,658.4	14,214.0	14,320.3	21,455.8	22,082.0
Imports							
Private Sector	7,535.1	7,511.7	7,508.0	10,818.3	8,971.7	5,584.4	9,541.7
Public Sector	9 ,018.0	6,039.7	4,037.1	4,925.1	6,372.5	7,824.2	12,774.7
Total (Incl Others)	24,496.0	21,238.6	16,548.7	18,813.4	17,057.2	14,904.0	24,197.6
Balance	1,094.1	1,499.0	6,109.7	-4,599.4	-2,736.9	6,551.8	-2,115.6

Source: Central Bank of Iran; EIU, Country Profile, 1987-88

Table 4.9 shows the role played in imports by the private sector and the fall in its importance after the partial nationalisation of the foreign trade by the government in May 1980. With the unstable and shifting balance of forces between conservatism and radicalism in the context of the Shia Islam as described above, and the subsequent attempt by the radical Majlis deputies for further nationalisation, the relative importance of the privat sector was reduced during 1981/1982 and 1982/1983. The table above also shows the importance of oil revenue in the current account compared with other components. Oil constituted the bulk of Iran's exports and foreign exchange revenues needed for imports - an importance which has dramatically increasd in recent years.

After 1983/84 foreign trade has remained low. In spite of a 40% average annual increase in non-oil exports, total exports decreased as a result of declining oil prices. The figures were $18,500 million in 1984/85 and $17,000 million in 1985/86. Exports reached an ebb in 1986/87 to a mere $7,500 million following the oil price collapse. In 1987/88 total exports increased to the $10,000 level.

Trade balance and current account registered surpluses in 1984/85 and 1985/86. However, in 1986/87 they were both well the in red -$2,500 million and -$3,500 million respectively. In 1987/88 trade balance and current account both were expected to be positve. 48

4.5.5 Composition of Exports

As indicated above Iran's economy is based on oil revenues. Excluding oil and gas Iranain exports are basically made up of traditional commodities and new industrial products.49 Among traditional commodities carpets and agricultural produce are two key items of non-oil and non-gas exports by value.

Table 4.10 - Non-Oil and Non-Gas Exports ($ million)

	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Traditional Commodities	379.8	745.4	621.2	326.3	262.4	330.6
(% of Total)	(70%)	(92%)	(96%)	(96%)	(92%)	(93%)
New Industrial Products	163.0	66.4	24.0	13.2	21.3	26.0
Total	542.8	811.8	645.2	339.5	283.7	356.6

Source: Foreign Trade Statistics of Iran; Central Bank of Iran; EIU Country Profile 1986-1987, 1987-1988

Before the revolution the share of the traditional commodities in total non-oil and gas exports was on the decline while that of industrial products was increasing.50 As can be seen in table 4.10, after the revolution between 1979/1980 and 1983/1984 the share of traditional commodities in total non-oil and non-gas exports has been over 90 per cent while the relatively minor role played by industrial exports has declined in absolute terms. The new ndustrial products which were gradually gaining a foothold in some foreign markets before the revolution have fallen back noticeably in recent years.

However, following the government's effort to boost foreign exchange earnings, the total non-oil and non-gas exports increased gradually. They were $317.0 million in 1984/85, $420.0 million in 1985/86, $682.3 million in 1986/87 and $854.1 million in 1987/88. Carpet exports, following its revival in 1984 have accounted for a major proportion of non-oil exports. It earned a record $500.0 million in 1987/88 constituting nearly 60% of total non-oil exports.51

4.5.6 Non-Military Imports

Iran's non-military imports before the revolution constituted mostly of intermediate goods, capital equipment and consumer items in that order. Between 1973 and 1977 an average per year of 57 per cent of Iran's total imports were intermediate goods, 26.2 per cent capital goods and 16.8 per cent consumer goods.52

The revolution brought a major shift in the types of goods imported. In fact capital goods imports declined to15 per cent in 1982 compared with 28.0 per cent in 1978. Also, there was a sharp cut in consumer goods imports especially items considered to be luxury goods by the Islamic government. Food imports, as discussed earlier, rose rapidly throughout the early 1980's despite the government's emphasis on agricultural development.

Table 4.11 Principle Non-Military Imports 1978/79-1983/84 ($ million)

	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Food and Live Animals	1,031	1,518	1,541	2,161	2,164	2,368
Chemicals and Pharmaceuticals	792	1,085	1,521	2,180	1,679	2,084
Iron, Steel and Manufactures	2,974	2,908	3,335	3,986	3,507	5,326
Road Vehicle and Machinery	4,534	2,989	3,055	3,527	3,331	6,317
Total (including oters)	10,372	9,696	10,844	13,515	11,845	18,103

Source: Foreign Trade Statistics of Iran: EIU Country Profile 1986-87, 1987-88

As indicated in the table above the money value of Iran's imports after the revolution has been subject to fluctuations. This is due to the fact that the value of imports are closely connected to the value of foreign exchange earnings. Thus the imbalance in oil revenues has resulted in an imbalance in the value of imports. However, since the significant rise in total non-military imports exceeding $18 million 1983/1984 as a result of sustained attacks on Iran's oil installations and tankers hauling crude oil, the value of total imports has fallen sharply because of decline in foreign exchange earnings.

In 1984/1985 and 1985/86 total imports fell to $14,655 million and $11,519 million respectively. By 1986/1987 it decreased even further to only $8,820 million. After three years of decrease in imports (-21.3% on average every year) in 1987/88, it took an upward swing and increased slightly to $9,769 million. This kind of imbalance in imports and the fact that Iran's industrialisation has been based on import substitution, has created significant problems in the economy. It should be noted that prior to the war, in the period of 1973/1977 the total imports had increased by 41 per cent on average annually ie from $3,659 million in 1973/1974 to $14,447 million in 1977/1978.[53]

4.5.7 Major Trading Partners

Before the revolution West Germany, the USA and the UK were traditionally the main suppliers.The USA lost its position after the revolution, being replaced by Japan.

Table 4.12 - Main Non-Oil and Non-Gas Trading Partners (% of Total)

Imports from	1981/82	1982/83	1983/84	Exports to	1981/82	1982/83	1983/84
W. Germany	17	16	19	W. Germany	32	19	21
Japan	12	11	17	UAE	1	6	14
UK	6	6	6	USSR	12	20	11
Turkey	2	7	5	Italy	14	13	9
Italy	5	5	5	Switzerland	8	3	4
South Korea	5	3	3	Kuwait	4	5	3
Romania	2	4	2	France	3	4	2

Source: Foreign Trade Statistics of Iran; EIU, Country Profile 1986-87,1987-88

In general all imports have to be authorised by ministries. Officially imports from Israel, South Africa and the USA are prohibited, though they often continue through intermediaries. As can be seen from the table above, West Germany and Japan have increased their commercial interest in Iran though Japan has recently been reluctant to prolong its dependence on Iran as a source of oil. Turkey, Iran's neighbour, has improved its position for supplying civil goods while North Korea's importance has grown since 1983 for providing military items. Also due to deterioration in Russian-Iranian relations as a result of the treatment of the pro-Soviet Tudeh Party during 1983, exports to the USSR declined in 1983/1984, though since then relations have improved.

Table 4.13 - Direction of Trade including Gas and Oil (% of Total)

Exports To	1983	1985	Imports From	1983	1985
Japan	19.5	15.9	West Germany	17.4	16.3
Italy	12.1	9.4	Japan	16.3	13.4
Turkey	5.6	8.8	UK	5.5	6.7
Singapore	2.7	7.1	Italy	5.3	6.0
Syria	5.5	6.5	Turkey	6.3	5.9
Spain	8.4	5.6	USSR	3.7	4.5
Netherland	6.9	5.5	Singapore	2.2	3.9
France	4.5	5.0	Spain	2.4	2.8
USA	5.4	4.8	Argentina	2.3	2.8
Romania	2.7	4.4	Netherland	2.4	2.7
West Germany	2.8	4.0	Kuwait	1.1	2.0
USSR	2.6	3.6			
Total(including others)	100.00	100.00	Total(including others)	100.00	100.00
of which: OECD	72.4	64.6	of which: OECD	71.7	70.7

Source: IMF Direction of Trade Statistics Year Book; EIU, Country Profile 1986-87, 1987-88

The table above implicitly shows the Islamic Republic's continuing dependence on the OECD economies despite its profound dislike of such links, particularly in the view of its official policy stressing trade with Islamic and Third World states, partially through barter deals. However, the need for hard currency persists and it is therefore the West that continues to dominate in trade.

4.5.8 Conclusion

Despite Khomeini's backing of the bazaaris and private sector trade, there still exists some uncertainties with regard to the status of the foreign trade sector. Within the revolutionary government there has been a continuing struggle over the economy and the alloction of control, with radicals in favour of a de facto nationalisation of all foreign trade and the conservatives eager to see traditional agencies in the bazzar persue their interest.

Following the revolution and the reduced import levels in 1979, a slow recovery set in with 1983/1984 as the peak year when oil revenues were relatively high and commerical confidence returning. In 1985 and the subsequent years with difficulties due to the continuation of the Gulf war, falling oil prices and consequent shortages of foreign exchange, imports have fallen sharply.

Military requirments has become increasingly important and there has been a significant increase in arms imports as a result of the Iraqi invasion. The ratio of arms imports to toal imports on average per year was 27.8 per cent for the 1979/1983 period. For 1985 it accounted for roughly 34 per cent of all imports and constituted a considerable foreign exchange burden. 54

The major pre-revolution suppliers, West Germany and Japan remain the main suppliers of Iran imports. Overall, there has been some diversification of trading partners after the revolution but the changes have not been significant enough to reduce Iran's dependence on the OECD countries, despite West Germany and Japan's reduced depedence on Iranian oil.

As for the Eastern bloc countries their exports to Iran increased due to 'American hostage' crisis and the Western imposed sanctions. The share of Socialist countries export increased from 10.7 per cent in 1979 to 14.3 per cent in 1980, 15 per cent in 1981, 19.5 per cent in 1982. Then as a result of improvements in foreign exchange earnings and therefore less need for barter deals the share of Eastern bloc countries fell to 13 per cent of Iran's total imports in 1983. 55 Although in absolute terms these countries have increased the money value of their exports to Iran since the revolution, nonetheless the changes have not been significant enough to change Iran's post-revolution trading patterns.

The Third World countries with whom Iran is trading are mainly within the Western camp in principle and the emphasis is on trading with adjacent states such as Turkey and Pakistan, though these are problems in respect of the quality of industrial products imported from these countries. Iran apears to be used to higher quality products from the West.

As for foreign trade policy, Iran does not seem to follow any specific approach. Depending on oil exports it may favour barter, cash or counter-trade, though the latter is much more common. Iran, in an attmept to reduce its current account deficit has been trying to limit imports from industrial countries to a proportion of the value of oil such countries buy from it.

To try to match oil sales to import purchases seems certain to guarantee that the Islamic government will contine to trade primarily with the OECD member states. For it is only the industrialised countires that can absorb large quantities of crude oil.

4.6 PLANNING

4.6.1 Introduction

After the revolution, economic planning became a controversial issue. Within the PBO there was serious confusion with regard to the real purpose of the central planning machinery. This confusion and controversy was of two distinct types. Firstly, those arising from the chaos of the revolutionary period and secondly those related to such fundamental questions as the structure of the Islamic economic system and especially the status of private ownership. Added to these problems were the country's political rivalry and the impact that had on planning efforts.

The confusion which impaired the effective operation of the PBO persisted up to 1982, until steps were made towards the development of some planning mechanism. As a result, while Iran was still suffering from the economic consequences of the revolution and the continuing war with Iraq, in 1983 the revised version of the First Islamic Republic Plan was submitted to the Majlis. The plan, prepared for the period 1983/1984 to 1987/1988 identifies the possible ways in which the Islamic government aims to control the evolution of the economy.

It oulines the goverment's long term socio-economic objectives and policies in detail at macro and sectoral level. Although the plan received the approval of the Majlis, it was not a favourite with the main power groups in the state and conflicted with the ambitions of powerful individuals who hoped to create economic empires of their own, uninhibited by the constraints of a planning frame work. The plan, despite its many virtues, was not given financial support and in the face of increasing demands of the military budget, rarely gained budgetary allocations in the years after 1984.

Considering that Iran was operating a war economy the focus of this section will be:

-A brief study of the abortive First Plan;

-The appraisal of the plan by concentrating on its objectives and aspirations, considering whether they were realistic in the circumstances;

-The comparison of the projected targets with actual post revolutionary performance.

4.6.2 Supreme Objective of the Plan

The ultimate objective of the Islamic society is man's development and devotion towards freedom from anything but God and his movement towards 'Allah'. Economic and social development must constitute an effort to remove any obstacles impeding man's and the Islamic nation's development and elevation. General objectives and orientations of the economic and social development in the Islamic Republic must be drawn up on the basis of Islamic laws and principles. Establishment of Islamic relations in society which is the objective of Divine Instructions, must be considered as the principle and all objectives, policies and plans must be drawn up and accepted in its light.[56]

4.6.3 Qualitative Objectives of the Plan

The general objectives, in brief were as follows:

a) Expansion of education and culture;
b) Securing the interests of the Mostazafin (the Down Trodden People);
c) Securing economic independence;
d) Provision of food and clothing;
e) Provision of housing;
f) Elimination of unemployment.[57]

4.6.4 Policies

Major policies for attaining the general objectives were as follows:

a) Prevension of consumerism and an emphasis on investment;
b) Agriculture as the axis of development;
c) Expansion of research in order to achieve economic independence and increase Iran's economic, political and military capablities;
d) Expansion of secondary activities in order to raise the villagers and tribal people's income;
e) Emphasising the expansion of intermediate and machine-tool industries;
f) Transforming oil revenues into infrastructural and productive capacities, closely related to the domestic economy;

g) Increasing utilization of available capacities in industry, agriculture and education to increase productivity;

h) Expansion of non-oil exports

i) Preventing the expansion of large cities and implementing settlement policies.58

In quantative terms, the plan envisaged that GDP will rise (in fixed prices of 1982/1983) from $119.4 billion in 1983/1984 to $168.9 billion in 1987/1988 at an annual average rate of 8.9 per cent. During the same period, it was anticipated that non-oil GDP will increase by 6.9 per cent on average per year, from $95.2 billion to $125.1 billion. The projected sectoral growth rates were according to Table 4.14 (past performances also given for comparison).

Table 4.14 - Average Annual Sectoral Growth Rates of First Plan 1983/84 - 1987/88 (%)

Sectors	Projected Target First Plan 1983/84-1987/88	Actual Performance Fourth Plan 1968/72	Actual Performance Fifth Plan 1973/77
1. Agriculture	7.0	3.9	4.6
2. Oil	15.9	15.2	-0.7
3. Industries and Mines	14.4	13.0	15.5
4. Services	3.6	14.2	15.3

Source: First Plan, PBO, Islamic Republic of Iran 1982; EIU, Country Profile 1987-88, P. 20.

Despite the poor performance of the oil industry during the Fifth Plan and the post revolutionary problems the First Plan put heavy emphasis on the growth in the oil sector.Likewise, the agricultural sector, with a history of poor pre-revolution performance was planned to increase its output by 7% annually. The projected shares of various sectors in GDP during the plan period were as below:

Table 4.15 - Projected Sectoral Share in GDP, 1983/84 - 1987/88 (%)

Sectors	1983/84	1984/85	1985/86	1986/87	1987/88
1. Agriculture	15.3	15.1	14.8	14.5	14.2
2. Oil	20.3	21.6	22.9	24.4	25.9
3. Industries and Mines	18.5	19.4	20.3	21.3	22.2
4. Services	45.9	43.9	42.0	39.8	37.7
Total	100.0	100.0	100.0	100.0	100.0

Source: First Plan

As can be noted, the share of agriculture was expected to remain more or less the same while oil and industrial sectors planned to increase their contribution to GDP. Services' share was expected to decline. The plan proposed expenditure on investment (by public and private sectors) of $168.9 billion (14,191.3 billion rials . $1 = 84 rials) of which the public and private sector would provide approximately 60 and 40 per cent respectively.

Services, construction and agriculture were seen as the major areas of investment, with the private sector almost exclusively concerned with construction. After construction, agriculture was by far the most important area of planned investment by the private sector, followed by services.

As the table 4.16 shows, 52.2 per cent of the total investment was to go to industry - admittedly to industries intended to serve agriculture. The plan, which had been revised to provide for more emphasis on agriculture than was the case in the original August 1982 draft, envisaged total investment of $26.2 billion for agriculture with an average annual increase of 25.6 per cent. As a result, agriucIture was to receive 15.5 per cent of the total investment - up 3 per cent on the figure in the original plan. The purpose of this emphasis was to provide food for an expected population of 47.11 million by the end of the plan period.[59]

Table 4.16 - Projected Sectoral Investment by Public and Private Sectors during First Plan 1983/84 - 1987/88 (billion dollars at constant 1982/83 prices)

Sectors	Total Investment	% of Total	Investment Annual Average Growth %
1. Agriculture	26.2	15.5	25.6
2. Oil	8.9	5.3	33.2
3. Industry and Mining	88.2	52.2	17.1
Industry and Mining	(23.5)	(13.9)	(22.9)
Water, Power and Gas	(22.4)	(13.3)	(20.2)
Construction	(42.3)	(25.0)	(12.5)
4. Services	45.6	27.0	17.7
Education, Health and Social Services	(8.6)	(5.0)	(17.8)
Other Services	(37.0)	(22.0)	(17.8)
Total	168.9	100.0	19.6

Source: First Plan

4.6.5 Projected Government Receipts and Expenditures

While the plan was an honest attempt to formulate policies for the reconstruction of the country, its heavy bias towards the use of oil revenues and dependence on state involvement in heavy industry and utilities was far too reminiscent of the former regime's orientation. During the First Plan period, the government revenue was estimated to be $34.7 billion in 1983/84 and was projected to rise to $59.8 billion in 1987/88. Therefore, the total revenue was programmed to rise at an annual real rate of 14.5 per cent. Oil was planned to contribute a constant 58 per cent to total government revenues during the plan. In calculating oil revenues it has been assumed that the average price of oil will be $33.25 per barrel during the plan period, in constant 1982/83 prices.[60]

Furthermore, it was envisaged that the oil exports would rise from 1.73 million barrels per day in 1983/84 to 2.97 million barrels per day in 1987/88, an increase of 71.7 per cent. This implies that oil revenues should have an average annual rise of 14.4 per cent, increasing from $20.3 billion in 1983/84 to $34.8 billion in 1987/88 in constant 1982/83 prices.

Total government expenditure was planned to rise from $41.2 billion in 1983/84 to $59.8 billion in 1987/88, an annual average growth rate of 9.7 per cent.[61]

Appraisal of the Plan and the Actual Peformance

Given the brief presentation of the First Five Year Plan, the plan was a genuine attempt at the resuscitation of the Iranian economy. The plan document represented a turning point in the politico-economic affairs of the country. Its importance lay not in outlining the government's long term objectives and policies, but in the change of approach and attitude. In the immediate years following the revolution, everything had to be labled 'Islamic' in order to be descirbed or justified, as the PBO did not use the term 'Islamic' as a delineator. The subjects of Islamic economics and Islamic economic systems were left out and did not play a role in planning. The central planning machinery, regardless of ideology, produced a development plan, though not without shortcomings, based on Iran's resource endowment.[62]

The policies of the development adopted by the plan was aimed towards 'economic independence' and 'self sufficiency' with agriculture as the 'axis of development'. However, the planned average annual growth rate of 7 per cent for agricultural sector was quite high by historical standards. The actual growth during the Fourth and Fifth plans of the Shah's rule was 3.9 and 4.6 per cent respectively. Considering the war and its serious consequences, i.e. dislocation of labour and increased migration from rural areas to the towns, the 7% growth target was highly unrealistic.

While the crucial status of agriculture had been recognised by the Islamic Republic, the projected investment in the agricultural sector left much to be desired. It was planned that this sector will receive $26.2 billion in total investment during the plan period. The breakdown of investment funds was unrealistic. It was forecast that non-government investment should be 71.3 per cent of the total.[63] Considering the flight of capital, the bitter struggle and impasse over land reform after the revolution, it was very optimisti c to expect the private sector to contribute such a large share of total investment in agriculture. Contrary to the planners belief, the agricultural problems were not the result of insufficient investment in that setor; rather it was the backwardness of the agricultural sector as a whole. In fact in the late 1960s despite considerable amounts of investment for the creation of co-operatives and farm co-operation alongside massive agri-business, development did not succeed, causing urban drift of population and capital. Due to considerable confusion in the countryside, this tendency was accelerated by the revolution. Investment and absorptive capacity of the rural areas can only yield higher returns when a hospitable environment can be provided for it. Otherwise it would lead to waste and added inefficiencies.

Despite the foregone problems it should be noted that between 1978/1979 and 1983/1984 the actual growth rate of the agricultural sector was an average 4.7 per cent per annum, which is a favourable growth rate by past standards.[64] However, despite this performance food imports since 1978/1979 have risen rapidly. Agricultural imports for 1987/88 were approximately $3.8 billiion, the highest level ever. City dwellers, only a third of the population in the 1950s, outnumbered the rural population by the early 1980s. In 1986 the absolute size of the rural population declined for the first time on record, making it harder for Iran to grow food while increasing the need for it. This problem has also been compounded by the war and the increase of the population by 3.7-3.9 per cent per year, one of the highest rates in the world.[65]

As far as the policies of development and industrialisation were concerned, these were similar to those of previous plans based on import substitution with the major emphasis on heavy industries, petrochemical and defence related industries. The ultimate objective again being 'economic independence' and 'self sufficiency'.

As far as the the projected growth rate of 14.4 per cent for industrial sector was concerned, it was slightly higher than achieved during the 1968 to 1972 period and only 1 per cent less than the growth obtained during the Fifth Plan (1973-1978). However, it should be noted that between 1978/79 and 1983/84 the industry and mining sector grew by an average annual rate of one per cent.[66] Therefore a recovery from an extremely low base has been achieved. However, because of the continuation of the war, the flight of managerial and entrepreneurial skills, the expropriation and nationalisation of private industry and the political rivalry, the growth figure projected was unrealistic. As long as the said problems exist it is unlikely that a rapid recovery can be achieved.

Out of total planned investment of $168.9 billion the industrial sector was to receive $88.2 billion or 52.2 per cent of the total. Considering the projected investment and the policies, it appears that the planners as in previous periods, went for spending oil revenues with no serious attention to the problems of absorptive capacity. Though the oil revenues in the plan was unlikely to materialise on anything like the scale envisaged, the main problem in Iran, since the 1973 oil boom, has been to absorb investment efficiently, not lack of funds. However, considering the consequences of the revolution and subsequent events that reduced Iran's absolute absorptive capacity, expenditure to the level envisaged in the plan would have been wasteful. Nonetheless, the revolutionary regime has attempted to resurrect the pre-1979 industrial ventures including the Shah's nuclear power plans, despite the very considerable cost, most likely beyond Iran's means at the present time and contrary to the aspiration of the plan.

In general, since the abatement of nationalisation, the revolutionary regime has continued with the industrial structure inherited from the Shah, with the added rhetoric of establishing an Islamic society.

As for the oil sector, the planned growth rate of 15.9 per cent was quite high, considering the low probability of a rapid expansion of the world economy, the persistent oil glut and the pressure on OPEC members to reduce their oil production. The projected oil price was also extremely optimistic. At the time when the plan was being formulated, the Gulf war had created a sense of insecurity and instability in the oil markets. Furthermore, the oil price rises of the 1970s had led to energy saving technologies in the West. All these factors, as well as the serious recession in the industrialised economies, should have served as a warning to the planners that the oil price might not increase to the expected level.

In fact the drastic decline in the oil prices during the recent years, demonstrates the miscalculation of the planners. As oil was expected to provide aroud 60 per cent of government revenue during the plan, the fall in the oil price completely undermined budget and investment plans.

The projected oil exports was also very optimistic and did not seriously take the world situation into account. Considering the aforementioned factors, the proximity of Kharg oil exporting terminal to the war front and Iraq's air superiority in disrupting the oil flow, all made it seem an impossible task to increase Iran's exports by nearly 72 per cent during the plan period. The projected oil exports of 2.97 million barrels per day in 1987/88 meant a total daily production of over 3.6 million barrels which, in the face of the current economic situation and the continuance of war, has not been achieved.

In fact Iran's oil production on average since 1980 never reached 3 million barrels per day. Oil output, because of the war, has been subject to great fluctuations. In 1987 after a very low ebb in February at 1.65 million barrels, output steadily increased to 2.5 billion barrels per day in mid year and peaked at 2.8 million barrels per day in August. The improvemet in output came as a result of a slackening of Iraqi air raids on oil facilities and tankers.[67]

In the services sector, the planners appeared to promulgate two contradictory objectives. On the one hand services were regarded as 'unproductive' and can therefore be dispensed with, and on the other hand, the main objectives of the plan were to raise the educational and cultural standards and to provide health and social welfare for the masses.[68]

The planned target of 3.6 per cent growth per year for the services is low in absolute terms and by historical standards. Actual growth rate during the Fourth and Fifth Plan were 14.2 and 15.3 respectively.

However, it should be noted that the actual average growth rate for the services sector, between 1978/79 and 1983/84 was 2.9 per cent, despite its erratic growth trends.[69]

In general the plan as a whole was highly ambitious and heavily biased towards the use of oil revenues. It emphasised the expansion of oil industry in line with its increased and now chronic dependence on oil revenues. In this respect, the plan ran directly opposite to the proposals for the oil industry made directly after revolution, when the aim was conservation. The main differences between the Islamic Republic's first plan and those of the Shah's period, are that the former contain the goals of establishing an Islamic society making agriculture the 'axis of the economy' and securing 'economic independence'.

