Assessment of the Economy of Iran and Statistical Analysis of the most important Indicators especially during the Past Three Decades with special focus on Foreign Trade along with short-term Forecast of some Economic Indexes

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1. Foreword

The present thesis which studies the current economy of Iran with a special emphasis on extraterritorial trade has some characteristics. First of all, the need to analyze the causes of the economic and social interactions in present Iranian society compelled the writer to have a look at the historical roots of the changes. No comprehensive book on the history of Iran's economy is available and the works so far written by writers and researchers mainly study the political, social and cultural events. The first part of this thesis which includes a summarized analysis of the history of Iranian economy, as far as the writer knows, is the first work in this area. Valuable researches have been done about the specifications of the Iranian economy in certain historical junctures by Iranian and foreign researchers and the writer has made use of some of them in the present study, but the Iranian economy as a whole and as a correlated system has not been analyzed and evaluated before. The second specification of the present research is the historical study of the Iranian economy until contemporary era with a special look at foreign trade within the framework of four historical periods. The selection of these four periods – as most writers divide the history of Iran into two pre-Islamic and post-Islamic periods- which is done for the first time can help clarify the economic and social changes better. The other advantage of this study goes back to the study of economic changes of Iran in the fourth and last phase during which the efforts to reconstruct and modernize economy are divided into three courses of modernizing structures before the Mullahs and one course of "efforts toward modernization" after the Mullahs came to power. The major part of the work is devoted to statistical study of economic changes during the Islamic Republic and offers comparisons with the Shah's time. The fourth characteristic of this study is the use of near 220 diagrams for better clarification of economic changes during the past century especially during the years of the Islamic regime. In these diagrams, the Qajar and Pahlevid periods have been statistically studied in brief and the Velayat-e-Faqih Regime in details. The fifth characteristic of this thesis is a statistical forecast for the most important economic indexes based on three scenarios for the short-term changes in the future of Iran. These three
scenarios include "economic liberalism with Mullahs", "economic liberalism without Mullahs" and the scenario of "tension".

2. A Look at the History of Iranian Economy

Iran is a country with an ancient history. The Ancient Greek used to call the inhabitants of this land Mede or Pars.(1) The reason can be attributed to the fact that the first kingdom dynasty of the western parts of the Country was established by the Medes and the founders of the two great empires, Achaemenides and Sassanids, Cyrus and Ardashir Babakan (Artakhshartra) belonged to the Pars Arians in the South and Center of this land.(2) Before the new official nomenclature, this historic land was known as Persia among the foreigners and even today, the name Persia to the Europeans is a reminder of Ancient Iran. "Aria" is a name by which both the East Iranians and the West Iranians of Media and Pars and also the Indians of "Veda" age and some of their fellow racial groups including Mitans liked to call themselves and indicated a sense of superiority that tempted them toward egotism caused by their physical strength and beauty in contrast with their aboriginal neighbors and foreigners.(3)

The development trend of the production method of the inhabitants of Iran dates back before the foundation of the first Median dynasty. Based on the archeological researches carried out so far, the mountaineers of Northwestern Iran were amongst the first human beings who started farming and animal husbandry in this land. Farming and animal husbandry followed tens of thousands of years hunting and food gathering life the evidences of which have been found in the caves and in the vicinity of rivers and springs. The step by step and long-term achievements of the Paleolithic ages and the climatic transformation following the freezing age changed the production method and ended the hunting age. The last age of Paleolithic- the Meta-Paleolithic age- in Iran ended about 7,000 years ago.(4)

The first human habitat belonging to about 10,000 years ago has been found in the northwest of Iran in the form of tents and mud houses. In these shelters, the first agricultural tools including mill and also storage for grains and simple ceramics can be found.(5) Based on an archeological survey, the Neolithic age which has started after the Meta-Paleolithic age in the Iranian Plateau and has resulted in full
settlement in rural areas and then to urbanization, can be divided into three stages. The first stage is the stage of food gathering with a remarkable change in tool making techniques, the second stage is the stage of gathering and storing food and the third stage is the stage of production and rural settlement. The traces of these three Neolithic phases can be found in different parts of Iran including "Ali Tapeh", "Kamarband" and "Ganjdareh" hills in Harsin and "Tapeh Sarab" near Kermanshah.(6)

The farming and animal husbandry gradually covered the east and west parts of Iran to the Persian Gulf until 6000 years B.C. From 5 to 6 thousand B.C. a new era began in agricultural production by settling on the banks of Karoon and Karkheh rivers in the southwest and also in the center of Iran. The first irrigation methods were used especially in the southwest Iran and the first townships substituted the initial less populous villages. Copper vessels were made and advanced painted ceramics emerged in the northeast and northwest, center and south of Iran in place of the early coarse ceramic jars.(7) In 5000 B.C., major transformations took place in the social structure. A group of towns were formed from the aggregation of dispersed villages and a group of towns formed a center. The inhabitants of the towns and its center increased rapidly. This change represents the first social division of work among farmers and shepherds.(8) By further development of agricultural production and side by side the transformation in texture of the towns, first the tribes and then the states were formed.

Investigating on the different ethnicities of the Iranian Plateau before immigration of the Aryans has so far shown the presence of Tapurs, Mards, Kaduses and Caspis in the North and Khutis, Luluies and Elamites in the West. We know the history of Elam better than those of Khutis and Luluies and the history of these two latter peoples better than those of Kaduses and Caspis.(9)

2.1 The First Civilization in the Iranian Plateau and the Formation of Elam State

The first period of civilization of the inhabitants of Iranian Plateau that lasted about 3500 years begins with the Elam Civilization. Following the new economic transformations and as a result thereof, the last centuries of the 4th millennium and the early 3rd millennium BC, this period can be assessed as the age of full blossom of the first common society in Iran.(10) The first state was formed in a relatively large
portion of the Iranian Plateau, the center of which was Susa, one of the oldest cities in the world and was led by the Elamites. The history of Elam can be divided into three periods of Early Elam, i.e. up to 1450 BC, Middle Elam, i.e. up to 1100 BC and New Elam, i.e. 814 BC. In a period of nearly 4000 years, sometimes the civilizations of Mesopotamia dominated the Elam territory and sometimes, the Elamites occupied their neighboring lands. However, in spite of counter-effects, the self-specific economic, cultural and social development and independence of Elamite society remained unchanged.

The causes of more rapid development of the southwestern parts of Iran go back to a number of effective factors. Firstly, Elam was located in one of the most fertile areas of Iran and the largest rivers of the Country including Karoon and Karkheh and also abundant forest and mine resources, provided for a natural development. It should be taken into consideration that Karoon River is very much similar to Tigris and Euphrates which were the cradle of the Mesopotamian civilization. Secondly, the adjacency with the Mesopotamia and the business relations with them intensified the economic progress and the social transformations of the society. Thirdly, the special strategic location of the region on way of road commerce of India and Mesopotamia and also the Central Asia. The Elamite government and culture remained stable from about 4000 BC until the reign of the first dynasty in the Iranian Plateau, i.e. the Median Kingdom, in spite of all defeats and ruins and was the most important and most durable symbol of cultural, social and economic development and independence of the people of this land, especially in the west and south of Iran. Durability, stability and capabilities of the Elamite culture during nearly 4000 years of its life in spite of all raids of its powerful neighbors from the Mesopotamia became of the main intellectual cornerstones of the culture of a land based on which the Iranian civilization was able to resist and continue its self-dynamic life today, after 7000 years of its foundation against all ups and downs.

The transformation of socio-economic structure of the south and southwest of Iran, which, based on the present archeological findings was more developed from other parts of Iran took form on the basis of common work and common land ownership by the farming groups settled after the age of hunting and fishing and as a result of the expansion of agriculture and rural settlement in the form of tribal and ideological consistency with the property of agricultural production. In
other parts of the Iranian Plateau, this trend passed later. Based on the internal specifications of the people of other parts who were specially influenced by the achievements of the developed state of Elam and also under its protection shield (which acted as a barrier against the raids of the tribes settled in the Mesopotamia), this trend gradually provided for the coalition of the Aryan tribes dispersed over the Iranian Plateau and the formation of the first Iranian dynasty at the beginning of the first millennium BC.

The archeological researches indicate wars and battles in 4000 BC which are in relation with the wars between Elamites and Sumeris and their invasion of the southwest Iran. During the reign of the Sumeris, the Elamites were in charge of business with the farthest parts in the east of Iran. The trade of Elamites expanded to the north of present Afghanistan, India and the Central Asia. The works and traces found in Egypt and Mesopotamia shows import of goods from the east of Iran in 4000 BC. Two commercial roads, the north road to the Central Asia and the south road from Kerman connected the businessmen to the east Iranians.

The researches carried out by French archeologists in the Transoxiana and the Central Asia indicated the inhabitance of "Indostal" people (the ethnic origin of these people is still a matter of dispute) on these areas. These studies show towns and settlements and class formation on the banks of Amu Darya which is similar to the southwest Iran, Khorasan and Mesopotamia in view of agricultural climatic potentialities. Research on the civilization of Iranians living in the east and northeast of Iran from Baluchestan through Khorasan and Amu Darya in 3000 BC have been carried out and are underway based on the ancient works and the character of ceramics obtained. These researches indicate of a culture relatively conforming to that of Elamites and bespeaks of the close cultural intermingling of Elamite Iranians of the southwest and the eastern and northeastern Iranians.(13) Based on the view of a number of archeologists, the Iranian Plateau is the main birthplace of painted pottery vessels which are the signs of the habitation of the first groups in Iran.(14) Discovery of new works in Halilrood plain in the east of Iran including hundreds of chlorite vases on which paintings of plants, human and animal figures and also marble vases, copper statues and pottery jars has made the archeologists to guess that this area has been a cultural center with a social hierarchy and ideology more developed than its time and have estimated it to be older than the Sumer civilization.(15)
The future researches will clarify other dark points in the history of eastern Iran.

At the end of the 3rd millennium BC, the Akkad Civilization in the Mesopotamia got strong and therefore, the commercial roads of Elamites and the eastern Iranians and northeastern Iranians sustained heavy losses.

The frequent raids by Sumeris and Akkadiens made the Elamites migrate to the mountainous areas and resulted in the formation of Elamite cities in Persia and Aden and military clashes with the Mesopotamian raiders. At the same time, the culture of the north of Iran was destroyed and the new culture of Khorasan took form at the end of the 3rd millennium BC and entered the scene of history side by side the Elamite culture at the south. During the 3rd and 2nd millennia BC, the Elamites were the ruling power in Iran and advanced up to the Caspian Sea and the Western Caucasus.(16)

At the beginning of the 2nd millennium BC, the Elamite government was reconstructed in Susa for a short time and reclaimed the southwestern parts of Iran from the neighbors. However, this government remained weak until the end of the 14th Century BC. Simultaneous with the reign of Assyrians state in Mesopotamia in 1310 BC, the Elamite state also grew strong and in its former capital, Susa, many new cultural elements including Indo-Iranian culture were formed. But the clashes between Elam and Assyrians in 636 BC imposed serious damages to the government of Elam. However, in spite of the Assyrians writings and the view held by a number of historians, the new archeological findings proved that this culture survived and continued its independent life.(17)

In its nearly 4000 years of power during which at times it extended its territory even to Palestine, the Elamite government brought about a large number of achievements in the production method. Among which, the manufacture of the first pottery machine and the first wheeled chariot are attributed to this state.(18) Also the manufacture of brake furnace encouraged the development of construction of buildings and making different statues and pottery vessels. The discovery of copper improved the working tools and war equipment. Gold was discovered and weaving and spinning developed. In the 3rd millennium BC, the Stone Age and the Copper Age were gone and the Brass Age began.(19). Based on the new archeological findings, Iran is one of the first civilizations- and probably the first- where copper was discovered and the production of copper tools not only to meet
the domestic demand but to export to the neighboring civilizations such as the primary civilization in Mesopotamia. Some archeologists hold that the first human civilizations in Mesopotamia, Egypt and Iran were simultaneous. Lack of gold, silver and copper sources in Sumer and Akkad and the abundance whereof in Iran and the discovery of copper works belonging to 5000 to 6000 BC in Arisman region in Iran shows the dominance of Iranians in extraction of copper and production of copper tools for export to other markets. It seems that since about 4000 BC, the industrial copper production in trader workshops, inter alias in south Kashan with the business goals were considerably expanded. In the sale of these products and their transfer to the neighboring lands, the nomadic people should have had a special role.(20)

In the middle of 2nd millennium BC, the brass age ended and the Iron Age began. The expansion of using iron in agricultural production brought about special achievements to the economic transformations of Iran. Using iron in the irrigation system ended in the introduction and advancement of the complex system of subterranean water canals. This irrigation method provided the possibility of farming downstream lands which faced shortage of water about 1000 BC and consequently, the productivity of agriculture enhanced and the population of non-mountainous regions increased. Small cities were formed by ruling landowners who controlled the farmers (subterranean canals, villages) and the nomads acted as their army. The newly-established cities founded as a consequence of the improvement of irrigation systems, played a minor role as compared with the Elamite cities in southwestern Iran.(21) Due to the economic development of the south and southeastern parts of the Iranian plateau and the special position of their territory, the Elamite businessmen established expansive relations with Mesopotamia and Central Asia and also India and as a result, the industrial production for market increased and led to further separation of professions from agriculture and development of crafts. Apparently, the second major work division, i.e. the separation of professions from agriculture took place in Susa and some other parts of Elam in the late 4th or early 3rd millennium BC. The exchange of goods and meddling in merchandise transaction changed Elam into one of the international business centers in the 4th and 3rd millenniums BC and this was one of the causes for the extraordinary transformations in this part of Iran. The invention of primary Elamite
script simultaneous with the Sumer script that is a special script and one of the first scripts in the world bespeaks of the economic, commercial and cultural needs and also the economic advancements of this land. (22) Among the export goods of the Elamites, pottery vessels, mineral stones and livestock, especially horse, could be seen. Providing security of the caravans, improvement of business roads and business revenues which had extended to the India, Egypt, Central Asia and even to China, was one of the main causes for wars and bloody clashes between Elam and its Mesopotamian rival neighbors, Akkad, Sumer, Babel and Assyrians.

The transformation of the socio-economic during the Elamites has some specifications; among which the fact that the Elamite government was a theocratic one during the primary periods and the religious leaders and temple managers dominated the economic and social trends. By expanding the borders of the government, the military rule gradually overcomes the theocratic statesmanship and stabilizes itself in the form of a unique unrivalled political institution. The economic foundation of the Elamite society is based on two organizations of king and temple which step by step leads to absolute monarchy and superior ownership of king on all lands and the creation of a bureaucratic aristocracy. At first both groups, i.e. the army chiefs and the religious leaders owned large farming lands and supervised on the domestic and foreign trade. In this society, all farmers and craftsmen are dependent to one of the above institutions and agricultural production, like in all ancient eastern countries, is the most important social production sector. Working on farmlands takes place through paying taxes and duties and doing gratuitous services for the two governmental institutions. In spite of assigning land to the farmers accompanied with assigning farming water which was of special importance in the arid land of Iran, the Elamite lands mainly remained under collective ownership and production within the framework of small kinship groups with common economy survived until the end of the Elam government.

In other words, the Elam government was the state symbol of all small economic units based on common Wace ownership or family Wace ownership. Therefore, it was still far from a feudalistic system based on private ownership and was a barrier thereto, but at the same time provided the means of moving toward it. The Avesta word of Wace here means the common residence of crowds, gathering point of a specific tribe and the base of collective production of a group of
common ownership. (23) The view of a group of historians who see the agricultural production in Elam as "primary feudalism" and compare it with specifications of the feudalistic agricultural production in Iran and its internal dynamism and changes to a greater detail in the future. On the other hand, the approach held by another group of historians on the dominance of slavery as the economic foundation of the Elamite society does not conform to the archeological findings and seems untrue. According to these findings, although the slaves and servant were present in the social production system, the major part of economic profitability on agricultural production was based on the small kin groups. Agricultural production was the basis of deeper transformation in socio-economic structures.

The word "Deh" (village) is derived from the Ancient Persian word of "Dehyou" meaning country, region and province. The age of this word dates back to before foundation of the first Iranian dynasty. The naming of the social units of Iranians followed the following pattern: Namaneh or Damaneh or Daam (in Avesta) in the sense of patriarchic family or home as the smallest economic section under the leadership "Namanopaty", then Wace which was a kind of village with mainly tribal structure with actual identical needs. At the beginning, Waces were nomadic and later settled in villages. Waces where the Aryan families used to live at the beginning of their rural settlement had a patriarchic structure. The Wace leader, "wacepaty" was not only the chief of the tribe, but also the head of the village. By transformations in their internal structure during the Sassanid dynasty, the Waces were called "Dehgan". The third phase was Zento meaning tribe with a value higher than Wace which was lead by Zentoma or Zantopaty and is guessed to have included near 30 families. Waces, however, included only about 15 families. The 4th division in the socio-economic structure was "Dehyou" (in the Gaats) and "Denghou" (in Khorda Avesta) which indicated the concept of country, territory, province and region. (24) Based on the inscriptions of Bisitun epigraph, during the Media dynasty, i.e. the first monarchy in Iran, Wace was the economic unit which embodied the family. (25) Based on Shahnameh, village existed as an economic unit side by side the city and they are never placed opposed to one another. The cities first emerged in Dehyous especially for administrative purposes and their first sign was Sharestan (tower and fortress) where the king or his representative lived. (26)
It can be said that the first Iranian dynasty headed by the Media and also the great Achaemenid Empire were specially founded on the basis of progresses, achievements and the persistent resistance of the Iranians of south and southwestern Iran under the flag of the Elamite government. Without the stable resistance of this independent cultural, social and economic institution against the repeated raids of Sumer, Akkad, Assyrians and Babel and without the cultural and economic exchanges with these neighbors, it can be hardly accepted that the Aryan tribes residing in the north and northeastern parts of Elam could achieve to found an expanded kingdom to cover the entire civilizations of the far east for nearly 1500 years, i.e. from the Media dynasty to the end of the Sassanid Empire. The borders of Susa and Elam governments in their primes, which according to some archeological findings encircled Khuzestan, Lorestan, Bakhtiari and Poshtkooh, parts of Fars and Isfahan in the east, Babel and even Palestine in the west, are witness to this claim. The intellectual influence of the Elam Civilization on the Iranian Plateau can, among others, be observed in the survival of Elamite language later called "Khuzi" language (the name of Khuzestan Province in southwest Iran is derived from this word) in the court of Sassanid kings until the Arab invasion.

During the Achaemenid Empire, the documents of the royal treasury in Persepolis were in Elamite language. Before the Arab invasion of Iran, Khuzi (Elamite) language occupied a special position in the court and among people side by side Persian and Dari languages. In some writings by Abdullah Ibn Moghaffa it is said that the royal court people spoke Dari, the Zoroastrian priests and the clergy spoke Persian and the kings spoke Pahlavi in the court but Khuzi in their private meetings with the ruling class.

It is believed that Aryans came to Iran on two occasions. Once in about 2000 BC and the second time in about 1000 BC. At the time of their immigration to Iran, i.e. in the 3rd millennium and the beginning of 2nd millennium BC, the Iranian Plateau – regardless of Elam culture, was divided into a number of different cultural zones; Gorga Culture in the entire eastern areas of Caspian Sea, Fourth Gian and Goudin Culture which included the east of Lorestan, Yanic Culture from East Azerbaijan to central parts of Iran and lastly, the South Culture in the southeast and east of Iran which embedded three different civilizations with painted pottery of Fars, Kerman and Sistan. The different methods applied in Gorgan civilization for the
manufacture of industrial products, on the one hand indicates relationship with Sind Valley and probably father with China in the east and on the other hand with Anatolia, Mesopotamia, Aegean Islands and Central Europe on the west. One of the reasons for this relationship is the fact that this region was located on the business route between east and west. According to the archeological data, it seems that the extinction of this civilization is related to the immigration of Aryan tribes from the Central Asia.(29)

The emergence of the modern civilization of Iran from the combination of apparently nomadic and pastoral civility of Arians and the native civilization of the inhabitants especially the Elamites, has not been a bloody process as believed by a number of historians, but has been more a process of peaceful gradual intermingling.(30) Another group of researchers have evaluated the entrance of East European Aryans who had abandoned their farming stationed life in Ukraine and gradually started a nomadic life since 3000 BC and who were consequently facing difficulties in finding food, from the north of Iran to the central and southern parts destructive to the developed economy and culture of west Asia. However, the combination of the culture of natives and immigrants ended in the flourishing of a new culture in the southeast of Caspian Sea in late 3rd millennium and early 2nd millennium BC and was gradually known as the origin of the Aryan culture in the Iranian Plateau. It seems that simultaneous with this transformation, another Indo-Aryan culture had been founded in the east of Iran and Afghanistan through Ural the bearers of which were the old Iranians living in the north and east of Iranian Plateau. Study of the Aryan languages shows the relationship between these immigrants with the inhabitants of the Eastern Europe and adds another proof to the accuracy of the European origin of the Aryan immigrants.(31) On the other hand, new archeological findings confirm the second view that is the acquaintance of the Aryan immigrants with agriculture and rural life prior to their entry into the Iranian Plateau.

2.2 The Second Period of Iranian Civilization and the Invasions of Lands by the Iranian Dynasties

The second period of the 1500-year history of ruling of the Iranian kings after the cultural merge of the natives and new immigrants, which lasted, with short pauses, until the overthrow of Sassanid
dynasty by Aras in 651 AD, dates back to early 8th Century BC. The defeat of Assyrians rulers by the Iranians living in Zagros Mountains and the invasion of Nineveh, the Capital, which for years had been the center of unrivalled power in the west Asia, in 612 BC, gave the Media Iranians a unique political and economic position in the developed world of that time. From among the four superpowers of the time which included Medes, Lydians, Egyptians and Neobabelites, the Medes were the most powerful of all. (32) The government of Media was most probably neighbor to the Iranian government of Kianian in the east of Iran. A little is known of the governments of Iranian peoples of east Iran during the Aryan period. The myths in Khodaynameh and Shahnameh (by Ferdowsi) relate the stories of the dynasties of Pishdadian and Kianian and the life of the Iranians of east and northeast Iran. Some of the Iranian myths about the Pishdadi kings and heroes are mixed with the Hindu myths, but the stories of Kiani period are more rooted in past history of Iran. The east Iranians were far away and inaccessible to the Greek historians who wrote of Medes and Achaemenides. Therefore, the story of Kianian and the heroes of Sistan have survived only in the forms of legends and myths and have been reflected in religious writings such as Avesta, the sacred book of Zoroastrians and its commentaries and are mentioned in Khodaynamehs. (33)

The most powerful government of the time, i.e. the Media kingdom was established from the coalition of tribes and small local governments with agricultural production based on clan Waces. The extraordinary progresses of these people were affected by the more ancient civilization of Elamites and were blooming on their Elamite basis. Formation of royal dynasties and placing a king at the top of the structure of social production did not cause deep changes in the form of family Waces in the bottom of the social strata. However, it transformed the nature of tribal Wace ownership. Under the new form, the farmlands remained non-transferable property of the Wace but were being divided among the farmers settled in the village periodically. Side by side the rural non-clan ownership, there existed three other types of ownership as well: Inherited family ownership, private ownership by kings and ownership of temples. (34).

Royal ownership on agricultural lands was categorized into three groups: lands specific to the royal court, lands received against services and lands conveyed against payment of price, in cash or in kind. The king's ownership was non-transferable and the lands
remained in the hands of the court forever. The revenues of these lands provided the needs of the king and his family. It seems that a major portion of such lands were given to the military and administration officers against their services. The state ownership of land was certainly integrated with the ownership of the water used for irrigation of the land. One of the special services was maintenance of water canals and resources, roads, soldiering services and others which sometimes took the form of unpaid work.(35).

Contrary to the Egypt and Babel, in the Elamite government, the temples had preserved their economic independence and were not yet mixed with the royal economy. This change took place gradually after the establishment of Median dynasty. It should be taken into consideration that temple ownership was prior to the royal ownership and the separation of military and administrative duties from religious tasks, gradually paved the way for division of public-owned properties. The reason should be first of all searched in the organizational independence of temples and their independent ownership and also the existence of numerous gods and even their variety in a single area. This non-centralized structure led to the increasing superiority of monarchy and graduate decline of the clergy rule. As a result, the clergy became part of the ruling aristocratic class under the rule of the kings. The manner of forming clan and rural Waces was, however, identical whether by the clergy or kings: collecting taxes on farmlands, imposing duties and unpaid labor, and using the income of workshop industrial productions in the institutes owned by them. The temples, the same as kings, had a lot of assets and cash money which they used and made lots of profits in private business transaction. In addition, they seized the lands of the debtors. The lands of temples were sacred and non-transferable as those of the monarchy. They were safe from any appropriation and were constantly expanding.(36) The special role of the clergy who had a specific position since the Elamite government and who formed a group of the ruling class of Elam survived the Median dynasty and remained even until today with changes and ups and downs.

During the Median rule, the remaining system of family Waces weakened more but was not destroyed. Under supervision of king and the centralized government, cities, bazaar, crafts, business, monetary relations and slavery were introduced to less developed areas and grew and in some other developed places such as Elam expanded considerably. In continuation of this trend, the society gets more
transformed and the systems of feudalism, aristocracy, hierarchy and class castes emerged. In studying of the history of Iran, it should be considered that in the course of economic changes, without elimination of patriarchic family wace system and in spite of the presence of many of its institutions and standards, slavery develops and without elimination of slavery, the regulations of hierarchic aristocracy, feudalism and social castes emerge and all continue side by side until a long time after the domination of Islam in Iran.(37)

During the 6th to 4th centuries BC, the Achaemenides of Pars established the first great empire of the ancient world in close unity with the Medes and invaded the territories of their three main rivals, Lydia, Neobabelites and Egyptians. They expanded the borders of their empire from west to the Mediterranean Sea and Africa and from East to the Sind River. Cyrus, the founder of the new dynasty whose father Kambiz was from the Achaemenid family of Pars and whose mother Mandana, a Median princess, saw Median as his own people and gave them equal rights and advantages.(38) The western Aryans of the Iranian Plateau, Medes and Parses and the eastern Aryans have mingled since the Achaemenid time and before that until today. During the Achaemenid rule, the Medes had a special role in the monarchy and the clergy officials "Magi" were usually from Medes.(39) The economic foundation of the Achaemenid Empire was based on feudal autonomy of Satraps (states) with relative cultural and religious freedom and very centralized military, political and economic control. One of the reasons for the economic, political and cultural bloom of Iranians during the Achaemenides was their openness to the achievements and customs of other civilizations. Herodotus says that no people in that time were as open to admitting foreign culture as the Iranians.(40) Due to the expanded territory of the Empire, the administrative system of tax collection which was very developed for its time was established. The tax received was remitted into the central royal treasury and expenses were paid from the treasury. By a merge of the cultural, political and economic knowledge of Elamites, Medes, Babylonians, Assyrians, Egyptians and other civilizations ruled by the Empire, a more developed financial system emerged and for the first time, an organized post (courier) system covering the entire territory of the Empire from Egypt to India and China was launched. For the first time in history, the Achaemenid government made current the gold imperial coin "Daricus" which was exchanged during the reign of Darius throughout
The expansion of the imperial gold coin led to further aggregation in hands of businessmen and the central government and consequently, the revolving money decreased and the loaning and interest system expanded. During this time, due to the increased financial capability of businessmen and banks and increasing financial disability of temples which were unable to organize their economic system, the influence of the clergy reduced to some degrees in favor of the businessmen. At the time of Darius, the imperial territory was divided into twenty Satraps (states) led by the representatives of the empire and the task of gathering tax for the king's treasury was assigned to them. Since the reign of Cyrus, the founder of Achaemenid Empire to the reign of Darius, no tax system had been created and the administration of central government manifested only in the form of collecting gifts from Satraps. Herodotus calls Darius more a businessman and an economic organizer, Kambiz an arrogant ruler and Cyrus a mild father. During the Achaemenid dynasty, agriculture progressed; business and scientific research expanded and the process of intermingling and absorbing achievements of different peoples were accelerated. The centralized government system of the Achaemenides, especially under the influence of Darius, the first founder of government organization in Iran based on the sovereignty of a king with unlimited and non-transferable ownership along with the loyal aristocracy and with its advanced bureaucratic and accounting system funded by taxes and duties received from different sectors of agriculture, industries, craftsmanship, roads and ports, survived with changes not only during the Arsacids and especially the Sassanid, but even after Islam until the collapse of feudalism and even for some time after the agrarian reforms of Mohammad Reza Shah in Iran. The conquest of Alexander and the fall of Achaemenid dynasty after more than 200 years ruling in Iran brought about a new cultural transformation. The Seleucides who ruled over the Iranian Empire near 100 years, gave a unique depth to the cultural exchange between east and west, something rarely seen in the future of the Iranian history. This cultural exchange was double-sided and led to more development both in the west and east. Although no major transformation occurred in the economic structure of villages, i.e. the main important center for economic production, business, crafts, urbanization, road construction, mine extraction, horticulture, knowledge, art and philosophy progressed considerably. Mixed
religions emerged and Iranian-Greek races appeared. By extension of the use of Greek language and its change into the formal language, the lingual reserves of Iranians increased. Although the Seleucides were soon driven away from Iran by Parthians and the domination of Greek language and culture ended, the Iranian society had advanced further in view of material and intellectual progress after the Alexander attack. The regain of power by the Iranians, as will be seen in the future of Iran history during Omavid and Abbasid, was also related to their step by step advancement in the army of Seleucides and their promotion to high ranks in the army. (44)

The period of Parthian empire who still had backward tribal tendencies and who were skilled in chivalry and shooting can be divided into three historical sections. These people lived near Gorgan and the eastern coast of the Caspian Sea and ruled the Iranian monarchy for near 470 years against powerful neighbors such as the Roman Empire. The historical phases of this empire included the founding period of a young dynasty, the period of bloom and expansion of territory and finally, the period of decline and fall. During the best days of the Parthians, Arsacid and Roman empires were that greatest governments of their time. (45). The Arsacid state, contrary to those of Medes and Achaemenides, had a non-centralized and feudal administration system and the king's authorities were controlled by two assemblies the Consulting Assembly of Arsacid Princes (Mahestan) and the Assembly of the Learned and the Clerics (Moghestan) which was less influential. Thus, based on some historical studies, the Arsacid system of government had similarities with feudal independent governments of the Middle Age Europe. The dominated states were independent in their domestic affairs and in addition to paying tax, used to provide the king with soldiers in wartime. Therefore, no permanent army, like that of the Achaemenides, existed in addition to the royal guard. The influence of the clergy in the government system was considerable at the beginning but gradually decreased. However, the high-ranking clerics owned the most fertile lands. (46) The feudal system of Parthian monarchy had been stabilized in Iran since the time of Seleucides. During the reign of the Greek, from the beginning and especially after they grew disable, Mede, Pars, Khuzestan and Armenia were practically independent. After coming to power of the Achaemenid, due to their backward tribal texture on the one side and the independence obtained by the Satraps of Achaemenid time on the
other, the new kingdom lost the traditional texture of eastern despotism specific of Iran. (47) Specially, the Persians were trying to weaken the dominance of Arsacids in the government system and finally, they took advantage of the weakened status of Arsacid kings and Ardashir, son of Babak, from the famous family of Sassanids, founded a new dynasty on the old foundations of the Achaemenides. (48)

The Arsacid government was more a military government and less religious and the clergy was not influential. However, it is believed that Avesta, the ancient book of Iranians was compiled since the time of Belash, the First and the revival of the Mazda Yasna religion in its traditional form began. It is probable that Avesta had been available in Pahlavi Arsacid script as well. (49) The religious structure of the society which is the basis of social order has been problematic in Iran since long. The reason behind the problem is the division of leadership positions among the three classes of Army, Clergy and Bureaucrats at the beginning and its later change into the four social classes of Army officers, clergy, bureaucrats and craftsmen. During the Arsacid period, the clergy and Magi undoubtedly enjoyed a special political and economic position in the society, although no data is available of an organized religious hierarchic system. (50) During the Parthian period, the landowners did not live in the cities and lived in their own estates which had fortress and soldiers under their command. These Persian semi-feudal landowners and governors did not support the Seleucides that much and never rendered the support they used to give the Achaemenides. (51) The reason may be attributed to the fact that the satraps of Pars region were exempt from paying tax during the Achaemenides. (52) The rituals and customs of Arsacids which included desert dwelling elements, blended with the customs and rituals of Persians on the one hand and were influenced by the Greek culture and the achievements of the 100-year government of Alexander's successors. The language of Parthians with the Scytian words incorporated therein is the same language that was later named Pahlavivd language and that plays an intermediate role between the Old Persian and the Modern Persian of today. (53) The Greek language did not expand among the people of the Central Asia and east Iran. It can be guessed that Aramaic language was used side by side the Greek in the administrative and bureaucratic organization of Iran following the fall of Seleucides. Even during the 100-year reign of the Greeks in Iran, the two Iranian and Greek cultures lived side by side. In some
areas, the Iranian culture and in some others the Greek culture dominated. However, it seems that the administrative and bureaucratic documents were written in Greek. The official state language however, had been the Parthian language. The Parthian script originated from Aramaic language and gradually substituted this script in bureaucratic writings. There are various approaches to the Arsacid Pahlavid Language as well. Some believe that this language with its different dialects expanded in the east and north Iran and the south and southwest Iran.

The industries and crafts progressed during the Arsacid, but the expansion was less than that of the Achaemenid time. Urban planning and business developed considerably and the foreign trade between east and west, from China to Rome, blossomed. The custom revenues earned from import taxes added to the government incomes. Control of business roads especially roads used for business with India and China was one of the major causes behind the wars between Parthian kings and their eastern and western neighbors. The purpose of wars of Romans against Arsacids, like the Greeks, was to control the eastern and western business roads of Iran and to obtain its huge profits. This strategic position was to keep its importance long into the future during the Arab invasion, Mongol invasion, Turk invasion, Tatar invasion and also Europeans since 15th Century and even today. The business roads to the west through Mesopotamia were also of special importance and the cities of this region were seriously involved. If on one hand, Estakhr, Kerman and Sistan connected Iran to India, Tigris and Euphrates also connected the business directly to India through the water ways of Persian Gulf. At the end of the first century AD, the business land roads became unsafe for a short time by the nomadic Arabs. Consequently, the subordinate roads and the marine routes from the Persian Gulf to the Indian coasts were used more.

The Arsacid time is the time of extraordinary bloom of commerce and trade. However, the Parthians did not expand business through the Caspian Sea and the Black Sea and only the Romans worked on this area. Some historians compare the Arsacid dynasty to the Ottoman empire in view of the lack of a regular governmental organization like that of the Achaemenides, lack of attention to education and culture who were capable and brave in wartime but appeared weak during the peacetime. Some other researchers, from the study of archeological findings including statues, tombs and
architectural works, have come to the idea that the Arsacid art has been developed and, for example, the Parthians were the pioneer of portrait painting to the time of Sassanid.(62) The Sassanid kingdom rule over Iran from 226 to 651 AD for near 430 years is similar to the Achaemenid empire in view of the statesmanship system, centralized power at the hand of the king, special position of religion in the government hierarchy, expansion and complexity of bureaucratic system and dependence to former rituals and traditions. However, it has embodied many cultural and social elements of Seleucides and Arsacid. The evolution of agricultural production and crafts, development of cities and emergence of new cities, improvement and increase of roads and deepening of work division among farming, craftsmanship and industry and the complexity of trade forms beginning from the Arsacid time, reached to its climax during the Sassanid dynasty.(63) In this period, an assembly of Magi (high Zoroastrian priests) was established for strengthening the national unity.(64) In spite of the Arsacid period when people enjoyed a relative religious freedom, all people were called to follow the ancient Zoroastrian religion and the other religions experienced increasing pressure. The Christians were not favored by the governing system especially after the east Roman kingdom chose Christianity as their religion. Furthermore, a special army head by the commanders and officers was founded who, contrary to the time of Arsacids, acted independent of governors and rulers.(65) During the reign of Anooshirvan, major changes occurred in the complex bureaucratic; tax, army and agricultural system of Iran and the government organization grew more precise.

Among the changes was taxing based on the area, instead of fertility of the land and the amount of tax was determined on annual basis. This tax reform reduced the cruelty of agents and encouraged the farmers to improve agriculture and increase their share. Furthermore, the Magi were granted new powers to reduce the pressure of local officials on the masses of people.(66) The farmers were given seeds and tools and animals to plant uncultivated lands. In order to improve irrigation and build dams and also to increase the population, marriage between the poor was encouraged and some prisoners of war were distributed in different parts of the Country in order to work in the agriculture sector. The luxury of Sassanid court was extraordinary. In view of some historians, no such luxury has ever been seen in any other royal family in the world.(67)
During more than 400 years of their rule, the Sassanid fought the Roman Empire in the west which had the most powerful military force and defeated that government repeatedly and took one of its kings prisoner. In the south and north, they resisted the desert dwelling tribes and their successive raids. Domestically speaking, they established a very complicated and capable cultural, social and economic system and elevated the knowledge of medicine, astrology and music art to lofty positions. It is not accidental that after the Arab invasion, many structures and governing methods of Sassanid were reconstructed in modern forms and survived in Iran until the collapse of feudalism even to the 20th Century.

The second blooming period of the Iranian civilization starting by Medes and ending by the fall of Sassanid Empire lasted near 1500 years. This period should be considered the logical continuation of the first phase of civilization in the Iranian Plateau following the emergence of Elam government. Within this framework, in those parts of the Iranian land, especially in south and southwestern Iran including Elam and Pars, the social production system and the bureaucracy, land ownership methods and tax collection underwent more changes and became more complicated. These areas had already experienced deep transformation in family wace system and the family ownership, state ownership and temple ownership and also slavery with more strict division of social work and increasing separation of farming and craftsmanship had been mixed. By further expansion of previous cities and emergence of new cities especially during the Arsacid and Sassanid dynasties, these relations gradually extended all over the territory of Iran.

The beginning of feudalism in Iran, economically speaking, dates back to this period of Iranian civilization, especially the Achaemenid kingdom. This trend developed during the Seleucides and Arsacid and especially the Sassanid and gradually changed into the dominant economic system. Business and trade found extensive dimensions in this time. Tendency toward commerce and concentration of large capitals in the market along with the urbanization, increase of number of cities, development of industry and crafts and further separation from agriculture work along with the expansion of domestic and foreign trade and change in the monetary system had since very old time developed in the east from Akkad, Sumer, Babel and Assyria, the neighbors of Iran and in a comprehensive way in the state of Elam. As said in the economic approach to the history of Elam, industrial
production and craftsmanship increased not only to meet the local demand and transact among nomadic tribes and the inhabitants of cities and villages, but also to supply to the market. In Elam government, the foreign trade extended from India to Central Asia and even China in the east and the Mesopotamia and Palestine to Egypt in the west. The revenues from trade were so high that both large profit making institutions of Elam government, i.e. the aristocracy and the clergy played a special role therein. Interesting to know that tendency toward business was not only common to the settlers but also prevalent among the nomads who were responsible for protecting caravan roads as well and they also made some income there-from. The continuation and deepening of this tendency can be found during the reign of Parthian nomads and then among Mongols and Tatars as well. Extensive inclination to trade and the distinguished role of bazaar as one of the characteristics of Iranian economy is worthy of attention even today.

The monarchy rule with aristocratic ownership in Iran, as many other civilizations, originated from religious government with ownership of the clergy and the temples and ended in state ownership under supervision of the king. During the first phase of Iranian civilization and upon establishment of Elam government, although the ruling clergy remained one of the most powerful owners of farmlands, gradually transferred the determining role of leadership to the aristocrats and to the king himself. The problem with the approach of the clergy goes back to their belief in multi-deity and the transformed social structure and the centralization of ownership in hands of the royal family which was manifested specially under the umbrella of a king. This centralization was not conforming to the multi-deity of the Elamite clerics. During the second phase of the Iranian civilization and upon coming to throne of the Median dynasty, this need of the society is gradually responded in view of religion. Mazda Yasna, which is the transformed religion of the old Mazda religion with naturalistic structure becomes the ideology for passing through the family wace system to the monarchy and centralized power of government. Mazda Yasna substitutes the unique God for the multi-deity of the ancient religion of Mazda and within this new framework, the clergy appears as a social class side by side the armed forces, rural people, shepherds, craftsmen and the bureaucrats. The clergy becomes a very powerful and influential class on top of the hierarchy of power beside the king. Sometimes the
clergy gets involved in land ownership, participation in and control of trade and commerce and earns huge incomes.

During the Achaemenid reign, although the Mazda Yasna religion is being practiced, there are some degrees of religious freedom. Although the theocrat Achaemenid king calls himself the representative of Ahura Mazda and the clergy forms a powerful political and economic class, there is still a distance to the traditionalistic theocracy which expanded later. During the early Arsacid dynasty when no particular attention was given to Mazda Yasna religion, the clergy was very influential in the government through "Moghestan Assembly", but gradually the military wing of the government got more weight and the influence of the clergy decreased. The kings, who came from tribal origin, gradually discovered the importance of religion in the domestic unity and conformity in the kingdom and therefore they embarked upon expansion of Zoroastrianism since the reign of Belash III onwards. During the Sassanid dynasty which was the logical continuation of religious reforms after Belash III, the Zoroastrian monotheistic religion was equipped with new jurisprudential rules and changed into the spiritual foundation of the government. The Zoroastrian priests gained much power and once again restituted their former position as one of the major political and economic pillars of the government. The clergy preserved their influence in the hierarchy of power after the Arab invasion and fall of the Sassanid and even to the present time with some ups and downs. Therefore, the major role of the clergy in the government structure in Iran, especially during the Sassanid period, which included occasional challenges between the king and the clergy as well, should be considered one of the economic characteristics of the second phase of Iranian civilization. During the same period but with a little delay, a similar trend was adopted in the East Roman Empire for expansion of Christianity.

Transformation in the ownership forms and structure of family wace villages of common ownership, started at the beginning of this 1500-year period and accelerated especially since the reign of the Sassanid. The social layer of petit feudals emerged from among the chiefs of villages and the major owners of agricultural lands and gardens with peasants dependent on land from among the royal court, aristocrats and army commanders. The king sometimes gave farmlands away in place of lifetime annuity or inherited pension. The economic transcendence from family wace and the formation of feudalism in
Iran was accompanied with three specifications; first the preservation of centralized government system under unlimited control of kings (regardless of the Arsacid government) which is known as oriental despotism, second; the lack of expanded growth of slavery in agricultural production as seen in Egypt, Greece and Rome and third; the independence of farmers from land as seen in the middle age Europe. The reason for independence of farmers from land and maintained high share of waces in economic production (the government of Elam and other Mesopotamian civilizations and also a large portion of the economy of Median and Achaemenid are manifestations of this type of production) and consequently the limited role of slavery in the social production structure can be attributed to the long history of family wace system and the power and influence of their representative chiefs in the ruling system.

The patriarchic family wace system in Iran survived with some changes beside the relations dominating the modern society even to the 20th century and the collapse of feudal system. The wace system or the tribal system has been able to adapt itself with new conditions due to successive immigration of new ethnicities to Iran. Viewing the fact that Iran has always been on way of migrating tribes and their raids as Aryans – there are doubts however on the migrating nature of Aryans-, Arabs, Turks and Mongols and as a cultural merge has occurred between the inhabitants and the immigrants as well as many bloody battles and much destruction, it can be considered as one of the economic characteristics of the Iranian society in this time and thereafter and emphasize on the conflict between nomads and rural or urban settlers. In Elam government, especially before the second immigration of Aryans, as the family waces and clan Waces and aristocratic and temple ownership were based on small economic units without private ownership, the conflict between nomads who lived within the framework of clan and tribe waces but based on the similar non-private ownership and the Elamite settlers was not that intense.

To emphasize on the importance of the conflict between nomads and the urban and rural inhabitants during the second period of Iranian civilization, it should be said that although similar historical samples can be easily found in societies such as China, Rome and India, but the continued nature and huge number of these immigrations and the very destructive raids in the Iranian Plateau which is the connecting road of three continents of Asia, Europe and Africa, gives special dimensions to this conflict. On the other hand, the special geographic
specifications of the Iranian Plateau, its mountainous and arid land, is another internal factor for longer stay of immigrating tribes and their continuous challenges with the more developed culture of settled Iranians and one of the causes behind lack of progress of ancient civilization of Iran during the latter centuries of the Iranian history.

In the economic study about the genesis and long-term survival of oriental despotism as special government form in Asia, the following four causes can be named in the case of Iran: First; the difficulties in irrigating farmlands and water shortage, second; the consecutive raids and immigration of neighbors along with the expansion of military, third; the role of conquest of new territories by the kings and fourth; the special role of Iran in foreign trade and the importance of guarding caravan roads.

Much is written about the role of water and irrigation in forming the centralized government system of Asia. In Iran, since the time of Elamites; control, maintenance, restoration and improvement of irrigation lines, dams and ditches which need centralized organization and large scale collective work was organized first by the temples and then under the control of a number of local rulers and later under the supreme supervision of one king and the aristocratic, cleric and administrative system around him. During the fourth millennium BC until the reign of Median dynasty, the complex subterranean canal irrigation system in other parts of Iran, especially after discovery of iron, was largely expanded and new cities were developed beside these subterranean canals on the mountain foots where living was not possible before. The maintenance of these canals was assigned to upstream nomad tribes who later formed the skeleton of the army organization and got stronger step by step. The tribe chiefs and local governors grew among these elite military forces. By owning farmlands and appropriating the lands of the natives by the Aryans, the centralization in its modern form was stabilized more in the Iranian Plateau.

The immigration and raid of neighbors and other peoples to the Iranian Plateau paved the way for further militarization. The Aryans who immigrated to the Iranian Plateau in two intervals and who, like many of the victorious forces in history, saw themselves superior than their former enemies, the aboriginals of the Iranian Plateau, assigned the hard works to the natives. Only long after, did they recognize some rights for the natives and this in itself strengthened the
centralization within the societies formed by intermingling of Aryans and the natives. Until the time they gained absolute power over Iranian Plateau, the Aryans used to build a fort around their place of residence after fighting the natives and defeating them and in order to keep safe their occupied lands from the raids of native people. These forts later changed into villages and cities. Reinforcing power in the occupied lands and the need to keep it against foreign enemies, the same as the defense system of Roman government against the German tribes, added to the power and influence of army forces in the wace structure and among the chiefs of tribes and local governments. In Iran, the successive attacks of immigrants and their habitation in the Iranian Plateau and their cultural merge with former inhabitants started in two turns by the arrival of the Aryans and continued by attacks of the Greek, the Arabs, Mongols, Tatars, Turks and Uzbeks until the reign of Safavid kings. The emergence and long life of oriental despotism in Iran can be an administrative-military reflection and reaction against these immigrations and raids as well.

The emergence of local governments and invasion of new lands and then creation of large empires during the Median and Achaemenid and other dynasties and their conquest of other countries provided the local kings and specially the king of kings with new potentialities and capabilities. Following these victories, the king who was the representative of Ahura Mazda, could divide the occupied lands among the aristocrats, army officials and clergy instead of salary or pension or reward for special services or to recruit soldiers and thus, sit on the most important throne of the empire alone by the grace of the assets gained.

The king was the most powerful and wealthiest person in the society and received tax from all producers, farmers, craftsmen and artisans, especially during the Sassanid, through a special administrative system the effects thereof remained until the collapse of the feudal system in the 20th century. The tax system was complicated and the census officers worked under supervision of ministers and support of sword of the army. The king received taxes and increased his treasurers. The government treasury was considered personal property of the king.

Although agricultural production in the Iranian society which was moving toward feudalism was the primary source of income of the monarchy, the special position of Iran in foreign trade, as the Mesopotamian and Central Asian civilizations, was of special
The growth and development of Elam civilization accelerated by foreign trade and the ample assets gathered in Susa were the result of revenues from the trade with India, Central Asia, Egypt and Mesopotamia. One of the reasons for the raid of Mesopotamian neighbors and specially the large state of Assyria on Elam was to get a share of these high incomes and to control the caravan roads to the far east. All Iranian and non-Iranian kings of the Iranian Plateau, whether from nomads such as Parthians and Mongols, or from settlers such as Achaemenides and Assyrians expanded the foreign trade more and more. Control, maintenance, development and improvement of business roads, especially in Iran which was located on the route of the international business of the time and was constantly under the risk of attack by small and big aggressions for the robbery of the wealth of caravans and treasures of the country, was one of the critical tasks possible only through a powerful centralized government. Market, commerce and complicated financial and banking operations and providing proper ground for profitability of such operations was one of the distinguished characteristics of the Iranian economy and, with some changes, is still interwoven in the centralized and labyrinth texture of the Iranian governments.

2.3 The Third Phase of Iranian Civilization and New Changes in the Social Structures

The third phase of Iranian civilization started with the invasion of Arabs and the domination of Arabs over the Sassanid Empire and continued until the reign of Safavid kings and a revival of centralized government more and less similar to the kingdoms before the Arab invasion. The characteristic of this period which started in 651 AD by the overthrow of Yazdegerd III, the Sassanid King, and lasted until the reign of Shah Ismail Safavid in 1499 AD, nearly 850 years, is much deeper cultural and social transformation and some new changes in the economic structure of the Iranian society. In this historical span, we face the raids and immigration and the cultural, social and racial intermingling of Iranian with a number of victorious nomadic forces including Arabs, Turks, Turkmen, Mongols and Tatars. The long-lasting dominance of Turks, Turkmen, Mongols and Tatars had few cultural effects but major harmful economic consequences. On the contrary, the short-term victory of Arabs during the Omavid Caliphs and the consequent economic destructions, by contribution of a large
number of Iranians in the government of Abbasid Caliphs and the Iranian character of these caliphs and their imitation of Sassanid kings, led to the gradual elimination of Zoroastrianism and took extensive cultural dimensions. On the other hand, by termination of the dominance of Arab Caliphs and the establishment of Iranian local governments during the Samanid and Buyids, the economy regained its strength based on the former achievements of the Iranians and the most flourishing period in the history of Iranian economy arrived through an extensive business and by incorporation of the scientific, technological and cultural achievements of other countries and especially its neighbors. Such a bloom became inaccessible to the Iranian economy later even up to the 20th century.

The fall of the Sassanid monarchy was the result of the decayed texture and semi-caste structure of its 400-year government which led to extensive dissatisfaction of masses of people and their successive rebels. Long and destructive wars with the Roman Empire, its western neighbor, also contributed to this fall.

The Sassanids were also raided by powerful enemies in the northeast such as the Hitalis who pursued economic objectives in their attacks. To some degree, one may agree with the view of a group of researchers who hold that this defeat was accelerated by radical interdependence of religion and government during the Sassanid dynasty. The unrivalled dominance of Arab Caliphs headed by the Omavid in Iran lasted near 110 years. The reducing trend of the Arab influence in Iran entered into a new phase by the fall of Omavid in hands of Iranians led by Abu Moslem Khorasani from east Iran and the establishment of Abbasid dynasty in Baghdad. By the establishment of Tahirids in 820 AD in the east, the government of Iran took the form of an Iranian local independent state which continued under different local governments for about 200 years until 1037 AD when the Seljuk Turks invaded Iran. The Abbasid dynasty lasted namely until 1285 AD when Mutasem, the last Arab Caliph was killed by Hulako Khan. The first period of Arab dominance over Iran under the Omavid rule which included looting and humiliating Iranians and lasted until 749 AD, was a period of economic collapse and numerous battles.

The Arab invasion of Iran entailed numerous economic and cultural consequences. Firstly that they immigrated to Iran in the form of full tribes, whether settled or nomad and established camps at the residence place of the Caliph's representative. These camps later
transcended into centers for urban life and places for development of a jointed Iranian-Islamic culture. Even until 10th Century AD, in many Iranian cities like Qom, the majority of residents were Arabs and Arabic was the common language spoken. Secondly, the immigrants appropriated parts of the framing lands to the degree that a large number of landowners in Iran were Arabs. The governmental lands comprised a large portion of the lands and the government exploited people through the administration system. Thirdly the dominance of Arabs led to the extinction of the former Iranian script, Aramaic-Pahlavi alphabet and the Arabic language became the official and dominant language of the Country for a while. Persian language was used only in the 10th Century AD first in poetry and later, in 11th Century AD, in prose. The fourth and the deepest effect was the expansion of Islam as the religion among the Iranians. Islam was reluctantly accepted during the Omavid but when the Abbasid came to power in 11th Century AD, most of the Iranians gradually converted to Islam.(70)

By the rebellion of Iranians headed by Abu Muslem Khorasani from the east in support of Abbasid and following the fall of Omavid, the Iranians started to accept the new religion and step by step separated from the ancient Zoroastrianism. The Iranian landowners and influential figures reach high positions in the government and this causes the expansion of Sunni sect among the Iranian aristocracy and leads to their support of Abbasid Caliphs on the one hand and the gradual inclination of the masses of farmers and poor classes to the Shiite sect in enmity of the Baghdad caliphs. The victory of Abbasid embodied some results for the Iranians. First that it stabilized the feudal system. Secondly although the government was irreligious as that of the Omavid, the Caliphate got religious taint and from then one the caliphs were considered the highest religious authority. Thirdly, the caliphate system was Iranized, i.e. the Iranians occupied high positions in the Abbasid government and many Sassanid rituals and statesmanship techniques were revived.(71) For example, the Sassanid taxing system based on the area and fertility of lands was restored.(72) The influence of Iranians in the Caliphate system increased to the degree that the capital of the country moved to Marv city in east Iran for a while during the rule of Mamun, the Abbasid Caliph.(73) This transformation as the beginning of the slow but growing inclination of Iranians to the new religion, although it is mixed with long-lasting
strong and bloody resistance of Iranians, especially after the murder of Abu Muslem by the Abbasid.

From time to time, the Iranians revolted and organized armed resistances some of the major ones were led by Magi, Sanbad, Babak, Maziar, Afshin and others. However, after passing through this challenging period and overcoming the most important obstacles, in Noldke words "the victory of Arabs over Iran, contrary to the Greek domination, penetrated deeply and rooted in the religion, rituals, customs and generally all aspects of the nation's life.(74)

The emergence of local Iranian governments began by the coming to power of Tahirid in 820 and lasted for about 200 years until 1037 when the Seljuk Turks gained power. This period, which was provided for by the deep social and economic transformations during the Sassanid dynasty, should be called the blossoming period of economic growth especially in East Iran. In this period, the farming lands were gradually reclaimed from the immigrant Arabs and payment of "Kharaj" or tax for farmlands to the Baghdad Caliphs decreased and from the Saffarid government onwards completely abandoned. In this time, tax reduced to gifts in special occasions.(75) On the other hand, the burden of paying "Jazia" (separate tax paid by non-Muslims) was removed by gradual conversion of Iranians to Islam. Under the semi-independent government of Tahirid, the financial pressure of paying tax to Baghdad was removed from Khorasan that provided half of the entire tax earned by the Abbasid Caliphs and whose people were always under the incessant pressure of different taxes of the Caliphs.(76). The next local Iranian governments such as the Saffarids, Samanids and Buyids also acted the same and their independence increased step by step. However, this relative independence was lost again by the raids of Ghuzz Turks and Seljuk Turkmen from the east.

The Seljuk nomads invaded first the eastern parts and then the western parts of Iran after their victory in Dandanghan war. After invasion of Baghdad in 1055, they extended their rule to Armenia, Shirvan, Georgia, Azerbaijan, Syria and Palestine. The administration of the bureaucratic affairs in Seljuk dynasty, as in Ghaznavid government, was assigned to the high ranking Iranian officials and clerics who had lost their positions after the fall of the Ghaznavid. During the entire reign of Alp-Arsalan and Malekshah, the foreign policy and the administrative, financial and civil organization and actually the entire government affairs were in the hands of Nezamolmolk, the Iranian
Vizier. He seriously believed in the centralization policy of the Sassanid, Samanid, Buyid and Ghaznavid and in implementation of this policy fought the dispersion and autonomy of the feudals. (77) The reign of Seljuks transformed the hierarchical form of the government. The Iranian feudals lost part of their lands. The military commanders who were mainly of skilled and warrior nomad Turks received land from the government and were exempted from paying tax to the central government to be able to finance their military forces. By these changes which practically led to the opposition of local feudals, pressure on farmers increased. On the other hand, the immigration of Turkmen nomads with their animals to the fertile agricultural areas of Iran damaged the economic growth in rural areas. (78) The centralized policy of Malekshah, the most powerful Seljuk king, and his successors which was nonconforming with the conveyance of land to the army forces and also their reliance on the Iranian administrative and bureaucratic officials strained the close relationship between the Seljuks and the Ghuzz nomads and ended in a war which entailed much destruction and ruins and damaged the structure of Iran economy even more. By death of Malekshah, the Seljuk territory was divided after 20 years of civil wars. Sanjar got the eastern parts and Mohammad the western parts. The rule of this dynasty ended after 116 years by the death of Sanjar in 1157 and once again, economic ruins continued and new wars began on the rule of Khorasan which lasted for about 30 years among the Ghuzzes, Khwrezm-Shahs, Ghurids of Afghanistan and other feudal rulers of Seljuk kingdom. At the end of these conflicts, Khwrezmshah Takesh defeated all others and became the victorious ruler. (79) Administration of the Iranian territory after the fall of Seljuks went into the hands of Khwrezm owners. The Khwrezm-Shahs tried to implement the centralized administration policy but their attempt faced the opposition of large landowners, especially in Fars and Isfahan and led nowhere. (80) The chain of raids and immigration of Central Asian nomads to Iran does not end by coming of Turks and Turkmen to Iran. Iran is still passing through its complicated economic, social and cultural conditions with these two new immigrant people and with the former Arab immigrants and when a new round of raids and immigrations starts from the east by Mongols and Tatars and Turks. From 1196 when Chingiz Khan invaded Iran until 1485, when the Timurid dynasty collapsed, for about 290 years, aggressive governments ruled Iran whose basic policy was public
manslaughter and assassination. First the Mongol Ilkhans like Holaku, Arghun and Ghazan and then successors of Tamerlane like Shahrokh and Ulugh Beg ruled over Iran. The Mongols did not bring deep changes in the cultural and economic bases, but they converted into Islam and embarked upon expansion of this religion in China and also the expansion of Persian language to the east in India and China. New immigrants like Seljuk and Khwrezm Turks and Turkmen were themselves integrated into the social, intellectual and economic life of Iran. They became Iranian and gradually entered the same process that other immigrants had passed in Iran. However, the mainly aggressive governments of this time, Chingizids and Timurids, although were based on the Iranian economic, political and bureaucratic consultants, did not have major Iranian characteristics like Seljuks and Khwrezm-Shahs. They were more like occupant foreign forces and, according to the historical documents; people looked at them this way. The victory of the Mongols in Iran as in other countries invaded by them, especially at the beginning, entailed catastrophic destructions and considerable damages to the infrastructure of the agricultural economy and unbearable pressure to the lower social groups such as the farmers and craftsmen. The aggression of the nomads against Iran, whether Arabs, Turks or Turkmen was always blended with destruction of farmlands, poverty and hardship for the settled people, however the Mongol raid was designed based on a specific plan. In view of Barthold, the distinguished researcher of the Iranian history, the reason for very cruel and aggressive operation of Chingiz Khan soldiers was the small number of them. It was not possible to control the very vast territory of the empire with only 200,000 soldiers. The Mongol army beheaded the entire population of the cities of Marv and Neishabour, in spite of the fact that some of the close friends of Chingiz Khan did not approve of this method. As a result of the Mongol attack, the east of Iran, Khorasan, became extensively destroyed and inhabited and some cities like Bamyan were removed from the scene of the world.(81). It is estimated that near 6 million people were killed in the Mongol raid. Due to the extensive slaughter of Iranians in the east, the Turk immigrants appropriated the fertile lands of Iran on the banks of Amu Darya and Syrdarya and resided therein.(82). In spite of the war aggression, Chingiz Khan, the same as the Parthian nomads, was a democrat as concerned the religion and avoided religious prejudice.(83) As concerns economy, his endeavor at first was to provide security of the trade roads and expand the
The Chingiz Khan corps were mainly composed of Mongol and Turk warriors. During the reign of Chingiz Khan Successors and following the relative independence of the eastern parts of Mongol Empire in Iran under the control of Holaku and Mongol Ilkhans, the business and commerce once again experienced a boom and the caravan routes became safe and secure. This characteristic is noteworthy in all periods of the rule of nomads in Iran, whether Parthians, Arabs, Turks, Turkmen, Mongols and Tatars. During the Ilkhans when the capital moved to Tabriz, this city especially experienced a lucrative state. According to Marco Polo in each city there are many craftsmen and artisans and are kinds of gilded and silk fabric are woven. In Tabriz, a lot of commercial merchandise comes from India, Baghdad and the tropics and European merchants, especially from Geneva come to Tabriz.