The Islamic plan is similar to those of the fomer regime in its over ambitious targeting and its lack of serious attention to absorptive capacity. Serious doubts must have remained over its successful completion. Even if the cost of the war was ignored, the government would not have been in a position to fund such high level development spending in tandem with a growing import bill for basic commodities and the need to make good the very considerable war damage.

References

1. M. Fischer, *Iran: From Religious Dispute to Revolution* (Harvard University Press, USA, 1980), p.223.
2. K. McLachlan and G. Joffe, *The Gulf War* (The Economist Intelligence Unit, Special Report No. 176, London, 1984), p.52.
3. S. Bakhash, *The Reign of the Ayatollahs: Iran and the Islamic Revolution* (Unwin Paperbacks, London, 1986), pp.175-176.
4. Ibid., p.176.
5. M .Fischer, op.cit., p.225.
6. S. Bakhash, *The Reign of the Ayatollahs,* op.cit., p.178.
7. S. Bakhash, op.cit., pp.195-200.
8. Ibid., p.201. Also see *Constitution of the Islamic Republic of Iran* translated by H. Algar (Mizan Press, Berkeley, USA, 1980), Article 46 states: "Everyone is the owners of the fruits of his legitimate business and labour, and No. one may deprive another of the opportunity of work under the pretext of this ownership".
9. S. Bakhash, op.cit., p.204. Also see *Constitution of the Republic of Iran,* op.cit., Article 47.
10. The 'Council of Guardians' comprising of twelve jurists assure that legislations are in accordance with the ordinances of Islam. The Land Reform Law was suspended on 12 November 1980.
11. The 'Governance of the Faqih' has been included in the Constitution of the Islamic Republic of Iran. See articles 107-112.
12. S. Bakhash, op.cit., p.207.
13. *Lloyds Bank Economic Report,* Iran, 1987, p.8.
14. *The Economist,* 4th February 1988, p.64.
15. The Foundation for the Disinherited is a holding company (revolutionary corporation) established after the revolution is the largest commercial organisation in Iran. It owns six hundred companies including one hundred and fifty factories, two hundred trading houses, eighty per cent of all the country's cinemas and many agribusinesses and farms. See further *Financial Times Survey,* 1st April 1985, p.viii.

16. *The First Five -Year Economic, Social and Cultural Development Plan of the Islamic Republic of Iran 1362-1366* (1983/1984-1987/88), The Plan and Budget Organisation (PBO), Tehran, Iran, 1982, p.11.
17. See J. Amuzegar, *Iran: An Economic Profile* (the Middle East Institute, Washington D.C.,1977), p.33, also see,*Lloyds Bank Economic Report 1987*, p.8.
18. *The Economist* 6 February 1988, P. 64.
19. See *EIU, Country Report*, No. 4 1987, p.18.
20. *Lloyds Bank Economic Report*, 1987, p.8, p.11.
21. M. Bazargan, *Moshkelat va Masa' el-e Avvalin Sal-e Enqelab (Difficulties and Problems of the First Year of the Revolution)*, (Iran Freedom Movement, Tehran, 1361; 1982), pp. 122-123, p.203. Also see S. Bakhash, The *Reign of the Ayatollahs*, op.cit., p. 179.
22. S. Bakhash, op.cit., p. 179.
23. Ibid., p. 180.
24. *EIU, Quarterly Economic Review of Iran (QER)*, 3rd quarter, 1979, p. 16. Also see M. Bazargan, Moshkelat va Masa'el, op.cit., pp. 201-205.
25. S. Bakhash, op.cit., p. 181.
26. *EIU, QER*, 2nd quarter, 1980, p. 16.
27. *EIU, QER*, 3rd quarter, 1981, p. 12.
28. *EIU, QER*, 4th quarter, 1980 p. 18.
29. *EIU, QER*, No. 2, 1983, p. 17. Also see No. 3, 1983 p. 20 and No. 4, 1983, pp.18-19.
30. *FT Survey*, 1 April 1985, p. xi.
31. K. McLachlan,*The Gulf War* (EIU, Special Report No. 176, London,1984), p. 62.
32. *EIU, Country Profile*, No. 2, 1987, pp. 17-18.
33. *EIU, Country Profile*, No. 3, 1987, p. 13.
34. *EIU, Country Profile*, 1987-1988, p. 29.
35. *EIU,Country Profile*, No. 2, 1986, p. 14. See further No. 3, 1986, p.17; No. 4, 1986, p.18; No. 4, 1987, p. 20.
36. See further S. Bakhash, op.cit., pp. 185-190.
37. *EIU, Country Profile*, 1987-1988, p. 34.
38. For further evidence on oil and gas growth rates see *EIU, Country Profile*, 1987-1988, p. 21.

39. Iran's industrial sector is controlled by three ministries - the Ministry of Mines and Metal which deals with smelting of Iranian-mined minerals; the Ministry of Industries which supervises electrical and electronic plants, chemicals, food, cement, textiles and light metal industries; and the Ministry of Heavy Industry with its associate the Industrial Development and Renovation Organisation runs forging engineering and automobile plants.

40. *EIU, Country Profile,* No. 4, 1987, p. 17.

41. S. Bakhash, *The Reign of the Ayatollahs,* op.cit., p.102.

42. Ibid., see further, EIU, QER, 2nd Quarter 1980, p.17.

43. S. Bakhash, op.cit., p.193.

44. H . Afshar, *Iran: A Revolution In Turmoil* (The Macmillan Press Ltd, 1985), p.229.

45. See further Ibid., pp.229 - 230.

46. See S. Bakhash, op.cit., p.193, P.216.

47. For evidence on Khomeini's statement see K. Mofid, *Development Planning In Iran* (Menas Press Ltd, 1987), p. 233. Also according to Article 44 the economic system of Islamic Republic is to consist of three sectors: state, co-operative and private. The state sector is to include foreign trade which will be publicly owned and administered by the state. Refer to Constitution of the Islamic Republic of Iran, translated by Hamid Algar, Mizan Press, Berkeley, USA, 1980.

48. For evidence on these figures see MEED 12th March 1988, p. 34.

49. Traditional commodities consist of carpets, cotton (except linter), fresh and dried fruits, skin and leathers, caviar, casings, gum tragacanth, cumin and mineral ores. New industrial products are soap and detergent, inorganic chemical products, shoes, biscuits and confectionary, ready made clothes and all fabrics, construction materials and vehicles.

50. For further information see J . Amuzegar, *Iran: An Economic Profile* (The Middle East Institute, Washington D.C, USA, 1977) pp. 148-149.

51. MEED, 13th May 1988, p.11.

52. K. Mofid, *Development Planning in Iran,* op.cit., p. 164.

53. See further MEED, 13th May 1988, p.11. Also see K. Mofid, op.cit., pp. 154-155, p.234.

54. K . Mofid, op.cit., pp. 259-260.

55. For evidence of these figures see K. Mofid, ibid., pp. 237-239.

56. *The First Five Year Economic, Social and Cultural Development Plan* 1983/84 -1987/88 (Henceforward First Plan), PBO, Tehran, Iran, August 1982, p.5.

57. *First Plan,* op.cit., pp. 6-11.

58. Ibid.,pp.11-23.

59. Ibid., p .24.

60. *First Plan,* op.cit. (Persian copy), p. 78.

61. Ibid., (Persian copy), p. 82. Also see K. Mofid, *Development Planning In Iran* (Menas Press, UK, 1987) , pp. 208-210.

62. For further realdng on this issue see H . Razavi and F . Vakil, *The Political Environment of Economic Planning In Iran,* (Westview Press, USA ,1984) pp. 113-120.

63. *First Plan,* op.cit., p. 94.

64. For evidence of this figure see *EIU ,Country Profile* 1987-1988, p. 21.

65. *The Economist,* 6 February 1988, p. 21.

66. See further *EIU Country Profile,* 1987-1988, p. 21.

67. *EIU ,Country Report,* No. 4, 1987, p.p 18-19.

68. K. Mofid, *Development Planning In Iran,* op.cit., p. 217. Also see *First Plan,* op.cit., p. 56.

69. *EIU ,Country Profile,* 1987-1988, p. 21.

5. ISLAMIC FINANCE

5.1 ISLAMIC BANKING

While prohibiting interest, Islam permits profit sharing. The central requirement of an Islamic banking system is the replacement of interest with profit on real activities as a means of allocating financial resources.

Following the revolution, the Iranian authorities chose to convert their banking system to an interest free system by passing the comprehensive Law for Riba-Free Banking. In this section an attempt will be made to study and analyse certain salient features and the implementation of the new system in the Islamic Republic of Iran.

5.1.1 Nationalisation

On 8th June 1979, the Revolutionary Council nationalised the banking system. It was the first step in a series of measures of desperation taken due to immediate economic and political necessity. As a result, twenty seven privately owned banks, thirteen of them joint ventures with minority foreign share holdings, were affected. Prime Minister Bazargan stated that "we respect private property but in view of undesirable and unprofitable conditions in the banks, to protect national rights and wealth and get the wheels of the economy moving, we deemed it necessary to nationalise the banks."[1] The head of the Plan and Budget Organisation added that "many of the owners of private banks did not have a good record and did not play their fundamental role in preserving the national wealth and rights."[2]

Hence, the banks takeover seemed inevitable. Politically the regime aimed to satisfy the high revolutionary expectation of the people after the revolution, Bank Markazi (the Central Bank) was under considerable pressure to keep an estimated half of the local banks from bankruptcy mainly because of the banks' history of over borrowing and involvement in risky ventures. Most of the board members of the banks had fled abroad and as stated by the head of the PBO, takeover was necessary in view of huge foreign and domestic indebtedness of some of the banks, and in order to guard against bankruptcy, secure private deposits and protect the 'national interest'. The latter being a reference made by both Bazargan and the head of the PBO, to fears that the private banks would be used to siphon off more money to accounts abroad. 3

As a result of nationalisation and amalgamation of private banks with those already government owned, five commercial banks and four specialist banks emeged.4 However, this regrouping bought little change to the mode of operations. The banks were not functioning as fully fledged Islamic banks.

5.1.2 Islamisation

Following the nationalisation, the revolutionary authorities in Iran took certain administrative steps to bring the banking system's operations into compliance with the requirements of the Islamic law . The government of Bani Sadr replaced interest with a system of service charges in 1981. As a result the banks levied a fixed 4% service charge on loans rather than interest. Depositors were also rewarded with a 'guaranteed minimum profit.' As can be noted, the proxis of interest were not eliminated at this stage of Islamisation, the transition came slowly. A comprehensive bill of Islamisation, prepared by a high level commission including bankers, academics, businessmen and religious figures was submitted to the Majlis in March 1982 and was approved in August 1983 as the Law for Riba - Free Banking. This law required the banks to convert their deposit accounts in line with the Sharia within one year, and their entire operations within three years from the date of the approval of the law.

The new system began to come into effect on the Iranian New Year, 21st March 1984. From this date no customer was allowed to open a new interest earning account or make a new interest bearing deposit. Nor were the banks allowed to make interest bearing loans. As from March 1985, interest had been abolished and transactions were on an Islamic basis. 5

The implementation of the Islamisation policy had been piecemeal and took six years to be fully introduced. More than 20,000 staff had to be put through courses on Islamic banking. The lengthy process of Islamisation was constrained by various economic developments associated with nationalisation of the banking system, political upheavals, the freezing of Iranian assets held abroad, acute economic recession and the Gulf war. It is important to note that at the time of revolution, the banking system in Iran was near collapse. A large number of newly established banks were burdened with high levels of non-performing assets and debts to both Bank Markazi (the Central Bank) and foreign creditors. The position of these banks was in particular due to the lack of banking and management experience compounded by inadequate regulatory controls. 6

Under the circumstances, if there was no nationalisation, imposition of mergers on many weaker banks would have been expected. 7 All these inherent weaknesses, leading to lower overall performance of banks, hampered the transformation of the banking system.

5.1.3 Bank Accounts

Under the Law for Riba-Free Banking, liabilities acquired by the banks must be based on two types of transactions; Qarz al-hasaneh deposits and term investment deposits. Qarz al-hasaneh whether current or saving accounts, yield no income at all, but are praised by the authorities as highly desirable on religious grounds. To encourage the placing of Qarz al-hasaneh deposits the banks may, at their discretion, offer to depositors one or more of the following: non-fixed prizes or bonuses in cash of in kind, such as air tickets to holy shrines, carpets, gold coins, even cars; an exemption or reduction from payment of commission for banking services; and priority in the use of banking facilities. The banks are to consider their deposits both current and saving as their own resources in respect of utilisation but no profits are to be passed to depositors. Full payment of the nominal value of Qarz al-hasaneh deposits are guaranteed by the banks. From the customers point of view, these accounts are to serve as a means of transaction, payment and liquidity. In accordance with the rules adopted by the Money and Credit Council the banks are to set aside 10% of their rescources (providing it dose not exceed the total amount of the total Qarz al-hasaneh deposits) to provide loans in the form of Qarz al-hasaneh. Money lent out must be used for one of the following purposes:-

(a) to provide equipment, tools and other necessary resources to co-operative bodies in order to generate employment

(b) to enable expansion in production, with particular emphasis on agriculture, live-stock and industrial products

(c) to meet essential personal needs such as wedding expenses, dowries, medical expenses, home repairs and loans for education.

Maximum loan for categories (a) and (b) are 5,000,000 rials and in respect of (c) it is 500,000 rials, repayable within five and three years respectively. Banks are permitted to charge a minimum service fee to cover the cost of administering these loans. 8

Term investment deposits are used to fund the whole range of the banks' activities but mainly medium and long term investment. Investment deposits are comprised of two kinds, short and long term. The former is for a period of at least three months (20,000 rials or more) and the latter for one year or more (50,000 rials at least.) Depositors are given a surety of return of their money deposited. In other words, depositors do not run the risk of losing their money should the bank's investment operations prove bad.

The banks in their capacity as 'depositors attorneys' utilise the investment deposits in compliance with financing and credit policies, and profits derived are divided between the bank and the depositors according to a pre-determined agreement. Although the banks can use their own resources that is, their capital and Qarz al-hasaneh deposits, the priority must be given to the utilisation of investment deposits meaning 'depositors' resources'. The banks can also use a combination of 'depositors' resources' and their own, in which case the bank and depositors share the resulting profits. Alternatively, the bank can act as a trustee and place the depositors' funds in an investment project in which case all resulting profits plus any capital gains are returned to the depositors. In this case the bank charges only a commission to cover the cost of administering the accounts. In all cases the banks undertake or insure at their own expense the repayment of the principals of the investment deposits.

On occasions when combined resources of the depositors and the bank are invested, the return to depositors is calculated to the total amount of investment deposits (net of statutory reserve requirements). The banks must declare their profits at the end of each six months of their operation (end of Shahrivar and Esfand correponding to about 21st March and 21st September) and pay the share of the depositors' profits into each account. Depositors who withdraw their money before the minimum time required or reduce it below the set minimum amount, do not earn profits. 9

5.1.4 Modes of Financing Operations

The methods of investment, provision of trade credit and leasing contracts are in accordance with Islamic banking principles similar to those adopted by some countries in the Middle East, though the operational procedures may differ slightly.

The Law for Riba-Free Banking provides regulations governing various modes of operation. Term investment deposits, for which the bank has the power of attorney for its utilization must be used in Mosharakat (partnership between bank and client), direct investment, Mazaraba (profit sharing between bank and client), Aqsat transactions (installment), Ijarah be shart-e tamlik (hire purchase), Salaf transactions (forward purchasing), Mozara'a (similar to Mazaraba but crop-sharing), Mosaqat (similar to Mazara'a but in irrigation) and Ja'alah (unilateral contract for doing a job). [10] A brief description of these modes from the point of view of the law and its related regulations and procedures is as follows:

5.1.4.1 Mosharakat

The law recognises two kinds of partnership. They are civil annd legal. Civil partnership is based on the contribution of cash or non-cash capital by several or legal persons to a common pool on a contractual basis for the purpose of making profit. It is a project based partnership of short duration and shall disolve and liquidate on accomplishing the objectives of the partnership. The bank undertakes participation in order to provide the necessary facilities for productive, commercial and service activities. The life of the partnership can vary from one to a maximum of three years, though in exceptional cases the Central Bank could extend its duration. The banks' share in the civil partnership cannot exceed 80 per cent of the total capital.[11]

The second form of partnership is concerned with firms in which the bank provides a part of the capital of new joint stock company or buys part of the shares of an existing joint stock company. The banks, prior to their engaging in partnership, are obliged to assess and evaluate the technical, economic and financial viability of the firms. The participation is permissible only if the result of such appraisal indicates minimum expected rates of return.

The Money and Credit Council determines the least expected rate of return. The maximum amount of equity participation by the bank or banks in a new, joint stock company should not exceed 49% while the limit of participation in an existing joint stock company is 20% or less. The banks are allowed to sell shares that they have thus purchased whenever they find it appropriate.[12]

5.1.4.2 Direct Investment

Banks can directly invest in any profit making project. The projects should be of developmental or productive nature. Banks cannot invest in the production of luxury or non-essential goods. The Law specifies that the ratio of the initial capital of these projects to total financial resources needed should not be less than 40%. The total fixed capital required for the implementation of such projects must be provided in the form of long term financial resources. Prior to undertakings of direct investment the banks must evaluate the proposed projects from the economic, technical and financial points of view. Use of the banks' own resources and investment deposits are allowed only if the result of assessment and evalution of any project is financialy viable and minimum profitability, designated by the Money and Credit Council, is expected. In conformity with the law the banks are required to report to the Central Bank their plans for the allocation of funds for direct investment at least six months before the end of each year (20th March) in order to be submitted together with the State Annual Budget Bill to the Majlis.

Once the projects in which the banks have directly invested have begun their productive activity, banks can sell the shares to the public. If as a result of this the banks share in the project falls to 49% or less of the total equity, the investment would be considered as a 'legal partnership' and the appropriate rules and regulations would apply. The Central Bank has the authority to investigate and audit direct investment projects in which the banks have participated.[13]

5.1.4.3 Mozaraba

This transaction is a short term contractual partnership of up to one year. In special cases only with the consent of the Central Bank, the duration may be extended. In Mozaraba the banks, as owners, place the required financial capital at the disposal of the agent-enterepreneur (i.e. either a real or legal person) for the purpose of providing the facilities necessary for the expansion of commerce. Like the aforementioned modes of operation, the banks are to assess the transaction for the safe return of the principal capital plus the expected profit. Banks are required to give preference to co-operatives in their Mozaraba activities. Furthermore, the banks are not permitted by law to enter Mozaraba with the private sector for imports.[14]

5.1.4.4 Installment Transactions

Banks are authorised to buy machinery, tools and equipment, raw materials and spare parts for firms and resell the same to them on installments. The pupose of sale by installment is to provide the necessary facilities to raise working capital for the productive units. The installment price is determined by taking into consideration the cost price of good as well as the bank's profit. The recovery period in respect of raw materials, tools and spare parts must not exceed the duration of one production cycle or one year at the most, extended in exceptional cases only with the consent of the Central Bank. As for repayment of loans for machinery and equipment, the period cannot exceed their useful life which is considered to begin on the date of their utilisation in the production process and its duration will be determined by the Central Bank.

For existing productive units in the agricultural sector, the banks are even permitted to buy and resell live animals on installments with a repayment period of up to two years. Where the sale is by installment and it is tended to provide working capital for a new project, industrial or agricultural, the respective bank can decide, on an individual case basis to extend the payment period over one year. Moreover the banks may sell by installment their own low cost housing units built for the purpose of expansion in the area of housing.[15]

5.1.4.5 Hire Purchase

According to the law, the purpose of hire purchase transactions is to provide the necesssary facilities for the expansion of services, agricultural , industrial and mining activities. As a result, the banks can purchase the needed machinery, equipment and other movable or immovable property and lease them to firms. At the end of hire purchase periods and after the last payment of the rental, the ownership of property will be transferred to the leaseholder, providing the leaseholder has fulfilled the conditions specified in the contract. The period of hire purchase must not exceed the duration of the effective life of the properties. Banks however, cannot engage in transactions in which the useful life of the property is less than two years. Furthermore banks are required to obtain as 'payment on account' at least 20% of the total cost as part of the rental over the period of the hire purchase.[16]

5.1.4.6 Salaf Transactions

These transactions are to provide the firms with needed working capital. Banks can purchase the firm's products in advance at a fixed price not exceeding the market price of the product at the time of the transation. However, the banks are not allowed to sell the products so bought in advance before their date of delivery unless the purchased products have been delivered before the date of delivery. The date cannot exceed one production cycle from the time of contract and in no circumstances can it be more than one year.

The forward purchasing of products by the banks is permitted only if such products are produced by the applicants productive units; are not rapidly perishable unless some measures can be taken against spoilage during the period between delivery and sale; and are readily sellable. The latter means that the bank at the time of forward purchase should satisfy themselves that the products in question would be readily sellable at the date of delivery.[17]

5.1.4.7 Other Transactions

In Mozara'a the banks can provide agricultural lands that they own or in their possession as a trust to farmers for a specific period with a pre-determined share of each party in the harvest. In addition to land, the bank may provide other necessary elements such as water, seeds, fertilizer, pesticides, implements and means of production and transportation and even if deemed necessary, pay a certain amount of cash to farmers during the production cycle.[18]

As for Mosaqat, similarly the purpose of it is to increase productivity and the production of agricultural products. The banks may provide orchards or trees that they own or are in their possession to farmers for a specific period and a specified amount of common share in the produce. Produce includes fruit, leaves, flowers and the like.[19]

In Ja'alah which is for the expansion of productive, commercial and services activities, the banks may provide or acquire services whenever they are needed and charge or pay commission or fees for such services.[20]

Discounting in its specific form, i.e. purchase of debt, is permitted as one type of credit facility. Banks can discount documents and commercial papers of production, commercial and services units in order to create the necessary financing facilities. In doing so they are bound to make sure of the reality of the debt and the credibility of the undertakers prior to the discount of documents.

Finally, another form of financing is Qarz al-hasaneh which was discussed earlier. A summary of modes of permissible transations corresponding to the types of economic activity are as below:

Table 5.1 - Modes of Financing Operations

Types of Activity	Permissible Modes of Transactions
Production (Industrial, Mining and Agriculture)	Mosharakat, hire purchase,Salaf transactions, installment transactions, direct investment, Mozaraba, Mosaqat, Ja'alah, Qarz al-hasaneh, sales on credit
Commercial (Imports, Exports and Domestic).	Mozaraba, Mosharakat, Ja'alah
Service	Hire purchase, installment,Mosharakat Ja'alah
Housing (Construction and Repairs)	Hire purchase, installment, Ja'alah Qarz al-hasanah, Mosharakat (civil) direct investment
Personal needs	Qarz al-hasaneh

source: al-Tawhid (Quarterly Journal), Vol III, No 4, July-September 1986, Sazman-e Tablighat-e Islami,Tehran, Iran pp. 65-66.

5.1.5 The Role of Bank Markazi

The Law for Riba-Free Banking has empowered Bank Markazi (the Central Bank) to intervene in and supervise the monetary and banking activities through the following instruments:

- Designation of various fields for investment and partnership within the framework of the approved economic policies.
- Determination of the least expected rate of profit for various investment

partnerships according to the branches of activity.

- Fixing a minimum and maximum ratio of profit for banks in their Mozaraba and Mosharakat activites corresponding to the different fields of activity.
- Determination of the lowest and highest margin of profit for banks, as a proportion to the cost price of the goods transacted, in installment and hire purchase transactions.
- Establishment of guidelines for advertisements by banks in respect of mobilizing and attracting deposits including determination of the types, amounts, minimum and maximum bonuses to depositors.
- Fixing maximum rates of commission the banks are to charge for their services.
- Determination of the lowest and highest ratios in all permissible financing and credit operation of the banks; also fixing the maximum amount of credit facility granted by banks to each applicant.

Bank Markazi is also required to determine legal reserve requirements for various types of bank deposits of the banks; bank-by-bank credit ceilings on aggregate and sectoral credit; the minimum ratio of liquid assets to short-term liabilities; and the ratio of credit facilities granted by each bank to that bank's capital. Furthermore, Bank Marakazi is authorised to inspect and audit banks accounts and documents. It has also been placed with further responsiblity to devise additional regulations to enhance its supervisory role, whenever required, in order to safeguard banks from insolvency.

Foreign Banks are prohibited from operating in Iran. However, they are allowed to establish 'representative offices' providing advisory services for Iranian clients mainly importers and banks. As a result, supervision of these banks by Bank Markazi is limited to ensuring that they comply with the regulations.[21]

5.1.6 Assets and Liabilities

It is too early to evaluate the full impact of the implementation of the Law for Riba-Free Banking. However, the availability of certain data permits the analysis of some aspects of Islamic Banking in Iran.

On the liability side of the banking sytem, as can be noted in table 5.2, private sector deposits have grown since the enforcement of the law. Their growth during 1984/85 was limited to 5.7% but by March 1986 they grew rapidly by as much as 13.3%. These increases were due to the influence of surplus in the foreign exchange balance, the increased debts of the public sector to the banking system and the rise in the balance of credit facilities awarded to the private sector. These expansionary effect were caused by the public sector's financial operations in spite of the goverment cuts in the budget. In 1986/87 as a result of the growth of liquidity, the deposits of the private sector with the banks rose by 20.5% to 8,080.0 billion rials in March 1987.

Qarz al-hasaneh savings in March 1985 amounted to 3433.4 billiong rials which showed the enthusiasm of the public for Qarz al-hasaneh charity account. However, this account by March 1986 was reduced to 903.3 billion rials showing a decrease fo 39.6%. As for term deposits, between March 1985 and 1986 short term deposits almost doubled, while during the same period long term deposits inceased by 19.3%.