During the Mongol empire and after the initial wars, no point in the entire empire witnessed so deep and vast economic restoration and reconstruction as Iran. The reason was partly due to the termination of military clashes and security of caravan roads from east to the west and partly because of the experienced administrative and tax management of the Iranians who took hold of the leadership of economic affairs.

The Mongol Ilkhans who did not create major transformations in the structure of Iranian economy, very soon faced the same problems of the former victorious nomads. The money was depreciated. In order to control the inflation, paper money was published in imitation of the Chinese, but their effort was defeated because of the lack of interest on the side of the Iranian merchants. In spite of relative restoration of business and crafts, the state treasury which was mainly dependent on the agricultural taxes faced serious crisis and shortage. The government incomes were low and payment of duties unbearable to the rural people. The financial crisis which was the reflection of extensive destruction of agricultural system and especially irrigation, made some economic and political reforms inevitable during the Ghazan Khan rule.

In spite of partial improvements, these reformist measures did not lead to better conditions and the ruins of Mongol raid had not yet been reconstructed when the invasion of Tatar nomads led by Tamerlane began and the economy entered into a new crisis. By the Tamerlane raids in 1380-1381 AD, the cities of Transoxiana, Sistan and Khorasan were burnt and the center of Fars Province, Shiraz, was converted into a pile of soil. However,
following these ruins, Tamerlane successors chose Herat in the east of Iran their capital. They restored trade and reconstructed Herat, Shiraz, Balkh, Mashhad, Samarqand and Bukhara and built beautiful buildings. In this period too, the same as the other periods following the victory of Arabs, the Iranians took charge of the administrative, bureaucratic and financial affairs and the commandment of army and military corps was assigned to the Turk tribes. During this period, the effect of the Iranian-Islamic culture on Turks and Mongols increased and the last glows of Iranian cultural boom after the Arab invasion appeared in the east of Iran under the rule of the Timurid. (90)

The third phase of the Iranian civilization which began by the Arab domination on the Sassanid dynasty and lasted until the reign of the Safavid kings, brought about deep changes in the social and economic and especially cultural structure of Iran. The most distinguished characteristic of this period was the expansion of Islam as religion among the Iranians. In spite of all its ups and downs, the powerful position of the clergy in the Islamic Caliphate, the same as that of the Zoroastrian priests in Sassanid Empire did not change much and even the endowed lands under the economic leadership of the clergy was developed more than before. During the third phase of the Iranian civilization, the rituals of government institution continues in the Islamic caliphate the same as the pre-Islamic era, although with some changes, with the same two specific characteristics of Iran; first the centralization of royal families or the oriental despotism and secondly the all-sided use of religion and the clergy as the most important cultural tool for the stabilization of economic and political system of monarchies and expansion of the territory of the empires. After conversion to Islam, Iran itself became one of the most important religious centers of the Islamic world and, the same as the Zoroastrian priests in the Sassanid empire, the Iranians acted the most critical role in development of religion, this time Islam, in Asia especially to the east of Iran. From among different Islamic sects, especially from Buyids onwards, the inclination to Shiite sect which was favored among the low social classes of Iran and implied independence connotations against Arabs as well was gradually intensified. Some of the Iranologists emphasize on the serious presence of Iranian elements of the ancient Zoroastrian religion among the Shiite religious rituals. One of the manifestations of the opposition of Iranians with the Arab policies in Iran especially with the Omavid caliphs who maltreated Iranians and held them inferior was that the
Iranians did not accept the mainstream Islam, i.e. Sunnite sect but accepted the division of Shiite which was believed to be a deviation of true Islam.(91)

Another characteristic of the third phase of Iranian civilization was the extensive racial and cultural intermingling of Iranians with the new immigrants. After immigration of the Aryans to the Iranian Plateau which entailed deep cultural transformations, the extensive waves of immigration of nomad tribes such as the Arabs, Turkmen, Turks, Tatars and Mongols during this 850-year period should be considered the second and the largest historical immigrations to Iran. Although the immigrants gradually integrated into the Iranian culture, they placed deep effects on its structure as well. These immigrations especially in the Central Asia, north and southwest of Iran, were the source of huge influences. We will discuss the extensive economic aftermaths of the nomadic immigrations in more details in the future. Successive and very destructive raids of the nomadic immigrants caused considerable geographical changes in the Iranian territory especially in the Central Asia. Following the destruction of irrigations and agricultural systems and consecutive slaughter of people which killed 6 million only under the Mongol raid in east Iran, the Central Asia was gradually vacated by the Iranian population and the geographical habitat of Iranians downsized. The immigration waves in the northwestern Iran, Azerbaijan and southwest Iran also entailed deep cultural effects. Extensive immigration of nomadic people, accompanied cultural elements specific of nomads as well as economic consequences. Intensifying violence in the society provided new tools for suppression of the opposition and lower social strata to the violent oriental despotism in Iran and to the centralized ancient monarchic dynasties. Building minaret from the heads to frighten the people and killing all inhabitants of a city who resisted the occupants are among these signs.

The other consequence of repeated military clashes and extensive ruin of rural areas, cities and irrigation systems, was low population especially in the farming areas. Evacuation of villages was not only the result of killing the villagers but a reflection of the insecurity caused by successive attacks of armed nomadic tribes. In the eastern parts of Iran, a lot of villagers abandoned their lands and immigrated to India or went to the cities. As the main source of state revenue was the tax received from agricultural products, decreased number of farmers led to deep financial crises in the feudal system of the rulers.
Another important characteristic of the third phase of Iranian civilization which entailed extensive economic, cultural and political consequences was the gradual dismissal of the Iranians from the army and military forces. The inclination of the Iranians toward Shiite sect which, contrary to Sunnis who have a peaceful attitude to their rulers, encourages the political leadership of the society in addition to religious leadership and which opposes monarchy might be the outcome of this gradual dismissal of Iranians from the most powerful governing organ in the country. Putting Iranians aside from commanding corps and assigning army to the nomadic immigrants who were skilled in military issues began during the Samanid with Turk slaves and grows very extensive after the Mongol invasion. Although the Iranians were set aside from military command positions as a reflection of the fear and lack of confidence of the nomadic immigrants, during all these 850 years and due to the need of rulers, the Iranian were in charge of administrative works and the organization of economic and political issues were assigned to Iranian ministers and bureaucrats. The leadership of religious affairs also remained under the Iranian control.

Repeated raids and violent suppression of Iranian resistance and also the elongation of the domination of nomadic tribes on Iran, gradually revealed their negative impacts on the society and this also can be considered another important characteristic of the third phase of Iranian civilization. The identity crisis, losing self-confidence, weakening of the spirit of resistance and combat, in spite of brave resistances (which is itself one of the essential elements of the Iranian ancient culture and which provides for defending the Iranian homeland during the millenniums and is very artfully depicted in Shahnameh, the masterpiece of Ferdowsi, Iranian epic poet), disseminated disappointment and the spirit of surrender in the society. During the 5th to 9th centuries AH, the destruction of the Country and the poverty of the masses of people following the invasion by Seljuks in the 5th century and Ghuzzes in the 6th century and Mongols in the 7th century and Tamerlane army at the beginning of 8th and 9th centuries AH contributed considerably to the pessimistic outlooks of Gnosticism and Sufism toward the secular and material life.(92) The period of domination of Tatars and Mongols, was the blossoming time of Sufism not only in Iran but also in many countries of the Far East including India, also in Central Asia, Turkistan, Rome, Egypt and even Africa due to similar social conditions. The different
consequences of this situation continued long after the fall of the eastern nomads in Iran and neighboring countries. (93) Inclination toward Sufism, the same as Mani religion, had the advantage of discarding racial and class distinctions. Sufism did not value religious privileges and equality was a major element therein. (94)

The other characteristic of this period following these raids was the dissemination of moral and cultural corruption in the society. The domination of Arab nomads over Iran transformed the cultural beliefs of Iran. However, on the other hand, by breaking the old strict class structure and emergence of local Iranian governments on the foundation of the cultural achievements of the Sassanid, another period of flourishing in Iran began and a unique economic and cultural development emerged. The very violent domination of eastern immigrations gradually led into moral corruption and cultural decay and by domination of Chingizid and Timurid, ended in the beginning of decay and decadence of the Iranian society. The family Waces during the first phase of Iranian civilization, as indicated before, formed the basic social and economic structure of the Iranian people. The decline of this system began at the time of Median dynasty and was accelerated and deepened upon reign of the Sassanid kings and gradually transcended into the developing structure of feudalistic agricultural production in the rural areas. This transformation deepened and widened during the 3rd phase of the Iranian civilization when the feudalistic structure of agricultural production changed into the dominant unrivalled formation in the economic texture of the Iranian society. The Arab invasion at first slowed down the growth of feudalist formation in Iran, because they developed the slavery by taking a large number of men and women prisoner and using them in agriculture, irrigation, animal husbandry, crafts and government mines. However, they were gradually dragged toward the general trend of feudalization in Iran. (95) One of the economic characteristics in Iran is the durability and stability of old forms of socio-economic structures side by side modern institutions. The mainly feudalistic nature continues to live beside the remnants and residues of slavery and transformed family Waces in the life of some nomads and even urban settlers. Iranian feudalism although different from the Western feudalism in view of forma of institutions, regulations and the survival of previous forms of economic production, is very similar in view of the perspective of economic nature. In Iran, the same as in other eastern countries, the state-owned lands surpassed other types of
feudalistic ownership and the government also owned a large portion of irrigation institutions and fruit sources. The oriental despotism and centralization of the ruling system was also based on ownership of main production tools, i.e. land and water. Beside the state ownership, the private feudalistic ownership of agricultural lands during the first period of Arab reign, i.e. during the Omavid Caliphs also existed specially among the Arab invaders. They also benefited from work of the slaves as in the state owned lands. Upon victory of the Abbasid Caliphs with the support of Iranian landowners (Dehgans) and some of the rural people of east Iran, the ownership of Arabs on agricultural lands decreased and the feudal government took a more Iranian structure. Consequently, the inclination toward feudalism which had accelerated during the reign of the Sassanid, once again regained its rapid pace after a short pause during the nearly 100-year government of Omavid Caliphs who were of Arab nomadic tribes.

During the Abbasid, although the dominant formation was the agricultural production, the slave labor was still used in the villages especially in irrigation and hard works the same as the time of Omavids. The slave markets were active in large cities of Iran and Iraq and purchase of any kind of slave from laborer to skilled craftsman, warrior, musician, player, dancer and singer was common. The deepest transformation in the economic structure of Iran was focused on the evolution of feudalistic forms of ownership. At the beginning of the 3rd phase of Iranian civilization, the dominant form of feudalism appeared in the form of major ownership of agricultural lands by the government. The private ownership of farmers beside the state ownership was the second form of unconditional inherited ownership. During the 8th and 9th centuries, another type of feudalistic ownership of land and water emerged which was the endowment or ownership by religious and Islamic charity institutions. This ownership was not negotiable or transferable. A type of conditional feudalistic ownership also emerged during the Omavid and developed during the Abbasid which was called "Ghata" (Piece) or in Persian "Nanpareh" (Piece of Bread). This term was used to describe lands assigned to the Arab rulers, commanders and soldiers on a permanent basis which could be inherited. Upon coming to power of Iranian and Turk dynasties in Iran, the custom of assigning Ghata (piece) changed into the custom of Aghtae (pieces). This term changed into Siorghal during the Ilkhans and Tyoul during the Timurid. This new form of
ownership existed side by side the government lands, the royal family lands, the endowments and the lands owned by landowners and farmers (Dehganan). It was later developed in Iran and can be somewhat assimilated with "Feu" in the Western Feudalism. The Aghtae system reached its climax during the Seljuk dynasty.(99) Aghtae is the dominant form of land ownership in the Middle Ages which gradually developed based on the exchange of land revenues against military-administrative services between the kings and the political-military heads. The outcome of the increase of this type of land assignment was the downsize of state-owned lands and the consequent weakening of central governments on the one hand and the expansion of the role of army in the political structure on the other hand.(100). Some changes occurred in the status of the family-rural Waces who were continuing their existence in a special form of feudalistic ownership as well. Due to the shortage of land in such villages, some of the members of the Wace had to provide farmlands for themselves around the village. As the number of people who owned little land or no land at all was great during the Abbasid Caliphs and as they didn't want to abandon their job as farmers, they started to work in the farmlands belonging to others with a share of 1/4<sup>th</sup> or 1/3<sup>rd</sup> of the harvest or other arrangements. The assignment of land by major landowners to the farmers led to the system of land lease. During the Abbasid, most of the family Waces were incorporated into the feudal system and became dependent to the government, Dehgans and piece owners. In view of tax payment, the agricultural lands were divided into the following categories during the Abbasid caliphs.

1- The lands which used to pay Kharaj and were mainly state-owned.
2- The lands which used to pay 1/10<sup>th</sup> of the product
3- The lands which were exempt from all or part of the tax. Much of the land owned by great clergymen, endowments, and above all, the lands owned by the true or alleged descendants of the Prophet, were among this group of lands.(101)

The product division system in Iran was specially based on Mozarea (farming together) and this system has played an important role in the economic structure of rural areas since the Sassanid era to the Agrarian Reforms of Shah in 1962. The system of Mozarea underwent some changes after the Arab invasion and the conversion of Iranians to Islam, but its main elements remained unchanged. Mozarea which is derived from the Arabic word of Zare meaning
"joint cultivation" or "agreeing on cultivation of land based on certain conditions" has three characteristics: Firstly, that the product is jointly owned by the farmer and the landowner, i.e. the product is divided only among the two parties and no third person gets involved. Secondly that Mozarea has a definite term, e.g. one year, 1.5 years, and thirdly that the farm should be capable of cultivation and harvesting and water for irrigation should be also present. According to Islam "Kharaj" is separate from the feudal share and in Mozarea it is always said that Kharaj is the responsibility of the landowner to pay. Before Islam and during the Sassanid dynasty, the owner's share was integrated and it seems that gradually two separate institutions, i.e. the feudal share and the Kharaj have been created.

The fall of Arab Caliphs in Iran and the reign of Iranian local governments led to the restoration of Iranian economy and its boom. In this period, the productive forces gained so much power and progress that was unprecedented and was not experienced again until the 20th Century. Following the regain of independence, the Kharaj and taxes did not exit the Country as in Caliphs' time but were spent inside Iran on reconstruction and expansion of irrigation systems and consequently the development of agriculture. Secondly, no foreign raid and destruction happened by the neighbors and the civil wars were not that destructive in this period. For example, in the subterranean canals of Kerman, water was transferred for 125 km. and the depth of these canals in some parts reached 90 m. By more and more complication of irrigation systems and use of all four systems, i.e. the ditches and brooks originating from rivers, the subterranean canals and the wells, operation of farmlands improved and expanded. In this period, a large number of streams and water canals were built to convey water from Karoon, Hirmand, Harirood, Zandehrood and other rivers to the agricultural lands. Different dams, reservoirs, mobile reservoirs (Occluse) and special canals for water conduction during floods were built and a large number of skilled experts were employed for seeking underground waters, constructing subterranean canals and other irrigation works. Building mills operating on animal force, control of flowing sands, planting new species of agricultural products including rice, citrus fruits, barley, wheat, cotton, saffron, eggplant, tropical and cold area fruit trees even in high altitudes, expansion of date farms, medicinal herbs and development of animal farming are among these achievements. The ownership system
in Fars was mainly in Aghtae form assigned by Buyid government to the men of army. The same system was developing in Khorasan under Samanid reign as well but was more non-hereditary and gradually changed to hereditary system. At this time, the area of state-owned lands was still considerable although declining. In Fars, most of the lands belonged to the king and he was assigning these lands to the villagers on hereditary basis and received rental in cash or as a share in the harvest. At this time, the long process of changing the majority of Iranian free villagers to feudal dependents ended.\(^{(105)}\)

The process of dispersion of feudalism and attaining financial independence and also military independence of local landowners which started from the time of Samanid and Buyid provided the economic foundation for inability of the central government and increased the vulnerability of Iran against its powerful eastern neighbors. Economic, political and military inability of a central government which was expected to unify and powerfully lead different peoples in the dangerous and strategic region of Iranian plateau was one of the most important reasons which made it easy for the Seljuk Turkmen, Ilkhan Mongols and Timurid Tatars to occupy and invade Iran one after the other. The aftermath of these invasions was unprecedented and very expansive destruction and ruin of the Country during a long historical period until the reign of Safavid.

During the Seljuk dynasty, Nezamolmolk was aware of this ever-increasing danger for the future of Iran and, without serious consideration to the economic grounds and the historical inevitabilities of fundamental transformation of social and class strata and structures, insistently emphasized on the revival of economic bases of a powerful central government on the foundation of expanded governmental ownership and limited rights of landowners and if needed, even restitution of lands from them in case of their maltreatment of the farmers.\(^{(106)}\)

During the Seljuk dynasty, the feudalistic division trend continued and the Aghtae lands to the prejudice of state-owned lands increased more.

Later, the collection of Kharaj fell in the hands of Aghtae owners, rulers and other local feudals and the institutions of the central organization of the government experienced serious decline in spite of all the centralization efforts of Nezamolmolk, the distinguished vizier of Seljuk kings and other Iranian viziers and bureaucrats. The previous efficient taxing organization like Divan-e- Kharaj (The Tax Department) lost their importance. New institutions emerged and
devoted the revenues of some areas to themselves. In this period, Aghtae gradually converted to inherited Tiyul and consequently, deeper dependence of farmers to feudals and the poor living conditions of rural people found new dimensions and the number of duties and special and new feudalistic taxes increased.(107) The Mongol invasion of Iran as in other countries, regardless of some historical junctures, not only led in more destruction but imposed serious damages on the economic capabilities of the Country and increased the violent use of farmers still more. However, the same as the Seljuks, they also continued the path of Iranian culture and civilization in spite of all characteristics of their type of government.(108) During the Mongol reign, the feudalistic ownership, feudalistic hierarchy, tax exemptions and Siorghal found more advanced forms. The Siorghal system which was the same as assignment of land in inherited Aghtae form against the military services, enjoyed judicial and administrative exemption in addition to tax exemption. All agents in Siorghal lands were appointed by the owner and were responsible only to him. Thus, in Siorghal which was given both to the army commanders and to the great clergymen, tax or governmental kharaj changed into owner's share and the process of feudalism deepened. On the other hand, the area of state-owned lands rapidly decreased and private owners, i.e. Owners of inherited lands, endowed lands and unconditional lands who enjoyed tax exemptions changed into major landowners who gradually formed their own specific feudalistic army, offices and special agents. The power and independence of Siorghal owner was such that actually the division of lands and assignment of tax exemption was done only under the name of the king and the central government and in fact the king had no way but to act as desired by the feudals.(109)

In spite of extensive destruction of economic structures of Iran following the fall of Samanid and Buyid governments and the consecutive raids of the eastern nomadic neighbors, the domestic and foreign trade sustained less damages. In fact, the trade boom during the local Iranian governments and the consequent development of financial and banking affairs were based on the same foundations which led to the expansion of exchanges in Elamite government and Median to Sassanid empires a few millenniums ago. And that was the special position of Iran on the commercial route between east and west and its extensive relationship with the civilizations of the time. The merchants very soon began to cooperate with the new rulers and after
the Arab invasion of Iran became the first group who accepted to reconcile with the violent rule of Omavid Caliphs and converted into Islam soon. To the businessmen, one of the major issues was guarding the business roads and security of routes for transport of merchandise and this was possible even under the violent rule of nomadic Omavid, Ghaznavid, Chingizid and Timurid. However, the violent dictatorship endangered the individual safety and security of the businessmen and the required security for concentration of capital and free movement of merchandise and money was not provided. These requirements were available in Europe more and the feudals did not live in the cities and were not that influential as in Iran. Therefore, the conditions were apt for the development of economic structures, growth of productive forces, science and technology, business and crafts, concentration of capital and the transcendence of commercial capital to the industrial capital, development of manufactures, increase of trade between cities and villages. As for the crafts, there existed a disordered status the same as in agriculture. Development of industry and crafts in the 3rd phase of Iranian civilization passed through the same difficult road that the Iranian agriculture did. The booming period of craftsmanship in Iran declines upon the wave of raids by eastern nomads and the fall of Iranian local governments. As a result of the destruction of cities, consecutive manslaughters, high taxes and duties, human and economic insecurity- in spite of some small hopes during the Ilkhans- is doomed to the same catastrophic destiny of the Iranian agriculture and consequently, as we see in the future of Iranian history, is unable to transcend into industrial generative capital.

The craftsmanship and banking affairs reached their climax during the reign of local Iranian governments. The development of these affairs was, on the one hand, based on the former achievements of Iranians especially during the Sassanid when large manufacturing workshops employing up to 1000 workers were active numerous in large lucrative cities. On the other hand, they relied on the expansion of modern international facilities as a result of which more extensive transactions were launched with China, Rome, Greece and other civilizations of the world. Under these facilities, the gilded fabrics were produced in large quantities during the 10th Century AD in Neishabour, Isfahan, Shooshtar and other cities, silk fabrics in Shiraz, Rey, Isfahan, Fasa and many other cities in Khuzestan, Fars and Khorasan for export. The cotton of Fars cities was famous. The production of large bales from Kazeroon and cotton clothes, textile
industries, copper, brass, silver and gold goods, manufacture of arms, mine extraction, development of ports and trade witnessed an unprecedented development and growth. Due to the large amount of commercial transactions, the businessmen were inclined to form company and cooperate on financial matters. The business grew so that, if during the Sassanid there were few Iranian sailors, at the time of Samanid and Buyid governments, nearly all sailors and traders in the Persian Gulf were Iranian who navigated the sea to the Mediterranean Sea, Arabia, India and China ports and who controlled the commercial market of the Persian Gulf. To these areas, Iran exported grains, cotton, oil, cotton, sesame, plant paints, raisin, date, different types of fruits, wine, honey, sugar, raw silk, perfumes, drugs, camel and horse. The Iranian businessmen were very rich and the capital of some of them equaled the 1.5 year tax of Fars Province. In addition to industrial products, one of the main fields of business was trading slaves who were mainly brought from Eastern Europe, Turkish plains, India and especially Africa. The Iranian cities which had expanded much since the time of Medes until the Sassanids and in which the separation of agriculture from crafts had started since the Elamite time but was slowly progressing, became the growth field for lucrative feudal cities of 9th and 10th Century Iran. The transformation process of Iranian cities in this time was apparently so that the old part of the city which was home to Iranian landowners and the rich Arabs was first moved to the trading and industrial part of the city on the suburbs and gradually ended in the destruction of the old part. The Iranian cities at this time, were larger and more populated than their Western counterparts. The social organization of craftsmanship in Iranian cities is apparently different from that of the European cities. The guilds did not have the old Western organizations and the variety of professions in some fields was more. On the other hand, the development of monetary and commercial relations in Iranian cities was more as compared with the Western feudal cities at least in the initial and intermediate stages.

Following the consecutive raids and immigration of the nomadic Central Asian tribes to Iran since the Ghaznavid in 999 to the Safavid in 1500, in a period of about 500 years, the role of nomadic elements in the Iranian economy increases and the agricultural economy sustains much loss due to the expansion of graze fields, destruction of farmlands and damage of irrigation systems. The researchers hold different views on the expansion of nomadism in Iran. For example,
some see it the outcome of dominance of nomads over the Iranian government and some other believe it to be the reflection of poverty caused by water shortage in Iran as a result of which the masses of people had to move from one place to another in search of the natural resources they needed. (113) Although the Writer sees the role of natural factors and water shortage effective in the durability of nomadic population in Iran, he believes the determining factor in the revival of this socio-economic way of life in the Iranian Plateau originates mainly from the longtime domination of neighboring nomads over Iran.

The same process shows itself more violently and extensively in the life of feudal cities as well with the presence of new feudal landowners who, this time, were mainly comprised of Mongols and Turks. The evident result is that the process of separation of agriculture from business and craftsmanship becomes slower and the road is paved for the economic collapse and backwardness of Iran as compared with European feudalistic countries. The other outcome of the repeated invasions and destructions which sometimes entailed complete ruin of major business and industrial urban centers is the slower growth of productive forces and limited expansion of the capabilities of craftsmanship, industry and trade. Furthermore, in parts of this 500-year historical juncture, other factors also play a role in the vast territory of Iran as a result of the insecurities and destructions. Destruction of many villages party to trade with the urban businessmen and peddlers, the heavy weight of the closed and autonomous nomadic economy, expansion of feudal system of land assignment or Aghtae and Syorghal which resulted in the reduced role of domestic trade and damaged process of capital accumulation in the economy of country intensified this trend of inclination toward natural economy in the society. (114)

Although both areas of crafts and trade sustained serious damages during the nomadic governments as compared with the beginning of the third phase of Iranian civilization under Iranian local governments, the expanse and the depth of its effect were different. As, during the reign of Arab Caliphs the businessmen soon reconciled with the Arab invaders based on the nature and requirements of their economic needs, the businessmen and especially the big ones shook hands of friendship with the Mongols very soon and by giving them a share in the business profits received some tax exemptions. By expanding slavery during the Mongol reign, they not only participated in slave
trade but used to get their food and means of transport from the people when traveling, the same as the Mongol rulers, and indulged in loaning the unable and insolvent villagers and practicing usury. (115) However, due to ruin of villages and destruction of agricultural lands and irrigation systems, the domestic markets borne sever damages and the cities were deprived of the natural market of suburb and surrounding areas. Reduced income of government from agricultural lands led to heavier pressure on craftsmen and businessmen and consequently, during the Mongol reign, the main revenues of the state treasury were from the taxes received from cities. In this period, for the first time, a tax called "Tamgha" was received from all industrial, business and retail workshops. These high taxes placed devastating effects on crafts and trade. On the other hand, another tax called "Tarh", made the businessmen and craftsmen buy the goods received from the farmers by the government as Kharaj four or five times more expensive than their market price. Also custom duties or Baj was approved for transport of merchandise and the huge burden thereof was imposed on the businessmen and craftsmen. The conditions of the craftsmen who were taken to work in the government factories manufacturing ammunition, clothes and equipment of the army were even worse. The government factories established in Iran in 1320 AD, were government property and their personnel were slaves for generations. (116)

In short, it can be said that during the 500-year reign of eastern nomads in Iran, not only the most important productive force, i.e. agriculture was greatly damaged but the crafts closed its fall and although business was less harmed because of reconciliation between businessmen and victorious nomads and although it even experienced a relative boom in some historical periods due to the safety and security of caravan roads and interruption in military clashes and extending transactions to faraway countries, the numerous injustices and insecurities caused by the new feudals prevented the accumulation of wealth by businessmen and a large portion of incomes fell in the hand of government officials who were only thinking of gathering wealth in short time. In the study of the second phase of Iranian civilization, the writer indicated the four characteristics of the economic structure of Iran whose function in transforming the 3rd phase of the Iranian civilization also paved the way for the durability of centralized economic and
political structure of Iran especially to the fall of the local governments of Samanid and Buyid. These four elements, i.e. the difficulty of irrigating agricultural lands and water shortage, repeated raids and immigrations of neighbors accompanied by expansion of militarism, the special position of Iran in foreign trade and guarding the caravan roads, together place the previous effect on the process of transformations. Only the fourth element, i.e. the influence of kings in administration of the Country leads to the weakness of the structure of central government and inability of kings in comparison with the past powerful kings of Iran as a result of the development of feudalistic relationships and extensive conveyance of land in Aghtae and Siorghal methods. During the 500-year period of nomadic governments, two tendencies existed side by side, the first was the tendency toward centralization which was specially supported by the Iranian bureaucrats and the other was the separatist tendencies which reflected the views and interests of feudal landowners. Each of these tendencies was dominant from time to time. For example, during the entire period of Hulakoid government, the fight between these two methods of governance was in process.(117) The decentralization tendency, regardless of some historical junctures, changed into the determining tendency during the 500-year domination of nomads and only after coming to power of the Safavid government and the beginning of the fourth phase of the Iranian civilization, the oriental centralized despotism revived in Iran with another content and survived until today with some of its characteristics.

2.4 The Fourth Phase of Iranian Civilization under the shadow of International Changes

Based on the research conducted by the Writer, the fourth phase of the Iranian civilization started by the establishment of Safavid dynasty, reconstruction of central government in Iran, reduced immigration of neighboring nomadic tribes on the one hand and the cultural intermingling of immigrant Iranians and the development of the inhabitants of this land into one nation and one large commercial and capitalistic market, in spite of all different cultural, economic and ethnic varieties and survived until present, i.e. the government of the Islamic Republic, with the same oriental despotism, this time under the disguise of Velayat-e-Faqih(Sovereignty of the Jurisprudent) for
nearly 600 years. In view of the write, close study of the early economic transformations of this period is of special importance in knowing the future changes of the Country and especially the present conditions of Iran. The important characteristic of this period is the emergence of the capitalistic elements in the economic structure of the society since the Safavid dynasty and its conversion into the dominant structure in social relations after passing through different stages. In this period, as in the former phases of the Iranian economy, the new relationships face the durability of the elements of former relations and within that long time, the capitalism grows side by side feudalism. The change of capitalism into the dominant economic system faces very serious domestic and foreign obstacles, this time in a larger and more complicated scale. Not only the domestic factors, but the international factors as well, had a considerable effect in the process of economic changes in Iran, through the scientific – technological renaissance in Europe and the emergence of powerful industrial poles in the world. The outcome is that the slow but gradual process of separation of Iran from the developed countries of the world which began in 13th century AD continues in spite of a short-term revival of Iranian economy during the Safavid. By the climax of modern system of capitalism in Europe, this short-term economic revival also faces its doomed historical failure. Thus, not only the Iranian kingdom, but the Ottoman Empire and even the Austrian Monarchy who were much closer to the changes in Europe, are left behind in the unbalanced growth process of capitalism. By the fall of Safavid dynasty, Iran, which, until 18th century was regarded one of the developed countries of the world in spite of all its economic structural insufficiencies, can be called a backward country.

Before the coming to power of the Safavid dynasty at the end of the 14th century AD, Iran was not a unified country and different independent local governors ruled the Country. Among these rulers who were of local Iranian feudals and the chiefs of nomadic tribes, especially Turk tribes, Ak-Koyunlu government which ruled over Azerbaijan, Armenia and West Iran and the Timurid government which ruled in Khorasan and somewhat in Qandahar were more powerful than the others.

The Timurid governments were under threat by the Sheibani nomadic Uzbeks in the Central Asia and the Ak-Koyunlu government by the Ottoman Empire on the west. The emergence of the central government of Safavid which grew up from within the territory of Ak-
Koyunlu is correlated with the Ghezelbash movement headed by the Safavid family. The Safavid were especially dependent on the nomadic Turk tribes a large portion of whom immigrated to Azerbaijan and Iran from the Asia Minor escaping from the pressures of the Ottomans. The number of these tribes was seven among whom the two tribes of Shamlu and Rumlu were completely obedient to the Safavid. These nomadic warriors who used to put on an turban with 12 purple lines in the memory of 12 Shiite Imams, were known as Ghezelbash, meaning red-headed in Turkish.(120) By the development of Sufism and dervish sects during the 13th and 14th centuries AD, at the time of Mongol rule in Iran, and as some followers and leaders from Safavid family were among these sects, the spiritual ground for their rule was provided. Simultaneous with the inability of Mongol rulers and the formation of military nucleus of Ghezelbash, the conditions were proper for the formation of a government. The name of this dynasty goes back to the grandfather of Shah Ismail, the first Safavid king. Sheikh Safieddin Ardabili, was one of the famous mystics of his time and a follower of Sheikh Tajeddin Zahed Gilani who even marries his daughter. Among the followers of Sheikh Safi, in addition to low classes of the society, feudal heads such as Khajeh Rashideddin Fazlollah and Khajeh Ghiaseddin Mohammad.(121) According to some researches, Sheikh Safioddin was a Sunni Muslim and believed himself to be of the descendants of Ali, the Fourth Caliph. It seems that when Sheikh Sadreddin, his son, substituted him, he became inclined to Shiite sect in order to attract the masses of people who were in favor of 12-imam Shiism. The Safavid sect who was similar to the Christian chivalry sects during the Crusades (Templar Knights), grew up from a dervish brothers sect into a spiritual warrior group. At the end of the 15th century, the Safavid sheikhs who were changing into a feudal band, misused the beliefs of the rural masses and the poorest social layers of the nomads in Iran and the Asia Minor. Every year, they attacked the non-Muslim countries such as Dagestan, Georgia and Trabzon under the pretext of Jihad (the sacred war) and brought war properties seized during the war to the nomadic warriors. The Safavid Ghezelbash gradually overcame their enemy, Ak- Koyunlu, in the west and in 1503 AD, lead by shah Ismail, the founder of Safavid Dynasty, defeated Sultan Morad Ak- Koyunlu. They also defeated their main enemy in the east, the Sheibani Uzbeks, in 1510 AD in a war near Marv City. The enemy was made to leave Khorasan and parts of the Central Asia and the
Safavid succeeded to form a central government with new specifications and with a tenure of Shiite religion once again after long period of dispersed feudal governments. Their commander, Ismail, imitating the Sassanid kings, called himself "Shahanshah" (the King of Kings) of Iran. Inclination to Shiite sect as the spiritual basis of Safavid feudalistic government can be studied in different approaches. First, in view of the fact that the inclination of kings and feudal class of Iran to religion as a tool for unifying masses and peoples of the empire was deep rooted in the ancient history of Iran since the time of Sassanid which manifested in the increased power of Zoroastrian priests in the government structure especially after support of Christianity by the Roman Empire. This historical tendency entered a new phase by the Arab invasion of Iran and the acceptance of Sunni Islam by the major Iranian landowners and the dissemination of Shiite sect among the lower social classes such as the farmers, craftsmen and poor nomads. By the emergence of local Iranian governments such as the Taherid, the Samanid and Buyid and their nominal support of the Abbasid Caliphs as the representative of high clergy, the religion was used as a tool in a delicate manner. They needed their recognition by the Caliph in order to gain religious credential and acceptance of the masses of farmers, craftsmen and businessmen and they earned this recognition even with the force of their swords. The Buyid government which was formed in the north of Iran and Gilan (where the Safavid sect led by Sheikh Tajeddin Zahed Gilani, teacher of Sheikh Safieddin Ardabili, the grandfather of Shah Ismail Safavid was formed and developed) and had centralization tendencies of the Sassanid, was also inclined to Shiism and some of the rituals of Shiite sect which are still common in Iran, such the Ashura ceremonies, dates back to this time.

In other words, the centralized kingdom of Iranians in most of its historical periods has been connected with inclination to religion, though with some ups and downs. The repeated efforts of Iranians to gain political and economic independence after the fall of the Iranian local governments and long-term domination of the neighboring nomadic tribes could not release itself from this old foundation of the Iranian society.

Secondly, the Safavid Kingdom which was, for the first time in the history of Iran, formed on the basis of religion and whose founder was a cleric family, manifested the wishes and dreams and long-term combats of the Iranian masses which had so far been defeated under
the violent suppression of the aggressive nomads and therefore, enjoyed huge support of the people especially in the first years of the Safavid cause. The first Safavid kings enjoyed a distinguished place in the society and their position was that of a prophet. People called them "Morshed-e- Kamel" (meaning Perfect Leader) and were ready to sacrifice their lives in obeying their commands. It was with the help of these very followers and supporters that the Iranian corps resisted against their powerful neighbors, Ottomans and Uzbeks and became victorious in defense of the Iranian territory several times. This trend and inclination in Iran can, to some degree, be assimilated with the manner of development of Islam in the Arabian Peninsula during the time of Muhammad, the Prophet of Islam and to the time of Omavid Caliphs. Some of the characteristics of the Islamic Revolution of Iran in 1979 AD during which Ayatollah Khomeini was leading the movement and his position was promoted to "Imam" and the "Supreme Leader of the Muslims" and who found a lot of supporters and lovers among the masses of people, reminds us of the support of Shah Ismail Safavid by the lower social classes of Iranian population and elevating his position to the level of the "Perfect Leader". The efforts of Iranians toward attaining independence and exiting the invaders from the Country which was of a huge political and social movement and also of a religious form, had formerly begun with the increased power of the Assassin in Iran but another trend, this time under the flag of Shiism, prevailed among the Iranians after the defeat of the Assassin by the Mongols. The writer approves of the view of V.V. Barthold who believes Shiism in all its forms and shapes acts as an ideological disguise for the rural movements of Iranians. This phenomenon which became the flag of Iranian combats under the disguise of Shiism and Sufism, has some similarities with the movements of Western Europe as well. The same as in Europe and based on the conditions of the time, these movements sometimes took the color of mysticism, sometimes atheism, and sometimes armed rebellion. At last they ended up in fighting against victorious eastern nomads and against their violent aggressions and feudalistic rule. The Shiites in Iran were a powerful force against high taxes, destructions and ruins, insecurities, manslaughters and repeated wars since the beginning of the Mongol attacks and were supported by the rural people and lower layers of city dwellers. By bringing up the issue of Imam Mahdi, the 12th Imam of the Shiite whom they believed a messianic mission and
said he is in disguise and will show up his face someday to eliminate the injustice "the Sunni Sultans" and establish the "rule of justice " on the face of earth, they were anticipating a social revolution within the framework of religion.(124) The support of rulers for the demands of the masses was, however, limited and used to change according to the needs of the rulers. This trend reached a point that the Safavid government who was born of the dervish schools , embarked upon suppression of dervish schools when the bases of their government became stable. They did a lot to eliminate the Dervish schools and achieved some victories as well.(125)

Thirdly, the permanent threats of the powerful neighbors, Ottoman Turkey in the West and Sheibani Government in the East who were both Sunni, affected the religious inclinations of the kings of Iran and their tendency toward Shiism in order to prevent the influence of the foreign enemies over their territory and to stabilize their position in the newly-occupied lands. This factor also made them more inclined to impose Shiism as the formal religion.

It was not unfounded that both the Ottoman Turks prevented the extension of Shiite Sect and killed about 40,000 Shiites in their raids on the Shiites of Anatolia and the Sunni Uzbeks who are of the Mongol origin in the Central Asia, were seriously involved in elimination of Shiism in their territory.(126) The negative outcome of the emergence of the religious government in Iran was the wide prosecution and slaughter of Sunnis and "Galatians". So that in any place where the Safavid regime stabilized themselves, all the other groups "believers of bad religions", were prosecuted, killed and suppressed. Consequently, the powerful Shiite clergy suppressed anybody who thought different during the 200 years of Safavid reign. They eliminated the Iranian culture that has reached its climax of development during the local Iranian governments of Tahirid and Samanid and Buyid and was still inspiringly alive during the hard and violent times of the eastern nomads, with their strict religious views and especially damaged the poetry and philosophy and in general, the cultural life of Iran.

As the fourth factor, the immigration of Turkmen nomads from the Arab Iraq to Iran who later formed the main nucleus of the Safavid Ghezelbash army can be indicated. Their immigration followed the repeated Ottoman raids who believed themselves the substitutes to Abbasid throne and who dreamed of a great Islamic empire under the flag of Sunnism, These immigrants who came to Azerbaijan and Iran
in large numbers and who hated the Ottomans, were inhabitants of Asia Minor where the Shiites had many supporters. The Shiite revolt in the Asia Minor led by a man who called himself "Shahgholi" (slave of Shah Ismail Safavid) which entailed numerous clashes with the Ottoman forces in this land indicates the extensive influence of the Shiites in this region. This revolt which was participated by a large number of Galatians Shiites who had egalitarian inclinations of the lower social strata was not supported by Shah Ismail due to the feudalistic nature of the Safavid Kingdom and their political precautions to avoid expanding challenges with the Ottoman government.(127)

Iran enters a new phase upon formation of the Safavid kingdom and the excessive reliance on the former known traditions of ancient oriental centralism which entailed closer relationship of the government and laws with the religion than in European Christian countries and in which the new social thoughts took a religious tone and, with some changes, came to the service of the governing layers and the ruling groups. The relationship of kings with the religion during the time of extension of Islam in Iran and, inter alia, its radical form during the Safavid dynasty, can be another form of the assumption of "Farrahi Izadi" (Divine Grace) in the concept of Sassanid kinghood and the new version of "Shadow of God on the Earth" in the post-Islamic era.(128) Much efforts begin for the economic reconstruction of the Country based on a combination of these two economic and cultural trends, i.e. the concentration of economic power in hands of the government and emphasis on Shiite religion in order to attain national unity. In spite of some short and long pauses, these efforts continue in various forms until today. However, achieving high levels of economic growth and competing the other developed countries of the world is not possible because of numerous reasons which we will discuss later. The climax of the Safavid dynasty in Iran which lasted nearly 200 years is the 50-year reign of Shah Abbas Safavid. This period not only includes military victories on powerful Ottoman and Uzbek neighbors and reclamation of some of the lost territories, but also manifests a short-time economic revival of Iran. Following the loss of foreign markets, domestic clashes and administrative corruption, the Safavid were dethroned in 1772 following the raids of Afghan khans from the east. Then the Afshar and Zand families rule over Iran one after the other for nearly 50 years until 1776. The reign of Nader Shah which
included many wars led to the formation of a large, but short-lived, feudalist state.(129) Upon fall of the Safavid and the restart of long-term civil wars and devastating raids of foreign enemies and the aggression of nomads toward the settled regions, the advanced irrigation system of Iran which had been reconstructed only for a short period and which is of great importance in the arid Plateau of Iran, once again sustained severe damages. Simultaneously the position of Iran in the foreign trade with its neighbors weakened and the domestic markets also gradually give way to the advanced products of industrial countries. The outcome is a bankrupt economy and a ruined agriculture which bring about stagnation of social and economic development.

In late 18th Century, the Qajar came to power in Iran. The Qajar period can be named the duration of collapse of traditional ancient feudalistic- patriarchic system and the genesis of capitalistic system in Iran. The Qajar era is a black page in the book of history of contemporary Iran, not only economically, but in view of politics, culture and military as well. In spite of all short-time efforts for economic reconstruction during the time of two distinguished viziers, Ghaem Magham and Amir Kabir, the Qajar governments in their nearly 120 years of rule in Iran, can be considered a symbol of the most corrupt and unable governments in the last 500 years. In this period, the Tsarist Russia and England play an important role by obtaining different economic, political and military advantages and the corrupt rulers did virtually anything for the sake if Iranian capital in order to fill their empty treasuries. The outcome of this political and military inability and administrative corruption was on the one hand losing a large portion of Iran markets especially in Caucasus, Persian Gulf and east of Iran and on the other hand, expansion of the great mass movement for attaining independence and reforms for the future development of the Country. Comparing with the Western Europe countries where the industrial capitalism had stabilized its economic dominance and was gradually strengthening itself, Iran was in this time an Asian medieval agricultural country with oriental despotism and in process of decay and destruction.(130) Although in this period, Iran was seriously under the political and economic influence of England and Russia, the strong adherence of the Iranians to their independence and their vast participation in their fight especially with the English forces showed that a scenario like that of India cannot be performed in Iran.(131)
The great popular movement in Iran which brought along the waves of the Constitutionalism Revolution, destroyed the broken foundations of the Qajar dynasty and seriously damaged the traditional oriental despotism. This greatest historical event of the recent 500 years in Iran, in spite of all its future achievements and failures, can be considered the most important basis of the endeavor of Iranians to build a bourgoie democracy in Iran. Following the defeat of the bourgeois- democratic revolution of the Constitutionalism, the Pahlevid dynasty was founded by Reza Shah after a short period of domestic clashes. The Pahlevid reign lasted until the fall of Reza Shah's son, Mohammad Reza Shah in 1979. The Pahlevid era is the stage of dominance of capitalistic relations and the destruction of the last remnants of the decayed feudalistic system in Iran. By Reza Shah reforms, the second period of economic reconstruction of Iran after the reconstructions by distinguished viziers of Nasereddin Shah Qajar began especially on the basis of military requirements. Following a 15-year interruption after dismissal of Reza Shah by the Allied Forces in the World War II and its consequent political challenges, the second period of economic reconstruction of Iran continued under direct supervision of his son, Mohammad Reza Shah, by agrarian reforms and destruction of feudalistic relations. This economic renovation which was achieved based on rapid increase in oil revenues, enjoyed more depth and expansion than the two former reconstruction periods. The disordered economic and political development of Iran and the emergence of financial crisis side by side the unbalanced rhythm of cultural transformations under the unchallenged dictatorship of Mohammad Reza Pahlevid which was based on only one self-made party and still embodied the elements of oriental despotism, paved the way for the Revolution of 1979 led by traditionalist Islamic clergy and for the first time in the history of Iran, the monarchy fell after about 3000 years and the first Iranian republic was announced. The first period of rule of the clerics in Iran coincided with the beginning of war imposed by the southwestern neighbor, Iraq. The war and its continuation after freedom of the occupied lands by forwarding ambitious and unreal slogans imposed unprecedented damages to the economy of Iran. In addition to the large number of people killed and handicapped, the huge loss of the industries and commerce was unique in the past 500-year history of Iran. The first term of presidency of Rafsanjani following the end of war was devoted to the reconstruction of extensive ruins of war. Only after
offsetting parts of these ruins and upon presidency of Khatami, did Iran gradually enter into the path of economic reconstruction. These changes are mainly based on the pre-Revolution economy with some new economic and political reforms within the framework of traditional oriental despotism and this time, the religious dictatorship under flag of the Velayat-e-Faqih (Sovereignty of the Jurisprudent). In the economic study of contemporary Iran, the writer has mainly focused on the last two periods, i.e. the reconstruction period following the agrarian reforms in Mohammad Reza Shah's time and especially the economic changes after the Islamic Republic. For a more precise study of these two periods, we analyze the economic changes in the Iranian market from the beginning of capitalism and especially the role of universal factors in these changes and in the fourth phase of Iranian civilization.

Iran experienced major changes as a result of the expanded activities of East Indies Companies and the British rule over India and its extension of colonial activities and also presence of the Russian Empire in the region. The development of modern economic relations, brought out the traditional society from its Asian medieval isolation and made it face the storm of the world history. In spite of the unequal political and economic relations between Iran and the European capitalistic countries, Iran did not become a fully colonized state, however, due to expansive interference of English, Russian and Dutch companies, it changed into a semi-colonized country. The history of this land has been seriously facing economic and political interventions of England and Russia since the beginning of Qajar dynasty. The control of Iranian market has, however, started since centuries ago. For example, in 16th Century AD, the relations of Iran and European countries developed as a result of which the Portuguese colonialists flooded Iran. Finally, military clashes between Iran and Portugal started which led to the casting out of Portuguese from Strait of Hormuz in the Persian Gulf during the late years of sultanate of Shah Abbas Safavid. During the reign of Shah Sultan Hossein Safavid, the French imposed a shameful business contract on Iran which secured consular rights (Capitulation) for the nationals of France. At the time of Nader Shah Afshar and following the attack of Tsar Peter on Dagestan and Derbent, unjust contracts were signed with Russia, In early second half of the 18th Century, during the Zandieh government, a business contract with England was concluded assigning numerous privileges and facilities to the British.
reduced influence of Iranians on the international trade was linked with the expansion of commercial influence of the Europeans in the region. For example in 1682 AD, the expansive influence of the Iranians who had near 100 merchants in Siam ended upon intrigue by the French Company of East Indies and with the help of French Embassy in Siam, the Luis Court employed French engineers and citizens in the army instead of Iranians. When the Dutch and the British got strong in the region, the Iranians were eliminated from the trade scene. Attacking Iranian ships which led to the complaint of merchants to the Safavid court started since late 17th Century and had unpleasant effects on the foreign trade of Iran.(134) In the 19th Century, the unjust contracts imposed on Iran by the Tsarist Russia and European governments, opened the gates of Iran to foreign capitals and products and Iran changed into the sale market of their industrial productions. The turning point of the economic influence in Iran is the conclusion of unfair treaties of Golestan 1813 and Turkmanchay 1828 at the time of Fathali Shah Qajar with the Tsarist Russia following the military defeats of Iran in Central Asia and Caucasus and also the Paris Treaty in 1857 with England to obtain South Iran. The unable Qajar monarchy abandoned Georgia, Armenia, Afghanistan and the Caspian Sea Fleet in order to stabilize the central power and have its government recognized in the international level and instead, restituted Tabriz and South Iran and assigned a series of commercial capitulation to Russia and England. These treaties provided for the expansion of economic influence of the foreigners in Iran. Consequently, the imports of Iran reached from 2 million pounds in 1830 to 5 million pounds in 1900 and the exports of Iran increased from 2 million to 3.8 million pounds. Thus, Iran stepped toward merge in the European network of international commerce.(135)

The old texture of industries and inability to compete foreign products, destroyed many of the handicrafts and manufactures and the small primary factories which were created in mid-19th century. After defeat of Iran in war with England in 1856 – 1896, Iran changed into a semi-colony for England and Russia. The conversion of Iran into a semi-colonized state was evidenced by granting numerous privileges such as contracts of telegraph, roads, shipping, transport, banks, tobacco, oil operation, fishery and so on. Thus, on the one hand, Iran changed into importer of foreign goods and on the other hand, supplier of raw agricultural materials for capitalist countries. Politically speaking, the
national independence was damaged and the King, the government, governors and many of Feudal khans changed into puppets in hands of colonial powers. (136) By the import of foreign goods such as watches, knives, mahout,, matches, tea, chinaware and so on and by the emergence of Russian agencies in the northern cities of Iran and also the southern cities and Tehran, a new caste of business bourgeoisie appeared in Iran that was of a broker nature. This class was to become one of the economic foundations of the colonial politics in the future of Iran. This even was an important change in the internal classification of the national bourgeoisie. At the same time, Iranian export goods such as cotton, rice, silk, dried fruits, skins, fish, caviar, medicinal herbs, carpet and fabrics like Kerman shawl, gilded fabrics, velvet of Kashan and Ghalamkar cloth of Isfahan and so on had a large market especially in Russia. (137) Side by side the development of bourgeoisie in late 19th and early 20th centuries, the industrial working class in the modern sense of the word appeared in Iran and developed with some ups and downs. In spite of the gradual and slow development of the working class, this new class was unable to organize its guild unions seriously due to the absolute monarchy and the governing oriental despotism. Even the labor law to provide the legal rights of the laborers was brought about for the first time during the Constitutionalism Revolution and in process of anti-dictatorship combats only in the form of official limitation of daily work. (138) The influence of colonial powers played a dual role in Iran. On the one hand, it accelerated the decay and fall of the traditional feudalistic relationships and on the other hand, helped development of the relations of modern capitalistic society. The growth of capitalistic relations, but, had a disordered and unhealthy process by economic and political dominance of foreign colonialists. The disorder in growth of capitalism also goes back to the process of change in the feudal system and especially change in the role of major landowners in the structure of the government as well.

During the dominance of eastern nomads over Iran, assigning agricultural lands based on feudal Siourghal method with extensive political, economic and even judicial authorities against military service to the central government provided for the weakening of central government and the monarchy system. In order to strengthen the monarchy, the Safavid kings increased the area of state-owned lands to the prejudice of Siorghals and prevented assigning new Siorghals with extensive rights. During this period, the state lands and
king's lands and especially lands conveyed to the tribes considerably increased and the area of Siorghal lands reduced. The Safavid kings preferred to reward the servants and the officials by salary or a gift called Tyul. Since the 16th century when the Tyuldari became common, the services of the officials and dependents of the government were rewarded by this gift which included all or part of the feudalistic share. Contrary to Siorghal, Tyul could not be inherited and the owner did not get administrative immunity. Tyul which was assigned to the dependents of the governing system from the state-owned lands was somewhat similar to Aghtae or temporary assignment of land which was common during the Abbasid caliphs. The lands granted to the nomad tribes was in the form of gift and was mostly called Yurt and was specially granted to the army officials and commanders. Although these lands were given to the tribe but were actually at hands of the tribal chiefs especially the Ghezelbash tribes who formed the military nucleus of the Safavid dynasty at its early days. However, they were not authorized to sell or own these rangelands. The nomads especially formed the nucleus of the feudal armies and were better off than the rural farmers who were under heavy pressure of paying owner's share, saved for the time of Shah Esmail who decreased the owner's share only for a little while, and used to pay feudal share in the state-owned lands mainly in kind (grains, rice, silk).(139) The trend of assigning power by kings to the government officials and reducing the influence of the nomadic tribes which had begun by the Safavid, expanded during the Nader Shah government as well. Following the financial hardships for managing the corps and filling the empty treasury to administer their non-nomad army who were under direct control by the king, used the same method already used by their preceding kings. Thus, a central regular army and local guerilla forces were organized and received Tyul from the monarchic lands for their salary. The only change occurred was that the Tyuls could also be inherited the same as the Aghtae and Tyul was to be inherited by the male children unless they avoid staying in the army.(140)

After coming to power, Nader Shah forwarded the centralization policy of the central government still further and stopped assigning Tyul to the army commanders. Karim Khan Zand also continued this policy and pursued the policy of settling the nomad tribes by kindness and benevolence and with the help of the government officials. He
tried to encourage his local officers to farming and rendering services.\(^{(141)}\)

The said financial hardships and heavy pressures of governmental taxes caused a number of revolts at the beginning of the Safavid dynasty. These revolts especially attacked the Ghezelbash chiefs and the Shiite clergy whose endowed lands had considerably expanded. The result was a serious economic crisis deepened by the defeats of Iranian against the Uzbeks in the east and in the war with Ottoman government in the west. However, some reforms harnessed the economic crisis for a short time and reduced the destruction speed of the feudal society. The climax of the economic boom of Iran after the fall of the local Iranian governments of Tahirid and Samanid and Buyid appeared in the time of Shah Abbas, the First. By the victory of the centralization policy of the central government and the control of the nomadic tribes and extension of the influence of settlers in the political and economic life, the economic situation entered into a new phase. The Shah Abbas government that relied on the government officials especially the Iranians, imposed changes in the army system which had huge economic consequences. Before the Shah Abbas reforms, the Safavid monarchy had about 200,000 Ghezelbash corps from which about 60,000 were usually called to military service. Upon reconstruction of the army and equipping it with modern military techniques and equipment, the number of corps reached about 120,000 from which 44,000 were regular experienced army staff and 75,000 feudal corps. The new change in the army system reduced the influence of the nomad tribes in economic areas as well and decreased the financial and political influence of the heads of Ghezelbash nomads and other tribes.\(^{(142)}\) It should be considered that the trend of pushing Iranians out of the most important government body, i.e. the military command, started from the time of Samanid and Buyid by employing eastern warrior nomads mostly composed of Turk and Turkmen slaves and continued during the Mongol invasion until the coming to throne of the Safavid kings. The dominance of the eastern nomads on the military apparatus led to their influence on the political bodies and consequently their long-term domination over the economic life of Iran and destruction of its fundamental economic structures especially agriculture and irrigation system.

The step by step regain of control by Iranians over army and eliminating the nomadic elements from this powerful ruling tool and also the immigration abroad of part of the Turkmen nomads from east
Iran and especially Khorasan, side by side the process of merging nomads with settlers and especially the process of bourgeoisie growth and the need for coordinating national markets and development of urbanization, once again after centuries, provided the ground for the dominance of civilization and culture of the settlers which was especially of Iranian nature. It seems that in spite of his short but powerful rule, Nader Shah has pursued the policy of settling the nomads, in his own violent style, more than any other king during the past 500 years until the rule of Pahlevi family. The aim of nadir the same as the other rulers in contemporary Iran was to prevent the revolt of nomads and local feudals. In 1730 AD, Nader made 50 to 60 thousands families from Azerbaijan, West Iran and Fars tribes to Khorasan and brought nearly 60,000 of Abdalian from Herat to Mashhad and Neishabour. In the same year, he removed 3,000 families from Haftlang Bakhtiar tribes and made them immigrate to Khorasan and after suppressing some of Cheharlang tribes, once again sent near 10,000 families of Bakhtiari tribes to Khorasan. Following the same policy, he made 6,000 Georgian families immigrate to Khorasan.(143) Nader's policy was continued by Karim Khan Zand as well. It was only after the Qajar took power and after Agha Mohammad Khan, the founder of this dynasty, that his successors revived the old policy of conveying land to the corps instead of salary and the nomadic culture also developed a little. The coming Qajar kings revived some of the customs and rituals of Seljuk government such as assigning provinces to the members of the royal family, which had become nearly obsolete during the Safavid. Conveying Tyules to the army commanders who supplied soldiers to the central government when necessary, once again added to the influence and the political and economic presence of the tribes. However, as some disturbances occurred, the Qajar government also displaced the tribes and sometimes even kept prisoners to guarantee their obedience.(144) Qajar monarchy can be assessed as a symbol of a relatively non-centralized government emphasizing on tribal administration method in which the khans were the representatives of tribal powers and the rulers were from the royal family. As the taxes did not reach the royal system desirably, the financial hardships were increasing and assigning concessions to foreigners was in the agenda. In this period of time, practically no army existed and the responsibility of safeguarding borders was assigned to the tribes.(145) The influence of trial and nomadic elements during Reza Shah time lessens by violently
forcing them to settle and by their extensive suppression with the use of regular, experienced and modern army. This policy continued during the reign of the 2nd Pahlevid king in a delicate manner through agrarian reforms and led to the point that the population of nomads and their tribes which was always estimated 1/3rd to 2/3rd of the entire population of the Country after immigration of Arab, Turk, Turkmen, Tatar and Mongol nomadic tribes to the Iranian plateau following the fall of Sassanid dynasty and as a result of the slaughter and forcing out of the farmers, destruction of villages and cities and the increase of rangelands in prejudice of farmlands, reduced to only 2 to 3 percent of the population after the new changes.(146)

During the Safavid reign over Iran, the outcome of these changes in the military structure, beside the changes in land ownership, was a more centralized government accompanied by extraordinary increase of the area of agriculture lands and private properties of the king. The decrease of economic, political and military influence of the nomadic tribes and assigning woks to the Iranian bureaucrats and government officials based on the ancient centralized bureaucratic traditions left from the past monarchies especially the Sassanid Empire, is one of the major factors of short-time blossoming of Iranian economy in this historical juncture. The same as the Sassanid era, this bureaucracy had a religious aspect but this time, much stronger and more radical. During the Safavid dynasty which was based on the religious beliefs-Shiite sect as the political and cultural surface of the feudalistic social system, not only the area of state-owned and private royal lands increased, but the lands owned by the religious institutions or endowments also increased more and consequently added to the economic and political influence of the Shiite clergy.