The study of private sectors deposits in table 5.2 implies that three years after the implementation of the law, the banking system has been able to expand while converting its liabilities into Islamic forms and increasing its absorption of deposits by 13% annually on average. This trend is still in effect and in the first five months following 21 March 1987, the volume of deposits inceased by 24.7% compared with the same period in the preceding years. This encouraging picture, however, tails to take account of the rising inflation. According to IMF figures, inflation for the year ended September 1984 was approximately 13% to 14% on an annualized basis.[22] Inflation having gone down in 1984/85 and 1985/86 picked up again in 1986/87. The growth of the consumer good and services price index for the above mentioned three years were 10.5, 4.1 and 20.8% (annual average growth 12.4%) respecitvely, while those of wholesale wre 7.6, 5.5 and 23.5% (annual average growth 14.5%).[23] In fact the rate of inflation was distorted by the reduced price indices of housing, clothes and heavy subsidising of food is believed to be much higher than the official figures.

As can be noted, despite the nominal expansion of the private sector deposits, in real term it was depressed as a result of considerable inflationary effects on the national economy.

On the asset side, the banking system was slower in converting its assets into Islamic forms. In 1985, from a total sum of 4,500.7 billion rials credits extended to the private sector, only 754.7 billion rials was in new banking faciltiles (table 5.3 and chart 1). From this sum 591.3 billion rials were allocated from term investment deposits and the rest, 163.4 billion rials, from Qarz al-hasaneh deposits. Moreover, the share of commercial banks in granting new facilities was 77. 3% of the total while that of the specialised banks was 22.7%. This indicates

Table 5.2-Private Sector Deposits 1984-1987 (billion rials)

Item	March 1984	March 1985	March 1986	March 1987
Private sector deposits	5,600.0	5,918.3	6,705.8	8,080.0 a
Sight	(2,013.5)	(2,509.0)	(2,747.3)	
Nonsight	(3,586.5)	(3,409.3)	(3,958.5)	...
Old accounts	3,586.6	-	-	-
Time deposits	(849.3)	-	-	-
Savings	(2,737.3)	-	-	-
Islamic accounts	-	3,433.4	3,958.4	...
Qarz al-hasaneh savings	-	(1,496.7)	(903.5)	...
Short term deposits	-	(938.3)	(1,863.4)	...
Long term deposits	-	(998.4)	(1,191.5)	...

Source :Al-Towhid (Quarterly Journal) Vol. III, No. 4, July-Sept 1986, Sazman-e Tablighat-e Islami ,Tehran ,Iran ,p. 77.
a Iran Year Book 88, p.208.

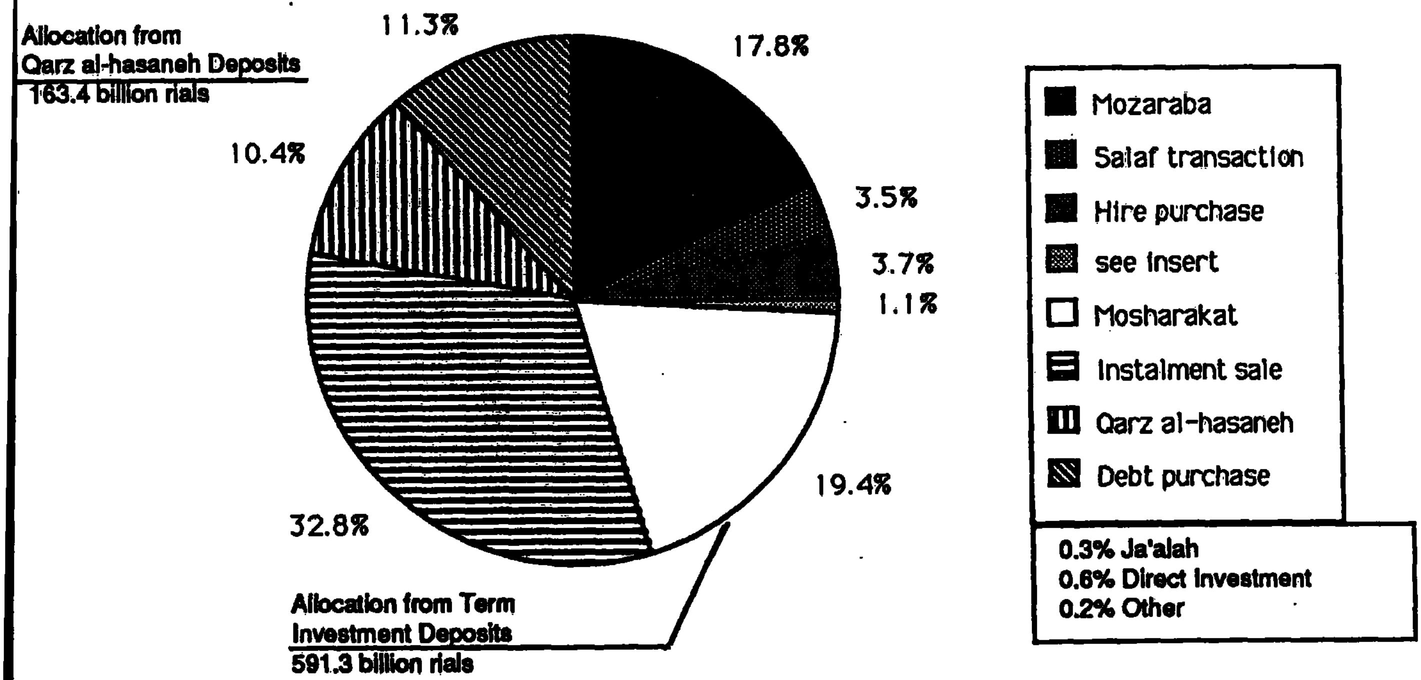
Table 5.3-Credits To The Private Sector 1984-1987(billion rials)

Item	March 1984	March 1985	March 1986	March 1987
Total credits	4256.6	4500.7	5081.2 a	5823.0 b
Old credits and loans (Commercial and specialised banks)	(4256.6)	(3746.0)	...	...
Islamic credits (Commercial and specialised banks)		(754.7)	...	...

Source: Z.Iqbal & A.Mirakhor, Islamic Banking(In Iran & Pakistan, I.M.F Occasional Paper,No 49, Washington, 1987, p.13. a&b Iran Year Book 88, p.208.

Chart 1 - Allocation of Funds by the Banks to the Private Sector according to various Islamic Contacts

1985; First year of Islamic Banking, Total allocation =754.7 billion rials (Commercial Banks 583.5 billion rials & Specilised Banks 171.2 billion rials)



Source: Z.Iqbal & A.Mirakhor, Islamic Banking (In Iran & Pakistan) I.M.F. Occasional Paper, No.49, Washington, 1987,p. 13

that the banking system in its first year of Islamic operation was able to use only 30.5% of the available short and long term investment deposits (see table 5.2). In addition it demonstrates that a major proportion of the credit allocations to the private sector has been concentrated in short term facilities i.e. commercial and trade transactions.

During 1985/1986 the pace of conversion from the old system to Islamic forms gathered momentum. The number of Islamic transactions in this year increased by 136% in comparison with the preceding year.[24] The granting of the banking facilities to the private sector grew rapidly by 12.8% and 14.6% by March 1986 and March 1987 respectively. Overall, since 1984 the scope of credit facilities to the private sector has increased by 11% annually on average as against 13% for the absorption of deposits.

5.1.7 Conclusions and Implications

Unlike many Islamic countires, Iran attempted to introduce full Islamic banking with a complete and once and for all transformation of its old system. Though it is too soon to discern fully the impact of adopting the new system, Iran has been able to replace the interest rate mechanism with non-interest based modes of financial transactions.

So far there has been general acceptance of the new modes of finacing and depositing. Private sector deopsits have continued to rise by 13% annually on average, despite the shift from fixed interest returns to variable rates of return on deposit. However, this nominal growth contrasts with the rising inflation, estimated to be 13-14% on an annualized basis. In real terms it seems private sector deposits have decreased. Progress on the development of non-interest based modes of financing has been slower mainly due to the need for changes in the banks' procedures and delay in acquiring the new skills necessary for applying such modes. Since 1984, the credits awareded to the private sector have grown 11% annually on average. The private sector liquidity has grown to an unprecedented level during the recent years, contributing to the rising rate of inflation.[25]

Currently, the rate of profit paid on the term investment accounts is calculated by the Central Bank on the basis of the overall profits made by the banking system. As a result all depositors receive equal rates of profit according to their investment regardless of which bank they held on account with. In 1986/1987 the rates of profit for short and long term investment accounts were 6% and 8.5%

respectively.[26]

Iran, in the effective implementation of the new systems, has encountered difficulties and bottlenecks. The most important is the lack of trained personnel. This is partly a problem inherited from the old system where the rapid growth of the banking system in the years immediately before the revolution, did not allow orderly recruitment and training of bank personnel.[27] Due to the principle of partnership and profit sharing, commercial banks are obliged to turn themselves into development banks, thereby becoming involved in the borrower's business and required a wider range of specialist expertise to evaluate and monitor projects progress, even more carefully than before. This means commerical banks with traditional specialisations in short term financing and credit facilties, attempt to attract trained personnel with expertise in terms of project evaluation and monitoring away from specialised banks. This exacerbates the personnel bottleneck problems.

Another problem is the lack of legal framework that clearly specifies the domain and limitation of private property rights and of contract in accordance with Islamic banking. Despite the comprehensive law for banking, lack of a proper definition of property rights has strengthened the environment of uncertainty and limited long term investment in agricultural and industrial sectors. This had forced the banking system to concentrate its assets in short term transactions.[28]

Government deficit financing also presents another problem. Financial transactions between and among elements of the public sector, including Bank Markazi and other banks can take place on the basis of a fixed rate of return. This fixed return is not viewed as interest. According to authorities in Iran, from the Sharia view point, the Central Bank and other organisations which are totally owned by the government, are all considered to be the government as a whole, therefore payment or receipt of any amount on deposits, loan or credits granted by the Central Bank to such organisations does not involve riba and are permissible. The reason being that such amounts are ultimately posted to government revenues on the one hand and to its expenditures on the other hand and consequently has no bearing whatsoever on the government resources.[29]

In general, the banks in Iran virtually monopolise the country's economy. The Law for Riba-Free Banking does not apply to the operations of the banks outside Iran. In respect of foreign assets and liabilities, the banks continue to receive and pay interest as usual though in practice due to the existence of rigid exchange controls, the banks have few transactions abroad. As a result, they cannot earn a steady interest by keeping their liquidity abroad. In fact the lack of access to any type of money market means no earnings for the banks' liquid assets.

By being Islamic, the banks through Mozaraba, Mosharakat and forming their own companies are moving in the direction of becoming conglomerates. The Central Bank, unlike in the pre-revolutionary period, cannot control the money supply and therefore to some extent the growth of the economy by changing interest rates. With the elimination of the interest rates, one of the most basic instruments of the monetary policy has been wrested out of the Central Bank's hand, while the rest of the classical tools have been retained in the current laws and regulations. In place of interest rates as a tool, the Central Bank has been vested with mechanisms (see the role of Bank Markazi) to achieve the intended goals of monetary or credit policies. In addition, the Central Bank can engage in discounting in a specific form, i.e. redemption of debt, though not much experience has been gained by using utilisation of this mechanism. The Central Bank by using this mechanism can discount certificate of indebtedness relating to the credits granted by the banks and play the role of rediscount rate as seen in traditional banking.[30] Moreover the Central Bank can also conduct open market operation in order to influence the market liquidity and ultimately the volume of banking credit. In the absence of an interest rate, by fixing the values of commercial papers for buying or selling from the market, the same result as the interest rate can be expected.

Overall the primary instrument of control in Iran before and after the revolution has been credit allocation, through which monetary policy and development policy objectives are co-ordinated. There has been no substantial change in the general objective and function of the Central Bank, but controls have become stronger since the introduction of the new law.

5.2 PUBLIC FINANCE AND BUDGET

In pre-revolutionary Iran, the public sector was large and grew larger each year, more rapidly than the private sector. In 1970/71 government outlays made up 27% of GNP and by 1975/76 it surpassed 48%. Likewise, during the same period, the public sector share in gross domestic fixed capital investment rose fron 60% to nearly 66%.[31] On the whole, the private sector did not have a significant effect on productive capital formation. One reason was perhaps that a large proportion of private investment was concentrated in private housing which only indirectly raised the productive capacity of the country.

The private sector was either excluded or not sufficiently attracted to sectors such as agriculture, transport, energy and fuel. This in turn was partly linked to the shortcomings of the public sector itself in not building up a solid public infrastructure which could have facilitated and encouraged large scale private investment in those sectors.[32] However, in the revised Fifth Plan in an effort to enlarge the country's productive capacity and in the light of 'big-push' strategy, certain strides were made. Inevitably, the private sector was given the opportunity for increased fixed capital investment, particularly in housing and industry, though its total planned share represented 33.6% of the whole investment.[33] In general the authorities relied heavily on the public sector to accelerate the rate of growth for the fulfilment of many social goals and the overall development of the country.

5.2.1 The Public Sector after the Revolution

The 1979 revolution brought about an enormous growth in the size and role of the public sector. The revolutionary government, by taking over large sectors of the economy through nationalisation and expropriation, has greatly diminished the economic role of the private sector. However, since 1979, policies regarding the relative functions of private and public sectors have regained some ground, yet the significance of the private sector, particularly in the face of the Gulf war, remained unchanged. Any future change in the functions of the public sector dependes as much on the political philosophy of the ruling clerics as their view of Islamic economic principles.

Nonetheless, the Constitution of the Islamic Republic recognises three ectors in its economic system, public , co-operative and private. The public sector includes " all large scale and major industries, foreign trade, major mineral resources, banking, insurance, energy, dams and large scale irrigation networks, radio and television, port, telegraphic and telephone services, aviation, shipping, roads, railroads and the like".[34] All these are to be owned and administered by the state. The co-operative sector only concerns co-operative enterprises engaged in production and distribution. The private sector activities are limited to agriculture, industry, trade and services to supplement the economic activities of the public and co-operative sectors.

5.2.1 The First Post Revolutionary Budget

The first budget for the Iranian year March 1979 to march 1980 took several months to be drawn up and was repeatedly amended. In practice, the budget was formulated on a monthly basis and the projected figure for the whole year was set at around $34 billion, just half the target set the previous year by the government under the Shah.

In the fall of 1978, in a futile attempt to win support among civil servants and others , the Shah's government increased salaries and benefits worth $3 billion a year.[35] These promised increases constituted one of the major items in the new government's expenditure; as were payments for projects and equipment ordered by the Shah, but cancelled by the new regime.

Despite the economic and financial disruption under the revolution, foreign exchange reserves appeared healthy. When the revolutionaries came to power, Iran's reserves stood at $12.839 billion in February 1979. [36] This figure increased to $14.561 billion at the end of the same year by obstructing the flight of capital and relative improved levels of oil exports immediately after the revolution. The government continued with the foreign exchange restrictions which had been introduced during the last few months of the Shah's rule.[37] A ceiling of $3000 was imposed on each person leaving the country. Despite these measures, the country's reserves were expected to drop as payments resumed for imports halted during the months of turmoil. As a result of the U.S. embassy hostages, all Iranian assets held in the U.S.A. were frozen by President Carter in November 1979.[38] Early in 1980, as a precautionary measure, Iran moved its assets in Western Europe to banks in Switzerland and to banks belonging to Libya and Algeria.

5.2.3 The Budget for 1980/81

The budget for the above year, announced in May, was set at $40.0 billion including a $6.5 billion deficit. The main revenues from oil and taxes were projected to $24.5 billion and $8.0 billion respectively. Development spending was anticipated at $14 billion and current spenring at over $26.0 billion. Various other expenditure made up the balance.39

In general, the post revolutionary period in Iran witnessed a rapid increase in current government expenditure. This was in part due to the expansion of the bureaucracy in mushrooming revolutionary orginisations such as the Revolutionary Guards, Revolutionary Committees, the Revolutionary Tribunals the Foundation for the Oppressed, the Martyr Foundation, the Reconstruction Crusade and the like. At the same time, the government was allocating large sums to sustain failing industries, subsidise food imports, reduce unemployment and provide various services. For instance, the government was paying 2500 workers at Sarchesmeh copper works and 12000 workers at Ahvaz Pipe and Rolling Mills, even though both projects were idle.40

The worsening situation was compounded by the outbreak of war in September 1980, adding further strains on the country 's economy and raising the level of current expenditure even more. In practice, the deficit came to $12.0 billion mainly because of the drop in oil revenues by 50% (see tables 5.4 and 5.5 for comparison).

Table 5.4- Government Budget (Actual Reciepts And Expenditure)
(billion rials, years ending 20 March)

Reciepts :	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
Taxes	368.3	340.4	554.1	613.9	796.5	898.7
Oil and Gas	1,219.9	888.8	1,056.4	1,689.5	1,779.4	1,373.2
Other	111.6	96.7	159.6	198.5	197.8	442.9
Total Receipts	1,699.6	1,325.9	1,770.1	2,501.9	2,773.7	2,714.8
Expenditure:						
Current payments	1,552.0	1,727.8	2,032.4	2,293.9	2,549.3	2,475.6
Others [a]	675.9	570.6	674.7	943.5	1,163.5	878.0
Total expenditure	2,227.9	2,298.4	2,707.1	3,237.4	3,712.8	3353.6
Surplus or Deficit	- 528.3	-972.5	-937.0	-735.0	-939.1	-638.8

Source : Central Bank of Iran; EIU Country Profile 1988-89
[a] Includes Special Payments

Tabel 5.5 - Goverment Budget Estimates
(billoins rials; years ending 20 March)

Revenue:	1980/81	1981/82	1982/83	1983/84	1984/85
Taxes	418.2	544.4	666.3	720.7	...
Oil and Gas	1,754.0	1,533.0	1,489.2	1,996.0	...
Government Enter -prise	36.1	135.7	234.0	69.0	...
Sales of Goods and Services	30.8	30.2	79.4	190.7	...
Miscellaneous	150.7	157.8	167.3	240.1	...
Foreign and Domestic Borrowings	37.1	61.0	37.6	25.0	...
Interest on Loans to Foreign Countries	55.6	-	-	-	-
Other	240.0	702.3	430.8	485.5	...
Total	2,722.5	3,164.4	3,104.6	3,727.0	3,623.1

Expenditure:					
Public Services	264.0	...	392.7	393.4	...
Defence Affairs	365.1	...	351.2	355.7	...
Social Affairs	521.2	...	1,028.9	1,272.1	...
Economic Affairs	967.8	...	919.0	957.0	...
Miscellaneous	...	...	612.1	624.2	...
Interest and Service Charges on Loans	...	...	23.9	18.0	...
Repayment of Loans & Debts	...	...	111.1	97.5	...
Investment Abroad,Loans & Aids	...	...	5.0	10.0	...
Total	2,118.1	3,165.9	3,443.9	3,727.9	3,893.1

Social Affairs: Education, Health, Welfare and Housing,
Economic Affairs:Industry, Electricity and Agriculture
Source: The Middle East and North Africa, Europa Publications Ltd., London, Various Years

Table 5.6 - Government Budget Estimates
(billion rials, years ending 20 March)

Revenue :	1985/86	1986/87	1987/88	Expenditure :	1985/86	1986/87	1987/88
Taxes	1,138.2	1,169.8	1,139.4	War Expenditure	400.0	430.0	700.0
Oil	1,867.0	1,600.0	857.4	War Reconstruction	50.0	35.0	...
Sales of Foreign Exchange	119.0	111.0	...	Fixed Investment	1,085.8	949.2	704.0
				Repayment of Foreign Loans	33.8	24.5	...
Other	396.3	424.2	629.9	Current Expenditure	2,305.3	2,341.3	2,267.0
Special Income	259.9	269.7	299.8	FromSpecial Income	259.9	269.7	299.8
Deficit Finance	354.4	475.0	974.3				
Last Year's Return	-	-	70.0				
Total	4,134.8	4,049.7	3,970.8		4,134.8	4,049.7	3,970.8

Source : The Middle East and North Africa, Europa Publication Ltd., London.1987; Iran Year Book 88

5.2.4 Erosion of the Reserves

As noted earlier, Iran's foreign exchange reserves in 1980 were relatively healthy. However, in 1981, the combination of three factors eroded the country's foreign exchange position. They were, the settlement of the hostage crisis, the Gulf war and the growing oil glut on the world market.

The hostages held since November 1979 were finally released in January 1981, but ultimately, the financial settlement came to dominate the agreement between Iran and the U.S.A. The American government unblocked a total of $11.1 billion assets held by the banks in the U.S.A. and U.S. banks abroad. However, of the total assets, $ 3.7 billion was used by cover syndicated loans to Iran by American and other banks. Another $ 1.4 billion was set aside to cover the repayment of unsyndicated loans and $3.2 billion was earmarked for possible claims against Iranian assets by U.S. companies and other entities. As a result, $ 2.8 billion immediately was transferred to Iran and the country gave up at one stroke, $ 8.3 billion of its foreign exchange assets.41

In addition to the damage and destruction, the Gulf war imposed a heavy financial burden on the country. According to the government estimates, the cost of the war for the first six months was $ 2.6 billion. These difficulties were exacerbated, particularly in the second half of 1981, by the growing oversupply of oil in world markets and a lowering of prices. Iranian crude prices ($37 for light in early January 1981) was unrealistic under those conditions.[42]

As a result of these factors, Iran's foreign exchange at the end of 1981 dipped seriously to $1.102 billion - three months before the official submission of the budget for 1981/82. Within a year however, the recovery of oil revenues in 1982 introduced confidence as foreign exchange rose to $5.287 billion.[43]

5.2.5 Debate on the Budget for 1981/82

In April 1981, one month into the new calendar year, Prime Minister Rajai proposed a $44.0 billion budget.[44] Besides covering the costs of the war, meeting current expenditure and paying the social services, the budget reflected the government's hopes of stimulating the weak economy. The budget was balanced on several unreal assumptions.Oil exports were to be boosted to twice the current 1.3 million barrels per day.

Military expenditure was expected to drop to an average of $610 million per month from $1.1 billion per month of the interim budget announced in early March; and the non-oil revenue from taxes and state-owned firms were envisioned to rise.[45] Moreover, substantial sums were allocated to revolutionary organisations, such as the Reconstruction Crusade, which was given a budget of $1 billion, and the new budget for the Revolutionary Guards was almost fifty percent more than the previous year's level. All these organisations were not subject to the government audit or other financial checks.[46]

These features of the budget were criticised by President Bani Sadr, many members of the Majlis and the governer of the Central Bank. The focus of criticism was on proposed oil exports and oil revenues. Increasing oil production was seen as a reversion to the policies of the Shah and of providing cheap oil for the industrial states of the West. Bani Sadr stated that this action would "pose a real danger to the independence of the country and intensifies the vicious circle of poverty and dependence".[47] He also described the budget as inflationary, whereby the government would be forced to expand the money supply and aggrevate the existing serious inflation - officially 27% but estimated by independent economists at over 40%.

Due to unrealistic assumptions, there appeared no simple way to finance the budget without borrowing, contrary to the Prime Minister's claim that it would be a non-deficit budget. The usual recourse of third world governments, loans from large Western banks, was not a possibility for revolutionary Iran under the circumstances. The $12.0 billion deficit of 1980/81 was financed largely by reducing foreign exchange reserves and in part covered by expanding the money supply. The latter was expanded by some $5.4 billion (over 25%) between September 1980 and March 1981. The Central Bank also lent to public sector banks and firms over $1 billion with much the same effect. Faced with difficulties, the government talked about a sale of bonds to the public but this was dropped, partly due to the government's lack of credibility, but also because of ideological objections against payment of interest. As indicated by Bani Sadr, in September 1980 some $2.8 billion had been withdrawn from Iranian banks over the previous three months.[48] A devaluation of the rial as an alternative was also discussed. However, it was realised that devaluation raised government oil revenues in rials but has no effect on the dollar cost of purchases abroad. Moreover, it would have added to inflation and rasied the cost of the government's domestic purchases. Therefore, a devaluation was precluded as it was thought that it would contribute only marginally and temporarily to solving the budget crisis.

In practice, allocations to government organisations were made on the basis of a temporary budget of 200 billion rials (over $2.5 billion) per month. In fact the government did not follow any precise plan for expenditure. Instead the money was spent in a random fashion in order to meet the immediate crises. An increasing amount of finance was channelled into the war. In May 1981, according to government officials, it was costing in excess of 600 million rials (about $7.5 million) per day in cash outlay alone. In mid June, earnings from oil fell short of the target and there appeared little prospect for implementation of any long term plans. In July 1981, the Majlis reduced total allocation from $44.0 billion to $37 billion. Some $2 billion (about 1/3) was cut from defence expenditure and $3.1 billion(about 1/4) from the development plan. An overall 5% cut in the expenditure of government departments was also demanded. Even so, a deficit of $8.5 billion was anticipated.[49] In fact the deficit came to about $11.5 billion.

Though actual oil and tax revenue, compared with 1980/81 increased but oil receipts fell short of its target for 1981/82 by 31% (tables 5.4& 5.5). The persisting heavy war expenditure and poor performance in oil exports were the chief causes of the deficit.

5.2.6 Budget Trends from 1982/83 to 1987/88

For the year 1982/83, the government proposed a $39.0 billion budget to the Majlis. Revenues were estimated at $31.9 billion leaving a deficit of $7.1 billion. As in the past, oil income anticipated $19.0 billion was to finance the major part of the budget. In this budget, reconstruction of war damage was given priority and much emphasis was placed on restoring the agricultural and industrial base in order to increase employment, limit imports and reduce dependency on oil. The budget also assumed a high level of recovery in the oil sector from the serious fall in oil revenues in 1980 and 1981.