During the past 500 years, the Shiite clergy has played a special role in three historical junctures of Safavid dynasty, Constitutionalism Revolution and the Islamic Republic. In order to analyze the roots of this change, in addition to the motives mentioned before, we study the structure of landowning system in Iran as relates to the endowed lands and its historical ups and downs following the dominance of eastern nomads over Iran, because it has a special position in the changes of the economic and political future of Iran. During the Seljuk era, the government officials and the wealthy renowned people established special endowments for administration of mosques and schools. According to the current available data, it can not be said what area of the endowed lands were of private state-owned lands. It seems that
transfer of lands into endowed properties was intended to protect them from the foreign raids. After invasion of Iran by the Mongols, the new rulers avoided appropriation of endowed lands. The Endowment Division existed since the first government of Ilkhans in Iran and in a special historical juncture was administered by Nasireddin Tousi. It seems that the endowments and charity foundations were exempt from paying tax and duties or were under less pressure for taxes. The tax received from farming lands was allocated to the mosques. Freedom from tax payment or tax exemptions should have been one of the reasons for expansion of endowed lands and extension of the influence of the clergy in the process of agricultural production and their participation in feudalistic usurpation. The second motive for this expansion of economic influence of the clergy can be lack of security in private land ownership under the violent rule of the nomads. By converting their lands into endowed land, the owners probably hoped to protect them from confiscation. Thirdly, the conveyance of endowed lands, brought the concerned land out of control of the central government and allowed their independent operation as a small economic unit. Consequently, not only the owners and clerics obtained more freedom of action and increased their influence and their advocates, the control power of the central government also decreased and thus, by this transformation and conveyance of ownership for a clever economic objective, a political goal was also pursued. During the Timurid governments, the revenues of endowments such as mosques, schools and dervish houses reduced considerably especially in Herat and the Central Asia where there were plenty of endowed properties. When Safavid came to power, the endowed lands expanded again. This time, the kings, especially Shah Tahmasb and Shah Abbas I and II and Shah Sultan Hossein created a lot of endowments. In spite of the endeavors by Nader Shah to reclaim, a lot of these endowments remained intact. The income of Astan Quds during the reign of Shah Sultan Hossein was 15000 Khorasani Tumans and in 1822 between 2000 to 2500 Tumans which decreased due to some economic and political changes and reached near 60,000 Tumans and 10,000 Kharvars (unit of weight about 300 kg.) of grains seventy years later.(147)

Most of the researches consider Safavid monarchy as the religious dictatorship in all corners of the society which was based on the individual dictatorship, oriental despotism and religious outlook to stabilize the position of the king. Based on these provisions, as stated
by Nezamolmolk, the king was the absolute owner of the entire lands. Although this view was not practically accepted by all unconditionally, it can be said that the private properties of the king expanded considerably and he appropriated a lot of lands. This trend is seen in the time of Shah Abbas, the most powerful Safavid king, as well. In order for him to be able to use his private lands and to be reprimanded less that he has appropriated those lands from illegitimate ways, Shah Abbas started to endow his lands. It is believed that endowing land during Shah Abbas reign has been more than in any other period. In addition to the kings, the feudals also showed inclinations for endowing lands with the same inner reasons as pre-Safavid era.

By endowing lands, the endowers reduced the risk of confiscation by the government, kings, the royal family and the government officials on the one hand and enjoyed tax exemptions on the other. Furthermore, the properties obtained in Illegitimate, used to become immune from any claim by their previous owners after one year from date of appropriation. Administration of endowed lands which were of various forms, was very profitable and in the hands of a very small number of individuals who gained lots of properties. During the reign of Shah Abbas II, some changes occurred in the administration of these endowments and their re-distribution among some others. This situation led to a redistribution of the gathered assets. It seems that the endowed lands were mostly leased out and were operated mainly by Mozarea instead of Moghatea. Another part of lands, i.e. the Siorghals which entailed more authorities for the owners, were also within the influence area of the clergy. Siorghal which was the same inherited Tyul, was assigned to well known cleric families, generation after generation. The Siorghals also benefited some tax exemptions and some did not pay any taxes at all. In provinces, a special auditor was in charge of administration of endowments and all ministers, officers, administrators and operators were supposed to give their computations to the endowments office and the special auditor was responsible to audit the accounts of farmers and lessees and to administer their affairs. (148) By the fall of the Safavid dynasty and the beginning of Nader Shah's reign, the foundations of the endowment system and the Shiite clergy sustained serious damages. Nader, who had expanded his territory too much, made the acceptance of throne conditional on substitution of Sunni set for Shiite sect as the formal religion of the Country, in order to create unity and homogeneity
among the different nations under his rule and after invasion of lands lost during the Safavid dynasty who were mainly of Sunni population. The change of formal religion and the substitution of Sunni for Shiite religion which was the formal religion of the Safavid kings pursued some other goals against the rich clergy as well and its economic consequences for the endowed lands were very deep. The effects of the economic changes of Nader Shah in the endowed lands remained even after the fall of his short-term monarchy. He started to take back the endowed lands that had expanded much during the Safavid time and entered these lands in the lands registration books in the last year of his government upon a command attaching them to the state-owned lands. These registration books were later called "Roghabat-e- Naderi" (The Nader Title Deeds). Actually Nader confiscated a large portion of endowments. During his time, a lot of endowments were taken back and the tensions between central government and the endowment owners intensified. Some of the influential figures avoided to submit the endowed lands to the government. The others avoided showing their endowment deeds on the fear of losing their lands and this provided the opportunity to some others to register such lands in their own name. The outcome was that the real owners became anonymous. Nader Shah, who faced the enmity of the Shiite clergy, was killed before he could implement his plan, however the outcome of these changes and the command was the appropriation of a lot of endowed lands by the central government or conversion of the same into private properties until the Qajar came to power. Therefore, the income of Astan Quds in Mashhad which is the most important religious and pilgrimage center in Iran reduced from 15,000 Tumans of Khorasan to 2000 -2500 Tumans since the end of the Safavid government to the early Qajar dynasty.(149) During the Qajar period, the reducing trend of the endowments continued and the area of royal lands increased. However, the changes in the endowed lands were not as extensive as the changes in the royal lands. But the trend which began by the reign of Nader continued especially during later years of Qajar dynasty and the process of changing these lands into private lands was common.(150) On the other hand, the same practice of the past which was a reflection of insecurity of ownership in the society, i.e. conveying lands to some clerics for evading tax payment continued side by side. During the Qajar, the inability to manage the country and the emptiness of the state treasury following foreign defeats and losing domestic and international trade, not only
led to the conveyance of different concessions to foreign countries, but also the government started to sell the state lands in order to finance its expenses and remove the financial requirements of the big and corrupt system of the court and its surrounding. In this procedure, the Qajar kings even seized some endowed lands and the enmity of the Shiite clergy with the Qajar court also returned to this policy. In addition to the government's need to money earned by the sale of these lands, the problem of the government was related to the inability of the bureaucratic system in profitable administration of state lands and increasing destruction of them. In order to overcome the financial hardships, even after about 100 years from the registration date of Nader Shah estates, the Qajar kings brought out the soiled title deeds of "Roghbat-e-Naderi" to sell more lands and to add to help their disordered government survive. As a result of this financial disorder which made the land market and its misuse a lucrative business, the registration of state-owned and endowed lands became a real mess, e.g. in Isfahan. After the Constitution Revolution, the temporary governments tried to take hold of the endowments affairs, the same as the past. A short time after approval of the constitution, the endowments department was established within the Ministry of Culture and took charge of the administration of the endowed lands but did not yield considerable results. When the Pahlevid came to power, more lands were seized from the endowments and it was tried to put the administration of the lands under supervision of central government. However, the government control was more superficial and these lands were still administered in a semi-independent medieval manner. The only new trend which can be seen during the Reza Shah reign is that, contrary to the past, the landowners did not endow lands or if they did, it was very limited. This might have been due to more security during his 20-year reign- in spite of his seizure of properties of some of the big landowners and the rich- as compared with the corrupt Qajar family. During the second Pahlevid king, the feudal system sustained severe damages by the introduction of the agrarian reforms and, as we will consider more extensively in the future, the capitalistic relations finally dominated the remnants of landlord-peasant relations. This change included the endowed lands as well and this was one of the motives which made the Shiite clergy an enemy of Mohammad Reza Shah and his modernization policy. Upon coming to power of the Islamic Republic and the seizure of political power by the clergy, extensive conveyance
of ownerships, displacement of authorities and government officials in all economic fields, which was unprecedented in the 500-year history of Iran in view of size and number, the economic influence of the clergy not only in endowments but in all other economic areas widened and deepened extraordinarily. The two periods of Muhammad Reza Shah and the Islamic Republic have been studied in more detail in the coming chapters. From what mentioned as sample, one can understand the importance and role of the clergy, especially the high ranking clergy of Iran, in the feudalistic relations and their extensive participation in earning money from the lower social castes and consequently their partnership in business and the domestic market of Iran. What was firstly called the traditional bond of feudalism with the clergy and which is known and emphasized by many researchers as the deep-rooted connection between the bazaar and the clergy in the contemporary history of Iran, is one of the economic specifications of Iran. This close relationship has drawn a special oriental and Iranian figure on the tableau of political, social, cultural and economic events of Iran.

During the Qajar era, the poor administration and disordered financial affairs, drew the country into a deep crisis. In early 20th century, the government budget had an annual deficit of 3 million Tumans and the income per capita was 7 to 8 million Tumans. The provincial governors used to allocate a large portion of the received taxes to themselves and the government moneys were mainly spent on the royal court, governors and the army. The annuities paid from the government budget to the close relatives of Shah was about 4 million Tumans, i.e. half of the government income. (154) The budget deficit was provided through foreign bonds and thus the country went into greater dependence day by day.

In Qajar dynasty, the king and the court on the one hand and the powerful Shiite clergy on the other, were the two pillars of power in the society. Contrary to the Sunni Muftis who held a humbler view toward the rulers, considered the king as a robber of throne. The economic reasons behind such a view were shown by the present writer to some degree. In view of the Shiite clergy, the true ruler was Imam and in his absence the religious leader. Historically speaking, the violent suppression of the advocates of Shiite clergy had caused a feeling of hatred toward the rulers in the hearts of the clergy. Since the Safavid era, the flag of Shiism rose in Iran and this sect changed into the formal religion of Iranians. In spite of the efforts of some kings for
dissemination of Shiite religion in Iran, the suspicion of the clergy toward the rulers remained and was never eradicated. The clergy not only controlled the administration of the religious affairs, but also the judicial and education as well. They even believed in special rights for the mosques and even for their homes. In the course of events in 19th Century and early 20th Century, the Shiite clergy played a paradoxical role in the changes of Iran in threshold of entering the capitalistic relations. On the one hand, they tended toward people with the tradition of religious resistance and on the other hand opposed the modernization in the society and supported dictatorship. A group of rich clergy was involved in economic affairs of the properties in their possession and supported the existing status. Another group of high ranking clerics accompanied the revolution to some degree on the assumption that they will make constitutionalism a tool for substituting the clergy for the Qajar king. Therefore, they supported constitutionalism conditionally. A large group of the middle and small clergymen, joined the opposition actively and created a group of intellectuals and placed a distinguished role in the culture and politics of this time.(155) The resistance of a group of clergy against the development of modern relationships in the society and their inclination toward traditionalism which was sometimes faced the support of people as well, has some similarities with the process of changes in some capitalistic countries. In England, the most traditional capitalistic country, the final replacement of modern relations for the old feudalistic system in the first half of the 19th Century faced extensive resistance for preserving the traditional life and its dependent structures.(156) In 19th Century and in the feudal society of Iran, small production and commodity-money relationships in cities and villages existed and, compared with the European feudalism, it can be said that such relations were more expanded since long. The influence of foreign capital, led to the destruction of old relationships. The outcome was the bankruptcy of craftsmen of cities and villages which were unable to compete the European industrial commodities. On the other hand, the composition of Iran's exports such as silk, velvet and gilded cloths gradually gave way to other products needed by European countries such as dried fruits, carpet, cotton, rice and so on. The change of export structure imposed sever damages to self-consuming natural economy of villages. Side by side the feudal aristocrats, new owners from among businessmen, clergy and government officials gradually embarked upon renting and buying
Emergence of new products, change of agricultural products into merchandise, emergence of new class of owners and seizing the real properties of poor peasants and the rangelands of nomads led to the poverty of peasants and their immigration to the cities or outside Iran. (157) Along with the growth of capitalism in Iran, a new class of national bourgeoisie inclined to industrial production also emerged in addition to the broker bourgeoisie. The efforts of this class toward supply of domestic market did not yield any result. The causes of failure can be accounted as intrigue of foreign capital and dependent domestic dictatorship, weakness of capital accumulation, lack of national economic policy and also the opposition of backward clergy who saw any industrial change to the prejudice of their domination. As a result, the traditional activities such as usury, trade, land ownership and paperwork with land and buildings developed. (158)

3. The Economic Renovation Phases of Contemporary Iran

The deep crisis of the traditional system from within, changes in social layers and classes and the storm of global events and interventions of foreign colonial powers, led to serious challenges in political level and consequently economic disorders in different intervals. The Babist movement appeared during the reign of Qajar dynasty in about 1839. Considering the cruel conditions of usurping the farmers, craftsmen and small businesses, Bab and his followers started to fight the foundations of power in Iran with a religious motif and by declaring the appearance of the promised Imam- 12th Imam of the Shiite believed to be absent-. The Babist and Bahai movements who were defeated and ended in the execution of Bab upon fatwa by the religious leaders in Tabriz city, was the last religious reaction with the ideas and thoughts similar to those of Ravandian and Qarmatians in Iran which were organized against the dictatorship and prejudices of the powerful sectarian Shiite clergy. (159) The axis and center of Bahai religion is based on human being and promised a better future to the masses by propagating a kind of egalitarianism and thus attracted the support of the people. (160) The serious suppression of Bahai movement occurred during the Amir kabir reign and in spite of the destruction of this movement, the advocates of Bahaism were active for some time thereafter and organized some riots. (161) In spite of the serious presence of religious tendencies in the society, signs of reduced power of the clergy in the political and economic life of Iran
since the time of Nasereddin Shah and in the process of modernization of the Country were expanding. In an effort toward economic reconstruction of the society, signs can be found before Nasereddin Shah and during the reign of Fathali Shah and Mohammad Shah, but the considerable transformation can be observed since the time of Nasereddin Shah onwards. Modernization of Iran was on the one hand in contradiction with the interests of the clergy and on the other hand was not conforming to the trial structure of the Qajar dynasty and therefore faced serious obstacles.\(^{162}\)

3.1 The First Phase of Economic Reconstruction in Iran

The Babist movement which was a popular movement of objection under the non-Shiite religious flag, although defeated, imposed some changes on the society and led to reforms by the governing system through two distinguished viziers, Ghaem Magham and Amir Kabir. These efforts which we called the first economic reconstruction phase in contemporary Iran are very shallow and unstable. As the Qajar monarchy had backward tribal inclinations and was very far from a deep knowledge of the changes in the developed world of the day, such renovations were introduced not by the kings but mainly by those around the royal court and especially by the two said viziers. However, due to the ignorance and corruption of the kings and the royal court, they yielded very little achievements.

3.1.1 Some Specifications of the First Reconstruction Phase

One of the characteristics of the traditional political superstructure of the Iranians has been the special function of the prime minister or the vizier during the powerful Sassanid empire. During the Qajar period, Mirza Abulghasem Farahani is the prime minister of Fathali Shah. He embarked upon modernization of the army organization, preventing the waste of government assets, reducing the influence of the clergy and the Mullahs inside the Country and avoiding the assignment of unequal economic and political privileges in the foreign policy. His policies can be interpreted as a kind of Iranian bourgeois nationalism. As a result of these actions, Ghaem Magham faced continued and direct intrigue by British and Russian ambassadors and political figures, the royal family and the clergy and was finally killed by the court, the British colonialism and the backwardness of the time. In
spite of the foreign and domestic interventions, Amir Kabir, the second cultivated prime minister of the Qajar dynasty, expanded and deepened the primary efforts of Ghaem Magham. Mirza Taghi Khan Farahani known as Amir Kabir, contrary to Ghaem Magham who belonged to the aristocracy, was from an ordinary family. Since 1849 when Nasereddin Shah Qajar came to power, Amir Kabir started his modernization movement in the capacity of the commander of armed forces and the prime minister. He reconstructed permanent army corps, constructed 15 factories to equip the army and to cut imports, launched the first official newspaper of the Country "Vaghaye Etefaghiyeh" and established the first non-religious school of the Country named "Darolfonoon" (meaning polytechnic). He encouraged education of foreign languages, political science, engineering, agriculture, mining, medicine, veterinary medicine, military sciences and music. The costs of these projects were provided by reducing the expenses of the royal court, increasing the import duties and new taxes on Tyul owners. These actions were strongly opposed by the powerful figures inside the ruling class and the representatives of England and Russia.

In 1851, Amir Kabir was dismissed and killed a short while after, but the Iranian economic modernization continued through development of economic relations with the west by attracting foreign investors. Thus, side by side export of goods to Iran, export of capital became a new policy of the European countries. Following this policy, the foreign investment reached from nearly zero to 12 million pounds in second half of the 19th century during the Qajar dynasty.(163)

The efforts of Amir Kabir faced continued intrigues of the Russian and English ambassadors and political figures, the royal family and the clerics and he was finally killed by the monarchy, the British colonialism and the backward clergy. In the enmity of Russia and England with Amir Kabir, his foreign policy in the Central Asia for coordinating the khan territories of Turkistan and other southern tribes of Russia and attracting them toward the central government of Iran also played its role. If this program of Amir Kabir reached its end, it would have severely damaged the interests of Russia and England.(164) The end of the Qajar period is simultaneous with the extension of some other changes in the economic and social life of the country inter alia, the expansion of foreign languages, familiarity with iron forgery, modern drafting techniques, establishment of telegraph and post, use of electrical light, foundation of telephone,
printing house, ministries, banks and some factories. As concerns agriculture, some subterranean canals were improved or constructed and some factories caravanserais and shops were built during the Qajar period. These changes were especially under the influence of the modern achievements of the western industrial states and were mainly shallow and lacked any continued vast influence. Thus, the first reconstruction phase in contemporary Iran started in the form of dependent economy from the time of Nasereuddin Shah Qajar. Nasereuddin Shah is the pioneer of a route in the economic history of contemporary Iran which was continued in the future history of Iran in different forms but with a relative conforming content, by Reza Shah, Mohammad Reza Shah and the Islamic Republic after presidency of Mohammad Khatami. Trying to transform the traditional structures and modernize the Country as in Ottoman, China, Japan and Russia was also a reaction to the military threat of aliens and especially the neighboring countries. From these countries, only Russia and Japan succeeded to overcome their backwardness and consequently converted into military forces seeking territorial development. The efforts of the two neighbors, Iran and Ottoman, failed to reach the final result. Iran's efforts were based on the tribal texture of Qajar family and the Ottoman's efforts based on the Islamic and religious caliphate. None of them achieved to destroy the rotten texture of feudalism and the growth of capitalism remained slow in both. The only Asian victorious example in overcoming the backwardness of the east was Japan. The view held by some researchers who believe the exceptional geographic location of Japan which was secure from direct attack of colonial powers, due to being islands, as one of the reasons for the independent development of this country may be worthy of attention. The endeavors of Amir Kabir in Iran toward modernization of the society failed, but twenty years later, the Japanese Empire achieved to reduce the increasing influence of colonial powers and introduce economic reforms within the framework of capitalism.
3.1.2 A Look at Some Statistical Data in 19th Century

By a look at the economic data, a more clear perspective of this historical juncture can be presented. In the present research, we have studied three areas of incomes, costs and extraterritorial trade based on the limited accessible statistical data. No exact statistics is available for the incomes of Iran and a perspective can be given only based on the estimations conducted by researchers and foreign travelers. The economic crisis and financial insolvency during the 19th Century shows itself more than anything in the reduction of Iranian currency against foreign currencies. The following diagram shows the annual mean depreciation of the silver fineness of Iranian currency during different periods. In this juncture, the depreciation between years 1800-1900 is especially considerable.

*Diagram 1 - Reduction in fineness of silver money of Iran in selected periods (%) – DS*

In the area of agriculture during years 1800 to 1888, we witness 41 percent growth without considering the depreciation of Iranian Rial against English Lira and the inflation which shows improvement of conditions. In spite of the 41 percent growth in agriculture sector, the taxes received from farmers increases for about 240 percent which leads to more poverty of farmers and their immigration to the cities. The following diagram shows the change in national production, agricultural production and agricultural sector taxation during years 1800, 1836, 1867 and 1888.

*Diagram prepared based on Statistical Sources at the end of the Thesis*
Diagram 2- Estimated land tax, agricultural production tax and national production tax of Iran - except customs -DS

In 1888, the revenues of the country were mainly earned from the three sectors of taxes paid in cash, taxes paid in kind and the custom duties. Reduced government income by losing the taxes received from the lost provinces in Caucasus following the defeat from the Tsarist Russia and the decreased extraterritorial trade and the deficit in commercial balance and also the ever-increasing depreciation of Rial against foreign currencies on the one hand and the lack of responsible economic policies to use the domestic potentialities especially to improve the agricultural and irrigation systems on the other hand, provided for the economic bankruptcy. The following diagram shows the total incomes received by the government in 1888 in major sectors.

Diagram 3 -Total revenues in Gheran – 1888-DS
A large portion of taxes were gathered in a number of large and fertile provinces such as the Azerbaijan, Fars, Khorasan, Tehran and Isfahan. Khuzestan Province which was one of the most important kharaj payers to the Pre-Islamic Iranian monarchies and which enjoyed large rivers such as Karoon and Karkha and very fertile lands, was in a stagnant state due to destruction and lack of a clear economic policy and paid only a small portion of the taxes so needed by the government. The total revenues of the government in kind from major provinces are given below.

Diagram 4 - revenues in kind from cities and counties calculated based on governmental rate (Gheran -1888) -DS

The following diagram draws a perspective of the growth of capitalistic relations in Iran. Although in 19th Century Iran we are miles away for serious growth of industries, but the revenues earned from the coinage institute, mines, brick furnaces and telegraph forms a larger portion than other sectors. The share of this part of government revenues in the future of Iran has been always increasing, although with some fluctuations.
Only a small portion of the tax revenues of provinces was allocated to the provinces themselves and the larger portion was remitted into the central treasury. The heavy costs of army and the extravagance of the court did not leave much space for investing in provinces. Lack of a programmed system for increasing the material and intellectual capabilities of the country is well reflected in the very trivial budget of higher education centers.

Diagram 6 – the amount withdrawn from city or county revenues for local expenditures (Gheran -1888) -DS
Only the living aid paid to the princes inside the royal court is 300 times more than the education budget. In this comparison, the pensions paid to the corrupt bureaucrats, aristocrats, clerics and the guards are not included.

*Diagram 7 - other costs in Gheran in 1888-DS*

In the area of extraterritorial trade in about 10 years from 1880 to 1888 we face a numerical increase from 708629 million Tumans to about 800000 million Tumans, but the general trend is negative due to the high prices and depreciation of Tumans against foreign currencies. The estimated reduction in extraterritorial trade of Iran in a period of about 10 years calculated in Sterling Lira is near 10 percent.

*Diagram 8 - estimated extraterritorial trade value (Lira) -DS*

Change in the process of extraterritorial trade is not limited to its depreciation only. Here, the composition of exports of Iran gradually...
changes to the loss of goods such as silk, velvet and gilded cloth in favor of other goods needed by the European countries such as opium, dried fruits and nuts, rugs, cotton and rice. The change of export structure imposes serious damages on the self-sufficient natural economy of villages and causes bankruptcy of rural people, craftsmen and small spinning workshops. The following diagram shows the exports of Iran in 1889 in Tumans for the most important goods.

*Diagram 9 - exports (Tuman) in 1889-DS*

With a glance at the goods imported in 1889, one can get familiar with the economic structure of this time. coarse textile, cloth, sugar and cubic sugar, spices and metals were at the peak of imported goods. The total amount of imports in this year equals 13,696,000 Tumans which is close to twice the value of exports of Iran in the same year.

*Diagram 10 - imports (Tuman) in 1889-DS*
The reflection of bankruptcy of Iranian economy can be especially seen in the deficit of extraterritorial business exchanges. In 1889, the imports of Iran is nearly twice as the exports and this imbalance side by side the reducing trend of tax revenues, draws the country into a deep economic crisis and to the threshold of big social revolts.

Diagram 11 - extraterritorial trade balance (Tuman) -DS

The most conspicuous change in the imports is seen in the field of cotton, wool and silk fabrics. On the other hand, new products are added to the import list of Iran among which one can name of paraffin. The increase of exports between 1850 to 1880 in view of Diagram 12 - change in export(%), -DS
exchange value in raw materials is seen and is notable in view of growth index in exported cotton. The two diagrams (12 and 13) which show the change in exports and imports of Iran during the 30 years in 19th Century, indicates more and more bankruptcy of domestic textile workshops and crisis in the craftsmanship sector and change of the structure of export products in service of the demands of industrial countries.

Diagram 13 - change in import(%)s-DS

The ever-increasing growth of imports alongside deficit of foreign trade since the beginning of the 19th Century was among the major difficulties faced by the unable Qajar kings. The following two diagrams show the incessant growth of imports in years 1830, 1857, 1868 to 1900. The extraterritorial trade balance of Iran also clearly reveals the depth of the financial crisis of the 19th Century. During years 1868 to 1900, the volume of foreign trade increased from 4000 Liras to 8000 Liras and in spite of increased exports, the deficit of extraterritorial trade of Iran doubled from nearly 1000 Liras to 2000 Liras.

Diagram 14 - imports in Lira-DS
The economic modernization of this period which was considerable only in short intervals under the wise leadership of bureaucratic system especially under the command of the two distinguished viziers, was practically very slow because of numerous difficulties. This disordered structure, gradually stabilized the Iranian economy on the bases of dependence on commerce and foreign investment. During the reign of Nasereddin Shah, the results of this process revealed in the form of incessant increase of inflation, reduction of government revenues and deficit of extraterritorial trade balance. Under heavy financial pressures, the government started the economic policy of excessive conveyance of operation rights, privileges and advantages to England and Russia in order to finance the costs and prevent political tensions.

These measures paved the way for a great social change in the society which promised of the bourgeois revolution of Iran. The Qajar family lacked a clear and target-oriented policy for modernization and instead of organizing social forces and effort for extensive participation of social layers and classes for overcoming backwardness, took a passive and mean position against the foreigners.(169). Harsh social tensions in the future of Iran were a reflection of these inabilities.

3.1.3 The First Efforts for Democratization of Government Structure

The constitutionalism movement which is the first anti-colonialism national movements in Asia, is the beginning of great social battles
under the flag of political parties with relatively specific social goals in Iran. (170)
This socio-political event in early 20th century which resulted in the retreat of the ruling class and imposing some changes in the policies of the Qajar family, had been influenced by different factors: decay of the feudal society, relative growth of commercial bourgeoisie and petit bourgeoisie, familiarity of the intellectuals with the ideas and living style of the Europeans and especially the unequal and colonial relations with England and Tsarist Russia which paved the way for a great anti-feudal and anti-colonial movement. The main demands of the movement included constitution, legislative parliament, securing and safeguarding individual rights and private ownership and other demands of capitalistic rights. The Constitutionalism Movement which started in 1905 deepened in following years and by its expansion, other social classes such as peasants, workers and petit bourgeoisie also brought their demands to the scene in a more serious and organized manner. Among the Asian countries, Iran was the first country to begin the war against the dictatorship of kings and the cruelty of foreign colonial powers. Upon pressure by people in 1906, Mozafarredin Shah, the successor to Nasereddin Shah, issued a command about the Constitution and declared regulations for parliament elections. The first Iranian parliament approved the constitution. According to the new constitution, the powers of king were limited by the parliament and the right of legislation, approving budgets and privileges were assigned to the parliament. In the years of constitutional revolution, the economic influence of Germany increased in Iran. In 1906, the navigation route from Hamburg Port to Persian Gulf was operated and a port was also leased in Iran. Germany obtained different concessions such the establishment of bank, granting bond and opening German schools in Tehran and helped anti-British and anti-Russian propaganda which was welcomed by the masses of people in Iran. On the other hand, America also started to expand its economic influence by sending financial expert teams to Iran and succeeded to get some concessions too. The expansion of economic relations with Germany and the United States of America led to the closeness of two old rivals on the north and south, i.e. Russia and England. In its business with Iran, Germany intended to add to its concessions gradually and ascend to the first rank. (171) Following these economic changes and the accompanying political and social events and in order to secure the endangered interests,
England brought its troops to the south of Iran in October 1911. Then the Tsarist Russian army entered the Iranian territory from the north. An anti-constitutionalism coup was organized in Tehran. The parliament was closed. Societies and newspapers were banned and the groups of combatants were destroyed. Thus, the bourgeois, anti-feudal and anti-colonial revolution of Constitutionalism which was the pioneer of anti-colonial battles of the Asian nations, was suppressed in a bloody manner during years 1905-1911 by foreign forces and with the help of the domestic backward elements. Although the Constitutionalism Revolution was defeated, it imposed a sever damage on the feudal regime and the Qajar royal family and after some follow ups, the government of this family reached its end. By the fall of Qajar dynasty in Iran and as a result of the movements of the people and especially the bourgeois- democratic revolution of Constitutionalism, the route becomes clear for enforcing economic transformations and taking new steps toward modernization of the Iranian economy. It is true that these policies were mixed with much inadequacies, but this juncture of time should be considered the actual starting pint of the modernization of Iranian economy.

However, the writer has evaluated the 20-year rule of Reza Shah as the second phase, because during the Qajar dynasty and under the leadership of wise viziers who considerably helped the development of economy and modern culture, the first saplings of future advancements were planted and useful efforts were conducted by some authorities of the government, the intellectuals and the politicians for the blossoming of economy, learning advanced techniques and culture of capitalistic countries, in spite of the corruption of the Qajar court. In fact, the foundations of the economic changes of Reza Shah period were laid in the Qajar era.

3.1.4 Some of the Statistical Data of the Early 20th Century

Before discussing the changes during Reza Shah reign, we indicate some economic indexes of Iran until 1911. As stated earlier, the bankruptcy in agriculture sector, inability in construction and renovation of industries, increasing inflation, trade balance deficit and the accelerating depreciation of Iranian currency against foreign currencies alongside corrupt administration, drew the government more and more toward assigning concessions to foreign countries and
receipt of foreign loans. In 1911, the larger portion of the government revenues was spent on paying back these debts.