The government was anxious to play down the overall cost of the war. However, it was widely believed that the cost had risen substantially. In October 1982, a supplementary budget of $4.8 billion was approved and increases were to the war and war reconstruction ($1.8 billion), current government expenditure ($1.2 billion), and the remainder for infrastructural projects.[50] Despite increased oil and tax revenue, the actual deficit surpassed its anticipated sum by about $2.0 billion (table 5.4)

5.2.6.1 1983/84

The budget for 1983/84 totalled an estimated $42.4 billion. Some 30% of that was to be spent on the war effort. A component of this budget was the First Five Year Development Plan of Islamic Republic covering the period 1983/84 - 1987/88. This plan foresaw the development of the Iranian economy, even under war conditions, providing oil revenues continued to flow (for details see chapter 4 - Planning). However, the confidence that the government showed in the plan was misplaced. The plan was criticised by the Majlis and returned to the government for revision. The actual deficit for this year came to about $11.7 billion.

5.2.6.2 1984/85

The budget for 1984/85 which was presented to the Majlis in November 1983, proposed total expenditure of $48.3 billion with the development budget at the same levels in 1983/84 but current and defence expenditure increased by 18% at current prices. The revenues were projected at $44.6 billion of which oil and gas were to provide $23.3 billion, 7% more than in the previous year. The war related allocations totalled some 31% of the entire budget expenditure. Imports were to be held at $20 billion against $22 billion the previous year. The government allowed for a deficit of $3.6 billion.

The budget proposals ran into opposition in the Majlis. It was realised that many of the detailed proposals were unrealistic and clearly the result of the relative strength of various ministeries competing for scarce resources rather than rational plan. The Majlis also considered that the growing dependence on imports to be an important factor contributing to inflation. At the end of 1984, the Prime Minister announced that inflation had dropped to 12.8% as against 16% at the end of 1983. According to IMF figures, inflation for the year ended September 1984 was approximately 13% - 14% on an annualised basis.[51]

Although there existed a considerable variation between town and country and between different towns in respect of inflation, it was said that official Iranian statistics, distorted by subsidies and based on an unrepresentative basket of goods, underestimate inflation by a factor of at least 100% when real rents and free market purchases are taken into account. Moreover, inflation in Iran was highly vulnerable to accelerated growth as a result of an intensification of the war effort. Overall as a result of the Majlis opposition the budget proposal was cut by 15 per cent.

5.2.6.3 1985/86

A budget of $42.0 billion for the year 1985/86 envisaged a 25% fall in the deficit, compared with the previous year's projected level. Again one third of the budget was devoted to the war effort and war related costs (see table 5.6). Education received the next largest sectoral allocation. The budget was cut by the Majlis to $38.3 billion, almost the entire reduction being made in the current expenditure. The cut was due to the expected fall in oil revenues.[52]

In fact, in 1985/86, the production of Iranian crude oil went up by about 2.5 million barrels per day. In spite of the rise in the production, exports of crude oil and its products fell to 1.5 million barrels per day on average. This was because the consumption of oil products rose rapidly by 10%, most of which was provided by the output of domestic refineries.

The lower volume of oil exports and price had a notable impact on the government revenue. As a result only 80% of projected revenue was realised. With the share of oil falling, the share of tax revenue rose about 6% compared with 1984/85 (see table 5.8). The growth in tax revenue mainly resulted from increased corporate taxes and taxes on consumption and sales of goods.53

Despite the depredations suffered as a result of the Gulf war, Iran succeeded in increasing its foreign reserves in 1984/85. However, in 1985/86 in spite of reduced foreign exchange allocations for importing goods, the effect of a sharp decline in oil revenue reduced foreign bank deposits by some $2.6 billion. Figures released by the Bank of International Settlement (BIS) showed that Iran's foreign bank deposits at the end of 1986 amounted to $4.9 billion compared with $7.5 billion in 1985 and $6.4 billion in 1984. In fact, since the U.S.A.'s seizure of Iran's assets, the country has suffered from relative financial isolation, which has reduced its options for investment diversifications. At the same time, the country needed to keep liquidity high in order to finance heavy war expenditure.54

In 1985/86 the private sector liquidity grew rapidly by 13% as a result of increased banking credits to the private sector and the rise in the debts of the public sector to the banking system.55 The growth in the volume of liquidity has been a contributory factor in the rising rate of the inflation in the last few years.

5.2.6.4 1986/87

Against this background, the budget for 1986/87, with total spending of $50.6 billion was presented to the Majlis. It provided a 12.5% increase for defence and strengthening of the defence industry, while allocations to other sections were to be lower than those for 1985 /86. In a debate, the budget was criticised for not fully taking into account the rapid fall in oil prices.56 Apart from the government's optimistic view of oil revenues, there was also the additional problem of accumulated deficits on foreign exchange receipts.

As predicted by the Majlis in 1986/87 the rapid fall in oil price, combined with reduced value of exports, left a strong impact on the government revenues. Consequenty, only half the projected revenues were realised, a fall of 36% in comparison with 1985/86. The government paid special attention to raise the exports of goods other than oil but the increase in those exports was small in comparison with the shortfalls caused by the lower oil revenues. Moreover the total tax revenue had a slight fall 0.8%, compared with 1985/86.57

In 1986/87 the Iranian economy was facing an unprecedented foreign exchange crisis. This caused a considerable fall in foreign assets, an increased rate of inflation and unemployment. The damages to economic installations caused by floods in some parts of the country were among the other economic problems.

Iran's policy as proclaimed after the revolution has been not to increase its indebtedness to foreign banks. Its debts to BIS has been reduced from $2.7 billion in 1981 to $1.4 billion in 1986. As long as this policy continues - though political factors limits the chance to raise funds in any case - Iran's room for manoeuvering will become increasingly limited by a lack of foreign exchange. Providing Iran uses its foreign exchange at the same rate as in 1986, $220 million per month, its net foreign bank deposits were expected to be as low as $1.0 billion at end of 1987, which is a dangerous level.[58]

In spite of the fall in foreign exchange assets, owing to the massive deficits in general budget and the government's borrowing from the banking system, the growth of liquidity was 19.1%, as against 11% which was fixed at the begining of the Iranian year, 21 March 1986. This rapid rise in liquidity together with the stagnation in production caused considerable inflationary effects on the economy. The inflation rate which had come down in 1985/86 began to rise again in 1986/87.[59]

It is noteworthy that against many predictable problems and contrary to expectations, the Majlis in March 1986 increased the planned expenditure of the 1986/87 budget to $51.3 billion with a projected oil revenue of $18.6 billion. Most of the spending increase was allocated to defence, and the steel and nuclear industries.[60]

5.2.6.5 1987/88

The general budget for this year, passed by the Majlis in March 1987, amounted to $49.6 billion ($1 =80 rials) with oil revenue accounting for 21.6% of the total projected receipts. Taxation and domestic borrowing constituted 28.7% and 24.5% of income for the general budget of the government.

Due to the drastic drop in oil revenue in 1986/87, the government made efforts to reduce the dependence of budget revenues on oil to some extent, but the reduced oil revenue has raised the borrowing from the banking system. Even though the ratio of borrowings in 1987/88 is less than 1986/87, it is still high in comparison with the ratios for 1984/85 and 1985/86.

In contrast to 1986/87 the government financial state improved during the first three months of 1987/88 as a result of increased oil revenue and the slight reduction in the government's payments. In all the government's revenue increased by 29% in the first half of the Iranian year (21 March - 21 September 1987), compared with the corresponding period in 1986.

However the government efforts to check this current expenditure was not successful with the continuation of the Gulf war. Current expenditure absorbed nearly 75% of the total expenditure. The government's proposed figure for the war current expenditure, (excluding war development expenditure) was raised to $8.75 billion as against $5.4 billion in 1985/86. As a result the ratio of total war expenditure to the total government expenditure rose from 32% in 1986/87 to more than 34% in 1987/88.[61]

5.2.7. Taxation

The revenue of government in Iran has been dependent upon income earned from the operations of the oil industry. Although this dependency has been exacerbated by the Gulf war, the Islamic government aims to reduce its reliance on oil income. For the attainment of this long term objective, the government has placed more emphasis on tax earnings.

In the past, tax collection was a haphazard process, which usually meant that employees on fixed incomes absorbed an outsized proportion of the burden. At present, the Islamic government is seeking to spread the burden to the private sector in order to boost revenue and secure taxation justice in the country.

The Minister of Economic Affairs and Finance stated in 1985 " the ratio on tax payment of employers to employees is 30 to 100 and unless employers pay 30% of employees share, justice will not be achieved in society and people with low incomes will be paying social expenditure of the affluents".[62]

The bazaaris, numbering 2.5 million people, are classed as self employed, and account for only 2.8% of all tax revenues. This compares with 7% from employees on fixed incomes. Taxation is a religious issue in Iran and many bazaaris prefer to pay Khoms - a tax of 1/5th to the clerics of their own choosing. Many conservatives in parliament, especially supporters of the bazaaris, argue that taxation apart from religiously required taxes are against Sharia and can only be applied in case of emergency for a specified period. [63]

In essence, the taxation policy in Iran is to raise non-oil based tax and ensure fairer distribution of income. But the whole issue has been bound up with the government's attitude towards the private sector and its role in the economy. The authorities are still vague about its freedom of investment though

Table 5.7 - Taxation Revenue 1973/74 - 1982/83
(billion rials years ending 20 March)

	1973/74	1977/78	1978/79	1982/83	Average Growth 73/74-77/78	Average Growth 78/79-82/83
Direct Tax	52.9	230.2	269.5	295.5	44.4	2.3
Taxes on Companies	(28.8)	(160.2)	(200.1)	(173.9)	53.6	-3.4
Income Tax	(18.6)	(57.4)	(58.4)	(96.8)	32.5	13.3
Tax on Capital	(5.5)	(12.6)	(11.0)	(24.8)	23.0	32.5
Indirect Taxes	78.2	213.4	196.4	318.4	28.5	12.8
Tax on Imports	(60.6)	(169.3)	(143.7)	(217.5)	29.2	10.9
Tax on Consumption and Sales	(17.6)	(44.1)	(52.7)	(100.9)	27.3	17.6
Totals	131.1	443.6	465.9	613.9	35.6	7.1

Source : Iran Almanac 1987

Table 5.8 - Ratio of Tax Revenue

Year	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Ratio of Tax Revenue to Total Revenue	21.7	25.7	31.3	24.5	28.7	33.1	39.0	58.0
Ratio of Tax Revenue to Total Expenditure	16.5	14.8	20.5	18.9	21.4	26.8	30.8	32.4

Sources: E.I.U., Country Profile 1988-89 : Iran Year Book 88

In general, the current government policies appear to be pro private enterprise.

Table 5.7 shows the comparison of tax revenue and its growth in the years before and immediately after the revolution. However, it should be noted that the total tax revenue after the revolution, dipped from 465.9 billion rials in 1978/79 to 368.3 and 340.4 billion rials in 1979/80 and 1980/81 respectively before rising to 554.1 billion rials in 1981/82 (see table 5.4). The trend of increased taxation (except for 1986/87) has continued since.

The amount of tax collected for 1985/86 was 1033 billion rials which showed an increase of 14.9% compared with 1984/85.[64] In the year 1986/87 the tax revenue amounted to a total of 1024.5 billion rials showing a slight fall in comparison with the preceding year.[65] This was due to the reduced oil revenue which influenced the government's income from other sources, including tax revenue. For example, customs revenue fell considerably owing to reduced imports and the halting of many productive and service activities. During 1986/87, of the total amount stated above, 579.6 billion rials was direct taxes and 444.9 billion rials in indirect taxes. This was a departure from the usual composition of taxes levied. Traditionally indirect taxation had been the main source of fiscal revenue in Iran. In fact during 1986/87 the government managed to increase collection of direct taxes by 11% and reduced the share of indirect taxes, including taxes on imports, consumption and sale of goods by the same percentage. In this year, the highest rise in tax income came from income tax and the lowest from import tax. The rapid rise of tax on business by 50% influenced the process substantially.

The latest figure for 1987/88 show that tax revenue has been rising and the figures for the first three months showed a 12% increase over the corresponding period in the previous year. The rise was mainly due to the increase in direct tax collection again.[66] Overall, between 1983/84 and 1986/87 the country's tax revenue grew by 9% annually on average.

As can be noted from table 5.8 due to the government's efforts to raise tax collections, the ratio of the tax revenue to the total income increased for two years following the revolution. With higher oil revenue in 1982/83 the ratio fell to 24.5% and 28.7% respectively. The subsequent lower oil receipts changed the composition of the government's revenue, raising the share of tax revenue from 33.1% in 1984/85 to a drastic growth of 58% in 1986/87. However, the ratio is estimated to fall to 28% in 1987/88. The oil revenue has picked up in the first three months of the Iranian year - 21 March to 21 June 1987 -in strong contrast to the same period in the preceding year, increasing by 100% over that period.[67]

It is evident from table 5.8 that the ratio of tax revenue to the government's expenditure after fluctuations immediately after the revolution, has increased steadily since 1982/83, though the total expenditure itself increased at a faster rate. Needless to say, the Iran - Iraq war's expenditure was an important factor contributing to the increased expenditure.

As mentioned earlier, an abnormality in Iran's taxation system is the high ratio of the salary tax compared with that of bazaaris and businesses. In an effort to amend this situation, the government in 1987/88 has lowered the salary tax in order to compensate for the reduced purchasing power of the salaried groups. At the same time, measures were taken to increase collection of business tax. It is noteworthy that due to the growth in the rate of inflation, the real wage and salary index of industrial workers has been lowered to less than 50, taking 1979/80 as the index year of 100.[68]

5.2.8 Summary and Conclusion

Budgets are prepared by the Plan and Budget Organisation in association with various ministeries but ratified only by the Majlis, whose aquiesance in budget arragements is not to be taken for granted. The Majlis traditionally considers government spending to be excessive and inflationary. Iran was operating a war economy and as a result, its entire financial system had been geared to the needs and demand of the war.

Since the revolution, there has been growing discrepancies between government budget estimates, approved estimates and actual expenditure, (see budget tables).

The deficit has grown alarmingly since 1980 despite efforts to control it. The Majlis has expressed concerns about the continuing high level of budget deficits, and the heavy borrowing from the Central Bank to finance these deficits. The government total debt, including borrowing from state organisations was estimated to be about 3,000 billion rials ($38 billion) in 1985.[69]

The excessive growth rate of liquidity has been an acute problem for the Iranaian economy since the Revolution. The volume of the private sector liquidity has grown 102 times between 1977/1978 and 1987/1988 from 100 billion rials to 10,200 billion rials. Efforts to fix the growth rate has not been successful as a result of the deficits in the general budgets of the government and its reliance on the banking system for meeting the deficits. The ratio of borrowings to total receipts of the government was 17.6% in 1983/1984. During 1984/1985 and 1985/1986 it came under some control and was reduced to 9% and 9.8% respectively. However in 1986/1987 as a result of a drastic fall in oil revenue it shot up to 34.5%. Although the ratio fell to 24.5% in 1987/1988, it is still comparatelvely high.70

In addition to high ratios of borrowing, the growth in the amount of credits awarded to the private sector by the banks has exacerbated the liquidity problem. All these factors plus the costs of the war, the reduced oil revenue in 1985/1986 and 1986/1987, the fallen exchange rate of the dollar and the world inflation rate - which has left its impact on domestic inflation through imports - have contributed to rising inflation rates.

The war budget is understated in budget estimates. As can be noted from the tables, it varies between 10% to 17% for various years. In fact, over 30% of state finances are entirely devoted to the war and military expenditures. There has also been an increase in government current expenditure, partly due to the war and because of mushrooming revolutionary organisations, often parallel to those inherited from the Shah's era, e.g. Revolutionary Guards and Armed Forces, Reconstruction Crusade and the Ministry of Agriculture. Moreover, financing failing industries and subsidisation of growing food imports has added another dimension to the increasing current expenditure.

The ratios of current expenditure to total government outlays during the period 1983/1984 - 1987/1988 were 64.8%; 65.7%; 70.5%; 64%; and 74.7% respectively. The rise in the current expenditure automatically reduced the development expenditure. Hence investment for employment of the potential labour force and the posssibility of increasing the economic-productive potential have diminished.

The ratios of development expenditure to the total expenditure on the whole has fallen after the Revolution. In the period 1983/1984 - 1987/1988 they were 29.5%; 29%;21.2%; 29.6%; and 17.7% respectively.71

Iran is an oil based economy , oil revenue being the main source of income. In the last few years the government has made efforts to reduce dependence of budget revenue on oil to some extent. The reduced oil prices and the lower oil exports have also helped the objective. During 1979/1980 - 1982/1983 the actual receipts from oil constituted an average 66.5% of the government total revenue (see table 5.4).

However, this ratio was reduced to 48.2% in the period 1983/1984 - 1985/1986 and to 21% in 1986/1987. It should be noted that the oil revenue during 1983/1984 - 1986/1987 were $24 billion; $19 billion; $15.5 billion and $6.6 billion respectively, a considerable fall in a four year period.[72]

Because of Iran's policy of non-borrowing policy from foreign countries, its financial maneouvrability is very much dependent on its reserves. Due to the combination of various factors, including the war and the sharp decline in oil prices, foreign exchange dipped to a dangerously low level, $1.102 billion in 1981. After a relatively healthy period the trough was anticipated to repeat itself in 1987. Since the revolution, there has been an accumulation of the deficit on foreign exchange receipts. Because of a mounting budget deficit carried over from year to year, the government tends to sustain expenditure by means of various short term devices including advance drawing on reserves. In following this practice, the defence and current expenditure budgets have virtually taken all available foreign exchange resources of the country.

The actual tax revenue, following an initial dip after the revolution, has risen steadily with the exception of 1986/1987 when the revenue decreased slightly. Taxation policy under the Islamic government aims at increasing the non-oil tax base in order to reduce the government's reliance on oil income. The tax burden in Iran is still tilted against the salaried people and consumers as a whole. However, in 1987 the government took measures to amend the situation by reducing the salary tax. This measure plus distribution of staple commodities through rationing system and placing strong checks on prices are aimed to reduce the pressure of inflation on the lower and middle classes.

The government has been trying to extend the tax burden to the private sector but the attitude of the radical clerics towards the role of this sector is questionable. Nevertheless, the Islamic government emphasizes taxation justice. This implies taxation on affluent groups of society, including the bazaaris. Increasing taxes has been a political minefield. Supporters of the bazaaris in the Majlis have raised religious objections to many of the new proposed taxes since the revolution. To amend this situation, recently a parliamentary resolution has required the guild unions to cooperate with the government for working out the tax rates to be levied on various businesses. Moreover, the authorities have recently been working on a new scheme to levy value added tax.

To sum up, the reduced oil revenues in the last four years has raised the government borrowing from the banking systems. The impact of the budget deficit so compensated for by borrowing is clear on the rising rate of inflation. In respect of deficit finance the government increased taxation steadily. Due to the strong linkage between foreign exchange reserve and oil reports, the government expenditure in respect of imports depended on the fluctuation in the amount of oil revenues.

Finally, oil revenues and budget policies of the government determine the monetary base in the Iranian economy. As noted before, since the revolution the budget has increasingly relied on the Central Bank financing. In 1973 the three components of the monetary base (net foreign assets, the Central Bank claims against the government and the Central Bank claims agains the banking system) were respectively 54.6%, 28.3% and 17.2% of the total. Since then there has been a major shift in the composition of the monetary base. In 1984 the same components were 19.5%, 68.1% and 12.4%. Also the monetary multiplier, which can be used to influence monetary policy, remained stable. All these, lead to the conclusion that fiscal policy in Iran dominated the conduct of monetary policy in recent years.[73]

References

1. V. Petrossian, *Middle East Economic Digest (MEED),* 15 June 1979, p.3.
2. Ibid., p. 4.
3. Ibid., also see S. Bakhash, *The Reign of the Ayatollahs : Iran and the Islamic Revolution* (Unwin Paperbacks, London, 1986) , p.178.
4. As it stand today the Iranian commercial banking system is comprised of Bank Melli (National Bank), Bank Saderat (Export Bank), Bank Sepah (Army Bank), Bank Terjarat (Trade Bank), Bank Mellat (Bank of the Nation). Bank Saderat runs a series of provincial banks with local government officials on the board There are also specialist banks: The Housing Bank, Industry and Mines Bank,

   The Agricultural Development Bank and Labourers Welfare Bank. The last three have a quasi-commercial role.
5. *Finacial Times Survey,* 1 April 1985, p.xiv.
6. Z. Iqbal and A. Mirakhor, *Islamic Banking* (Occasional Paper, No 49, IMF, Washington DC, March 1987), pp. 9-10.
7. V.Petrossian, *MEED,* op.cit., p.4.
8. For complete and detailed information see Qanoon, A'een-nameh, va, Dastoaral amal-e Amaliat-e Banki Bedon-e Riba (*The Law, Regulations and Procedures of Riba-Free Banking*),(Bank Mellat, Iran, Tir 1363 ; July 1984) p.10, p.17 and pp.58-59.
9. Ibid., pp.17-18, pp.35-38.
10. Ibid., p.10.
11. Ibid., pp. 39-40.
12. Ibid., p.21, pp. 41-42.
13. Ibid., p.22 pp. 43-44.
14. Ibid., p.23, pp .45-46.
15. Ibid., pp .24-25, pp. 47-52.
16. Ibid., pp .25-26, pp. 53-55.
17. Ibid., pp .23-24, pp .56-57.
18. Ibid., p. 27, p.61.
19. Ibid., p. 27, p.62.
20. Ibid., pp .26 - 27, p. 60.
21. See further Ibid., p.12 and Z. Iqbal and A. Mirakhor, *Islamic Banking,* op.cit., p.12.

22. *The Middle East and North Africa* (Europa Publication Ltd., London, England, 1987), p.415.

23. *Iran Year Book 88* (Moini-Biontino Verlagsgesellschaft mb H Bonn, W. Germany, March 1988), p.206, pp. 208-209.

24. *Iran Year Book* op.cit., p. 267.

25. For evidence on liquidity see Ibid., p. 208, p. 246.

26. See Ibid., p.267.

27. Ibid.

28. Z. Iqbal and A. Mirakhor, *Islamic Banking*, op.cit., p.30.

29. *al-Tawhid* (Quarterly Journal), vol III, No 4, July-September 1986, (Saman-e Tablighat-e Islami, Tehran, Iran), p.80.

30. See Ibid., p.88.

31. J. Amuzegar, *Iran: An Economic Profile* (the Middle East Institute, Washington D.C, USA, 1977) , p. 189.

32. R .E. Looney, *The Economic Development of Iran* (Praeger Publishers, USA,1973), p.20.

33. For information on fixed capital formation during the revised Fifth Plan see K. Mofid, *Development Planning in Iran* (Menas Press, UK, 1987) , pp. 104-105.

34. See constitution of the Islamic Republic of Iran, translated by H .Algar (Mizan Press, Berkley, USA, 1980) , Article 44, pp. 44-45.

35. S. Bakhash, *The Reign of the Ayatollahs*, op.cit., p.176.

36. *The Middle East and North Africa* (Europa Publication Ltd, London, UK, 1979) , p. 364.

37. *EIU, Country Profile*, 1987-1988, p. 45.

38. *The Middle East and North Africa*, op.cit., 1979, p.364.

39. Ibid., 1980, p.373.

40. S. Bakhash, *The Politics of Oil and Revolution in Iran* (Staff Paper, the Brooklings Instutution, Washington DC, 1982) , p.31.

41. *EIU, QER*, 1st quarter, 1981, p.7.

42. S. Bakhash, *The Politics of Oil and Revolution in Iran*, op.cit., p. 29.

43. *EIU, Country Profile*, 1987-1988, p. 46.

44. *The Middle East and North Africa*, op.cit., 1982, p. 406.

45. *MERIP Reports*, July/August 1981, p.14.

46. S. Bakhash, *The Politics of Oil and Revolution in Iran*, op.cit., p. 32.

47. Ibid., p.33.

48. *MERIP Reports*, op.cit., p.14.

49. *The Middle East and North Africa*, op.cit., 1982, p.407.

50. Ibid., 1983, p. 327.

51. Ibid., 1984, p. 401.

52. See further Ibid.

53. *Iran Year Book 88* , op.cit., pp.204-205.

54. *MEES*, 30:31, 11 May 1987, B1.

55. *ran Year Book*, op.cit., p. 206.

56. *The Middle East and North Africa*, op.cit., 1987, p. 414.

57. Iran Year Book, op.cit., p. 207.

58. *MEES*, op.cit., B1.

59. *Iran year Book*. op.cit., p. 208.

60. *The Middle East and North Africa*, op.cit., 1987, p. 414.

61. *Iran Year Book*, op.cit., p. 242, p. 245.

62. *Iran Almanac*, Tehran, Iran, 1987, p. 186.

63. *FT Survey*, 1 April 1985, p. VIII.

64. *Iran Almanac*, op.cit., p. 207.

65. *Iran Year Book*, op.cit., p. 207.

66. Ibid., pp. 242-243.

67. See Ibid., p. 209, p. 243.

68. For evidence on this figure see further Ibid., p. 247.

69. *The Middle East and North Africa*, op.cit., 1987, p. 414.

70. *Iran Year Book*. op.cit., p. 251.

71. Ibid.

72. See further Ibid., p. 248, p. 250.

73. Z. Iqbal and A. Mirakhor, *Islamic Banking* , op.cit., p.14.

6. OIL AND WAR

6.1 THE OIL SECTOR

Before the revolution, Iran ranked as the world's fourth largest oil producer and second largest exporter. In mid 1978, Iran's oil production was over 5.5 million barrels of crude per day, but it plummeted as the political unrest peaked in late 1978. Oil production was even halted for two months at the end of 1978 owing to the strikes by oil workers. Sudenly Iranian oil became a non existent factor in international oil supply.