**Diagram 16 - some costs in 1911**

The old disease of budget deficit in Qajar period which entailed irresponsible and quick assignment of different concessions to foreign countries, especially the northern neighbor, Russia, and also England continued until 1908 and thereafter. The budget deficit alongside the revenues and costs of the Country can be seen here. The budget deficit in this year was equal to 11806800 Gherans.

**Diagram 17 - revenues and costs in 1908**

Two specifications or new changes can be seen in the government revenues at the beginning of the 20\(^{th}\) Century. Firstly, the ratio of custom revenues to total revenues increases, compared with 19\(^{th}\) Century, and the share of taxes in cash or kind, i.e. agricultural revenues decreases accordingly. The share of sectors such as mines
and industries slowly goes up. This change indicates the expansion of extraterritorial trade in general and the very slow industrial growth and destruction of the feudalistic structure, closed and self-sufficient economy of rural areas in Iran.

The second characteristic which we had faced repeatedly in the past was the accelerating increase of the concessions assigned to foreign countries and expansion of their role in the domestic economy. In 1908, the customs earnings composed more than half of the non-agriculture incomes and the concessions nearly 1/5th of the said incomes in the total government revenues.

*Diagram 18 - revenue in Gheran in 1908-DS*

One of the biggest changes in the economic structure of Iran can be searched in the costs texture. Deep crisis in the structure of feudal economy and the tensions and great mass movements in the 19th and early 20th centuries reduced the power of the corrupt court of Qajar and induced considerable changes in the cost structure. In 1908, contrary to mid-19th Century, we are not facing conditions where the court and the aristocracy devoted a very large portion of incomes to themselves. Now, different ministries absorb the most part of the budget. The direct share of the court in government expenditures reduced from the first place in mid-19th Century to the 6th place. Upon formation of parliament and ministries, although we still face different forms of corruption in the government system as in the past, the number has lessened and a new and modern administration system is being formed.
As regards the extraterritorial trade, although the government income gradually increased and reached from 14064000 Gherans in 1897 to 42557746 Gherans in 1911, i.e. nearly 400 percent, the share of Iran in the total income earned was really trivial. In the meantime, the business routes especially the marine routes were under full control of foreign countries specifically England and Russia. Navigation in the Caspian Sea was completely controlled by Russian and the marine routes of the Persian Gulf and the Oman Sea were under control of England and later Germany.

Diagram 20 - loading ships 1908(tons) - DS
In the business transactions of Iran through the marine routes of the north and south, the Persian Gulf had a significant and ever-increasing role. The following diagram shows the total loadings of the vessels entering the Persian Gulf and the Caspian Sea.

*Diagram 21 - total loading of ships entering the Persian Gulf and the Caspian Sea in 1908 - Loading (tons)* -DS

In the composition of the most important goods imported to Iran between years 1988 and 1911, no significant change can be seen. The first positions belong to cotton fabrics, sugar, gold, silver and tea.

*Diagram 22 - major imports in 1911- Gheran* -DS

The biggest change in the Iran's exports between years 1888 to 1908 occurs in regard to opium. That is, the opium which had the first rank among the export goods in view of the value in 1888, lost its position and was substituted by cotton and then fruits and carpet.
The following two diagrams show the most important business partners of Iran in the field of export and import. In both fields, Russia is the most important and England comes second.

Diagram 24 - exports in 1908- Gheran-DS
The carpet which continually gets more significance in the exports basket of Iran was exported more to Russia, the Ottoman and the United States in 1908. Fruit was more exported to Russia and India, opium to Ottoman and China, skin and rice mainly to Tsarist Russia. The following diagram shows the function of the most important export goods to different destinations.

**Diagram 26 - fruits exports in 1908- Gheran-DS**

**Diagram 27 - woolen carpets exported in 1908-DS**
The economic hardships in Iran and the inability in agricultural and industrial production can be specially observed in the extraterritorial trade balance of Iran with her most important business partners. The negative trade balance in 1908 reached 109080728 Gherans which is near 1/9th of the entire volume of extraterritorial trade. In this year, Iran has positive trade balance only with Russia and the Ottoman. Considering the various incomes of Russia from difference concessions granted to it, this trade balance cannot be truly considered positive. It can only be said that the degree of economic usurpation of Russia was less than its rival, England, who earned a large portion of the incomes through concessions. The only positive point goes back to
the Iran's trade with her neighbor, the Ottoman, which shows a positive balance as preceding and following years. This is also due to the industrial underdevelopment of the Ottoman in comparison with Russia and England.

3.2 The Beginning of the Second Phase of Economic Reconstruction in Iran

In 1920, Reza Khan entered the Cabinet in the name of Sardar Sepah (the Commander of the Army). In 1921, he put aside Seyed Zia and undertook the responsibility of the Ministry of War. He played an important role in suppression of Gilan and Azerbaijan movements and other local movements. In 1925 A.H. he called for the Constitutional assembly, dismissed the Qajar Dynasty and seized the throne.(172) He stabilized his rule by complete support of England and the dependent capitalists and growing bourgeoisie and by making use of popular deceitful slogans.(173) The Reza Khan's seizure of power was connected with extensive support of the army and with pretending to be religious and adherent to religious rituals and traditions which attracted the clergy and the influential seminaries of Najaf and Qom.(174) In the Constitutional Assembly, the major clerics of Qom, Najaf, Tehran and other cities supported him unanimously.(175) In order to establish a new order and concentrate the government in all aspects, Reza Shah embarked upon some measures and started his ambitious plan for economic, social and cultural reforms. First of all, he reconstructed a modern army with 5 times increase of the army budget and dismissed all political parties in order to control the situation and enforce his own decisions. He banned all workers unions, reconstructed the ministry of justice and, after stabilizing his power, weakened the influence of the clergy. He reduced the number of clerics in the Parliament, lessened the traditional religious ceremonies such as the Eid-Ghorban, the mourning ceremonies and passion plays in Moharram. He also reduced the visa issuance for pilgrim trips to the holy sites of Mecca, Medina, Najaf and Karbala. He developed Persian literacy and added a large number of Persian words to the lexicon of the formal language. He declared the old clothing of the Iranians illegal and made the people wear European clothes. He intensively developed the educational reforms.(176) The tendency to restore Persian language, however, dates back to before Reza Shah's time. Nationalism and inclination toward ancient Iran,
trying not to use non-Persian words was popular during Qajar dynasty as well and can, for example, be seen in the thoughts of Jalaleddin Mirza Qajar in his book "Namaye Khosravan" (The Kings' Letter), and in the ideas of Akhondzadeh.(177) Akhondzadeh who was grown up in Caucasus, knew himself of Persian race and was studying the causes of backwardness of Iran and the ways to overcome this backwardness.(178) The efforts of Reza Shah toward modernization of Iran took place after the major defeats of the governments of the east in 19th Century. In this decade, Napoleon invaded Egypt, the Ottoman Empire was defeated by Russia, Russia and England separated Caucasus, Turkistan and Afghanistan from Iran and England overcame India. The modernization process in Egypt, Iran and the Ottoman Empire was of much similarity. The basis of reforms in all three countries, Mohammad Ali in Egypt, Ata Turk in Turkey and Reza Shah in Iran, was economic changes and the cultural elements of all three looked to the West. In none of them, religion played an important role.(179) In order to implement his goals, he established a new government, centralized the rule, suppressed the nomads, put the local khans under pressure, controlled the clergy, unveiled the women, eliminated the aristocratic titles, made military service compulsory, built cities, industries and different schools. At the same time, he expanded his dictator policy of breaching the Constitution, appointing army officials to government posts, accumulating personal wealth, arresting and killing the intellectuals. (180)

3.2.1 Specifications of the Iran's Economy during the Second Phase of Reconstruction

The economic policy of Reza Shah included some new characteristics. Following his activities, the number of landowners affiliated to bourgeoisie increased and the landlord – bourgeois ownership underwent some reforms. However, the dominance of the remnants of old feudalism remained unchanged to a large degree and the basis of the economy which was the backward agriculture and feudalistic production did not change that much.(181) On the other hand, by expansion of capitalistic relations, the industries grew, new relations established with England and Iran Oil Company and the labor works in cities and villages increased. As for the foreign economic relations, the contract for assuring mutual impartiality was signed between Iran and Russia in 1927, a business agreement was concluded, the 1921
contract for dissolving the capitulation was emphasized and enforced in relations with Western countries. In order to establish trade balance and stabilize the foreign currency rate, the foreign business became exclusive in 1931, the export and import goods were rationed and this decision was enforced in spite of disagreement of foreign states. (182) The importance of oil in the Iranian economy increased day by day and, following an accelerating continuous trend, changed into the determining factor during the past decades. At the time of Mozaffareddin Shah Qajar when the concession for oil extraction and operation in Iran was assigned to Darcy, which was approved by the Iranian parliament after nearly 20 years, the Iranian statesmen were not aware of the importance of oil in global economy. At the end of 1933 when Reza Shah dissolved this concession, the conditions had changed and the Iranian rulers knew well that the oil is a precious treasure looted by the British Oil Company for a long time. (183) In regard to the concession of the British Oil Company, Reza Shah at first posed for a complete transformation but later took a reconciling policy and in 1923 concluded a new agreement for operating the oil reserves of Iran until year 1993 and increased the banking rights of England in Iran. (184) Following the conclusion of this Contract, most of the political figures who wanted the end of the influence of British companies in Iran, were prosecuted and put under pressure. One of the business specifications of Iran during Reza Shah was the developing economic role of the Germans in Iran. The exchanges between the two countries increased rapidly until 1940 and the exports of Germany to Iran grew five times. Germany became the largest oil customer of Iran and used to buy all non-oil Iranian products in fair prices. In 1938, direct shipping line was launched between Hamburg and Khorramshahr ports and Luft Hansa Airlines founded the Tehran- Berlin air route. (185) On the other hand, a new business treaty was concluded with the Soviet Union in 1940 and the difficulties of transit between Iran and Germany through the territory of USSR were solved in a proper manner. The right of transit, however, excluded war ammunitions. The Iranian government pursued its policy of reducing business relations with the Soviet Union in this juncture of time and embarked upon some actions to materialize this goal. By constructing textile factories, he reduced the dependence of Iran to import of textiles. The 31 textile factories most of them governmental, the import of these goods from the Soviet Union decreased to 1/3rd. Secondly, by imposing exclusion in foreign trade,
he established a central company and a number of joint stock companies for fabrics, dried fruits and nuts, sugar, cubic sugar, wool, skin, rice and candy to increase the capabilities of the Iranian business in competing the centralized governmental business system of the Soviet Union. Thirdly, by building roads and the nationwide railway, he expanded the relations between northern ad southern areas, especially between the Persian Gulf and the Caspian Sea and reduced the dependence of the northern parts to imports from the Soviet Union. The economic policy of Reza Shah in the second and the beginning of his third decade of rule was based on relative impartiality in foreign policy. By means of this impartiality, he tried to develop the national economy and to build some industries, railroads and other roads without foreign loan. The number of registered commercial and industrial companies increased from 93 to 1735 from 1932 to 1940 and reached 2165 companies in 1945. The position of industrial productions improved and reached from 9.4% in 1936-37 to 18.4% in 1940-41. It is worth mentioning that from the total of 1300 million Rials investment between years 1938-1939, 550 million Rials belonged to the government and Reza Shah himself. Reza Shah also got back the concession of printing money from the Imperial Bank that was owned by England and assigned to the newly-established Bank Melli Iran. The administration of telegraph network was taken back from Indo-European Telegraph Company and the administration of customs offices from the remaining Belgian officers. The construction of roads in the second stage of economic modernization of Iran was a continuation of the efforts of the viziers of Nasereddin Shah Qajar in building and improving roads. In 1925, the entire length of freeways in the Country did not exceed 3200 Km. most part of which ruined. In 1941, the newly-founded Ministry of Roads, maintained more than 20,000 Km. freeways with a relatively good quality. These roads which were basically created for military purposes, formed the infrastructure of the economic development and especially the industrial development of the Country. In this period, the workforce in oil industry reached from 20,000 to near 31,000 and a large number of small workshops, especially shoemaking, carpentry and dressmaking workshops were established during 1310s. On the other hand, new industrial, commercial, administrative and residential zones were created. Ambitious projects and especially new basses for the modernized army, ministries, industrial factories and educational
institutions increased the government budget 8 times from less than 245 million Rials in 1925 to more than 4.3 billion Rials in 1941.(188) These costs were financed by different ways and had their own specifications:

1- Oil production increased during Reza Shah's reign, something not available in the first stage of the economic reconstruction during Nasereddin Shah's rule.

2- The policy of assigning royalties and concessions to the foreigners which had developed during Nasereddin Shah's period, continued and reached from one million Pounds to about 4 million Pounds within the framework of the dependent economy and attracting foreign capital.

3- High tariffs and improvement of business after disorders of the First World War, increased the revenues of Iran's customs from 91 million Rials to 421 million Rials.

4- The income tax which was very trivial reached 280 million Rials in 1942.

5- The country's annual income through exclusive foreign trade which faced the opposition of European countries, reached from zero to 1.2 billion Rials.

6- Since 1937, Reza Shah started to offset budget deficit through inflating raising methods and thus the volume of revolving cash reached from 16 million Rials in 1932 to above 1.74 billion Rials in 1942.(189)

Following the economic changes by Reza Shah including the exclusive foreign trade which increased the annual government income for 1.2 billion Rials, the dissatisfaction of traditional merchants of Iran in the bazaar who were closely connected to the Shiite Clergy increased. The economic concentration policy, income tax and goods and services tax alongside exclusion of foreign trade led to the bankruptcy of a lot of such merchants. Furthermore, 216 different guilds became exempt from paying taxes on the aim of reducing their financial dependence on the bazaar organizations thus eliminating the influence of the authorities and heads of union who were closely related to the clergy on their subordinates, i.e. the craftsmen, petit businessmen and the laborers to a large degree. These policies of Reza Shah side by side the religious transformations and
especially the reforms in the judicial system which reduced the influence of the clergy caused numerous tensions in years 1927-1928 and again in 1936-1937 on the side the clergy and the bazaar against the governing regime. These tensions were violently suppressed by the well-organized army-police system. (190) The economic changes initiated by Reza Shah, although not all-sided and comprehensive, brought about a relative but unstable industrial growth for the backward country of Iran. The most important factors for lack of success toward a stable and all-sided industrial and economic development can be named, in order of significance, as follows:

1- The operation of Anglo-Iranian Oil Company led to more and more looting of the Country's reserves without providing the Iranian government with a sufficient share for economic modernization. During years 1960-1961, the investment in Iranian oil industry in its 4th decade of life was about 16 million Liras, while the capital of the said Company at the end of this same decade was assessed about 200 million Liras. (191) Lack of enough accumulated wealth for radical reconstruction and persistent economic renovation and lack of sufficient income at hands of the government caused adopting decisions which increased pressure on the masses of people and caused social tensions. Under the unequal international economic and political relations of the day, and in order to respond to the ever-demanding needs of his court and his relatives and to protect his totalitarian monarchy, Reza Shah adopted approaches which impregnated the society with major social movements, in the same way that Nasereddin Shah has ignorantly provided for the Constitutional Revolution by the disruptive implementation of his economic, social and political reconstruction plan.

2- The dominance of the remaining forces of feudalism in the agriculture sector and the extensive poverty of farmers who constituted the majority of the population, led to the small size and stagnation of domestic market. Reza Shah clearly expelled the necessary agrarian reforms from his plan and by maintaining and boundless expansion of his ownerships in traditional ways, tended toward the landowners and avoided to transform the old feudal-peasant relationships.
3- Huge investments on non-productive projects such as war equipment factories was another reason for the insufficiency and failure of economic modernization policy of Reza Shah regime. Regardless of the effect of West policy in creating more or less strong military-political rings on the southern borders of the Soviet Union especially in Iran and Turkey (in Turkey, Ata Turk followed the same policies as Reza Shah after the fall of the Tsars in Russia), the cause of such investments can be attributed to the lack of social support for the Pahlevid king and the extensive dissatisfaction of people, the same as the time of Nasereddin Shah Qajar. Reza Shah had seized the power by a coup of the army and upon all-sided support of England and saw his survival dependent on the expansion of army power. However, by military investments especially building roads with military purposes, he achieved to help the industrial development of the Country indirectly.

4- Lack of economic, political and social security in the groups who could provide the necessary capital added to the hardships of renovation and modernization of economy. Although Reza Shah helped the industrial capitalists increase their share in national production, his support of them against the landowners was temporary and unstable. He seized properties of many of them, made some others sell their assets and lands and deprived some of their own wealth. Ahmad Qavam fled to Europe on the fear of the insatiable appetite of the dictator. Sepahdar committed suicide on the fear of tax audit. Reza Shah killed Farmanfarma, the Qajar Prince and imprisoned and killed Teimur Tash. In the state of insecurity in economy and while the process of accumulating wealth in the growing bourgeoisie layers of Iran was by itself facing the hardships caused by change of the backward system and the pressure of the foreign colonialism, these profit seeking actions of Reza Shah frightened the capitalists. Thus, the modern bourgeoisie with its small wealth, avoided to invest in industrial sector and pursued the same old path of traditional commerce and transactions of land and real estate. A deep problem which has so far undermined the modernization of Iranian economy under the influence of various time and
place factors. This explains why 550 million Rials from the entire 1300 million Rials investment in years 1960-1961 belonged to the government and Reza Shah himself.(192) When dismissed from power, he left a bank account of 3 million pounds cash and more than 3 million hectares land for his heirs.(193)

5- Lack of policy with a clear economic perspective was the Achilles' heel of the economic plans at this time. A look at the successful countries who achieved to overcome their economic backwardness in Asia, inter alia Japan, clarifies the dimensions of this economic short-sightedness better. Politically speaking, the emergence of different tendencies during the transition course to capitalism in Iran has similarities with other countries in the world, such as Japan and Germany. In the process of development of new relations, the same as Japan and Germany, Iran was fluctuating between democracy and socialism and dictatorship and the militaristic and dictator tendencies of the governments was similar to these two countries.(194) The characteristic of Iran in the process of capitalistic growth was, among other things, the religious inclinations as a political alternative for feudal system beside other superstructure forms.

Although the Iranian kings and also masses of people were seriously opposed to the Shiite clergy especially at the end of the Safavid dynasty and consequently reduced their economic influence by decreasing the endowed lands, but they continued to play their role because of some reasons. Firstly, the Safavid dynasty especially after Shah Abbas came to power did not have a texture similar to the feudalistic governments in Middle Age Europe under control of the Church and the system had even got the color of Pre-Islamic Iran and secondly, under the Safavid reign with their Shiite flag, not only Iran did not go backward as the Middle Age Europe, but even reached its economic boom for a short period, gained national identity and ended the dispersion and anarchic local governments. Actually, the dominance of the Shiite clergy during the Islamic Republic over the economy and over the social, political and cultural life of the Country can be looked upon as a experience necessary for Iran to pass through a religious rule once for ever and then go back to the mainstream
secular trend of capitalistic growth the same as other countries of the world.

Economically speaking, the unclear policy of Iran can be shown through a comparison with Japan. In spite of the time of Reza Shah who paid not attention to the agriculture and was pursuing a quick heterogeneous aimless industrial development, the bloom of Japan's economy during 1886 to 1905 was the same as most of European countries in their early capitalism growth days, based on agriculture rather than industries. The first source for accumulation wealth was silk production and export. After improving the quality of silk production to the European standard levels, Japan became the biggest silk exporter in the world and exported nearly 15 million Pounds silk per year during years 1899 to 1903. Side by side the silk industry, textile industry and yarn production was the second major source of income for Japan which was in close relationship with agricultural economy. In 1907, 5.1 million people were working in this industry and the industry produced nearly 400 million pounds yarns. The process of industrialization and increase of the volume of industrial exports gradually yielded fruits. In 1880s, 2/3rd of the Japan exports were composed of silk, tea and rice and it was after 15 years that copper and coke became the most important exports and the machine-made products formed half of the exports.(195) The economic plan of Reza Shah not only did not require enough attention to the exports, but failed to make necessary use of the economic potentialities in agriculture by leaving the traditional backward structure of villages unattended. The Reza Shah's rule was a new effort for development of growing capitalistic relations in Iran in the new international conditions, but it was only a fake imitation of what has been formerly carried out successfully by Henry the 8th in England, François the 1st in France, Ivan the Terrible in Russia and Ferdinand and Isabel in Spain for the elimination of the ancient feudal relationships.(196) The totalitarian government of Reza Shah remained within the old and narrow framework of bourgeois-feudal relationships in spite of the economic renovation of Iran, avoided to implement agrarian reforms and gave many concessions to the landowners. The big landowners occupied 8% of seats in the first parliament, 12% in the second parliament and 26% in the third parliament.(197) Furthermore, he achieved to attract a group of the old aristocrats and obtained an efficient support among the traditional middle class. Emergence of government companies and government exclusive concessions,
created a group of exporter and importers and industry owners related to the monarchy. The renovations initiated by Reza Shah, especially in the later years of his rule, caused transformation of the class structure of the society. Reza Shah sought the legitimacy of his rule in reconstruction of economy and revival of Iranian nationalism. The re-organized army in the first place and the modern bureaucracy in the second place formed the foundations of the new social structure of his monarchy. A new class composed of landowners rising from among the army officers, employees and businessmen emerged and confronted the feudal aristocracy. The members of this class can be called bourgeois- feudal, because they misused the peasants as the past feudal regime and took heed of the past system, although they owned land based on private ownership. The economic modernization of Reza Shah, on the other hand, stabilized the capitalistic system base in Iran. A portion of the Iranian bourgeoisie resisted England and its economic pressures and emphasized on the independence of the Country. This social class played a special role in the changes of the coming decade of Iran following the dismissal of Reza Shah from power. Furthermore, a large group of intellectuals also emerged. Some of them supported the interests of domestic capitalism and another group developed leftist inclinations and got close to the workers, farmers and craftsmen movements. Another characteristic of Reza Shah's reign was the reduced influence of the clergy in political and social affairs. Following the legal and judicial changes, the Shiite clergy were removed from legal and judicial posts and their influence in education greatly decreased.

The financial capabilities of this group also decreased by reducing the ownership of endowed lands. A group of religious leaders such as Ayatollah Modarress were arrested and some killed. The industrial growth of the Country led to the increase of number of workers and laborers. The new working class although comprising less than 4% of the entire workforce, was much concentrated in a number of larger cities and for this same reason enjoyed a high political competence. More than 75% of large factories were located in Tehran, Tabriz, Isfahan, Gilan and Mazandaran. 64000 workers were working in 62 factories and a large number of handicraft workshops. Tabriz had 18 production factories. Isfahan, the main industrial center of Iran had employed 11000 workers only in 9 textile factories. Khuzestan Oil Company had 16000 workers in Abadan Refinery and 48000 in drilling oil wells. The general living
conditions of the working class was very bad and the workers associations were banned in 1951. (201) However, a few worker strikes happened in 1929-1930 but were violently suppressed. In 1936, any kind of strike was strictly banned based on a circular. (202) The situation of farmers even worsened by the continued feudalistic manipulation especially during the economic crisis of 1929-1930. The lower demand for agricultural products in the global level led to reduced cultivation and area of agricultural lands in Iran. The burden of the crisis of global economy fell on the shoulder of the farmers through increasing the owner's share. The violent policy of forceful settlement and extensive disarmament of nomadic tribes was strongly pursued. These events led to vast mortality of the livestock and numerous resistance movements which were severely suppressed by the new re-organized army, war airplanes and tanks. During these years, the economic growth of rural areas was very little and the rural industries remained unchanged. (203) The economic development, change of the structure of social layers on the one hand and the non-democratic structure of Reza Shah regime on the other hand, inevitably led to social tensions especially among the intellectuals. In 1931, a group of opposition students in Europe called for a special congress in Cologne and demanded freedom of political prisoners. The following year, the students and the remaining cadre of Iran Communist Party published a new periodical in Munich. Following the tensions in Iran, Reza Shah passed the law for control of communism and in May 1st 1973, 53 of the advocates of the Iran's left movement were arrested and imprisoned and their leader, Taghi Arani, killed in jail. The 53 persons and Taghi Arani were the group who later founded Hezbe Toodeh Iran (Iran People's Party). A party much mixed with the political events one decade after the First World War. (204) During the Reza Shah's reign, the capitalists enjoyed a relative support against the landowners and local feudals through a restored government system and by customs supports, encouraging the sale of domestic products and so on, the capitalists were given some assurance, although unstable and brittle. On the other hand, industrial growth expanded the working class who were quickly suppressed. For example, the oil company workers in Khuzestan went on strike and Reza Shah suppressed them in Abadan and imprisoned its leader with the help of the British navy. (205)
By the beginning of the Second World War, a new page of the contemporary history of Iran was turned. During the war, Iran declared impartiality as in the first World War, but implicitly increased her support of Germany under Hitler. Adopting this policy by Reza Shah, who had seized power through military coup and with direct support of England, led to his dismissal. In September 1941, the allied forces – the Soviet Union from the north and England from the south- occupied Iran. The supporters of Germany were prosecuted. Reza Shah was made to resign in favor of the Crown Prince, Mohammad Reza Shah and left the Country. The Germans had adopted the policy of increasing influence in Iran especially after the fall of Bismarck and their influence had reached its climax during Reza Shah's reign.(206) Reza Shah was first sent to Morris Island and then went to Johannesburg, one of the major investment centers of Pahlevid family.

It is worth noting that, in spite of large investments on the royal army during 20 years reign of Reza Shah, due to dependence of foreign colonialists and lack of relationship with the masses of people as well as corruption of its commanders, this army was unable to resist the allied forces even for a short time. The officers, who were supposed to be exemplary for their subordinate soldiers, abandoned the battle front before receiving command to do so and fled to Tehran. A lot of war equipment belonging to different army ranks were left behind and fell in hands of the nomads.(207)

As indicated earlier, Reza Shah can be considered a king who continued the same economic and political policies of Nasereddin Shah in the new age of domestic and international changes of the time. On the path of economic modernization of Iran, he was placed in new conditions:

1- The anti-colonial movement existing before the reign of Reza Shah, although unable to show itself due to the suppression of the dictator system of Reza Shah, was growing deeper and more expanded in the social layers.

2- The Soviet Union with a different economic policy had substituted the Tsarist Russia and this new system provided the Iranian rulers with new economic and political maneuvers.

3- In spite of the unfair division, the foreign currency resources of Iran through export of crude oil has increased which in
itself helped the Country to accelerate her economic modernization process.

4- The capitalistic relations had developed and the bourgeois class enjoyed more capabilities in the national economy.

During his 20-year government, Reza Shah imposed new strokes on the traditional texture of the society with the use of new economic, social and political potentialities and advanced the country a step further. However, he remained within the framework of dependent economy and, in order to preserve his monarchy, failed to exert the last blow to the structure of the backward feudalistic relations, while at the same time helped development of capitalistic relations especially through foreign investment. Thus, the national economy remained in the process of changes within the framework of unstable reconciliation of old and new relations and provided for the future tensions.

3.2.2 Statistical Diagrams in the First Phase of Economic Modernization

In this section, the most important economic characteristics of Reza Shah's time are being outlined with the help of diagrams. In the discussion on the first phase of economic modernization in Qajar period, especially at the end of 19th and beginning of 20th Century, we indicated some changes such as the change in the government structure, reduced influence of the royal court in expenses, modern structures especially in the form of ministries, increasing reduction of the share of agriculture sector in national revenues, increased income of customs and concession assigned to foreign states, more dependence of Iran to the global economy, slow industrial development with an organized support of the administrative system and the destruction of the structure of self-sufficient closed domestic economy especially in villages. During the reign of Reza Shah, although no serious change toward further democracy occurred in the political structure, the industrialization process entered a new phase this time under the leadership of centralized government system and especially the king himself. A look at the credits and budget of the government during years 1935 to 1942 shows these transformations. Three major points can be outlined. First, the investment on the Ministry of War and organizing military forces which was the top
priority during early years of Reza Shah's reign reduced since 1940 after gradual stabilization of central government and suppression of the opposing forces and is replaced with investment on roads and industry. Secondly, the increasing investment during the last years of Reza Shah's reign in reconstruction of roads which pursued two objectives of providing better facilities for the army in case of local riots of foreign raid and also for transport of goods in the transit roads and earning more income, acted as a proper structure for rapid industrialization of the Country.

The third characteristic was increasing investment in the industry sector. The highest growth index in assigning credits during years 1940 to 1942 belongs to the industry sector which equals the investment on roads and shows an incessant growing pace, the same as budget on education, from 1935 to 1942.

*Diagram 30 - credits of ministries in government budget (in million Rials) - DS*

The growth of public budget between years 1935 to 1942 provides a more clear perspective of the economic orientation of the Country. Regardless of the very high share of increased income of the royal court which goes back to excessive appropriation of national incomes by Reza Shah and his close circles, the general trend of the increase of governmental investments can be assessed positive. Specifically, the special attention given to the industrial and commercial affairs and the first position of this sector in the budget growth along with the concentration of government on health and culture in the backward country of Iran can be easily observed.
One of the characteristics of the economy in this period, the same as all later periods until now, is the increasing share of oil export in the economy. The writer has studied years 1920 to 1927 in an assessment of the change of the oil share in government revenues during the early years of Reza Shah. Only during these 7 years, the income of Iran through oil export increased from nearly 0.5 million Liras to 1.4 million Liras, approximately thrice, while the value of moil exports had only doubled which means that the government of Iran was getting a larger share in oil exports.
With a look at the oil income increase index, value of exports and the increase of volume of oil exports, we observe the conspicuous increase of government revenues a short time after coming to power of Reza Shah in 1925. Long-term negotiations between the government of Iran and the Anglo-Iranian Oil Company led to relative, though insufficient, improvement in the share of Iran from oil exports.