With the establishment of Khomeini's regime in February 1979, the strikes ended and oil exports were resumed in early March at about one million barrels a day. The immediate effect of the revolution on Iran's oil industry was a temporary disruption of its production and the resumption of oil exports at a much lower level imposed by the revolutionary government.

The focus of this section is to discuss the evolution of Iran's oil policy and practices since the revolution. It also examines the country's production, consumption, exports and the likely prospects of the oil sector.

6.1.1 The Oil Price Shock of 1979/80

The effects of the revolution on the international oil market resulted in a sharp increase in oil prices. A little more than a year after the revolution, oil prices almost tripled, resulting in the 'second oil price shock'. The price increases however, were not as a result of shortages that had existed during the 'first oil price shock' in 1973. Rather, it was largely due to the anxiety caused by the Iranian revolution. The political uncertainties in the Middle East arising out of the revolution, put the reliability of future Middle East oil production and supplies into question.

According to the US Congressional Research Services in November 1979, "the Iranian Revolution's principle implication for global oil and energy supplies is that it marks a point of no return for the world's major oil importing countries. No longer are they assured of ample, reliable, cheap supplies of oil. Now they are entering into a new, troublesome era of scarce, expensive and uncertain oil supplies at increasing prices and further subject to political conditions and risks".[1]

However, in 1979 oil was plentiful in comparison to the 1973 oil price shock. As Iran's oil production fell, the difference was made up by other major oil exporting countries, in particular Saudi Arabia. In other words, the oil market was not tight. The OPEC's daily production into 1979 almost equalled that of 1978, but this was not enough to bring supply in line with demand largely because of panic buying by anxious consumers and the hoarding of oil by some speculators in order to profit from escalating prices. The Japanese in particular, contributed to the sharp price increase as their major suppliers such as BP, Shell and Exxon, most affected by the Iranian supply loss, reduced shipments in favour of their own home markets.

This had a major impact on the volatile spot market as Japan acquired 20-25% of the total available oil.[2] Owing to the continuing biding up on the spot market and the accompanying disorder, the official price of oil jumped from $13.34 per barrel, trippling after the Shah's departure from Iran in January 1979. By mid 1979, Saudi Arabian light crude was above $30 per barrel on the spot market and around $40 at the end of the year.[3] The oil market was disoriented and the overwhelming reason was uncertainty in supply.

6.1.2 Ideological Baggage and Oil

The dramatic drop in Iran's oil production, particularly during the first three years of Khomeini's regime had its roots in revolutionary ideology, in domestic political rivalry, in misreading of international oil markets and in the Gulf war.

The revolutionaries who seized power considered that the oil production during the Shah's rule was at levels far beyond Iran's revenue requirement. They believed oil revenues were being squandered and the counrty's main natural resource was being needlessly exhausted. Bani Sadr, for example, believed that the Shah's regime deliberately used oil to subjugate the entire underdeveloped Iranian economy to the dominant economy of the Western industrialised world, particularly the United States. He stated in his book entitled 'Oil and Domination' (Naft va Solteh) that under the Shah "oil became the instrument of the destruction of the foundation of Iran's independent economy".[4] Khomeni also expressed similar radical views and regularly referred to the plunder of Iran's oil resources by the United States and the West in his sermons and declarations during his exile abroad and even the day after his return to Iran.

However, statements and radical views of this type, which culminated before the revolution, were part of the growing opposition to all aspects of the Shah's government, in particular to his oil policy.

The oil factor was the most important instrument for the seizure of power by the revolutionary forces. Having used oil strikes to topple the Shah, Khomeini's regime then used oil revenues to consolidate its power base inside Iran. Khomeini, who previously considered the oil industry to be a tool of foreign domination in Iran, told the industry's employees after the revolution that "the industry is the lifeline of the nation". Speaker Rafsanjani spoke of oil as a "divine blessing" and "the foundation of the Iranian revolution.".5

Against this ideological backdrop, and the fact that, since the overthrow of Mosadegh, nationalists and opposition groups in Iran, continued to suspect the Shah's oil policies and his dealing with the majors, Khomeini's regime unilaterally cancelled the agreement with the Iranian Oil Participants (the former Consortium), that purchased the bulk of Iranian oil. Further measures were taken to limit foreign involvement by taking over the functions of the consortium-controlled Oil Service Company. Unlike the Shah's government, the Islamic Republic displayed little interest in downstream operations of oil related enterprises outside Iran. Decisions were also taken on a broader front regarding engergy. As a result, the Shah's nuclear energy programme was virtually abandoned and Iran divested itself of its joint venture refineries with South Africa, France and South Korea. In addition, deliveries of gas to USSR was cut in 1980 due to a price dispute, with prices considered to be law by Iran.

6.1.3 Marketing Patterns

After the revolution, Iran's crude oil marketing patterns underwent a change. The participating oil companies eventually signed new purchasing contracts with the Islamic Republic, leaving their claims for losses of cancelled agreements between Iran and the former Consortium, for later negotiation. As a result of the new contracts, the majors were not the bulk buyers of Iranian oil and under the circumstances, the Islamic government could not revert to the pre-revolution marketing patterns, which the revolutionaries considered as exploitative. In addition, following the oil price shock of 1979-80, there were many ready customers for Iranian oil. Iran sold oil directly to independents, and the Japanese and other governments on a sale, barter or joint venture basis. Furthermore, these buyers were paying premium prices on short term contracts.

The marketing strategy, with short term commitments, then seemed to suit the Islamic government which was eager to retain flexibility until basic oil policy could be determined.[6]

As a result, by mid 1979, the National Iranian Oil Company (NIOC) with an average production of 3.1 million barrels per day was selling oil under thirty five contracts to the eight majors, twenty one independents and six governments. Later, during the same year, the number of customers rose to fifty two.[7]

In general, the marketing pattern in immediate years following the revolution was sale of oil to a large number of customers on short term contracts. Though the NIOC recognised the long term advantages of dealing with bulk buyers and majors, the political development militated against such views. Large scale purchasing contracts with the majors, remained suspect in the eyes of radical clerics. In fact the NIOC had to justify continued sales to the majors in the face of widespread criticism. With a favourable oil market, the desire to maximise revenues from every barrel exported, encouraged sales on short term contracts to smaller customers.

Nevertheless, trade sanctions imposed by the USA and the EEC in 1980 due to the hostage crisis in Tehran, brought about changes in trade patterns. As a result, Iran sold more oil to countries like Turkey, Sri Lanka, India, Brazil, South Korea, North Korea and the East European states. The Soviet Union, itself a major oil producer and exporter, purchased oil from Iran in 1981. Eastern bloc countries received 16.4% of Iran's total oil exports in 1981 as against 11.4% in 1980 and 3.1% in 1979. In 1982 and 1983 the percentages were 9.7 and 11.3 respectively.[8]

The revolutionary government also sold oil on the spot market which became a regular feature of post-revolution marketing policy, as long as spot prices remained highly attractive. The large amounts of uncommitted crude oil available to NIOC and the prevailing high prices, clearly exerted a strong attraction. In fact there was a growing temptation to regard spot prices as the benchmark for determining official prices and negotiating new contracts with buyers.

As a result of these new sales strategies, the majors' share of Iranian crude declined. Short contracts for nine to twelve months, a wide variety of customers and a tendency to bargain for short-term gain became the characteristic of Iran's marketing practice. Iran, as far as the importers were concerned, was not a reliable supplier and its relations with large customers were disrupted.

However, this became a factor of importance when world demand began to fall and prices weakened in late 1981 and early 1982.[9]

6.1.4 Pricing Strategy

Internal factional struggles for power that followed the revolution were largely focussed on the country's oil industry and its oil policy. Despite this ideological onslaught of the revolutionaries against Iran's oil exports, Bazargan's government followed a relatively moderate line of policy. However, the resignation of Bazargan in November 1979 as a result of the hostage crisis was the end of moderation. Iran began to pursue an aggressive pricing strategy.

The NIOC added premiums in addition to the official prices and imposed surcharges on customers purchasing oil in excess of contracted amounts. Various formulas were devised to maximise revenues, such as shares for Iran in the refinery margins of major customers. Iran also demanded from its customers a higher price for present purchases as a pre-requisite for guaranteed future supply. Although other OPEC members adopted similar measures, Iran was usually the initiator of such practices for higher price increases. Iran's crude prices were clearly the highest in the region.[10]

In OPEC Iran tended to stand with the oil-price hawks. Iranian delegates began to show more inflexibility. At the OPEC conference in Caracas in December 1979 Iran proposed that OPEC adopted prices equivalent to the cost of producing other forms of energy. This proposal, first suggested in an OPEC study, meant the price of oil ought to vary between $35 and $60 per barrel.[11]

On the OPEC long-term strategy committee which convened to work out measures for regular and orderly modifiction of oil prices, Iran agreed for faster and larger price increases. At this point it should be noted, the prices were changing so rapidly in 1979 and 1980 that Iran like other oil producers, based its prices on information revealed by the spot market, which was then reacting to changes in the market condition much faster than OPEC. During this period important price decisions were effectively made by members outside the OPEC framework.[12] Nevertheless, when prices began to fall after 1981, Iran argued strongly that OPEC members should adhere to production limitation for market stabilisation and the maintenance of high prices.

Iran's militancy and aggressive pricing strategy, in part stemmed from its experience of confused market circumstances that followed the revolution. The price of Iranian light rose from about $13.45 per barrel in January 1979 to

$32.87 per barrel in February 1980.[13] These sharp increases were owing to the coincidence of a number of complex market factors triggered by political upheaval in Iran. But the authorities in Iran appeared to believe that the attitude of revolutionary militancy had much to do with these price rises. This belief and the experience of a run away price had an impact on Iran's oil policy and its inflexibility that followed until the end of 1981. Furthermore, the election of Bani Sadr as president and his position on oil policy - limiting oil exports and creating, in the long run, an oil free economy - reinforced the sentiment of low production and high prices. It is noteworthy that in 1979/80, under the circumstances Iran could afford a sharp drop in production due to the country's balance of payments. When the revolutionary seized power, Iran's reserves stood over $10 billion.

With favourable oil prices in excess of $30 per barrel the country's reserves was expected to rise and Iran's oil minister was predicting an oil price of $40 per barrel by the first quarter of 1981.

As a result of all these consideration, Iran continued with an aggressive pricing policy. In fact its prices were higher than the comparable crudes. At the beginning of April 1980, Iranian crude was then the most expensive in the Persian Gulf, between $6 and $8 higher than other regional crudes. Though this gap narrowed later in the same year as a result of production cut backs, but Iran's prices remained high. Japanese and other companies refused to continue liftings at previous levels and an atmosphere of resistance developed by all buyers. Therefore, Iran's export dropped percipitously, apparently due to price inflexibility, but in reality it was the product of political, ideological and economic forces acting on oil industry in Iran.

By September 1980, when the outbreak of the Gulf war disrupted Iranian oil exports, Iran was exporting about 0.7 million barrels per day, compared with an average daily production of 3.1 million barrels for the preceding twelve months.[14]

6.1.5 Deteriorating Economic Condition

In 1980 despite a 4% decline in world demand for oil, Iran continued to insist on high prices for oil, resulting in a decline in output and earnings.[15] As the country's foreign reserves were strong, reduced oil revenue was not a source of worry for the regime. In 1981, however, there was a collapse of oil revenues, both as a result of destruction through war and because of an oversupply situation on the world market. Iran began to move towards a crisis, as the reserves dipped seriously. In addition after releasing the American hostages in January 1981, the government had to set aside over £6 billion of its foreign exchange assets as security to cover the financial claims made against Iran by American citizens and entities.[16]

The war initially disrupted crude oil exports but liftings from the Kharg terminal were resumed within weeks of the outbreak of hostilities. Discounts had to be given to customers to cover the cost of high insurance premiums on tankers entering the war zone.

The war continued to act as a deterent to large scale lifting from Iranian terminals. At this stage the damage caused by the war to Iran's oil industry was not significant. Though the Abadan refinery was virtually destroyed, this did not affect crude oil exports, because Shah's government had redirected export lines from Abadan to Kharg and Bandar Mah Shahr.

Nevertheless, with reduced refining capacity Iran had to import additional oil products and the capture of Korramshahr by Iraq meant higher costs as shipments of goods to Iran were rerouted to other ports. Initial Iraqi attacks on oil installations were ineffective, but the added cost of prosecuting the war on Iran's deteriorating economic condition in the immediate post revolution period was considerable (see the chapter on the post revolutionary economy).

These difficulties were exacerbated especially towards the end of 1981 by a weakening of oil prices and as noted before, the growing surplus of oil on the world market. World energy consumption continued to fall and oil consumption dropped a further 3.3% in 1981.

Under these conditions, Iran's high prices for crude, $37 for light, in early January appeared increasingly unrealistic for the customers. Iran had troubles in marketing its oil.

Some major customers e.g. Japanese companies suspended liftings for a short period and subsequently chose to stretch out their nine-to-twelve month contracts to twelve-to-fifteen months. Iran's exports in the second half of 1981 was between 0.5 and 0.7 million barrels per day as against 1.0 to1.1 million barrels per day in the first half of the same year.[17] During this year, the Iranian daily average exports was 0.85 million barrels. Foreign exchange earnings at this level were below foreign exchange expenditure, resulting in heavy reliance of the government on reserves. Iran's collapse of the oil revenues compounded by the erosion of the foreign exchange reserves and the war at a time when the economy was only operating at half its productive capacity, forced the government to take austerity measures including a severe curtailment of imports. Iran, a mega-hawk in terms of price, failed to read market warnings.

6.1.6 Rationalisation of Oil Policy

Because of the aforementioned problems, Iran was forced to revert to a more pragmatic oil policy. For the first time after the revolution, officials began to speak to the need to increase exports and to recapture traditional Iranian markets. The budget for 1981/82, submitted to the Majlis, reflected the government's intended policy to stimulate the flagging economy by increased oil exports. Nevertheless, oil exports at high levels, was severely criticised by opposition groups and in particular by Bani Sadr and his followers. They considered the reduction of oil exports as a step towards ending foreign exploitation of Iran's resources and the country's dependence on oil.

In June 1981 the impeachment of Bani Sadr followed by suppression of opposition groups facilitated the way for a flexible oil policy. In addition, the OPEC members at their conference in Geneva in October 1981 agreed to reduce the differential of light grades of crude and set a new market price of $34 per barrel for Arabian light. These decisions by OPEC indicated that unrealistic high prices could not be maintained in a soft market. In fact this collective decision, provided an opportunity for the Iranian authority to justify and reduce Iran's inflated prices.[18]

As Iran attempted to re-enter the market, in order to recover its revenue base, it encountered severe difficulties in selling its oil. With a supply glut in the market, non-OPEC countries were cutting prices and OPEC states, hard pressed for cash, were seeking to increase crude exports. With the continuing perception of Iran as an unstable and insecure trading partner and the risks of tankers entering the war zone, buyers resistance remained strong. Moreover Saudi Arabia in keeping its production deliberately high (e.g. 9.9 and 9.8 million barrels per day in 1980 and 1981 respectively) was attempting to deprive Iran of an oil market.[19] This overproduction during the above mentioned years when world oil consumption was dropping about 4% each year, was in part to pressure Iran to end the war and cease encouraging subversive activities in the Persian Gulf region.

In spite of an unfavourable market, Iran, however pushed an aggressive marketing policy. It cut prices in three steps, by $4 during February 1982, offered large discounts unofficially and on the spot market.[20] Also Iran signed basic agreements to exchange oil for food and other goods, and added to its efforts, to sell oil to Iran's potential customers still uncertain of buying Iranian oil. Furthermore Iran ignored the production quotas adopted by OPEC in March 1982 as a means of boosting oil prices.

Iran's quota was set at 1.2 million barrels per day but during 1982 it was producing an average daily output of 2.39 million barrels, an increase of one million compared with preceding years. It should be noted that neither Iran nor Saudi Arabia adhered to their production quota. Nevertheless, Iran rested its claim for increasing production on the size of its population, the war and its historical share of total OPEC production.

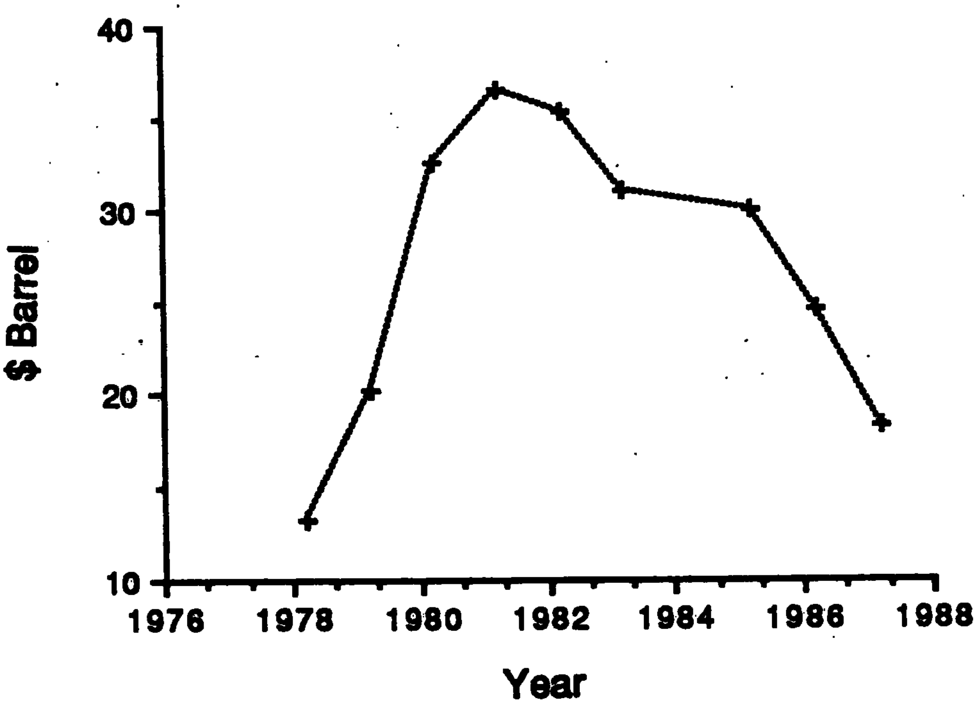
6.1.7 Iran and OPEC since 1982

By cutting prices and raising production in the spring and summer of 1982, Iran switched to a policy of volume maximisation, at any price, to recapture its traditional market and satisfy its own revenue requirements. At the same time Iran displayed some appreciation for the value of OPEC as an instrument through which the producers could co-ordinate policy and through which the country could secure its own needs. Iran, for example, intensified its oil rivalry with Saudi Arabia and sought support among some members to challenge Saudi's predominent role in the OPEC as a result of the ideological, political and strategic conflict between the two countries. As stated by Prime Minister Mosavi "With an increase in our country's activities in the international scene, including the oil market, using oil as a political weapon weakens Arabia's role".[21]

However, a further reduction in world oil demand in 1982 and the failure of OPEC's production quota plan due to considerable discounting of some major producers led to a further price reduction, In 1983, OPEC considering the market realities reduced its official prices to $29 from a high of $34 per barrel with a total daily output of 17.5 million barrels. These decisions apparently were confirmed at the OPEC meeting in Vienna in 1984 as a means of defending the price and stabilising the demand for oil.

Iran's quota was set at 2.4 million barrels and that of Saudi Arabia's up to 5 million barrels, with the latter acting as the swing producers to fill in the gap between the rest of OPEC's production and the overall 17.5 million barrels

Graph 2- OPEC Crude Oil Prices 1978-1987



Source: S.Holly,Conflict in the Gulf, Lloyds of London Press, 1988, p.34.

Notes: Based on average official sales price(F.O.B) weighted by the volume of production of indivitual members.

production level set by the organisation. Iran persistently complained about Saudi Arabia's quota and demanded an increase to its own quota from 2.4 million to 3.2 million barrels per day.22

Saudi Arabia, in 1985 was producing 3.1 million barrels per day about one million barrels more than Iran. The fact that the Saudi quota was larger than Iran's was inconsequential. In reality the implications of declining demand for oil were grave for all OPEC members and they were all fighting for larger pieces of a diminishing pie.23

In December 1985, OPEC took the decision to hold onto its share of world market. Consequently the oil price collapsed in 1986 from $27.50 to less than $10 after discounts. In fact for most of the world, 1986 has been the year of the third oil price shock with oil prices diving almost as dramatically as they rose in the two big upheavals of the 1970s.

The dismissal of Sheikh Yamani, the Saudi oil minister led to a reversal of OPEC's policy. In December 1986 in a deal between the Saudis and the Iranians, a production sharing agreement was patched together to reverse the damaging decline in oil prices rather than stretch the share of the market. The new price of OPEC marker crude was set at $18 per barrel, which to Western observers appeared to be impossible to maintain. Nevertheless, as a result of Western buyers precautionary puchases and inevitably the reduction of existing stocks in the West, the price rose to $20 per barrel.

In June 1987, OPEC set its production levels at 16.6 million barrels, anticipating overproduction from some members. Prices rose temporarily during July 1987 as a result of increased tension in the Persian Gulf and open hostility between Iran and Saudi Arabia over rioting in Mecca. As tension decreased and the convoying operations of the tankers by the UK and USA in the Persian Gulf were seen to be successful, prices again fell below $20 per barrel. Contrary to the expected rise again in preparation for the winter stockpile, prices fell in August to $17.30 per barrel. By January 1988 due to OPEC's serious overproduction and aggressive discounting, oil prices fell to $16.65 per barrel.24

Iraq's refusal since 1986 to accept a quota under Iran's was blamed for increasing indiscipline in the OPEC. However, in November 1988, at OPEC meeting in Vienna a production ceiling of 18.5 million barrels with a price target of $15 to $18 per barrel was agreed by all members. Iran accepted quota parity with Iraq but gained an 11% rise in its production. This meant that, Iraq had to reduce its real output to parity with Iran. In fact with the continuation of the Iran-Iraq ceasefire, OPEC had to accommodate its quotas to the fact of Iraq's rapidly rising export capacity and the desparate need of both Iran and Iraq for increased revenues for post war reconstruction. Fortunately the rise in the world demand for OPEC crude since its nadir in 1985 (13.2 million barrels per day) has allowed the overall production level to rise enough to make a settlement possible. Evidence is now growing that weaker oil prices since 1986 have stimulated the demand for crude oil partly as a result of faster economic growth in the West and partly because of reduced effort to conserve oil or find substitutes.[25]

6.1.8 Production

In 1973 the NIOC assumed operational control of the oil industry. Before the revolution in 1978, oil production in Iran was handled by three entities:

- By foreign service contractors who carried out exploration, development and production activities on behalf of NIOC in return for fees. The most important of these contractors was the Oil Service Company (OSCO) controlled by Iranian Oil Particpants (the former Consortium). OSCO produced 88.5% of all Irania noil.
- By joint ventures between NIOC and foreign oil interests in accordance with a predetermined profit sharing formula. The five, which operated offsshore oil fields produced about 11.3% of the total production.
- By NIOC itself, producing the rest; less than 1/2% of the total.

As already discussed, after the revolution, the Iranian government took over all the assets and functions of OSCO and the share holdings of the joint offshore ventures.[26] The revolution and the subsequent oil policy in the early stages caused a profound change in the oil sector. The production level after its ebb during 1980-81 was increased but has remained below 2.5 million barrels per day (See table 6.1). Causes for the low level output, discussed in detail before, had more to do with external events than domestic policies. The war with Iraq especially after 1983, disrupted production and export patterns mainly by the Iraqi policy of trying to dissuade tanker traffic from using Kharg loading terminals.