**Diagram 33 - oil revenue growth coefficient-DS**

The following diagram show the income of Iran through export of crude oil from the beginning to the end of the reign of Reza Shah. In the oil revenues diagram, in spite of fluctuations, we observe 80% increase. As far as production is concerned, we see an ever-increasing trend with approximately no serious fluctuation. Thus, the economic

**Diagram 34 - export raw oil revenues in million Liras-DS**
The dependence of the Country to oil export and the gradual industrialization based on single product exports, the same as many developing countries in Asia, Africa and Latin America was being shaped.

The remarkable increase in oil extraction to meet the demands of the industrial countries which provided for the development of role of oil in the Iranian economy is outlined in the following diagram. Between years 1913 to 1922 and as we approach the reign of Reza Shah, we face a great leap in oil extraction. Although oil extraction continues to grow until the end of his government, the growth instant and the its quick increase never reaches the period between 1913 to 1942.

Diagram 35 - raw oil extraction in million tons-DS

The Achilles heel of Reza Shah's economic policy in the industrialization of Iran was his lack of attention to the improvement of extraterritorial trade balance without oil, i.e. non-oil exports. During years 1931 to 1942, not only we see a serious decline in the

Diagram 36 - exports without oil(Tons/Rials)-DS
weight of non-oil exports, but we don't observe a considerable increase in the value of such exports, disregarding the inflation. During years 1931 to 1942, we first encounter a decline and then a low 10% increase during 10 years. Lack of attention to equality in extraterritorial trade balance without oil can be seen in the incessant increase of imports. No increase in the weight occurs but the value of imports increases from 9.32 billion Rials to 47.17 billion Rials, i.e. nearly 500% increase. Reza Shah achieved to improve the extraterritorial trade of Iran only through insufficient increase in extraction and export of crude oil not by a considerable increase in the value of non-oil exports in industrial and agricultural areas.

Diagram 37 - Imports and its value-DS

A glance at the juncture between 1919 to 1927, at the beginning of Reza Shah's government reveals a sample of this incorrect tendency in the Iranian business policy which continued to the end of his reign. At the beginning, he successfully tries to improve the trade balance and

Diagram 38 - non-oil exports and trade balance-DS
save it from the permanent old deficit, but his efforts to overcome economic hardships, increase non-oil exports and organize economy and investment in quick-yielding industrial and agricultural sectors and the extraterritorial markets for export and gaining income—the same as Japan and some other Asian countries, remained ineffective and the process of modernization of Iranian economy cannot go out of its deadlock.

3.2.3 The End of the Second Modernization Phase and the Disorder following the Second World War

At the climax of his power and with the sign of defeat of Hitler Fascism, Reza Shah inevitably left Iran upon entry of Allied Forces to Iran, however his constitutional monarchy with semi-feudal – semi-colonial structure remained in place. The absence of Reza Shah from the scene could not change the dictatorship system much, because no organized political party existed in Iran and any objection was violently suppressed during the dictator rule of Reza Shah. In this period, political changes were determined in new forms under the influence of British foreign policy. However, the entry of the Allied Forces and dismissal of Reza Shah provided an appropriate bed for gradual growth if anti-totalitarian movement among different classes of people. The changes following the Second World War in Iran were actually a continuation of the incomplete Constitutionalism Revolution in years 1905-1911. As Iran was the first Country in Asia who raised the flag of anti-colonial campaign, once again changed into one of the pioneers of anti-colonial fights in Asia during the years following dismissal of Reza Shah. Both great movements of Iran occurred in a milieu of historical necessity for eliminating feudalistic relations, in lack of a powerful central government and with a view to encouraging international conditions. The radical economic, social and political demands were still in the working agenda of the modern growing layers of the Iranian society. The anti-colonial movement in these years is simultaneous with the extensive wave of combats of third world countries for attaining independence. India gained independence in 1947, the flames of liberalistic movements rose high in the Southeast Asia, the Civil War continued in China and the process of fights in Africa which was still entirely under the yoke of colonialism was deepening. Thus, the colonialism which was prevalent for hundreds of years was harnessed to a large degree by the
3.2.4 The Second Endeavor for Democratization of Social Structure

Mohammad Reza Shah, who came to power after compulsory resignation of his father and lacked popular support, first of all broke the two great movements in Azerbaijan and Kurdistan with all-sided foreign support and suppressed the movements by killing 25 thousands and leaving tens of thousands wounded. The suppression of these two movements paved the way for an all-sided raid to the nationwide movement. Attacks on resistance forces in Mazandaran, Gorgan and Isfahan began. Following the strike of Khuzestan oil workers, martial law was announced. The leaders of worker syndicates were arrested and based on the plots of the governors and support of Arab tribes of Khuzestan, 46 of the strikers were killed and 17 others wounded. In Mazandaran cities also, armed bands assassinated representatives of workers in the daylight. In 1946, a lot of factories were occupied by the army and gendarmes and many papers and worker syndicates were banned. The second move for democratization in these years was specifically influenced by the oil policy of the Country. Until 1951, about 15% of the government income was earned from oil exports and its share in the gross national production was only about 4 percent, but in years 1947 to 1950, the foreign currency revenues of Iran from oil export equaled 66 percent of the entire foreign currency earnings. The policy of England was focused on preventing Iran from developing oil-related industries. The only exception was the big oil refinery in Abadan operated with 5 million tons capacity in 1951. The policy of absolute control over the oil resource of Iran extended to the degree that even the purchase and sale of shares of Anglo-Iran Oil Company in Iran was banned in order to prevent any influence of Iran in the said Company. The unfair oil policy of England caused a large wave of disagreement among different classes and groups of Iranian society. The covenant signed in 1933 between Reza Shah and English Oil Company did not change the unequal status that much and extended the operation of oil resource of Iran without securing long-term interests of Iran until 1993. On October 22, 1947, the National Consultative Assembly (Parliament) passed a law on "restitution of
rights of the Iranian nation" which can be called a beginning for the oil nationalization movement of Iran. (213) Years 1951-1953 can be considered the years of severe political tensions among different social classes of Iran for playing a role in the future destiny of the Country and also the years of intense rivalry between England and America on the Iranian market especially the oil reserves of the South. Due to lack of political and social stability and an organized central government, no considerable changes occurred in the economic structure of the Country during this period. However, the anti-colonial movement in this decade reached unprecedented achievements in the history of political movements in Iran and it can be said that the future of Iranian economy after the coup in 1953 was a reflection of these same events and achievements (the same as the political and economic reforms of Nasereddin Shah after the opposition movement of Babists in Qajar era). After the Second World War, Ghavamolsaltaneh who was one of the big landowners of Gilan was appointed prime minister. The young king did not have a significant role in the political and economic events of these years. In his first year of government, he traveled to the Soviet Union and, by concluding the contract for operation of north oil resources for 50 years with the Soviet Union, tried to improve the relations of Iran with her powerful northern neighbor. According to this Contract, the share of Iran in the first 25 years was determined 49% and that of the Soviet Union 51%. On the other hand, the relations with America strengthened and as America gained more power after the War, the economic, political and military presence of this Country in Iran expanded. In 1947, the extended military presence of America in Iran was stabilized and the contract term of American advisors extended. They organized the army in the American system and equipped it with American war ammunition. In the same year, without approval of the Parliament, 25 million dollars loan was received from America for the purchase of arms and ammunitions from America and the military airports were built in Qom, Rasht and Babolsar near the Soviet border. According to another covenant, more American were employed in the Ministry of War and the General Headquarters of Army and the American officers were granted exclusive right to work in the Iranian army. The United States was trying to enter Iran, as the neighboring Turkey, into the anti-Soviet block. (214) After Ghavam became the prime minister, the Americans gradually pushed the British out of their trench. England openly disagreed with the payment of 250 million dollars loan by
America to Iran and also the 25 million dollars loan for purchase of ammunition and army requirements. The American ambassador in Tehran proposed Ghavam to revise the Iran-England oil treaty and to assign the administration of oil to American-Iranian or American-British-Iranian oil company. He even declared the readiness of his government to purchase the entire share of the British in the Iranian oil. Thus, the United States made the best use of its superior position after the Second World War and the inability of the European rivals, who had sustained many damages during the War, in the global scene including in Iran. When Hakimi became the prime minister, the first 7-year economic plan of Iran prepared with all-sided cooperation of the American company of "Madras-Navson was ratified in the Parliament in February 1949. In order to implement this plan, 7.8 billion Rials from oil revenues, 6.7 billion dollars loan from the World Bank and 4.5 billion Rials loan from the Central Bank of Iran had been foreseen. From the amount of 21 billion Rials as the border point budget of the plan, 5 billion Rials for development of agriculture, 5 billion Rials for construction of ports, airports, railways and roads, 1 billion Rials for establishment of Iranian Oil Company, 1 billion Rials for piping, water and power supply, 1.5 billion Rials for home construction, 1.5 billion Rials for health and medical aids, 3 billion Rials for industries and mines and 1 billion Rials for training workforces were incorporated in the Plan. The deep economic crisis led to intense political and social tensions aiming at deep changes in the old structure of the Company. Following different political events, Mosaddegh was appointed prime minister and by announcing the nationalization of oil, executed the policy of "economy without oil". After an unsatisfied visit of the US and following the vast economic disorders, Mosaddegh founded the strategy of "economy without oil", because in his view, the complicated knot of oil could not be opened in near future. The policy of economy without oil which Mosaddegh selected in 1951 did not succeed. Overcoming the deep financial crisis during Mosaddegh time was only possible through sale of oil but no clear policies were followed or access to new markets. Due to foreign pressures and unclear economic policy to overcome the economic problems of the day, Mosaddegh government refused to sell oil and emphasized on the doctrine of "economy without oil" as before. On the other hand, the economic pressures by America and England, inevitably led to the expansion of non-oil economic relations of Iran with Easter Europe.
countries. In this historical juncture, the American government even did not accept to sell the sugar needed by Iran in installments or against export products. (215) By his impartiality policy and refusing to accept the common proposals of America and England to conclude a new oil treaty, Mosaddegh government aroused further enmity of these two states. Thus, his government became a target of military coup the practical leadership thereof was assigned to General Zahedi. The first coup attempt failed. Zahedi and his assistants were arrested first and then released, but the second attempt, which, as described by the French paper "Observer", was organized by 45 million dollars financial aid by the US to Zahedi succeeded and a large number of political activists were arrested or killed. The same as the Constitutionalism Revolution, the Oil Nationalization Movement also failed, but brought about some victories: 1- Mosaddegh government passed the Law for Nationalization of Oil, something really unprecedented in the history of Iran and the East Asian countries 2- He did not enter into the groupings of America or England and signed no unfair treaty with them. 3- Decisively cut off political relations with England and deported its representatives, an event which caused extensive reaction in the world and especially in West Asia. 4- Imposed sever damage to the economic interests of England, for example, closed the Bank of England, Iran and Middle East which was one of the colonial bases of England. In his short government, however, Mosaddegh committed some major political and economic mistakes in implementing his policies, in spite of the said achievements; 1- The policy of "Economy without Oil" was an inevitable failure from the beginning and practically paved the way for the military coup by the use of rich and dissatisfied capitalism and feudalism. 2- Mosaddegh did not take serious and clear actions to reduce the economic and political consequences of Truman's Point 4 which seriously threatened the political and economic independence of the Country and as a result, the CIA agents and dependents found the opportunity to organize their operations for overthrowing his government. Although he had a clear view of and was determined about the nationalization of oil, he avoided to disseminate the slogan of Republic in place of Monarchy. When the young king fled the Country under people's pressure, his government got a very good opportunity which he did not make use of. 4- On the other hand,
Mosaddegh and his National Front refused to unite with the leftist party of Hezbe Toodye Iran (Iran People's Party) which, in spite of being declared illegal, was active and capable of supporting his government. Lack of an organized unity between the two major political forces, Iran National Front and Iran People's Party was due to the unclear and heterogeneous view of Mosaddegh toward this political movement and also the radicalism of this leftist party.

The Constitutionalism Revolution shattered down the foundations of the old system and the dictator regime of Reza Shah established the national bourgeois and semi-traditional unity of the new society on these smashed foundations. The events of years 1951-1953 expanded the political, social and economic achievements of this new society and gave new dimensions to the anti-colonial fights aiming at attaining demands of the masses. The greatest achievement of these years was fighting for nationalization of oil industry and the extensive national endeavor including the efforts of Iranian bourgeoisie to relieve from the international work division system based on dependence on oil export and this was materialized by adopting the policy of "economy without oil". Although the nationalization of oil and the policy of "economy without oil" was doomed to defeat because of weakness of domestic forces and the incomparable power of the colonialists, it displayed the demands of the vast masses of people and gave new dimensions to the anti-colonial objector movement. Another great achievement of these years was the gradual formation of economic groupings and social strata and classes in the framework of parliamentary and party campaigns. Based on the economic changes of the Iranian bourgeoisie during the years of during the second modernization phase of Iran – after Nasereddin Shah- the Iranian social texture transformed and the bourgeois, workers and other social classes were changed. The economic and political events in these years were mainly under the influence of the activities of these two social classes and their supporting forces within the framework of two political institutions, Iran National Front as the representative of bourgeoisie, close groups and even layers of landowners on the one hand and Iran People's Party as the representative of workers, peasants and leftist intellectuals on the other.
In this part, we will describe some of the most important economic changes in the field of oil extraction and oil income and its effect of non-oil exports and imports with the aid of diagrams. Years 1942 to 1954 are full of tensions of political changes the climax of which was in the years of Mosaddegh government. Between 1942 and 1951, oil extraction increased nearly 5 times, in spite of severe domestic challenges, which is much more than the 10 last years of Reza Shah's reign. The market demand for Iran's oil in the industrial countries, investment and discovery of new resources were the causes behind this rapid increase. During the Mosaddegh time, however, oil extraction greatly reduced and reached the level of meeting only the domestic demands.

Diagram 39 - raw oil extraction in million tons-DS

The revenue of Iran through crude oil exports and its increased role in supplying foreign currency needs of the Country and organizing the domestic economy between years 1920 to 1951 are shown in the following diagram. The Iranian income from oil which was less than 2 million Liras before 1932, increased to near 4 million Liras in the last years of Reza Shah's rule and to above 16 million Liras in the tension years after Reza Shah through 1951.
Disputes with oil companies during Mosaddegh government caused heavy financial pressure on the oil-dependent economy of Iran and the Iran's income from oil during this period reached close to zero and was even less than the 1920.

*Diagram 40 - export raw oil revenues in Liras-DS*

The reflection of crisis in oil export and effort of Mosaddegh for economic reconstruction without reliance on oil can be observed in the change of value and weight of non-oil exports of Iran. The growth coefficient of these exports from 1932 to 1950, i.e. the beginning of the crisis faced a fluctuation. During the final 10 years of Reza Shah's reign and because of lack of considerable increase in the share of this sector, we face a reducing trend in the extraterritorial trade balance.

*Diagram 41 - export of goods minus oil products-DS*
No considerable change occurs between years 1950 to 1952 and the fluctuations are in the same level of the previous years. The major change from 1950 to 1953 in the area of non-oil exports goes back to the reduced foreign currency income of Iran from crude oil exports and the short-term efforts to attain substitutes for oil. These efforts also remain futile because of the all-sided inabilities of the sick economy of Iran and the political failures in modernizing the government structures.

Lack of sufficient foreign currency and the disorder of extraterritorial trade balance following the oil crisis, led to quick decline in imports and dissatisfaction of a large group of businessmen and capital owners who step by step joined the group opposing Mosaddegh as the Prime Minister. The value of imports of the Country between 1947 to 1950 reduced near 7 times and the shortage of needed goods and the consequent expensiveness paved the way for considerable increase of imports after the 1953 coup and removal of Mosaddegh from the post of prime minister. The events of 1941-1953 although did not reach their final goal, played a special role in the process of future changes of the Country and their economic and political outcome affected not only Iran but even the Middle East as well. By the success of the coup and Mohammad Reza Shah's return to the throne, some other inevitable economic changes occurred. In regard to the oil covenants, the international oil consortium agreement was signed and enforced in 1954, one year after the coup. In this stage, the party to Iran were not only English companies. 14 American companies including all members of the International Oil Cartel, one French company, one English company and one Dutch-English company in the International Consortium gained control over 100,000 miles oil rich fields of Iran formerly managed by the English companies.(216) This composition satisfied the want of Americans who have gained much power after the Second World War for dominating the Iranian oil resources. In the concluded treaty, the 50-50 profit division agreement demanded during the oil nationalization movement was apparently adhered to and became a basis for the negotiations of Middle East countries toward securing their economic rights. In spite of some positive amendments in the new oil treaty, in practice, the International Consortium enjoyed all the rights of the previous Anglo- Iranian Oil Company and all documents related to discovery, extraction, refining, transport, price and so on were kept hidden from the Iranian government. This agreement which was concluded in 1954,
determined the term of operation of Iran's oil until 1994 and the National Iranian Oil Company accepted some undertakings to pay "compensation" to the former Anglo-Iranian Oil Company. Furthermore, Iran accepted to pay the English company an annual amount of 6.7 million Liras for 10 years, totally amounting to 67 million Liras for the unworn-out establishments and utilities in the territory of contract. Thus, in spite of about 50 years looting of the Iran's oil resources, it was agreed to pay a total of 143 million Liras compensation to this Company. Also, it was supposed to receive 214 million Liras from the International Consortium as key money.(217) After the Second World War, by rapid increase of crude oil exports from the Middle East region, the global pricing system of oil which was previously determined by the US underwent some changes. The share of the Persian Gulf states in global oil production reached from 4.8% in 1940 to 12.2% in 1948 and in 1949, this region secured the third place in oil production after America and Venezuela. What had become clearly known was that the output of oil wells in the Middle East region was higher than other regions. The average 24-hour yield of each well in 1949 in the Persian Gulf region was 5143 barrels, in Venezuela 200 barrels and in the United States only 11 barrels.(218) What especially attracts the attention is that in spite of vast oil resources in the Persian Gulf region, the oil industries were not expanding, because America was itself an oil exporter. The growth of industries started seriously when America changed from an oil exporter to an importer of crude oil. During the challenges on nationalization of oil in Iran and the dissemination of similar demands to the Middle East countries in their negotiations and talks on division of oil profits on 50-50 basis, the price of Persian Gulf oil reduced to about 1.75$ a barrel but at the same time the price of oil in Mexico remained 2.66 dollars and in the Caribbean Sea, 2.30 dollars a barrel.(219) The International Consortium agreement considered two types of payments to the government of Iran; income tax and owner's share with specified payment. Based on the computations declared later in 1964 by OPEC, from 11 dollars average price of each barrel oil product in the Western Europe markets, only 74 cents, i.e. .7% was paid to the oil exporting countries. 41.4% was the profit of exclusions and 52.3% was received by the European oil importers as tax, duties and so on.(220) The extraordinary profit earned by the oil companies had different reasons:
1- The geological conditions in the oil rich fields of Middle East countries provides for very low access cost, because the oil reserves are located in relatively low depths and drilling deep wells is not needed for oil extraction.

2- The volume of oil extraction from the wells in this region is much more than wells in other regions. For example, the annual productivity of a well in the Middle East, the Near East as well as Iran is 200 to 300 times more than a well in the United States.(221)

3- The wage of oil workers in Iran is 10 to 15 times less than their American colleagues. In Iran, the wage of workers in oil industry was even less than the wage of other workers in other industrial institutions and the salary paid to the workers in South Iran oil establishments was 18 Rials against 12 to 16 hours work which was not even enough to feed themselves. The International Labor Organization commission reported in 1950 that the wage of oil industry workers in Iran is 4 times less than the wage of similar Venezuelan workers. The result was that the production cost of 1 ton oil in America- Texas was 11.8 dollars and in Iran only 5 dollars.(222)

The conclusion of the new agreement which was objected by the people and reflected in the Iranian newspapers even in the days after the Coup was simultaneous with the arrest and execution of political activists. The differences between the new agreement and the Oil Nationalization Law which was passed in 1951 by the Parliament under pressure of the Iran National Front are as follow: 1- Operation of Iran's oil which, based on the 1951's Law, was supposed to be in the hands of Iran, was assigned to the International Consortium. The share of Iran from oil exports during 1966-1971 was only 3 percent.(223)

2- The territory under control of the Consortium increased and in addition to areas controlled by English Oil Company, the government of Iran gave control over 8 islands in the Persian Gulf and its coasts to the Consortium.

3- After this agreement, the extraction of oil from Iran extraordinarily increased. During 9 years until 1963, this Consortium extracted more than 240 million tons oil which was more than the entire volume extracted by Anglo- Iranian Oil Company during its 50 years of operation in Iran (the entire 50-year extraction of this Company was only 325 million tons). The amount of operation of oil by Iran during these 9 years was about 250 to 260 thousands tons, i.e. only 1/1000th of the amount extracted by the Consortium. Nearly the entire oil extracted was taken out of the Country without paying any tax or
custom duties. The net profit of oil companies during the 5 years of 1956-1960 in Iraq was 62 percent, in Saudi Arabia 61 percent and in Iran 71 percent of the investment. (224)

4- Contrary to the demands of Oil Nationalization Movement, all refineries, oil pipes, power factories and other facilities were placed under control of the International Consortium and some other unlimited powers for building railways, ports, airports and so on were assigned to that Company. Consequently, the refining of oil in Iran considerably declined and Abadan Refinery operated with low capacity.

5- The 1953 military coup and assigning the South oil concession to the International Oil Consortium opened new gates to foreign experts especially Americans and in some cases, the number of such experts doubled. At the beginning of 1962, 900 foreign mainly American experts were working in the Consortium premises while in the same year, 40 Iranian experts lost their jobs and were substituted by foreigners. (225)

6- Dismissal of the oil industry staff was not restricted to the experts but included even the Iranian workers and laborers. While the operation of oil was increasing year after year, the number of personnel reduced more than twice and reached 40,000 persons. During 4 years, 15000 workers became unemployed and 30 million Sterling Liras were added to the Consortium's annual income and the plans for future dismissals were programmed. Since the beginning of the activity of the Consortium, more than 30,000 Iranian workers were made to immigrate to other countries including Kuwait in search of job. (226)

The agreement of the International Consortium not only aroused objection of the people, but even the Shah himself objected to its serious shortcomings in an interview in 1957 and asked for a higher share from the oil export profits. (227) What was adding to the economic hardships in addition to low government income was the increasing military costs f the regime after the coup. By joining the Baghdad Anti-Soviet Military Treaty which was later called Cento after Iraq left it, together with Turkey, Pakistan and Iraq, the armament expenses of Iran increased. During 1953 to 1961, the Shah spent more than 65 billion Rials on military affairs and building relevant establishments and thus stepped the same path as his father, Reza Shah, had trodden during his 20-year rule. The increase of
unnecessary nonproductive heavy costs added to the financial hardships of Iran. During 5 years following the admission to Cento, these costs devoted more than 40% of the annual budget of the Country to themselves. The side expenses of military forces for construction of roads, airports, ports and other military establishments were more than this. (228) The excessive increase of military expenses caused budget deficit and imbalance in payments of Iran every year and consequently the gold and foreign currency reserves lessened. During years 1958-1959 to 1960, these reserves decreased from 117 million dollars to 70 million dollars and the deficit of Iran payments balance in the same interval increased from 49.2 million dollars to 63 million dollars. Along with these financial disorders, inflation raised and the Iranian currency was depreciated day by day. After the Second World War, the exchange rate of dollar against Rial reached from 32.5 Rials to 75.5 Rials for each dollar. The inevitable consequence of this financial bankruptcy was the increase of foreign debts. The foreign debts of Iran, without inclusion of military and technical aids, reached to 574.3 million dollars in 1963. According to the reports of foreign media, these debts had increased to about 1 billion dollars. The most important economic problems of Iran during these years can be sought in the following factors:

1- After conclusion of the new agreement with the International Oil Consortium, the bankrupt and oil-dependent economy did not actually gain a new income. It is true that the Iran's oil revenues reached from 32 million dollars to 181 million dollars in 1954-55 and increased to 437 million dollars in 1961, (229) but these incomes were ineffective against the flooding import of foreign products. Furthermore, it should be taken into account that the increased income was not because of the increased price of oil but due to unprecedented increase of the volume of low cost oil exported from Iran.

2- The military policy and the increased armament expenditures and the consequent heavy pressure on the Country's budget added to the budget deficit. In addition to the tendency of America toward expanding its bases in the south of U.S.S.R., this policy was indicative of the fear of the coup regime of Shah who knew no popular base among for itself among the people.

3- the increased influence of foreign investments which started since 1952 helped the foreign companies and international capitalists to exit huge profits from the Country every year. The total amount of profits
of foreign companies earned in Iran in 1958 amounted to about 1 billion dollars.\(^{(230)}\)

Following the policy of open doors, in the same year, 1084 foreign companies including 220 American companies, 185 English companies, 151 German companies, 160 French companies, 53 Japanese companies and 40 Swiss companies were working in Iran. The government of Iran guaranteed that the owners of foreign capitals are authorized to take their money out of Iran whenever they may wish and that their profit during their first five years of activity in Iran is exempted from tax.\(^{(230-1)}\) On the other hand, numerous facilities were provided in the banking system for attracting foreign investment and American, French, Japanese and English banks started wide activities with the help of Iranian capitals. The open gates policy on the other hand led to irregular import of foreign goods and the bankruptcy of the disabled domestic economy. During these years, the imports increased 5 times as exports and the trade payments balance deficit increased four times. The financial crisis resulting from heterogeneous economic policies after the coup, made the government adopt some futile decisions such as reducing import of some sedan cars, alcoholic drinks and luxury items.\(^{(231)}\)

4- The dominance of the remnants of feudalism in agriculture and the general poverty of peasants who formed the majority of population of the Country resulted in the stagnation of domestic market. Although Reza Shah started the second phase of the modernization of Iranian economy and led it forward a few steps, he failed to understand the necessity of agrarian reforms in the backward country of Iran and did not respond to the need of the people and the incomplete demands of the Constitutionalism Revolution. The outcome of economic disabilities and insufficiencies in the years following the coup was that the Country remained in its backward state and did not succeed to follow up the economic renovation of Reza Shah's time by adopting an elaborated economical policy in spite of the increased oil revenues earned from extravagant export of the oil reserves. The consumption per capita of industrial goods in Iran during these years was even less than the two neighboring countries of Iraq and Turkey. The industrial stagnation of the Country led to the bankruptcy of many institutions including textile and leather factories and by the increase of number of bankrupt companies, the money fled into the foreign banks.\(^{(232)}\) Economic bankruptcy and increasing unemployment rate led to mass objections especially in rural areas and the peasant movement
expanded since the end of 1960 to the degree that in some villages, the peasants expelled the landowners from the villages. Transformation in the feudal texture of Iranian villages which was a historical necessity entered into a new stage by the expansion of popular objections and with the positive approach of American rulers toward creating a new structure in Iran. The same as some other developing countries, the efforts toward agrarian reforms faced disagreement and resistance of major landowners in Iran as well. Similar resistance could be observed in Egypt where not only the feudalism but the neonatal and developed bourgeoisie also opposed the agrarian reforms law passed in 1973. In India too, the reforms faced resistance of major landowners who were among the leaders of opposition and some members in the leadership of anti-colonial movement in 1970 such as the family of Vidahan Sabha earned most of their income through land.(233)

3.2.6 Agrarian Reforms and the Reactions

In Summer 1962, six legal bills on reforms in the Country were drawn up and put to referendum. Later, 6 other clauses were also added and the law about agrarian reforms was the most important bill of all. The most important of these bills included: agrarian reforms, nationalization of forests, sale of government factories and fabrics with the aim of financing agrarian reforms, changes in the Parliament elections law, giving shares in the income of industrial institutions to the workers and establishing "Literacy Corps" for fighting illiteracy in villages.(234) The Law on Agrarian Reforms which had been approved by Amini was completed and expanded by Alam government and its implementation started in the end of 1962. The implementation of agrarian reforms faced the disagreement and objection of major landowners and the backward religious circles. In June 1963, demonstrations were held in Tehran and Qom and some other cities for three days in which Khomeini played a special role.(235)

The military forces of Shah suppressed the demonstrations, arrested the objectors and send Khomeini in exile first to Turkey and then to Iraq. The agrarian reforms can not be considered a final solution for eradicating feudalistic and semi-feudalistic relationships in Iranian villages. These reforms provided gradual passage of rural agriculture of Iran to the capitalistic development and were implemented in fair
conditions for the landowners and the rural inhabitants. The positive result of agrarian reforms was the weakening of the economic and political influence of big landowners in villages and their general function in the political life of the Country. However, these reforms did not cause a deep transformation in the life of rural people and their income per capita still remained trivial. The major requirements of agrarian reforms included:

1- Maximum area of authorized ownership for each person was 400 hectares irrigated land and/or 800 hectares dry farmed lands. Each owner could transfer to his legal heirs 1.5 times this area within 2 years from approval date of the Law. He could also transfer any area of his lands to others provided that he paid some money to the government as development duty.

2- According to this law, the ceiling of ownership for each person all over Iran was one entire village and the rest of his lands were supposed to be bought by the government and assigned to the villages who worked on those lands.

3- Mechanizing and renovation of agricultural system were predicted to be achieved in two ways: First, through agro-industry companies which were a special capitalistic form mixed with foreign capital and secondly through agrarian joint-stock companies which acted as a gradual and long way for converting peasants to workers of such companies. The Shah expressed his view of these changes as such: "The agriculture of Iran should be mechanized. Agricultural poles should be created in places where the land is fertile and water is available for irrigation and in the same ratio, even more, the number of workers should be added in the Country and the number of those involved in agriculture should be decreased." The agrarian reforms provided more facilities for development of capitalistic relationships in villages and at the same time, provided good conditions for the landowners who tended toward new approaches and also for the big private firms and foreign companies. The specifications of agrarian reforms in Iran can be summarized as follow:

1- Disregarding the historical necessity of transformation in Iranian villages, which was in the agenda since the Constitutionalism Revolution, these reforms were executed from the top and with the support of Washington in the framework of "Alliance for Development".