Table 6.1- Iran's Oil Production and Consumption (m b/d)

year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Crude Oil Production	5.88	5.66	5.24	3.16	1.46	1.31	2.39	2.44	2.03	2.19	2.03
% of OPEC	19.1	18.1	17.5	10.2	5.4	5.8	12.6	14.3	12.4	14.2	11.1
Domestic Consumption of Refined Products	0.43	0.51	0.51	0.54	0.51	0.62	0.72	0.87	0.72	0.73	0.72

Source: MEES 31:5, 9 November 1987

Iran's collapse of productive capacity from a pre-revolution period of nearly six million barrels per day to just over two million barrels per day, has brought general decay in the oil industry. This had developed from the shutdown of fields due to lack of maintenance. Wells have not been maintained since 1979 and corrosion of well heads and shafts has set in. In some cases, the damage has been irreversible. At the same time, offshore fields have sufferred from neglect or from severe war damage.27

6.1.9 Domestic Consumption

Iran's oil consumption has been the highest among the OPEC members. With the growth of population and increased industrial and economic activities in the 1970s, domestic consumption grew from 0.18 million barrels per day in 1970 to over 0.5 million barrels per day before the revolution. After 1979, despite the disruption in economic activities and rationing of oil products for the most part of the war, consumption apart from minor fluctuations, has continued to grow. (see table 6.1). This in part can be accounted for by the continuing population growth, the highest in the third world, and the size of Iranian forces fighting a war. Historically, oil has been the single most important source of primary energy in Iran and four products (kerosene, fuel oil, gas oil and gasoline) accounted for 93.9% and 90.9% of all oil products consumed in 1982/83 and 1983/84 respectively. Use of liquid petroleum gas and other oil products were minimal.28

Considering the growing domestic demand for oil products, the Shah's government increased its internal refining capacity from 0.68 million barrels in 1972 to 1.2 million barrels per day in 1978. Abadan refinery, large by any standards, before the revolution, had a total capacity of 630,000 barrels per day. After the destruction of this unit during the war, Tehran refineries (250,000 barrels per day) have played a major role in domestic supply. Refineries at Shiraz (45,000 barrels per day), Tabriz (80,000 barrels per day) are augmented by topping plants at Kermanshah (18,500 barrels per day) and Lavan (20,000 barrels per day). Although Iran's refineries have a capacity in excess of domestic consumption, the demand for middle distillates i.e. kerosene and gas oil has been rising steadily. It is disproportionately high and accounts for more than half of all oil products used in the country.[29]

Before and after the revolution, Iran has had to import middle distillates to meet increasing demands. Furthermore, air raids by Iraq have affected production at Esfahan and Tabriz, though the extent of damage is not known. As a result of the loss of the domestic capacity, the refineries are less able to cope and therefore a higher proportion of crude exports are returned to Iran as refined products. The major beneficiary in this respect has been Aden, where the refinery has been expanded to make good Iran's shortfalls. Iran has also continuing arrangements with other international refineries in Singapore, Japan and South Korea for refined imports. In all, Iran was importing about 200,000 barrels per day of oil products in 1987.[30]

6.1.10 Exports

As can be noted from table 6.2, in the three years preceding the revolution Iran was exporting 4.5 to 5.3 million barrels per day, a rate second to that of Saudi Arabia. After the revolution, Iran's oil export dropped substantially but the direction of exports remained more or less the same. Japan remained a major importer followed by West Germany. In 1982 and 1983 Japan received 14.2% and 23.0% of Iran's oil exports and the shares of West Germany were 2.8% and 13.8% respectively. As noted earlier, the revolution brought changes in Iran's marketing pattern but the country's dependency on West European countries and Japan as its major buyers of oil, has increased. For example, in 1979, Western Europe and Japan together accounted for about 52% of Iran's total oil exports. This share was increased to about 69% in 1983 following Iran's reversion to a more pragmatic oil policy and increased production. In contrast, oil exports to USA has been reduced from 22.8% to 3.2% rising to 5.8% in 1983 - contrary to USA's embargo and the Iranian government's vows not to sell oil to the so called Great Satan.[31]

Table 6.2 - Volumes and Values of Oil Exports

Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Gross Export of Crude Oil and Refined Products (m b/d)	5.33	4.98	4.57	2.64	0.93	0.85	1.80	1.77	1.57	1.60	1.46
% of OPEC	18.1	16.9	16.3	9.1	3.7	4.1	10.9	12.2	11.0	12.1	9.3
Values of Petroleum Exports ($billion)	22.92	23.59	21.68	19.18	13.28	12.05	19.23	19.22	12.25	13.11	6.60

Source: MEES 31:5 9 , November 1987

Iran since its change of policy has been able, to a certain extent to regain its share in the OPEC's export market. Table 6.2 shows that, Iran since 1982 on average retained 11% of the said market. As for the value of exports, the recovery of oil revenues during 1982 and 1983 introduced a note of confidence into the Iranian economy. However, with declining crude oil prices (see graph 6.1) the revenue dropped by one third in 1984. In 1985 it rose slightly due to increased export but dipped to $6.6 billion in 1986 with the collapse of oil prices, causing great difficulties for the Iranian economy.

6.1.11 Summary and Prospects

For three years following the revolution, Iran's oil policy was closely based on ideological considerations and internal political rivalries. The revolutionary government misread the state of the oil market and systematically decimated the ranks of its own managerial staff in the oil industry. The Islamic Republic from the start decided to eliminate national dependence on the international oil market and as a result cut production during 1980 and 1981. With the second oil price shock of 1979/80, resulting in oil prices being trippled, Iran was in a favourable economic position to sustain low production and pay its way. Disaster came, however, in the form of the collapse of oil revenues as a result of the war and because of the oil glut in the world market. Erosion of foreign exchange compounded by a general deterioration in economic conditions took the Islamic government on a course diametrically opposed to its proclaimed path. Consequently Iran silenced the internal opposition and then reverted to a more pragmatic policy. Since then the revolutionary rhetoric concerning the desirability of an oil free economy has subsided and the oil policy of the Islamic regime has come to significantly resemble the Shah's.

In the spring of 1982, Iran reduced its oil prices and raised production by undermining the OPEC price policy in order to satisfy its own revenue needs. It also stepped up its efforts to repair its relations with its major traditional customers in order to re-establish a reputation for reliability and consistency as an oil supplier. However, the Iranian marketing pattern has remained mixed with large shares of its total exports being sold to Japan and West European countries. Also, Iran has sold oil to Eastern bloc states and to non-traditional buyers such as Brazil and Spain.

Despite Iran's aggresive marketing policy, the production level has remained below 2.5 million barrels per day as a result of a host of political, economic, technical and market factors. Given Iran's present difficulties, the production level will probably remain below four million barrels per day for the next five years.

According to Iran's oil ministry's ten year plan, outlining the crude oil and natural gas production and supply porjects, overall crude oil production capacity is forecast to rise from 3.3 million barrels per day in 1989 to 4.1 million barrels per day in 1993.[32] To reach this capacity, production might be slowed down due to labour shortages, foreign exchange problems and technological shortcomings. Since the revolution an increasing number of oil wells have been shut off due to falling reservoir pressure, exccessive salt contamination and poor maintenance.

Iran's oil authorities have also announced exploration and drilling programmes in various areas onshore and offshore. In addition, expansion and reconstruction of oil fields and of oil production units are in the programme. The rise in crude oil production is also attributed to gas injection projects in oil fields. The projected foreign exchange requirements for these projects in five years, 1989 -1993, are $2,650 million.

However, these operations may be hindered by several problems. Iran so far has been reluctant to open up new areas to foreign oil companies which will attract foreign expertise and capital. On its own, Iran would require the return of a large number of skilled foreign technicians. Under present circumstances with continuing political and administrative disorder, no major decisions have been made by key figures in these respects.

Major expansion is also planned for refining capacity which is projected to rise from 7.43 million barrels per day in 1989 to over 1.3 million barrels per day, or an average annual growth of 15%. Refineries are to be built, completed, re-constructed (e.g. Abadan) and repaired in anticipation of an increasing domestic energy consumption.

Iran's domestic energy consumption is the largest in the OPEC and traditionally a substantial part of it has been oil products. However, even with NIOC refineries in full production availability of energy in Iran will continue to be restricted. Considering the significant export value of oil for Iran's economy and allowing for extensive substitution of natural gas for oil products, a growth rate of less than 5% in energy is forecast for the next five years.

Iran's priority remains increased oil production capacity. As long as this is not achieved, the amount of oil it can export will not significantly differ from its present level unless natural gas is used extensively as an alternative source of energy.

6.2 THE OIL WAR

The Gulf war has re-emphasised Iran's far reaching economic interests in the Persian Gulf. The most important of these interests is oil. It accounts for 90% of the country's foreign exchange. Soon after the outbreak of hostilities between Iran and Iraq, oil became an instrument of war. Since more than 80% of Iran's oil was exported through Kharg Island, it became the most attractive strategic target for Iraq and remained so until the cease-fire. Intensification of air-raids on Kharg, obliged the Islamic government to shuttle crude oil by tankers, down the Persian Gulf to a relatively safer area for export. With the escalation of the tanker war, the conflict became more than just a regional problem, with non-regional countries involved and motivated by gaining strategic advantages or long-term economic interest.

This section is concerned with the military-economic trends of the oil war and in the process will address the following questions. What were the goals of the oil war? Did it effectively disrupt Iran's oil exports? How did Iran respond in the way of transporting its oil? What was the cost of the shuttle service? Finally this section concludes with an examination of the maritime tolls and the cost of the Iran-Iraq war followed by a summary of the oil war.

6.2.1 Introduction

There can be few industries more vulnerable, both at sea and on land, than the oil industry. During the Gulf war, this fact was emphasised right from the start, as both belligerents attacked each other's oil installations. With the continuation of the war, impairment and destruction of oil industries became part of the war strategy.

The day after the outbreak of the war, Iraq attacked Iran's huge oil refinery in Abadan. As a result of aerial raids and daily shelling, within a month the refinery was shattered.

In the course of its advance into Iran, Iraq's main axis of attack, was in the oil-rich province of Khuzestan. The Iraqi forces targeted the important cities of Khorramshahr, Abadan, Ahvaz and Dezful. Ahvaz is a vital oil supply centre by virtue of being the intersection of several pipelines connecting the oil fields in

Khuzestan to the north and south east of Iran.

Dezful, which was repeatedly attacked by Iraq, has several strategic importances attached to it. As well as being a military stronghold, it is also the site of a pumping station which feeds oil from the Abadan complex to the central and northern parts of Iran. Had the Iraqis achieved all of their military objectives in Khuzestan by capturing Dezful and Ahvaz, the whole country would have run out of oil in a few weeks and the Iranian resistance might have subsided.

For its part, Iran attached strategic targets inside Iraq. As early as 24th September 1980, Iran attacked Basra, the location of huge industrial projects including a petrochemical plant, a natural gas processing unit and an oil refinery. In a series of attackes, Iranian warships and jet-fighters inflicted severe damage to al-Amaya and al-Bakr oil terminals at the mouth of the Shatt al-Arab, both capable of receiving Very Large Crude Carriers (VLCCs). The Iranian attacks on these two deep water terminals and on the Faw terminals, practically stopped Iraq's oil exports through the Persian Gulf, thereby severely reducing its oil exporting capacity.

The Iranian airforce also struck at a variety of oil targets in Kirkuk, Mosul, Irbil and the petrochemical plant near Basra and Zubair. Iraq, having been subjected to air-raids, responded with a number of strikes against Iranian targets, such as the oil and petrochemical installations in Bandar Khomeini, Bandar Mahshahr and Kharg Island. As a result of these attacks both sides, right from the early stages of the war, were involved in strategic exchanges, especially on oil targets. Soon oil became an instrument of the Gulf war.[33]

6.2.2 Early Attacks on Shipping

The outbreak of hostilities stopped merchant ships plying the Shatt al-Arab and some seventy stranded vessels blocked the waterway. With Khorramshahr captured by the Iraqi forces, and Bandar Abbas overstretched as a result of rerouted shipments of goods, Iran inevitably, had to utilise its two major commercial ports in the northern zone of the Persian Gulf, i.e. Bandar Khomeini and Bandar Mahshahr. In addition, the destruction of the Abadan oil refinery, necessitated the import of additional oil products.

As a result, under the protection of the Iranian Navy, with close support from the airforce, convoys of ships sailed to and from these ports at irregular intervals. However, with its Super Frelon helicopters armed with exocet missiles, Iraq attacked these convoys at every possible opportunity. Although Iran conducted its first anti-shipping attack as early as 7th October 1980, the first merchant ship casualty did not occur until 21st May 1981, when a Panamanian-flagged bulk carrier, Louise One, was hit and sunk by an Iraqi air-strike along the Khor Musa inlet, heading for Bandar Khomeini.[34]

On 14th January 1982, Iraq warned international shipping to keep clear of the western waters of the Persian Gulf, after it had claimed to have sunk three ships leaving Bandar Khomeini. From May 1982 onwards, Iraq made further attacks on merchant ships and also on Kharg Island.[35] The first tanker attacked at this island, was on 30th May 1982, a Turkish-flagged ship called Atlas One, which was hit by Iraqi aircraft during loading operations.[36]

In mid-August 1982, Iraq declared an exclusive zone extending up to 35 miles from Kharg Island, in which ships were liable to attack.[37] From November of the same year, maritime hostility spread beyond the northern waters of the Persian Gulf, with an Iraqi air-strike on an Iranian tanker Shirvan, while en-route from Sirri Island to Bandar Mahshahr (see map 1 and 2).[38]

On the other hand, Iran pledged itself to safeguard tankers plying Kharg Island, by providing armed protection. At the same time, it continued with the naval blockade or Iraq and made intermittent surveillance of merchant ships on suspicion of carrying military equipment to Iraq via Kuwait. Nevertheless, Iran did attack merchant ships on various grounds. Between the outbreak of the war and February 1984, before the initiation of what came to be known as the Tanker War, twenty-three Iraqi and five Iranian attacks on merchant ships were recorded.[39]

6.2.3 Reversal of War Aims and Strategies

After the fall of Korramshahr, the war changed from a limited dynamic war to a general static one. Iraq aimed at retaining the captured territories and went into an operational defensive. Apart from some minor deviations, the two armies, more or less remained locked in a static war until 1981. During this period, Iraq made an abortive thrust into Ahvas and the Iranian Airforce, in a series of attacks, closed down the oil facilities at Kirkuk for several weeks.[40]

In 1981, Iran made significant attempts to break the stalemate and its major breakthrough occurred in September, when the seige of Abadan was lifted. This momentum culminated in May 1982, when Korramshahr was recaptured. By June, almost all of the occupied territories, were liberated. During this period, Iraq signalled its willingness to end the war, while Khomeini's regime dismissed the proposal and declared its new goals to include not only the overthrow of Saddam Hossein, but also compensation for damage.[41]

In the summer and winter months of 1982, Iran launched three limited offensives in the direction of Basra, Mandali and Amara, and managed to secure pockets of territory inside Iraq, but failed to break through the Iraqi defences. Thus, by the end of 1982, the war aims and strategies of Iran and Iraq, underwent a complete reversal. Iran's war aims progressively changed from liberation of its lost territory, to occupation of Iraqi territory. Consequently, it launched dynamic operations and took the initiative, while Iraq remained in static defence. Iran limited the fighting to the battlefields and largely ignored economic targets, while Iraq extended the theatre of war to the rear, focusing on its countervalue attacks. With the change in the nature of Iran's war aims, the army renewed its opposition to invade Iraq, and many experienced men who had volunteered to defend Iranian soil, returned to civilian life. Meanwhile, the purge process in the armed forces, though to a lesser extent, continued.[42]

As a consequence, the Revolutionary Guards and the Baseej, became the main part of the Iranian forces and the army's participation was significantly reduced. Contrary to the army's viewpoint, the Revolutionary Guards continued with human-wave tactics, which later dominated the battlefields.

Meanwhile, the balance of air-power, due to a host of problems, gradually slipped from Iranian hands. Iraq took advantage of this diminishing strength - Iran could keep no more than eighty five aircraft operational in the summer of 1982 - and made a series of attacks in 1982, on Dezful, Abadan and as stated earlier, on Kharg Island and ships plying Iranian ports.[43]

In 1983, Iran launched four offensives and opened new fronts in the north, making minor advances into Iraq, but without being able to break the Iraqi defence lines. The pattern of offensive became routine. In early 1984, the Iranian authorities advocated the need for a final blow against Iraq's regime. In an attempt to forestall the impending offensive Iraq carried out aerial attacks on eleven cities in Iran. In turn, Iran retaliated, thus both sides were involved in what came to be know as the 'first War of Cities'.

Nevertheless, Iran launched its two-stage offensive in February, the largest until then, involving some 500,000 men on both sides. The more important stage of the offensive was to the north of Basra. The only notable Iranian success, though with heavy losses, was the capture of Majnoon Islands oil fields containing fifty oil wells with a proven oil reserve of nearly eight billion barrels.[44]

6.2.4 The Tanker War

From April 1984, Iraq shifted its countervalue strategy to a higher level and started the tanker war. The delivery of five Super Etendard planes in late 1983, equipped Iraq to carry out the war of maritine denial around Kharg Island, which it had prematurely declared in August 1982.

Iraq launched its first attack on 25th April 1984, against the Saudi Arabian tanker, Safina al-Arab. The Iranians retaliated three weeks later, by striking at Kuwaiti tanker, Umm Casbah.[45] During 1984, the Iraqis launched twenty one attacks and damaged nineteen tankers in the process. The Iranians countered with seventeen attacks, all of them against tankers. Iraq escalated the tanker war, launching thirty attacks and damaging twenty three tankers in 1985, while the Iranians were responsible for twelve strikes, damaging six tankers (see table 6.3).

Intensification of Iraqi air-attacks on Iranian tankers, or tankers carrying Iranian oil, was geared to two objectives. The first, was to force Khomeini's regime to negotiate an end to the war by crippling its economy. The second, was the aim of drawing in other states, especially the Western powers, with the threat which the war represented to their own interest in the region. The hope was, that these powers would add their weight to that of Iraq, in order to bring about a peaceful settlement.[46]

Despite the numerous attacks on ships by both sides, the tanker war had a negligible effect on the oil market. Although the tanker war heightened anxiety among some observers, there were no shortages or permanent price increases on the international market. The continuing oil glut negated any cause for concern in the short term.

As for Iran, the effect of the tanker war began to surface four months after its launch. By the end of May and in early June 1984, Iran's export from Kharg Island, which was around 1.6 million barrels per day, dropped to about 600,000 barrels per day, costing Iran about $25 million daily. However, the overall cost to Iran was bearable. Iran continued to export 200,000 barrels per day from its offshore wells, through Sirri and Lavan ports. It also very quickly, recovered much of its Kharg Island terminal oil customers, by offering them a discount of $3.00 per barrel, which more than compensated for the $2.33 per barrel increase in cargo insurance.[47]

In fact, Iran's average daily export during 1984 and 1985, remained more or less the same, though marginally less in comparison with 1983. Iran's exports were 1.77 million barrels per day in 1983, and 1.57 million barrels per day in 1984. In 1985, despite the intensity of air-raids on Kharg Island, the export volume was 1.6 million barrels per day (see table 6.2). Iraq made seventy seven air-raids agasinst Kharg Island between mid-August and late December 1985, rising to one hundred and twenty in a full year.[48]

In 1985, the ground war was comparatively static, despite an offensive from Iraq, the first since 1980. However, with increased confidence, due to its air superiority and Iran's inability to mount a decisive offensive, Iraq initiatied the 'second War of Cities' in mid-March, by launching large scale, aerial bombing campaigns against thirty Iranian towns and cities. Iran responded in kind, and within ten days, the 'second War of Cities' was over.

6.2.5 Aerial Bombing of Economic Infrastructure

Throughout 1986, Iraq systematically picked off economic targets in Iran. However, the scope of attacks was too wide to be devastating. The targets included communication networks, railways, industrial plants, power generation facilities, garrison towns, hydroelectric schemes and oil installations. After May, the most damaging attacks were focused on oil refineries. The Tabriz, Isfahan and Tehran refineries, were severely damaged. Emergency repairs at Tehran did not restore the refinery's output of 225,000 barrels per day capacity. With the tanker war continuing, shortage of oil products became acute in mid-1986. Thus, Iran was forced to triple its imports of refined products to some 300,000 barrels per day, and finally imposed petrol rationing in October. The country was probably saved from the full effects of Iraqi attack, by the seasonal factor. The aerial raids were in March and May, and heating oil was not in great demand in the Spring. Nevertheless, the fuel shortages affected the military and civilians adversely.[49]

6.2.6 Escalation of the Tanker War

Developments in the land war during 1986, were accompanied by the intensified attacks on ships. Once again, Iraq made a deliberate bid to choke off Iran's oil exports.

In February 1986, an Iranian amphibious force crossed the Shatt al-Arab and captured the Iraqi port of Faw. This move, which was more of a psychological victory for Iran, increased the confidence of the Khomeini regime. Indeed, this regime once again, re-emphasised the need for a 'final offensive'. These threats and the growing indications of an impending, large-scale offensive, drove Iraq to launch a wide aerial campaign on Kharg Island, on shuttle tankers that ran oil from this island or from adjacent loading points to Sirri in the lower part of the Persian Gulf, and on product tankers hauling processed Iranian crude back from the Aden refinery.

In January 1986, Iraq acquired some two hundred new AS30 missiles from France. These missiles, more effective and with a longer range than Exocets, allowed the Iraqi airforce to expand its operational zone.[50] In August of the same year, Iraqi aircraft mounted a successful attack on the Iranian oil terminal of Sirri Island, 120 miles south west of the Strait of Hormuz. In November 1986, Iraq attacked Sassan oilfield - west of Sirri - and the new, Iranian oil-terminal at Larak Island in the Strait of Hormuz, about 750 miles from the nearest airport in Iraq (see map 1 and 2).

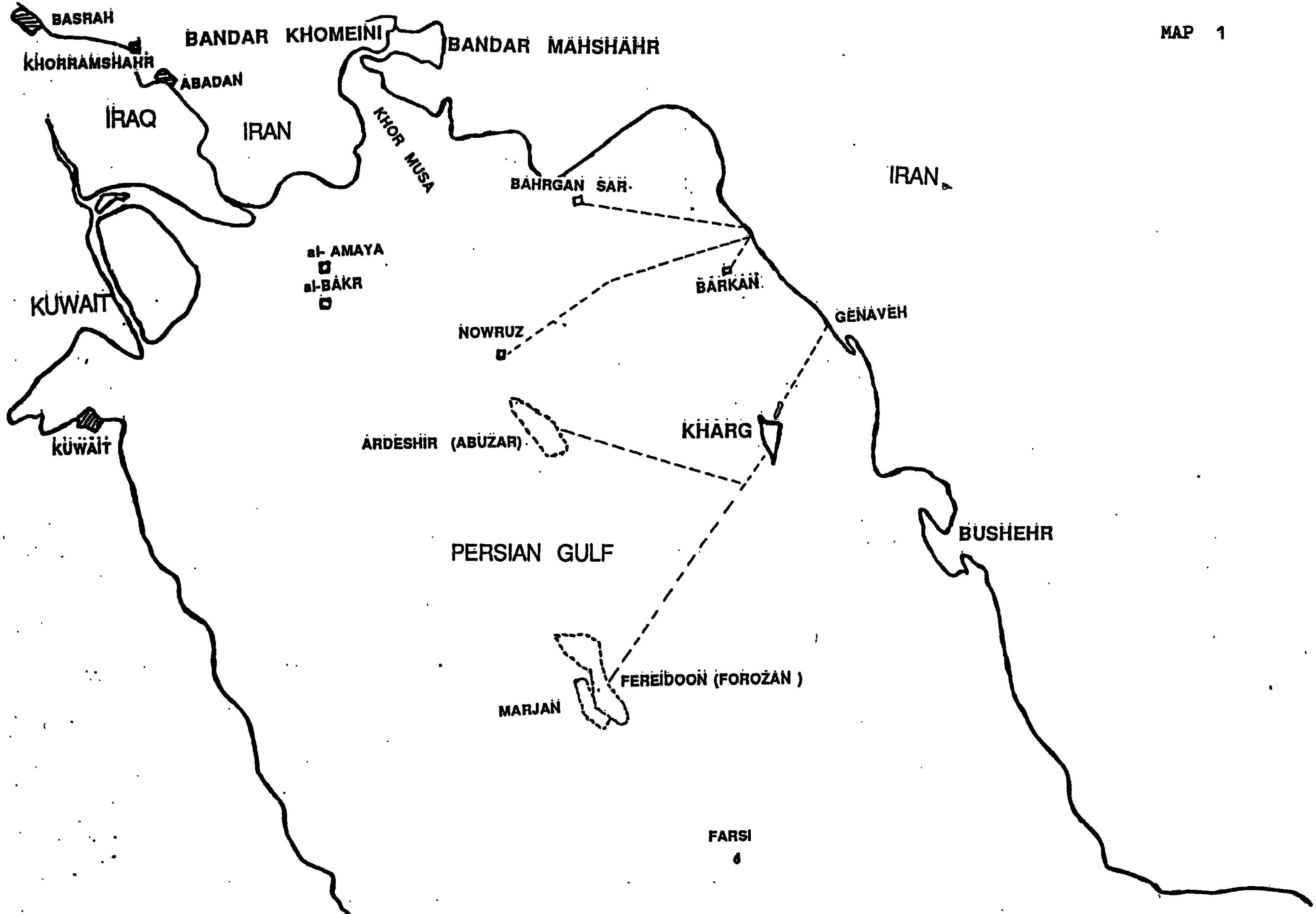
As Iraq increased its offensive capabilities in the Persian Gulf, the Iranians stepped up their retaliation, from an irregular surveillance of shipping, to a full-scale programme of intercepting, boarding and searching vessels suspected of carrying arms and other supplies for Iraq. In addition, it repeated its warning to the Gulf States, to restrain Iraq and in the process, attacked tankers. As Iraq itself, was invulnerable in the sense that it no longer used the Persian Gulf for shipping, its allies, especially Saudi Arabia and Kuwait, were prime targets.

Against this background of escalation, the Gulf States began to seek additional assistance and the British, followed by French and Americans, responded to this need by increasing their naval presence in the Persian Gulf and Oman Sea.[51] The major concern of the Western powers, was the ferocity of the intensified tanker war.

During 1986, Iran and Iraq together, launched ninety three attacks (Iran thirty eight and Iraq fifty five), eighty of them on tankers. The situation was clearly becoming more dangerous for all concerned.

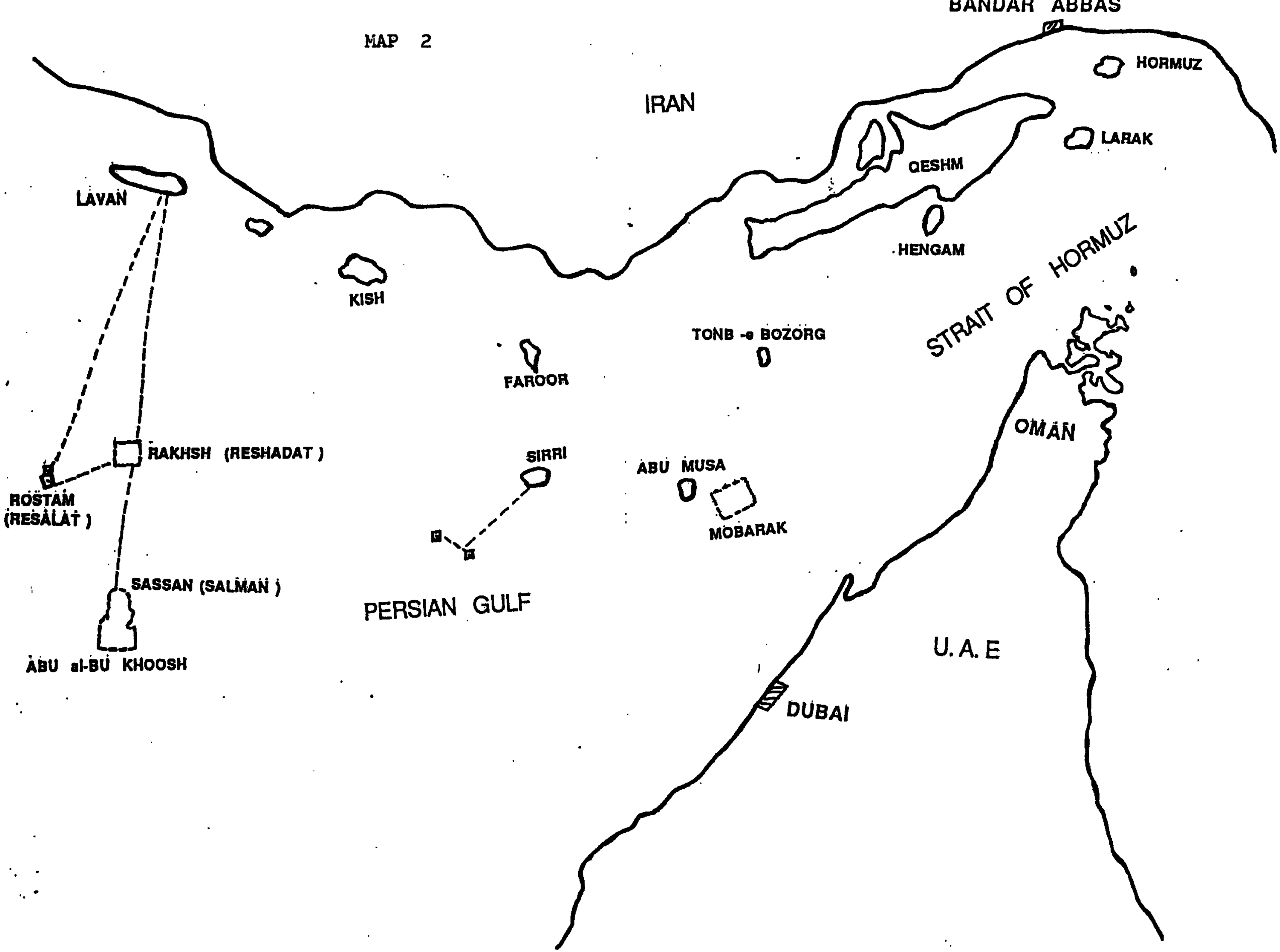
6.2.7 Re-Flagging and Acceleration of Internationalisation

MAP 1



BASRAH
KHORRAMSHAHR
ABADAN
BANDAR KHOMEINI
BANDAR MAHSHAHR
IRAQ
IRAN
KHOR MUSA
BAHRGAN SAR
IRAN
al- AMAYA
al-BAKR
BARKAN
KUWAIT
GENAVEH
NOWRUZ
KUWAIT
ARDESHIR (ABUZAR)
KHARG
BUSHEHR
PERSIAN GULF
FEREIDOON (FOROZAN)
MARJAN
FARSI

MAP 2


BANDAR ABBAS
HORMUZ
IRAN
LARAK
QESHM
LAVAN
HENGAM
STRAIT OF HORMUZ
KISH
TONB -e BOZORG
FAROOR
OMAN
RAKHSH (RESHADAT)
SIRRI
ABU MUSA
ROSTAM
(RESALAT)
MOBARAK
SASSAN (SALMAN)
PERSIAN GULF
U. A. E
ABU al-BU KHOOSH
DUBAI

Early in 1987, Iran launched other offensives and intense fighting continued, mainly in the vicinity of Fish Lake, a twenty-mile long man-made moat, east of Basra. Western analysts invented the dictum that, 'Iraq cannot win and Iran cannot lose'.52 In the end, Iran made little progress on land.

At that point, the super-powers became deeply involved. In April 1987, the Soviets stepped up their support for Iraq and its allies. The Kuwaitis were allowed to charter three Soviet tankers to lift their oil. In May of the same year, the United States matched that, by re-flagging eleven of Kuwait's twenty one oil and gas carriers, and escorting them through the Persian Gulf. On 7th May, a Soviet freighter was fired on by Iranian gunboats. Ten days later, a Soviet tanker on Kuwaiti charter, hit a floating mine. The crisis intensified when, on that same day, an Iraqi aircraft fired a missile into USS Stark.53 Iran's response to the US re-flagging was mining operations. On 29th July, Bridgeton, the first re-flagged Kuwaiti tanker to sail under an American escort, hit a mine. Britain, France, Italy, Holland and Belgium, all sent warships to the Persian Gulf in America's wake, as escort or minesweepers.54

Against this backgrond, the level of tension reached breaking point. The increased naval presence of the West in the region, accelerated the internationalisation of the Gulf war. The West's reaction was clearly in response to the perceived threat from Iran alone. In fact, it became a confrontation between the US and the Khomeini regime.

For the Iranians, attacks on ships was a clear-cut issue. Their attacks were in response to Iraqi attacks, and directed at the economic targets of Iraq's allies and partners, regardless of what flag.

6.2.8 Respite and Resumption

During 1987, there was a month-long lull in Iraqi attacks, after the USS Stark incident. Another lull coincided with peace moves by the United Nations in July. This lasted over six weeks, until Iraq's patience ran out at what it saw as deliberate stalling by Iran on a cease-fire resolution passed by the United Nations. However, during this period, Iran boosted oil exports, ferrying more than two million barrels per day, earning hard currency, about $25 million daily, to replenish its war coffers.

From August onwards, Iraqi war planes hit a string of Iranian offshore oil installations, tankers, oil-fields, factories, offshore oil terminals at Genaveh, Sirri, Kharg, Farsi and Lavan Islands. As the atmosphere worsened, Iran rejected the UN cease-fire demand and responded by attacks on shipping. Once again, the tanker war reached flash-point, as Iran and Iraq traded attacks. After the capture of Iran Ajr, the mine-laying vessel, by the US navy, tension between America and Iran grew. On 8th October, US naval helicopters sank three Iranian boats near Farsi Island. On 16th October, from the captured Faw peninsular Iran launched a Silkworm missile at a Kuwaiti re-flagged ship, as it prepared to join an American convoy. In the end, the US retaliated by an attack on the oil platforms of Rostam (Resalat) and Rakhsh (Reshadat).[55]

As a result, concern mounted about a serious threat to world trade in the Gulf area. However, despite the flurry of air and sea attacks, thirty vessels a day still entered or left the Persian Gulf, the same rate as before. Owners continued to send their vessels to the region, as they were reluctant to turn down scarce orders in an over-supplied market. By September 1987, according to Lloyd's casualty reporting unit, three hundred and fifty three ships had been attacked or damaged in the Persian Gulf since the tanker war started in 1984, including eighty five during the current year.[56] Total attacks by both belligerents on tankers and other ships were as below :-

Table 6.3 - Attacks on Merchant Vessels during Tanker War period 1984 - 1988

Attacks	1984	1985	1986	1987	1988	Total
By Iran	17	12	38	83	47	197
Tankers	(17)	(6)	(35)	(65)	(37)	(160)
Other Vessels	--	(6)	(3)	(18)	(10)	(37)
By Iraq	21	30	55	78	34	218
Tankers	(19)	(23)	(45)	(66)	(30)	(183)
Other Vessels	(2)	(7)	(10)	(12)	(4)	(35)
Total Attacks by Iran and Iraq	38	42	93	161	81	415

Source: Iran and Iraq Conflict 1984-1988 :The Tanker War- No End?. INTERTANKO. Oslo. Norway. 3rd Edition. June 1988

Despite the intensified raids, about one-sixth of the non-communist world's oil, was shipped through the Persian Gulf, and Iran managed to export on average, 2.27 million barrels per day.[57] As for the rest of 1987 and into 1988, though the contact between the Iranians and Americans was minimal, the tanker war continued as usual. Iraqi attacks, as before, came from the air, while Iran used speedboats with similar effect.

On land, during the winter of 1987-88, Iran launched a number of limited offensives in Iraqi Kurdestan, around the town of Halabcheh. This was the highlight of Iranian success, though Iraq's use of chemical weapons, caused heavy civilian and military losses. During February and March 1988, the 'War of Cities' once again, was pursued with ferocity, with Iraq launching more missiles on urban areas in Iran than vice versa. This caused a lull in the tanker war as from 18th February, lasting for twenty three days. However, it was resumed again once the 'War of the Cities' subsided.

The situation at sea, became more complex as the US in particular, became militarily committed to the conflict. On 14th April 1988, the USS Samuel B. Roberts, returning alone from a convoy trip to Kuwait, struck a mine and sustained damage. Four days later, the US responded by blowing up Sassan (Salman) and Sirri oil-platforms and sunk an approaching Iranian patrol boat. The escalation led to raids on a Sharjeh oil rig and on a British-flagged tanker, by Iran. The raids were answered by the US, seriously damaging two Iranian destroyers. This naval confrontation coincided with the Iraqi success in recapturing Faw with a well planned offensive.[58] Between April and the end of June 1988, Iraq reclaimed virtually all of its territory in Iranian hands, including the area east of Basra and the Majnoon Islands.

6.2.9 The Shuttle Service

With the escalation of the war, and its spread further south in the Persian Gulf, radical changes surfaced in the methods of oil transportation. The Iranians created a shuttle service in 1985, between the Kharg Island oil terminal and Sirri Island. Later on, with inceased operational range of the Iraqi Airforce, the trans-shipment centre was moved to Larak Island in the Strait of Hormuz, requiring large stationary tankers to serve as storage vessels.

The shuttle run was an incentive for shipowners, as it allowed them to avoid the immediate danger zone in the north of the Persian Gulf. In effect, the shuttle service subsidised oil liftings, by saving the charters the difference in freight rates between Kharg Island and the southern trans-shipment centres, as well as the additional war risks insurance premiums.

The size of Iran's shuttle fleet, despite many Iraqi hits, had grown from eighteen ships in October 1987, to twenty five in January 1988. Out of this total, fifteen vessels (2.96 million tonnes deadweight) were chartered, and ten (2.69 million tonnes deadweight) were under Iranian flag, managed and operated by the state-owned, National Iranian Tanker Company (NITC). In addition, Iran had seven storage tankers at Larak Island, with a total tonnage of 2.97 million deadweight.[59] Most of these vessels, with tonnage in excess of 230,000 deadweight, known as VLCCs and ULCCs, were among the largest tankers available. They were relatively old, and some among the worst-equipped tonnage still in the world, for not meeting international standards in respect of vessel safety and pollution prevention. Because of these shortcomings, very few traders would have used these vessels and the shuttle service was one of the rare opportunities open to them.

With the escalation of attacks on the tankers in 1988, Iran apparently boosted its tanker fleet through purchases and chartering. Around thirty four tankers (seventeen chartered and seventeen owned by NITC), were used for short haul shuttles, and long haul trading trips, and twelve vessels for crude oil and product storage at Larak, with a total tonnage of 12.67 million deadweight. While most of these vessels were operating on short haul shuttle voyages and storage, around six or seven were used to transport homeless crude to the European oil market, and to import petroleum products, due to domestic shortages. During the first six months of 1988, ten of these tankers were attacked by Iraqi aircraft and around six were, at any time, under repair at either the Dubai or Singapore dry docks.[60]

Considering the number of vessels on long voyages and under repair, in reality the tonnage of the shuttle service during the last eighteen months of the war, remained more or less the same. Increased employment of ships were in anticipation of Iraqi attacks, and preparedness in replacing damaged ships with those in operational condition. At the same time, Iran deployed electronic counter-measures and decoys to misguide or spoof the Exocet.[61] The head of NITC had admitted that the company was under constant pressure during the war, and it had survived only due to defensive measures, salvage arrangements and vigorous repair programmes. For shuttle operation, NITC "chartered twice as many ships as were needed and when one was hit, we had another ready in its place". Overall, one hundred and ninety two tankers, owned and chartered by NITC, were hit during the war and more than one hundred and fifty seamen had died.[62]

6.2.10 Kharg and Oil Exports

During the war, Kharg remained the most attractive strategic target for Iraq. Its airforce attacked this island over two hundred and fifty times. These attacks had all but closed the oil export terminal at Kharg. As early as August 1985, the Iraqi government claimed that the bombers' crushing blows to the island, had changed it into ashes. Iraq's failure to put Kharg out of action, can be attributed to a host of considerations discussed below.

When the war started, Kharg had a good deal of surplus capacity. The Shah forsaw exports of over six million barrels per day, much of which was to pass through the island with fourteen tanker berths, four on the west and ten on the east side of it.

Iran's oil exports, after the revolution, decreased substantially and after 1982, its average daily export, hardly exceeded 1.9 million barrels. Out of this, about 200,00 barrels were exported directly from Lavan and Sirri Islands farther south in the Persian Gulf (this offshore output was reduced to just over 50,000 barrels per day, due to US and Iraqi attacks before the cease-fire).[63] This meant that only 1.7 million barrels per day, needed to flow out from Kharg, which is the average volume of crude carried by a tanker.[64] Therefore, for the Iranians to reach their export target, they only needed to get one tanker to the Larak trans-shipment centre every day.

Since the eight hundred and fourty mile round trip from Larak to Kharg, took ten days, including three or four days at each end for loading and unloading, only ten tankers in the shuttle fleet, would have been sufficient - if there were no Iraqi air raids - to maintain the export level.

As discussed earlier, the size of Iran's shuttle-fleet, in particular during the last two years of the war, far exceeded the minimum number. In addition, Iran kept large stocks of oil at Larak in storage tankers, with a capacity of about twenty one million barrels of crude (though some tankers stored refined products for domestic use). If the crude carriers contained say, fifteen million barrels, Iran would have been able to continue daily exports of 1.7 million barrels per day for over a week, without any top-up from Kharg.[65]

Militarily, Iraqi attacks on Kharg, were infrequent and often limited in scope, intensity and duration, though their cumulative effects, in particular for the last three years of the war, were considerable. Iraqi pilots often attacked the berths and the tankers alongside them. But Iranians, by practice, became skillful patchers. Often they put the berths back into action within days. Considering the volume of exports, Iran needed to keep only about five out of the fourteen berths in operation. In addition, as an emergency measure, single bouy loading points were brought into use to supplement the loading berths.

Kharg and the vital pumping stations in Genaveh, which feeds oil into it, had a formidable air-defence and Iraqi attacks on the island, were usually from a high altitude. In fact, the Iraqis lacked aircraft which could make accurate attacks on land from extremely low altitudes. Iraq did not exploit its air superiority to the full. It did not try to mount mass air-raids on Kharg, i.e. a lot of aircraft approaching the island simultaneously from different directions in order to swamp the defences. While Iran's air defence should not be overstated, Iraq in general, appeared to be reluctant to hazard its airforce, perhaps serious losses could diminish its most effective reserve of military force.[66] Instead, the Iraqis concentrated on tankers at sea, with missiles such as Exocet fired from twenty miles or so. Tankers, as slow-moving ships with no defences, travelling between Kharg and Larak, known as, 'Exocet Alley', were easy targets.

6.2.11 The Cost of the Shuttle Service

It is difficult to gauge the cost of the shuttle service, because most of the ships' purchase and charter price, secured by Iran for extra tonnage, have been confidential. When the tanker war started, a general depression existed in the tanker markets, especially for the largest sizes. This meant that tankers similar to most of those used in the shuttle service, could be obtained at very low cost, either by purchasing or charter agreement. However, with the instensification of the tanker war, a stronger market emerged and as a result, the prices of ships were strengthened. During the first quarter of 1986, the average price of an eight years old VLCC, was about $5 million. In 1988, the price rose to $17 million. In contrast, during the same period, the average price of oil fell by about 35%, thus making the running of the shuttle service even more expensive.[67]

This economic reality led Iran to seek transportation alternatives, such as projects to build pipelines to Jask on the Oman sea coast. Overall, the shuttle service from Kharg to Larak, reduced Iran's income by thirty cents per barrel, taking into account, damages to tankers. Ending of the service will save Iran about $300 million per year as a result of reduced charter, crew, insurance and other, related costs.[68]

6.2.12 Maritime Tolls

The tanker war has been one of the most damaging conflicts for the international maritime community. Tolls on shipping were on a constant upswing since its initiation in 1984. It peaked in 1987, with one hundred and sixty one ships being attacked by both belligerents in a single year.

In 1988, except for a brief lull, the tanker war did not subside until the acceptance of the UN's Resolution 598 by Iran, on 18th July. The biggest, single casualty of the tanker war occurred on 19th March 1988 when Iraq hit two Iranian shuttle tankers, Avaj and Sanandaj, at a waiting platform at Kharg Island, in which fifty one were killed.[69]

The total merchant ships which have been attacked by both Iran and Iraq since 1984, was four hundred and fifteen, over 82% tankers. Considering the number of recorded attacks before the tanker war, and some seventy ships stranded in the Shatt al-Arab since 1988, and undoubtedly damaged, around five hundred and thirteen merchant vessels in total have been subjected to various degrees of attack.

Throughout the tanker war, attacks on maritime targets, had damaged 69.91 million tonnes deadweight of shipping. A total of sixty three tankers, amounting to 10.91 million tonnes deadweight, were declared constructive total losses. Very few flag nations escaped the attack. In total, two hundred and fifty seamen have died during the tanker war.[70]

6.2.13 The Cost of the Iran - Iraq War

Estimates of the costs of the war to Iran are at best educated guesses as the defence budget was heavily supplemented by arms purchases abroad which was not registered within the budget clearly. On the surface, between 10% to 17% of the budget every year was allocated to the war but in reality this figure exceeded 30% of the entire state finances. In addition, a substantial amount of the government's current expenditure was devoted to the war effort. Foreign exchange expenditure to support the war was in several categories e.g. direct costs for arms purchases, financial grants to Syria and payments to various organisations opposed to Iraq, e.g. Iraqi Kurds, and other covert and overt operations in the region.

The cost of the war to the economy has also been substantial. Iraqi strategic attacks on econmic targets, expecially oil installations, intensified after 1985, caused considerable damage to the physical infrastructure of the coutnry.

Table 6.4 - The Cost of the War (US $ billion)

	Iran	Iraq
Weapons purchases	7-10	30-35
Foregone oil revenues	4-8	40-45
Foregone non-oil income	15-20	35-45
Compensation to victims' families	8-10	7-8
Pipeline construction	-	3-4
War risk insurance	1-2	-
Imports of petroleum products	4-6	-
Total	39-56	115-137

Source: Petroleum Finance Company; MEED 2 September 1988

The accumulated costs of physical destruction and social strains are incalculable for both Iran and Iraq. However, regardless of social costs even the lowest estimates suggest that the wealth of the two nations is at least $150 billion lower than it would have been, had the war not occurred. According to Petroleum Finance Company (PFC) the total cost incurred by Iran and Iraq is almost $200 billion, more than two thirds of it borne by Iraq due to its heavier spending on arms and the loss of oil exports earnings. But this figure excludes the cost of damage done to the physical infrastructure of both countries.

An estimate by the Japanese Institute of Middle Eastern Economics (JIME) puts the cost of the Gulf war at more than twice this level for 1980-1985 alone. The burden on Iran is estimated to be substantially higher than the table above. The cost in absolute terms is $188.7 billion, equal to 46% of the total.

Table 6.5 - The Cost of the War (US $ billion)

	Iran	Iraq
Revenue/expenditure losses		
Loss of oil revenue	23.4 *	65.1 *
Extra military expenditure	24.3	33.0
GDP losses		
GDP loss (oil sector)	108.2	120.8
GDP loss (non-oil sector)	30.2	64.0
Fixed capital losses		
Unrealised fixed capital formation	76.5 **	43.4 **
Loss from destruction (oil sector)	na	na
Loss from destruction (non-oil sector)	25.9	8.2
Total	188.7	226.0

Notes: * Included in GDP losses, do not add in calculating

** Constant prices at 1980 (in case of fixed capital losses)

Source: Japanese Institute of Middle Eastern Economics (JIME).

According to JIME "since war losses are small both in Iran and Iraq, in the first stage of reconstruction, the existing production facilities will speedily recover from war damage... In the second stage of recovery, it can be expected that active investment will be stepped up. This will include the re-opening of projects which were abandoned in the planning stages ... The largest problems expected at the second stage of recovery are the problems of securing sufficient funds to carry out development projects".71

While JIME is quite optimistic about the reconstruction prospects, the financing so far remains as one of the main obstacles for Iran's reconstruction. Months after the ceasefire, financing and the overall reconstruction programme has yet to be worked out. Iran's officials have been unable to find a unified approach. Various bodies such as the cabinet, Majlis, the Council of Policy Making for Reconstruction are all drawing up their own separate plans with no overall and unified answer to the financing problem. However, this cannot be solved without improved relations externally and more unity and central control internally.Financing to some extent is a political as much as an economic problem.

6.2.14 Summary and Implications

Militarily, the oil war and indeed the entire Iran - Iraq conflict has achieved very little. In many respects it had two losers - Iran and Iraq. This war is "unlikley to go down in history, either for its direct strategic lessons, or for its military accomplishment ".[72]

The tanker war which was initiated by Iraq, primarily to choke off Iran's oil exports, failed to live up to its expectations. Iraq's military aim in respect of the oil war in the Persian Gulf mismatched its capabilities.

In pursuing the oil war at sea Iraq used its air power. Iran retaliated mainly with high speed boats, ships and pre-First World War mines, which caused havoc in the Persian Gulf. Yet, in spite of the mounting threats, tankers undertook the perilous voyage and ship owners took up charters. The depressed state of shipping, especially tankers on the international scene, did not leave the ship owners and the seamen with many alternatives but to go through the missiles and flames in the Persian Gulf.

The effect of the oil war on the international market was minimal. It failed to cause an oil price shock. From 1984, accurate and aggressive attacks by Iraq reduced Iran's oil exports marginally but it did not affect the market considerably. Iran's oil income which varied markedly during the war, has its roots in an unstable international market, currency fluctuations and in changes in national oil policy.

Nonetheless, the damage during the oil war at sea and on land has been significant both to Iran and Iraq, and to the international maltime community. According to Iran's Minister of Economy up to November 1987, the cumulative damage sustained by the country's oil sector is estimated to be $150 billion.[73] This figure compared with those estimated for the cost of the entire war appears high. Whatever the material losses, they pale into insignificance before the social costs and the human tragedy for both Iran and Iraq.

The Gulf war was a source of tension and instability in the region, and will continue to be so for a long period. Even a true peace settlement would leave garve uncertainties in the region. Militarily, re-arming and concentration on building combat ready forces will continue. As for Iran, the war has demonstrated that ideological fervour can not be a substitute for military reality. It has become clear to the religious leaders that fighting forces can not succeed without better training, leadership and combat equipment. The war has also indicated that, air power can hardly be used as substitute for victory on the ground. Iraq's initiation of the tanker war and raids against refineries and power plants produced initial panic and disruption but such attacks had no great military effect.

And finally, the entire Iran - Iraq war in many ways was a mistake from start to finish. It was a foolish war.

References

1. W.H.Donnelly, C.A.Phillips, A.Reifman and J.P.Riva Jr, *Global Oil and Energy mplication of Iranian Revolution, In Economic Consequences of the revolution in Iran* (a compendium of papers), (US Government Printing Office, Washington,1980) , p. 98.
2. S. Holly,*Conflict in the Gulf: Economic and Maritime Implication of the Iran - Iraq war* (Lloyd's of London Press Ltd, Essen, England, 1988) , p. 32.
3. For further information on this issue see Ian Skeet, *OPEC: Twenty Five Years of Prices and Politics* (Cambridge University Press, Cambridge, UK, 1988) , pp.159 - 161.
4. As quoted by R. K. Ramazani, *Revolutionary Iran* (the John Hopkins University Press, USA, 1986), p .205.
5. See further Ibid., pp. 206-207.
6. S. Bakhash, *the Politics of Oil and Revolutions in Iran* (a staff paper), (The Brookings Institution, Washington DC, 1982), pp. 9-11.
7. For evidence see F. Fesharaki, *Revolution and Energy Policy in Iran* (*EIU*, Special Report No. 82, July 1980) , pp .44-47.
8. For details see K. Mofid, *Development Planning in Iran: from Monarchy to Islamic Republic* (Menas Press Ltd, Cambridgeshire, England, 1987), pp .203-232.
9. See further S. Bakhash, op.cit., p.12.
10. F. Fesharaki, op.cit., pp. 49-50.
11. S. Bakhash, op.cit., pp .14-15.
12. M. el-Mokadem, D. Howdon, C. Robinson and P. J. Stevens, *OPEC and the World Oil Market 1973-1983* (Surrey Energy Economic Centre, Eastlords Publishing Ltd, 1984), pp .32-33.
13. For evidence of these figures see F Fesharaki, op.cit., p .51.
14. See further S. Bakhash, op.cit., p.51.
15. M. el-Mokadem etal, op.cit., pp .15-16.
16. S. Bakhash, op.cit., p. 28.
17. Ibid., p.29.
18. See further Ibid., p.34.
19. For evidence on these figures see *MEES* 31:5, 9 November 1987.
20. S. Bakhash, op.cit., p.35.

21. R.K.Ramazani, *Revolutionary Iran*, op.cit.
22. Ibid., p. 209.
23. For evidence see *MEES* 31:5, 9 November 1987.
24. S. Holly, *Conflict in the Gulf*, op.cit., p.34.
25. *F. T* 29 November 1988.
26. B. Mossavar-Rahimi, *Energy Policy in Iran: Domestic Choices and International Implications* (Pergamon Press, New York, USA, 1981), pp. 56-60.
27. For further information on the state of the offshore fields after the cease fire see *MEES* 32:21, 27 February 1989.
28. *EIU, Country Profile*, 1987/88, p. 33.
29. B. Mossavar-Rahimi, op.cit., pp. 64-65. F Fesharaki, op.cit., p. 109.
30. See further *EIU*, op.cit., p .33.
31. K. Mofid, op.cit., p.229.
32. For evidence on these figures see *Iran Focus*, November 1988.
33. R.K. Ramazani , *Revolutionary Iran: Challenge and Response in the Middle East* (The John Hopkins University Press, USA 1986), pp. 216-217.
34. S. Holly, *Conflict in the Gulf: Econmic and Maritime Implications of the Iran-Iraq War*, (Lloyds of London Press Ltd., 1988), Apendix B.
35. *Maritime Affairs* , (A World Handbook, Langman Group Ltd., Essex ,UK 1985), p. 235.
36. S. Holly, op.cit., Appendix B.
37. *Maritime Affairs* , op.cit., p .235.
38. S. Holly, op.cit., Appendix B.
39. E. Karsh, *Iran-Iraq War: A Military Analysis*, (Adelphi Paper 220, The International Institute for Strategic Studies (IISS), pp. 28-29.
40. Ibid., p.21.
41. See further Ibid., p.25.
42. S.Zabih, *The Iranian Military in Revolution and War* (Routledge, London,UK, 1988), pp. 179-183. Also see E. Karsh, op.cit., pp. 25-26.
43. E.Karsh, op.cit., p .26.
44. S.Zabih, op.cit., pp. 186-187.
45. S.Holly, op.cit., p.5.
46. S.Chubin and C.Tripp, *Iran and Iraq at War* (I.B.Tauris and Co. Ltd., UK, 1988), p.66.

47. R.K.Ramazani, op.cit., p .135.

48. S.Chubin and C.Tripp, op.cit., p .135.

49. G.Joffe and K. McLachlan, *Iran and Iraq: The Next Five Years* (EIU Special Report No. 1083, 1987), p.5.

50. S.Holly, op.cit., p. 6.

51. Ibid.

52. *The Economist* 23 July 1987.

53. *Iran-Iraq Conflict 1984-1988: The Tanker War - No End?* (International Association of Independent Tanker Owners ;INTERTANKO, Norway 1988), 3rd edition, p. 6.

54. *The Economist*, Op.cit.

55. S.Holly, op.cit., p.8.

56. As quoted by Reuter (Abu Dhabi), 3 September 1987.

57. *EIU, Country profile* 1988-1989.

58. *The Economist* 23 April 1988.

59. *MEES*, 11 January 1988. In 1985, before the creation of shuttle service, NITC owned five vessels.

60. *MEES*,11 July 1988.

61. See *The Observer*, 15 November 1988.

62. *MEES*, 7 November 1988.

63. *MEED*, 2 September 1988.

64. Conversion factor used: one metric tonne of crude oil is equivalent to 7.33 barrels of crude oil. Majority of shuttler tankers were VLCCs in excess of 200,000 tonnes deadweight. For names and tonnage see *MEES*,11 January 1988.

65. *The Economist*, 11 October 1987.

66. E.Karsh, op.cit., pp. 37-38.

67. S.Holly, op.cit., p. 42, p.57.

68. *MEES*, 7 November 1988.

69. *Iran-Iraq Conflict 1984-1988 : The Tanker War - No End?*, INTERTANKO, op.cit., p.4.

70. Ibid. As quoted in supplement with updated figures. 11 August 1988.

71. *MEED*, 2 September 1988.

72. E.Karsh, op.cit., p.54.

73. S.Chubin and C.Tripp, op.cit., pp. 127-128.

7. CONCLUSION

With its tenth anniversary behind it, the Islamic Republic of Iran is facing staggering economic and social problems. The country's economy has become seriously distorted by the eight-year war. However, Iran showed considerable ingenuity in meeting the challenge of the war . It demonstrated resourcefulness and improvisation on the work-bench as well as on the battlefield, mainly ignoring relative values of the experiment or enterprise. For instance the senseless use of the untrained and poorly equipped young men on the battlefield. Against all odds, the regime demonstrated skill in using nationalism and Shi'ism in mobilising and motivating its troops in the war and its supporters at home. It managed to keep the oil flowing and some refineries operating despite war damage. It was also able to export adequate oil to fund the war in the harsh economic and military conditions . Besides, Iran diversified the source of its arms supplies and increased the capabilities of its domestic arms industry and saved foreign exchange.

In addition, the regime appealed to the commitment of the populace and capitalised on their support while squeezing the well-off and placating the bazaaris, on which it still depends. The economic hardship from the war has affected all the Iranian people, in particular the 'disinherited class' or 'Mostazafin'. It was in their name the revolution was made and for whom Khomeini claimed to take power in 1979. Recurrent shortages of subsidised food, spiraling prices and the erosion of the real value of wages and salaries by rising inflation has placed consumer goods beyond the reach of many ordinary members of the public. In fact the already low living standards of many people have actually declined, owing to the negative growth in the past five years.

There are many areas in which the Islamic regime has fallen short of its objectives, notably in its approach to the ownership of property and wealth. Contrary to the regime's stated intention, the wealth has not been transferred from the rich to the poor. Instead, the transfer has been from the private sector to the public sector through expropriation and nationalisation. Since the revolution, the state has taken over all banking, insurance and major industries and large private enterprises. The public sector controls eighty per cent of foreign trade and deals extensively with the retail distribution of goods. Also, it has taken over a signifacant amount of urban property. After the cease fire, as the country prepares itself for reconstruction, there appeared to be a tendency to reverse this process, whereby the private sector would be allowed a larger role in the economy. However, recent culmination of radicalism in Iran, advocating the maintenance of the state control over the economy, makes this reversal unlikely in the near future.

The extension of the state control has taken place in the name of social justice, i.e, the more equal distribution of wealth for the benefit of the 'disinherited'. This pledge of the Islamic government has not been redeemed. Nor, has the pledge of an Islamic economy that was supposed to make the country self sufficient. " Because these goals are fundamental to the self-image of the revolution, because they remain elusive, because no-one really knows any longer how to achieve them, they divide the leadership, lead to erratic economic policies and, to a degree, undermine the legitimacy of the regime ".1 Although part of this failure can justly be blamed on the war, there are other factors that can hardly be attributed to it. For instance, proposals to redistribute agricultural land became frozen owing to the struggle between the Majlis and the Council of Guardians. As a result, the ownership of up to a third of Iran's farmland remains under dispute.

The country has a population of over 50 million, with an annual growth of between 3.7-3.9 per cent, one of the highest rates of increase in the world. It is dependent on a high and ever increasing food imports. The regime has markedly failed in its goal of reversing the migration from land to the cities.

Lack of active and structured policies has been particularly damaging for agriculture. The authorities in Iran, without acknowledging it , are urban oriented. The focus of their attentions have been for the majority of their followers in the cities and food subsidies are designed to assist the urban poor and not the farmers. Activities of the Reconstruction Crusade and allocation of funds by the government to promote agricultural production are mainly for short term objectives. Long term requirements such as reliable and larger irrigation water supplies are largely neglected.

Lack of direction from the top, fall of invesment in real terms, insecurity of land tenure exacerbated by the adverse effects of the migration and the explosive increase in population, obliged the regime to import some $3 billion worth of food a year. Food items were among the biggest imports after the war material. Although the war adversely affected agricultural work in most productive areas of Khuzestan and Kurdestan, the food imports cannot be attributed wholly to the war. Political and ideological differences within the leadership prevented efficient development of the agricultural sector. The agriculture that was supposed to be the 'axis of the country's economic development', has become a source of embarrasment to the government that was critical of the Shah's erosion of agricultural self sufficiency in the 1960s.

The problems facing industry are similar to that of the agricultural sector. Though the all-out war effort showed Iranian capabilities and ingenuity in manufacturing a wide range of armaments, this was accomplished at a considerable cost to the manufacturing industry. With Iran spending over one third of its budget on the war, many of the country's most modern and best equipped industrial plants were turned over to munitions. Many industrial groups were charged with research related to arms production. The process of reconversion will be complex and time consuming.

Iraqi air raids on industrial targets have wrecked or badly damaged some major heavy industrial plants . Factories , still in operation, are operating at less than 40 per cent capacity. This is a result of acute shortages of raw material, electricity and of parts for machinery as well as shortages of managers and skilled workers.

Iran's industry has not undergone structural changes in the past decade in accordance with the Revolution's aspirations to become self sufficient .The country is far from this goal. Nevertheless, it has finally made a start and there exists the potential, if it is capitalised on and developed. For instance, there has been a considerable change and emphasis in terms of reliance on domestic manufacturing. Some of the changes are impressive but they are not coordinated or systematic. Most of the progress was made under the pressures of war and international sanctions, though it may be lost as pressures ease in peace time. Likewise, if the oil income rises considerably, government and industry, similar to that of the Shah's era, may both take shot-cuts and become over-reliant on imports.

As under the Shah's government, the current emphasis is on the oil sector and petrochemicals. Nevertheless, the exigencies of war budgets have resulted in relatively small units being constructed. Private investment in the Iranian industry has been scarce. During the war, trading has provided easy porfits without the risk of investment in manufacturing.

In respect of foreign trade, except for restrictions on import of luxury items, there has been few structural changes. The bulk of Iran's non-military imports still comes from OECD countries. West Germany and Japan remain major suppliers and only the USA has been officially excluded from the list of trade partners. In terms of military imports and defence procurements, Iran has been obliged to turn to the Eastern Bloc countries for less expensive armaments and those that can be paid for in bartered oil. This is chiefly due to shortage of foreign exchange and because of ideological constraints disapproving foreign loans. As for non-oil exports, there has been a rise in the contribution of foreign exchange earnings since the revolution. However, the improved ratio is due more to the fall in oil exports than to a genuine rise in non-oil exports.

One of the key problems of the Iranian economy has been unemployment. Half of Iran's rapidly growing population is under fifteen years of age and according to the national census at the end of 1987, 3.8 million were unemployed. This figure would certainly be much higher if those in seasonal or part time employment, earning very low wages, were taken into account. The unemployment would be endemic when demobilisation of the war ends and men under arms return from the front in search of jobs.

The war mobilisation resulted in some 1.6 million men being employed in various branches of the regular forces ,the Revolutionary Guards, the Basij and war related organisations. The Basij volunteers , mainly recruited from the rural areas, have sustained more loss than any other forces during the war and as such, have compounded the deteriorating problems in the agricultural sector. "Males in the 15-24 age group in the rural areas who assume many important agricultural tasks, number 1.5 million. If only half of the numbers estimated (very conservatively) to have died or been maimed in the war are of rural origin, there has been a loss of nearly 10 per cent of the rural labour force in this age group". 2

Of the estimated total war-dead, placed at one million by many observers, Iran has suffered worst with also large numbers of permanently disabled.

However, in the short term, even the most comprehensive reconstruction programme - which is lacking at present - will be unable to find gainful employment for the millions of unemployed in Iran, as most of them have no specialised or vocational training.

Stagnant productivity, high inflation, unemployment, migration of villagers into the cities, booming population, creation of jobs for returnees, lack of an adequate and efficient transport system, inadequate electric supplies and shortages of skilled managers and manpower are some of the major economic problems facing the Islamic Republic. Any solution to these problems has its roots in the formulation of a coherent economic policy to increase productivity. Iran, as in the Shah's era, is an oil based economy and therefore remains vulnerable to fluctuations in the international market. In 1986, the country's foreign exchange earnings were halved overnight owing to the collapse of oil prices.

In addition to this vulnerability, ideological constraints present a major obstacle for the government in deciding on a consistent economic policy. Since the war ended the old disputes have erupted and have exacerbated the divisions within the regime over key issues including economic and social policies. Meanwhile, the checks and balances provided by the constitution ensure that legislation ends up being referred from one legislation body to another,i.e. the Majlis and the Council of Guardians, with no final decision being taken - an equilibrium of incompetency.

Free marketeers like Rafsanjani wants to use the end of the war to restore laisser-faire while the radicals prefer state domination of the economy. Although Khomeini made several statements in support of the private sector, but these have been ambiguous.

Though the leadership in Iran has resorted to cosmetic measures to cover up these differences, the divisions remain the same. Khomeini, as supreme jurist, vacillated during his rule. He sided with the Council of Guardians at times while on other occasions supported the Majlis. On many occasions, he gave varying and inconsistent views on economic matters and as such, added to the complexity of the issue - a divide and rule strategy. By the time of Khomeini's death, Iran's economy was in desparate straits, its people exhausted and its political future more uncertain than at any other time since the fall of the Shah.

Recommedations

Khomeini made it clear at the outset that the Islamic Repulic should not be judged on its economic performance . He even stated that the revolution was not about the 'price of watermelons'.3 Nevertheless, the economic issues are the major challenges facing the revolution and in the next few years will determine its course.

Although the expectations of the Iranian people are lower than those of the Shah's era, the leadership cannot count on a population of over 50 million simply by preaching austerity or like Rafsanjani , after ten years of upheaval, urging people to believe that 'the revolution has just started'.4 With abatement of the war, further consolidation of the Islamic regime in Iran depends on its success in reconstructing the post war economy in favour of the former disadvantaged classes and the mass of war-striken people.

In what follows, an attempt is made to provide some basic recommendations for the task of restructuring the economy. What these recommendations suggest is that, attempts in these directions should be taken seriously and their achievements are crucial for long term economic stability in Iran.

1. At the outset, the Islamic Republic must clearly define the role of the economy and decide on its direction. The success in this task , in the final analysis , depends on the ingenuity of the leadership in either removing or modifying the existing ideological constraints. This in itself necessitates a confluence of values, expectations, objectives and instruments under the effetive control of the religio- political leader.

2. The Islamic regime must establish corporate domestic and foreign economic policies and decide on the parameters of foreign participation in its post-war economy. It needs to integrate the Iranian economy into the world's economic system. The regime ought to redefine some its archaic tenets and ideals. Iran can not afford to isolate itself from the rest of the world . In the words of Rafsanjani it is impossible in today's world to be totally independent. The isolation and extreme xenophobia that prevailed in the last decade need to be ended.

3. Prior to the formulation of economic policies, the regional imbalances

should be addressed fully. This serious shortcoming which existed during the Shah's rule, has been further exacerbated by the eight year war. Regional needs and available resources should be identified. Uneven economic activity of the pre-revolution era should not be allowed to persist.

The policies in the long run, should focus on the promotion of a wider dispersion of economic activity and development of infrastructure in geographical terms including some disadvantaged and distant areas of the country. One of the major instruments for achieving this, could be the government's investment decision and allocation of funds. Even distribution of capital may contribute to reduction of migration from rural areas to towns.

4. Strategic changes are to be put into the operation of Iran's economic planning machinery. So far central planning has been unsuccessful in Iran. Incremental changes , as against one-off major shift, must be allowed whereby in the long run various regions can formulate and implement their own plans. A rational approach should be used in deciding the boundry of the regional plans. For instance, the level of oil production should be centrally planned, whereas production level in agriculture should be included in the regional plans.

5. What should be planned ? And, what are the immediate economic priorities for post-war reconstruction? Considering Iran's shattered infrastructure and its moribund industrial base, a quick recovery is inconceivable. However, there is an urgent need to reverse the serious decline of agriculture and rural community in Iran. The continuation of present trends can aggrevate the falling living standards and rising food imports.

Another priority that must be addressed is the revival of Iran's industrial base with the establishment of horizontal linkages among the production units within the economy. For instance, further use of oil in the petrochemical industry towards production of paint, plastics, fertilizers and pharmaceuticals for domestic use . Serious efforts should be made towards economic self-reliance.

Iran needs to diversify its domestic energy consumption and substitute natural gas for oil products with the aim of freeing its daily consumption of 700,000 barrels a of oil, for export. Oil revenue is a critical factor in the successful pursuing of economic policies.

Other areas of concentration should be housing , transportation, communications and electricity. Low -income housing ought to be supported by government expenditures. Increased efforts should be directed towards boosting productive capacity of industry where it could provide much of its own hardware. This can be achieved by securing a gradual transfer of suitable technology from abroad to Iran.

Another major economic problem in Iran is education. The level of illiteracy is high and the young population of Iran cannot be expected to enter an unemployed workforce. The government must boost education and training for men and women alike. The country must have a skilled labour force that can fulfill the requirements of the economy.

In conclusion, it should be stressed that the aforementioned recommendations are far from complete and by no means exhaustive. There are many economic, ideological and political issues that have to be decided and positively dealt with before Iran can rebuild its strained economy.

References

1. S.Bakhash , '*A Domestic Prespective*' in '*The Iranian Revolution Ten Years Later* ' (a compenduim of papers), (The Royal Institute of the International Affair ,London , 1989).
2. As quoted by S.Chubin and C. Tripp, *Iran and Iraq at War* (I. B. Tauris and Co. Ltd., London, 1988), p.130.
3. See *The Economist*, 2 April 1988.
4. *F.T*, 1 February 1989.

BIBLIOGRAPHY

Abdul-Rauf, M., *The Islamic Doctrine of Economics and Contemporary EconomicThought* (American Enterprise Institute, Washigton, D.C., 1979).

Afshar, H., *Iran: A Revolution in Turmoil* (The Macmillan Press Ltd., 1985).

Amuzegar, J., and M.A.Fekrat, *Iran:Economic Development under Dualistic Conditions* (The University of Chicago Press, 1971).

Amuzegar, J., *Iran: An Economic Profile* (the Middle East Institute, Washington, D.C., 1977).

Armajani, Y., and T.M. Ricks, *Middle East Past and Present* (Pentice Hall, Inc., USA, 1986, second edition).

Bahar, M., *Miras Khar-e Estemar* (*Inheritor of Colonialism*), (Sepehr Press, Tehran,1355, fourteenth edition) .

Bakhash, S., *The Reign of the Ayatollahs: Iran and the Islamic Revolution* (Unwin Paperbacks, London, 1986).

Bakhash ,S., *A Domestic Prespective* in *The Iranian Revolution Ten Years Later* (a compendium of papers), (The Royal Institute of the International Affair, London , 1989).

Bakhash,S., *The Politics of Oil and Revolution in Iran* (Staff Paper, the Brooklings Institution, Washington, D.C., 1982).

Bani Sadr, A.H., *Eqtesad-e Towhidi* (The Economics of Divine Harmony), 1357 (1978).

Bazargan, M., M*oshkelat va Masa' el-e Avvalin Sal-e Enqelab (Difficulties and Problems of the First Year of the Revolution),* (Iran Freedom Movement, Tehran,1361; 1982).

Bharier,J., *Economic Development in Iran 1900 - 1970* (Oxford University Press, London,1971).

Chubin, S. and C. Tripp, *Iran and Iraq at War* (I. B. Tauris and Co. Ltd., London, 1988).

Constitution of the Islamic Republic of Iran, translated by H. Algar(Mizan Press, Berkley, USA, 1980).

Donnelly, W.H. and C.A. Phillips, A. Reifman and J.P. Riva Jr, *Global Oil and Energy Implication of Iranian Revolution*, in *Economic Consequences of the Revolution in Iran* (a compendium of papers), (US Government Printing Office, Washington,1980).

The Economist, Various issues.

The Economist Intelligence Unit (EIU), *Country Profile*, Various issues.

EIU, *Quarterly Economic Review of Iran (QER)*, Various issues.

EIU, Regional Review, *The Middle East and North Africa* (Europa Publication Ltd., London), Various years.

Fesharaki, F., *Revolution and Energy Policy in Iran* (*EIU*, Special Report No. 82, July 1980).

Financial Times , Various issues.

Financial Times Survey, 1 April 1985.

Fischer, M., *Iran: From Religious Dispute to Revolution* (Harvard University Press, USA, 1980).

Graham, R., *Iran : The Illusion of Power* (Croom Helm Ltd., London, 1978).

Gurdon, H., *Iran : The Continuing Struggle for Power* (MENAS Press Ltd., Cambridgeshire, UK, 1984).

Halliday,F., *Iran: Dictatorship and Development*, (Penguin, Middlesex, England, 1979).

Holly,S., *Conflict in the Gulf: Economic and Maritime Implication of the Iran - Iraq war* (Lloyd's of London Press Ltd., Essex, England, 1988).

International Association of Independent Tanker Owners, *Iran-Iraq Conflict 1984-1988: The Tanker War - No End?* (INTERTANKO, Norway 1988, 3rd edition).

Iqbal, Z. and A. Mirakhor, *Islamic Banking* (Occasional Paper, No. 49, IMF, Washington, D.C., March 1987).

Iran Focus, Various issues.

Iran Almanac, Tehran, Iran, 1987.

Iran Year Book 88 (Moini-Biontino Verlagsgesellschaft mb H, Bonn, W. Germany, March 1988).

Jansen, G.H., *Militant Islam* (Pan Books Ltd., London , 1979).

Joffe, G., and K. McLachlan, *Iran and Iraq: The Next Five Years* (EIU Special Report No. 1083, 1987).

Karsh, E., *Iran-Iraq War: A Military Analysis*, (Adelphi Paper 220, The International Institute for Strategic Studies ; IISS, 1987).

Katouzian,H., *Shi'ism and Islamic Economics*: : Sadr and Bani Sadr, in Nikkie R. Keddie, ed., *Religion and Politics in Iran* (New Haven, Yale Universty Press,USA,1983).

Katouzian, H.,*The Political Economy of Iran*: :*Despotism and Pseudo-Modernism*,1926-1979, (The Macmillan Press Ltd., London,1981).

Lloyds Bank Economic Report, Iran, 1986,1987.

Looney, R.E., *Economic Origins of the Iranian Revolution* (Pergamon Press Inc., USA, 1982).

Looney, R.E., *Iran at the End of the Century* (D. C. Heath & Co. , USA, 1977).

Looney, R.E.,*The Economic Development of Iran* (Praeger Publishers, USA,1973).

Maritime Affairs , (A World Handbook, Langman Group Ltd., Essex ,UK, 1985).

McLachlan, K., and G. Joffe, *The Gulf War* (The EIU, Special Report No. 176, London, 1984).

McLachlan, K.,*The Iranian Economy 1960 - 1976* in H.A. Amirsadeghi and R.W. Ferriers, eds.,T*wentieth Century Iran* (W.Heineman Ltd., London ,1977).

Middle East Economic Digest (MEED), Various issues.

Middle East Economic Survey (MEES), Various issues.

MERIP Reports, Various issues.

Mofid, K., *Development Planning in Iran: from Monarchy to Islamic Republic* (MENAS Press Ltd., Cambridgeshire, England, 1987).

Mofid, K.,*The Economic Consequences of the Iran-Iraq War,* paper presented at the BRISMES Conference July 1987.

el-Mokadem, M., and D. Howdon, C. Robinson and P. J. Stevens, *OPEC and the World Oil Market 1973-1983* (Surrey Energy Economic Centre, Eastlords Publishing Ltd., 1984).

Mossavar-Rahimi, B., *Energy Policy in Iran: Domestic Choices and International Implications* (Pergamon Press, New York, USA, 1981).

Nazir Ali, M.,*Islam: A Christian Perspective* (Paternoster Press, Exeter, UK, 1983).

The Observer , Various issues.

The Plan and Budget Organisation (PBO), *Iran's Fifth Development Plan* , 1973 -1977, March 1973.

The PBO, *Iran's Fifth Development Plan* 1973-1978, revision version, May 1975.

The PBO, *The First Five -Year Economic, Social and Cultural Development Plan of the Islamic Republic of Iran 1362-1366* (1983/1984-1987/88), Tehran, Iran, 1982.

Qanoon, A'een-nameh, va, Dastoaral amal-e Amaliat-e Banki Bedon-e Riba (*The Law, Regulations and Procedures of Riba-Free Banking*),(Bank Mellat, Iran, Tir 1363 ; July 1984).

The Qur'an, Text and Explanatory Translation by Marmaduke Pickthall (Salehi Publications, Tehran, Iran).

Ramazani , R.K., *Revolutionary Iran: Challenge and Response in the Middle East* (The John Hopkins University Press, USA 1986).

Razavi, H., and F. Vakil, *The Political Environment of Economic Planning in Iran ,1971 - 1983 : From Monarchy to Islamic Republic* (West View Press,Inc. ., USA, 1984).

Rose, G., *The Thought of Khomeini* in Nikkie R. Keddie, ed. *Religion and Politics in Iran,* (New Haven, Yale University Press, USA,1983).

Sadr, S.M.B., *Iqtisaduna* (Persian trans, Eqtesad-e Ma), Entesharat-e Eslami (Islamic Press), (Tehran, vol.1 and vol.2).

Sampson, A.,*The Seven Sisters* (Hodder & Stoutghton, Coronet Edition London, 1976).

Singer, H., and J. A. Ansani, *Rich ansd Poor Countries* (George Allen and Unwin Publications Ltd., London, 1982 , Third edition).

Skeet, I., *OPEC:Twenty Five Years of Prices and Politics* (Cambridge University Press, Cambridge, UK, 1988).

al-Tawhid (Quarterly Journal), vol III, No 4, July-September 1986, (Saman-e Tablighat-e Islami, Tehran, Iran).

Taleqani,S.M., *Islam and Ownership* (Mazda Publishers, Kentucky, USA,1983).

Taleqani,S.M., *Society and Economics in Islam* (Mizan Press, Berkeley, USA, 1982).

Wright, D.,*The English Among the Persians* (W. Heineman Ltd., London, 1977).

Zafrulla Khan, M., *Islam: its Meaning for Modem Man* (Routhledge and Kegan Paul, London, 1980).

Zabih,S., *The Iranian Military in Revolution and War* (Routledge, London,UK, 1988).