2- The aim of these measures was to stabilize the bases of the Shah's regime, reduce the objections of rural people and develop capitalistic
relationships in villages and were combined with efforts to attract the satisfaction of the major landowners as serious allies of the government.

3- In spite of new steps toward renovation of villages in the framework of agrarian reforms, the average income of farmers remained low as before.

4- Half of the farmers did not receive any land in the course of agrarian reforms and on the other hand, a considerable portion of large pieces of land remained in the hands of big landowners. From total 802 million hectares cultivable land, about 350 million were conveyed to the farmers and nearly 407 million remained at hand of big landowners.

5- The plan for establishment of agrarian joint-stock companies progressed slowly and included a small number of farmers.

6- Under this plan, fertile lands were assigned to landowners and foreign investors through Agro-industrial companies. Entry of foreign capital into Iranian villages, which was unprecedented, contrary to colonized countries of India, Brazil, Cuba and so on, took place through Agro-industrial Companies. In 1973, 50 agro-industrial companies were established in Iran. With government investment and 3 American companies and one Japanese company, an agro-industrial company was established in Khuzestan Province. Similar projects were carried out in fertile regions such as Azerbaijan, Dasht-e-Moghan, Ghazvin, Mazandaran, Khorasan and so on with the partnership of German, Dutch, English and other foreigner investors.

The enforcement of agrarian reforms, in spite of its positive aspects, did not increase the productivity of rural people much and the production of agricultural products remained in the same low level. Dependence on import of agricultural products continued and absorbed an important portion of the national income. The investment of government in agriculture sector and financial aid to the rural people which was supposed to increase agricultural production, did not yield due result due to planning deficiencies and executive disorders.

As a large number of small agricultural units had been created after the agrarian reforms and as these small units had a minor economic ability, the government loans played a special role. A modern organization for loaning and investments was necessary for helping
the improvement of agriculture. This help could have been specially provided by improvement of irrigation system, especially in a country where unique traditions such as building subterranean water canals dates back to very old times in her thousands years old history and where the precipitation is trivial in comparison with world scales. According to government forecasts, the existing irrigation systems were supposed to be operated and improved and new systems planned and built. Then, the modern mechanized agriculture with high output was supposed to be launched by providing farmers with required machinery and agricultural trainings. In order to achieve this end, warehouses, transportation means, chemical fertilizers, toxins and so on were needed which was impossible for the poor peasants to procure. If the agrarian reforms were enforced in the correct manner, the farmers could provide for their own needs first and then indulge in economic relationship with the cities. What was adding to the difficulty of the job, in addition to incorrect economic policies of the government, was the fact that the Iranian farmers, who had been under usurpation by the feudalism and the big landowners for thousands of years, were unfamiliar with the new capitalistic world based on competition and continuous increase of output. As planned on paper, granting government loan to the farmers was supposed to help their investment in reconstruction and modernization of agriculture and enhancing productivity. In practice, as no serious control on investment of farmers was in place, the agriculture loan mainly obtained through mediators was either spent on non-productive expenditures or used as ordinary loan with interested refund. The result of this wrong policy which did not bring about any increase in efficiency and productivity was reducing the amount of government loans to the villagers. Granting loan which was planned to initiate reforms in villages and enhance work efficiency, led to the increasing indebtedness of the villagers. Decrease of government loans in the course of time, made the bankrupt villagers apply for private loans. Thus, beside the debts of the villagers to the government, numerous new debts were added such as the debt for repayment of land mortgage, mortgage interest, debt for using irrigation water and so on. Sometimes, the number of creditors reached even 10 different institutions. According to a study in 1970, the amount of loan granted to the villagers was sufficient but the received loan was in excess of the amount needed for reconstruction of agricultural lands and consequently a portion thereof was used for daily expenses. It should
be considered that it was natural for the poor and backward villagers who were deprived from the facilities of urban life, to use these financial aids for removing the daily needs of their simple life. In some cases, the outcome of the policy of government and private investment and loaning ended in more indebtedness of the farmers. The loans for investment were not proportionate with the productivity of the farmers and as a result, the bankruptcy of small rural units was expanded yet more. (238) Generally, it can be said that agrarian reforms did not seriously improved the life of rural people but severely damaged the feudalistic traditional relationships in villages and developed the capitalistic relations in the villages and also the business transactions between city and village and connected the village to the chain of growing capitalistic economy of Iran and in some aspects to the chain of global market. The structure of agricultural economy, however, remained unable and, regardless of some exceptions, developed consumer characteristics.

3.3 The Third Modernization Phase of Iranian Economy

The first phase of modernization of Iranian economy during the Qajar dynasty was an initial effort in very difficult international and domestic conditions which yielded positive although trivial consequences for the economy of Iran. In the second stage of modernization, during the reign of Reza Shah, these changes which accompanied some proper economic decisions and relative improvement of international conditions in favor of Iran, expanded and deepened and imposed sever blows on the structure of the backward decaying feudalistic system. After relative political and economic stability during Mohammad Reza Shah's time in the years following the coup and upon implementation of agrarian reforms and especially conspicuous increase of oil price in the global market, the economic changes were accelerated. In this historical juncture, the national economy developed palpably and effective measures were taken in fighting the economic backwardness of Iran. During the years of the fourth 5-year economic plan of Shah, between years 1967-1973, Iran's economic growth was 11.6% based on fixed prices. General national income during years 1971-1974 increased 21.2% based on current prices and 14.2% based on fixed prices. In 1974, due to rapid increase in oil extraction and doubled price of oil in global markets, the foreign
currency incomes of the Country grew about 3.3 times more than before and this caused a considerable surplus for about 8.2 billion dollars for the government of Iran.(239)

3.1.1 The Determining Role of Oil in Economic Growth

The future deep transformations in the structure of the backward economy of Iran were made possible through high revenues of oil. This time, contrary to the immediate years after the coup, the increased income of oil exports was due to considerable increase of oil price in the global market rather than increased quantity of exports. During 1963-64, 555 million dollars, in 1968-69, 958 million dollars and in 1970-71, 1.2 billion dollars was saved in the government treasury. In fiscal year of 1973-74, this amount reached 5 billion dollars and after four times increase in oil price in 1975-76, reached to about 20 billion dollars. This historical change in foreign currency revenues provided new and specific conditions for the Iranian government who had always been involved with different financial hardships. Based on the new conditions and by adopting elaborated economic policies, a major part of economic backwardness of the Country could have been overcome. The increased budget was spent on Third Economic Plan of years 1962-1968 and Fourth Economic Plan of 1968-1973 and Fifth Economic Plan of 1973-1978 and increased the economic development of the Country. During two economic plans and as a result of spending 9.5 billion dollars the G.D.P. increased for 8, 14 and 30 percent, respectively, during years 1970-73. The initial plans for economic development were devoted to preparing the infrastructures including restoration of transport system, agriculture sector especially agrarian reforms and irrigation master plan. In the future plans, industry, mining and human resources were considered.(240) After mutual negotiations between the Consortium and the Iranian government, a new agreement was concluded in March 1973 under great influence of Shah. Based on this Agreement which was enforced since July 1973, National Iranian Oil Company undertook the entire responsibility of oil industries and simultaneously undertook to provide the Consortium "a certain quantity of oil in a fair guaranteed price" for 20 years. Consequently, the free pricing of oil and determining quantity to be exported was, to some degree, out of control of the government. It can be said that the Iranian oil was put
under control of Iran but the control of Consortium, although limited, remained in force.(241)
In 1974, following the accelerating increase of oil price, the foreign currency income increased notably. The share of Iran in global oil market was 6 million barrels a day, i.e. 10.6 percent of the total crude oil production in the world. The treasury improved so well that Iran repaid her foreign debts before their maturity dates and furthermore, Shah granted loans to the countries in trouble, directly or through international institutions. The government also started to invest overseas. The increasing trend of foreign currency incomes led to adoption of new decisions to change the Country's budget. In 1973, the budget was doubled(242) and the volume of cash money rapidly increased because of the great acceleration of current and development costs and extensive loans of banks to private sector. The total payments of Iran during 1973-1977 was near 10 billion dollars which was 3 percent of the G.N.P. of the Country.

Foreign currency was taken out of Iran in three forms of loan, gratuitous aids and investment. In this period, the total amount of loans reached 7.8 billion dollars, gratuitous aids to 1 billion dollars and overseas investments to 894 million dollars. Also a loan of 1 billion dollars was given to the World Bank. The government of the Islamic Republic still has problems in collecting the repayment of loans granted during Shah regime especially with the United States.(243)

The need to production factors and providing the requirements of institutions and also infrastructures for enforcement of development policies and also the inability of domestic products in providing such demands, increased the imports extravagantly. During only one year, the imports increased for 86% and reached from 6.1 billion dollars in 1973 to 11.5 billion dollars in 1974. The increase of cash funds which was followed by a 15.5% inflation rate, made the government adopt anti-inflation policies. This policy was implemented through reducing current costs and increasing development costs which was mainly invested on by the government. The outcome of these polices was reduction of inflation to 9.9 percent. In 1976, the oil export increased for 10.2 percent and due to high price of oil in global market, the revenues from oil and gas reached 24.17 billion dollars. This amount was a new record in the history of oil export revenues in Iran. On this basis, the share per capita of each person from the oil revenues reached 717 dollars, something really unprecedented in the history of
Iran. In 1976, the quantity of imports increased as before and reached the amount of 20 billion dollars but the anti-inflation policies of the government did not work and the inflation rate increased to 16.5 percent. In 1977, the global demand for oil decreased and consequently reduced the foreign currency income of the government which was dependent on oil, but the volume of imports increased and reached the amount of 25.2 billion dollars. Simultaneously, the inflation rate increased to 24.9 percent. During years 1973-77, the average growth rate of industries was 7.4 percent and the mean growth rate per capita was 5.6 percent. Execution of large industrial projects reduced the unemployment in these years and the unemployment rate reached 2.9 percent which was unique in the history of contemporary economy of Iran. The growth of industries was mainly through government investments. Average growth of investment in this period reached 22.9 percent and the relation of investment to G.N.P. to 34.4 percent which was again unprecedented. The high economic growth led to huge class differences, increasing inflation and lack of attention to villages. During this period, Iran entered into a plan according to which the governmental oil industries were supposed to develop quickly and enter into the oil market directly, without refusing to cooperate with foreign cartels. By new decisions in OPEC, the traditional method of assigning oil concessions which had been a heavy burden on the shoulder of Iran and other oil rich countries for decades was put aside. After this achievement, the United States abandoned the policy of reducing oil price for some time and tried to enforce only the policy of control of energy resources. Increased oil price and higher incomes of oil producing countries, faced the industrial world with the question that how these countries will spend the income thus earned. Not only in Iran, but in other oil exporting countries as well, profitable use of the reserved funds was in the agenda. Some of the problems they faced in pursuing this aim included the low level of economic growth especially lack of machine manufacturing industries inside the Country, small size of domestic market, multi-form economy with the superiority of commodity – based economy, existence of feudalistic relations, less developed and backward infrastructures and the shortage of skilled workers and engineers. Some economists believed that the foreign currency reserves of Middle East countries will reach 50 billion dollars till 1980 which can affect the currency-financial system of the entire capitalist world. According to the statistical data of the International Monetary
Fund, the foreign currency reserves of oil producing countries at the end of 1974 were more than 40 billion dollars or, i.e. 10% of the entire world reserves. It should be noted that the foreign currency reserves of the United States was 7.15 billion dollars and that of Japan 2.13 billion dollars and their reserves were reducing. Based on the assessment of International Bank of Development, the reserves in oil rich countries were increasing. The general trend in oil producing countries was one of the two following ways: some countries used this income for domestic development purposes and some others such as Saudi Arabia and Persian Gulf states deposited it in the banking system or used in international consortiums. In spite of wasting money in useless military costs, paying loan and similar expenses, the government of Iran used the major portion of these incomes for the development of domestic economy. Some experts believe that the continuation of industrialization process of oil producing states is contradictory to the interests of big capitalist countries and the political and military tensions imposed on the Middle East region are intended to impede the economic growth of these countries and inhibit their accumulation of large and uncontrollable assets in this rich area. During the past few decades, especially after the Islamic Republic, the larger portion of crude oil export revenues have been spent for procuring arms or restoration of war damages and the growing rate of wealth accumulation in the final years of Shah which could have influenced domestic and global economy has declined.

3.1.2 Specifications of Economic Growth in the Third Phase

Economic success, growth of industries, progress in education and other social areas which began with the agrarian reforms and expanded by increase of oil prices, although implemented under 5-year plans, lacked a comprehensive and specific program. The most important decisions were adopted by confirmation and final control of Shah himself and the supervision of governmental, judicial and parliamentary authorities were subdued. The third phase of the economic modernization of Iran which was mingled with special supervision of Shah and his decisions pursued the following aims and initiatives:
1- Investment in industrial fields and development of infrastructures were carried out by direct participation of the government. These
investments were dependent on the income earned from crude oil exports and therefore, the government had a determining role in renovation and modernization of the national economy. Regardless of deep historical roots of oriental despotism in Asia and the 2500-year old tradition of centralized power in Iranian monarchy, the unchallenged dictatorship of Shah in this time juncture was specially based on the high financial capabilities of the regime.

2- Due to lack of sufficient capital and as the process of capital accumulation was not complete in Iran as in the European countries, the private sector did not have the money needed for large economic projects and consequently required financial support and legal decisions by Shah and his legislative – administrative apparatus. The group of capitalists who participated in renovation activities of this time, the same as Reza Shah's time, was only from the past landowners, high ranking government officials and the businessmen.(246)

3- Foreign investment became common in Iran especially after 1953. During 1960s, the foreign investments were mainly in rubber industries, chemical industry, construction and mining but extended to automobile, steel, arms and ammunition and agriculture sections in 1970s. In spite of the interest of Shah in investment by foreign investors, the amount of these investments in Iran was little and for example only 2.8 billion dollars in 1973-1978 while in the same period, the government investment reached an amount of 42.2 billion dollars. The private sector invested only half of the above amount in the industry; near 23.4 billion dollars directly and 2.7 billion dollars through government loans.(247) In regard to attracting foreign investment in Iran, Shah held that the increase of foreign capital in Iran and their presence in this Country will make the Western capitalistic states more interested to the stability and independence of Iran.(248)

In spite of positive changes in the backward structure of Iranian economy, the trend of changes were not homogeneous and the new structure had lots of disorders and all these contributed to public dissatisfaction over the non-democratic regime of Shah who had returned to power by the help of CIA and through a military coup. The major economic factors which led to the fall of Shah's regime can be summarized as follow:
1- In spite of economic improvement, the illiteracy rate in Iran was still high, about 68 percent, and the mortality rate was one of the worst in the Middle East. The illiteracy rate even increased in these years and the level of education was one of the lowest in the Middle East.

2- In spite of helping the rural people and the improvements caused by agrarian reforms, still 96 percent of villages did not have electricity and about 50 percent of families owned no land. The financial support rendered to the villagers was little and the stagnation of agriculture as well as lack of financial motives for cultivation due to lack of supportive policies, made a large number of rural people immigrate to the cities. These were the reasons why Iran changed from a food exporter in 1961 to an importer of 1 billion dollars foodstuff in mid seventies.

3- The class gap widened incessantly and the poverty pyramid expanded in the lower social layers. Capital concentration in hands of upper class increased heavily and the administrative corruption and swindling reached to billion figures. In the last few years of Shah's regime, huge amounts- probably exceeding 2 billion dollars- were directly remitted from the oil revenue to the bank accounts of the royal family every year. The Shah's income was estimated to about 5 to 20 billion dollars.(249)

4- The military costs and the role of Gendarme of the Region played by the Shah regime imposed heavy losses on the national budget. Between years 1949-1956, Shah purchased more than 12 billion arms from Western countries and increased the military budget to 7.3 billion dollars until 1956. According to the information released by the American Defense Department, the total value of weapons sold to Iran during 1972-1977, was near 14.4 billion dollars. The other law enforcement forces also devoured large portions of the Country's income, openly or secretly.(250)

5- The economic crisis which was the fruit of imbalanced economic development, increased the inflation and greatly added to the living cost index. This index doubled during years 1949 to 1956. The highly ambitious economic projects of Shah increased the development investments three times during only one year, i.e. 1974-1975 and this added to the revolving cash surprisingly.(251) Fighting overcharge aimed at eliminating or reducing inflation extended to the fight of Shah's regime with the Bazaar and the traditional Iranian bazaar was derived more toward its past ally, the clergy.
6- Although some steps were taken for increase of industrial production and reducing the dependence of economy to oil exports, they were insufficient and lacked comprehensive programming. It is true that the foreign trade balance of Iran became positive upon increase of oil revenues, but this improvement was not due to the increase of non-oil exports. For example, during years 1948 to 1963, the value of non-oil exports reached from 42.3 million dollars to only 82.1 million dollars, while in the same period, the revenue from crude oil exports increased from 29.2 million dollars to 342.2 million dollars. (252) This trend remained constant with minor changes until the end of the Shah's government.

7- The economic growth and huge investment in industry sector increased the number of workers and salaried people. The second stage of economic modernization under leadership of Reza Shah added to the number of workers and changed the class composition of the society to a large extent, but the economic projects of Mohammad Reza Shah caused a major leap. The approximate number of workers and agricultural laborers was estimated about 3.5 million. During Reza Shah's reign until the end of 1941, the workforce of the Country had reached 16 percent but in mid-70s, this figure doubled and reached about 34 percent. (253) Thus, the rural working class changed into the largest social class of Iran. Poverty and misery, not only among the industrial urban workers but also among the construction workers and especially in villages was painful. The worker objections which had a major role in the political events of 1941-1953, although suppressed by the army after the military coup, played an even more important role during the climax of economic crisis.

At the end of 1974, 620 unions and 20 workers federations were active in Iran. (254) The syndicates worked under control of the Ministry of Labor and the Intelligence Organization and all industrial institution and factories were supervised by SAVAK (Iranian Intelligence and Security Organization). The workers movement declined in the early years of agrarian reforms but intensified since 1975 and entered into the serious stage of fighting at the climax of revolution by Khuzestan oil workers who closed the oil pipelines. In 1974, the punishment up to 15 years confinement and even death penalty was approved for worker activists in industrial institutions. (255)
3.1.3 The Third Initiative for Founding Democratic Structures

By the fall of Shah, the third phase of economic modernization in Iran which was deeper and more extensive, compared with both former phases, ended. The years following the Revolution and the years of Iran-Iraq war, from 1979 to the end of the war and to the government of Hashemi Rafsanjani have the same characteristics of the years of Constitutionalism Revolution and the political tensions of years 1941 to 1953. During these years as in the two former problematic periods, no radical economic transformation in way of economic modernization occurred but the need for still deeper and more expansive changes was brought to the scene and entered the agenda of the time. The necessity of sustainable economic growth and the need for implementation of demands so far unattended needed new political and social framework to which the dictator regime of Shah was not responsive. The 1979 Revolution which was supported by millions of people and by all social groups and classes, although fell in hands of traditionalist clergy, stroke some blows on the structure of oriental totalitarian despotism and the centralized monarchic governments of Iran. It is true that the so-called Islamic Republic fulfilled some of the old wishes of the Shiite clergy who dreamt of caliphate and government since the time of Imam Ali, the first Imam of the Shiites, in the form of the sovereignty of Jurisprudent (Velayat-e-Faqih), but the structure and foundation of the Republic which came out of the combats of different social groups including workers, middle class and petit-bourgeois of Iran, contrary to the dictator regime of Shah, was based on division of power and in form inspired by the Western democracy. As a matter of fact, the political life of Iran had gradually revived itself based on economic growth and accumulation of more wealth by private sector and also establishment of necessary infrastructures. Although the Islamic Republic was miles away from a democratic texture in the beginning, it can be undoubtedly claimed that the governmental despotism during the recent two centuries has gradually weakened from the semi-feudal rule of Qajar to the dictator reign of Reza Shah and then the totalitarian regime of Mohammad Reza Shah under control of intelligence organization and to the present day traditional Jurisprudential Islamic Republic. By extensive presence of masses of people and more active role of different social classes, parties and groups in the political, social and economic
scenes, the process of democratization both in depth and width has accelerated and this same factor has played a determining role in gradual retreat of Iran dictators from their positions. In none of the studied historical junctures, the dictator rulers of Iran have voluntarily involved themselves in democratization. They have used any small opportunity to invade the lost trenches and reverse the wheel of history in violent totalitarian methods. This tendency toward reversing the course of history during past years can be seen, among other things, in the considerable cultural retrogression during the Mullahs' regime which some of its manifestations bring the Middle Age Europe to one's mind.

Upon coming to power of the Islamic Republic, considerable changes occurred in the area of ownership and redistribution of Country assets. Displacement of ownerships and adopting unclear economic policies reduced the profitability of industrial units. Consequently, the actual national production and the real average income of each family after the Revolution reduced. In spite of displacement of the ownership of private sector profitable assets which were confiscated by revolutionary courts and conveyed to the government, the administration of works was assigned to some special persons or groups. In a short interval, 28 private banks that owned 43.9 percent of the total assets of all Iranian banks were transferred to the government. But the government did not achieve considerable victories in regard to foreign deposits. Under these changes, all automobile industries and the production of basic metals such as copper, steel, aluminum and also the capital of 51 major industry owners and capitalists of Iran and their close dependents were declared nationalized. The confiscated properties were assigned to a new organization called "the Mustazafan (the Suppressed) Foundation" by the revolutionary courts. Later, this foundation became excluded from any audit under laws and regulations of public audit. In 1982, the assets of this foundation which has turned into an inefficient economic giant included 203 industrial and productive factories, 472 big farms, 101 big construction companies, 238 commercial and servicing companies and 2786 large buildings and landed properties. The range of displacement of ownership in industry sector was very extensive. By 1982, 14.2% - in 1976 it was only 3.5%- of industrial plants with 10 workers and above which included 68% of workers and produced 70.9% of the added value in industry sector, also 95.7% of plants with above 1000 workers and 37% of
plants with 50 to 999 workers had come under government's management. In the agriculture sector too, large areas of lands were occupied by farmers first and their appropriation approved by the government later and thus an area of 800,000 hectares farmlands was assigned to the farmers. The new decisions reduced the class distance for a short while but on the other hand decreased the income per capita in the Country and increased the unemployment rate from 2.9% in 1977 to 11.5% in 1980. Furthermore, the foreign investment declined and reached from 634 billion Rials in 1977 to 43.2 million Tumans. On the other hand, the Iran's revenues from crude oil exports, which have decreased after the fall of Shah, increased due to higher oil price in global markets and reached 24.97 billion dollars, but with the beginning of Iran- Iraq war, this short-term increase did no help to the disabled economy of Iran which had no clear orientation. (256)

3.1.4 Iran- Iraq War and its Economic Consequences

The outbreak of war imposed heavy pressures on the disordered economy of Iran and took it into deeper crisis. Following these changes, the revenues from oil export decreased to half, i.e. to 11.6 billion dollars in 1980 and the foreign debts increased to 4.5 billion dollars. Bombardment of industries, destructions caused by war, increased military expenses and the allocation of a large portion of the national budget to military affairs, beside the unclear disordered economic policies, damaged the newly growing industries essentially. The economy of Iran which was suffering from serious structural problems of transient phase and became more dependent to oil exports in the new conditions, was put into more hardship by reduced oil income which reached 10.6 billion dollars in 1981. In spite of short-term increase of oil revenues in 1982 and 1983, these revenues still decreased and even reached 6.2 billion dollars in 1986. Consequently, the government was every year facing budget deficit since 1986 to the end of the war and the inflation increased up to 30 percent. In such conditions, the government inevitably adopted the policy of severe government control. The import of essential goods was programmed and the coupon system was implemented to provide for the minimum needs. During this period, the reduced oil revenues and heavy burden of military expenses did not allow any investment in industrial sector. On the other hand, due to unclear government policies and disorders caused by Iran- Iraq war, the private sector refused any investment.
The total amount of annual government investment reduced to 1/3rd compared with 1977. This reduction reached 1/4th in machinery section and 1/3rd in construction sector and as a result thereof, the unemployment rate reached 15.8% at the end of the war. Between years 1978 to the end of war, the Iranian economy sustained many damages. Some of the specialist and skilled workforce immigrated overseas and the inability of government in administration of economic units taken from private sector and also the international pressures reduced the growth rate. The reduction in number of specialists and educated persons was not only due to escaping them after the fall of Shah but also the result of the policy of dismissing all those who did not think the same way as the new rulers in all economic and educational levels and so on. A large number of experts were retired by force or dismissed on the pretext of "lacking commitment", "being westernized" and other similar pretexts. Following the "Cultural Revolution", universities were closed and the admission of "others" to the universities and higher education institutes blocked. The "Ideological" test became common in admission to any educational program or job. About 1 million specialists left the Country and another large group inside the Country was deprived from working in specialized positions. For example in State Budget & Planning Organization, 1047 experts with education of B.S. or above were working in 1976 whose number decreased to only 210 experts after the Revolution. The war absorbed much credits. By increased population of the Country due to Islamic slogans opposing birth control, the income per capita reduced and the gross national production got a rapid declining trend. The damages of the 8-year war on the economy of Iran were great. In this war, 300,000 people were killed, 61,000 were lost and became untraceable, 50,000 were taken prisoner, more than half a million people became handicapped and 2.5 million people lost their homes and became refugees. During the war, 52 cities were seriously damaged, 6 cities were completely destroyed, 15 cities were destroyed up to 80% and 30 percent of all villages in the 5 war-stricken provinces were completely ruined. Only the destructions of war in residential areas are estimated over 18 billion dollars. According to an assessment, the total damages during the 8 years of war has been the sum of 592 billion dollars about 210 billion dollars of which were direct damages to the infrastructures such as
machinery, buildings, equipments, raw materials, commodities and other economic assets. In spite of all their insufficiencies, the 5-year economic plans of Shah after the agrarian reforms had helped the Iranian economy flourish. Based on these experiences, after the end of the 8-year war and upon coming to power of Rafsanjani, the policy of 5-year economic plans once again came to the agenda and the first 5-year plan after dethroning the Shah (5-year plan of 1990-1994) was approved and implemented by the government. The major aims of this new plan were restoration of war destructions and increase of national production capacity. The first period of presidency of Rafsanjani cannot be evaluated as a new beginning for economic reconstruction or Iran. In view of the writer, this period can be called the period of reconstruction of war ruins which were on the one part caused by the policy of the government of Iraq against Iran who imposed the war and on the other hand deteriorated by the revengeful and visionary policy of Khomeini after emancipation of Khorramshahr and expelling the Iraqi Army out of Iran. At this point, Khomeini brought forth the unwise slogan of "the path to Quds (Jerusalem) passes through Karbala and Najaf" and dreamt of emancipation of Karbala and Najaf.

It should be taken into consideration that a large number of industrial establishments of Iran were attacked by the Iraqi army after emancipation of Khorramshahr and thus the economic structures were severely damaged. If Iran had terminated the war after emancipation of Khorramshahr, more than half of the destructions of war and its bodily and financial damages had been reduced. Secondly, the process of economic organization of Iran which began in 1970, i.e. 12 years after the Islamic Republic came to power could have started much earlier. Thirdly, due to the superior position in the war, Iran could have received near 50 billion dollars compensation proposed and guaranteed by Saudi Arabia and some other oil rich countries of the Persian Gulf. Fourthly, the wave of destruction of major key industrial units of Iran which happened in the final stages of the war could have been prevented. Economically speaking, the costs of the second part of the war after the emancipation of Khorramshahr can be estimated near 400 billion dollars. If we consider the annual oil revenues of Iran to be 20 billion dollars, this amount equals twenty years oil revenues of the Country.

The motive behind the policy of continuing war by the authorities of the Islamic Republic was not only their unrealistic ambitions in
foreign policy, but more importantly, sought a hidden undeclared objective of rewinding the wheel of history and retaking the lost trenches of new, and this time cleric, despots and to eliminate the semi-democracy obtained by the Revolution of February 1979. During the war under the slogan of "War, War, until Victory", the war between the fanatic clergy under the leadership of Velayat-e-Faqih and his allies with the democrat and liberal forces was in process on the other side. The war helped the regime suppress its domestic opposition, because the pretext of need to internal peace and protection of unity for the purpose of victory over foreign enemy justified the suppression. The Islamic Republic reached no victory in the war with Iraq and, in Khomeini's words, finally "drank the glass of poison", but achieved to retake a large number of lost positions in the domestic war against the liberal masses. Other Iranian dictators during the historical periods studied by the writer were all equipped with a violent suppressive system and took no heed in killing the opposition liberals, but the Velayat-e- Faqih Regime who not only suppressed the liberals severely in an unprecedented manner based on a misuse of religion, but also interfered in all daily affairs of the people and destroyed any trace of modernism, can be called the most violent government in the past decades of the history of Iran and in some areas, identical with the Europe's medieval governments. The current pale democracy in Iran is not desired by Velayat-e-Faqih Regime, but is on one side the residue of the fights of Iranians during past decades and on the other the outcome of extensive objection movement among different social layers and groups especially the youth, students and women whose personal freedoms have been under pressure of the sharp edge of traditionalism and retrogression.

By the end of the war, the economic restoration efforts of the Mullahs were influenced by three factors; reducing the war expenses, increasing government revenues and the policy of open doors adopted by Rafsanjani government and the consequent increase of imports. The increase of government revenues was directly connected with the increase of oil price in global markets, because the oil export incomes reached from 9.6 billion dollars in 1989 to 12.37 billion dollars in 1990. The policy of open doors in this period can be generally homogeneous with the similar policies of Shah after the coup in 1953. At the beginning of the 5-year economic plan of Mullahs, measures were taken to simplify the foreign exchange system and the foreign exchange rate was changed into three different rates in the banking
system and one rate in the open market. The official exchange rate was determined 70 Rials for oil revenues, import of essential required goods and repayment of government loans. The exchange rate of 600 Rials for each dollar was formally approved for import of mediating and capital goods and the floating exchange rate which was determined by the banks. The exchange rate in open market was relatively controlled by brokers and exchange shops. The policy of open doors increased the volume of imports from 16.5 billion dollars in 1979 to 22.3 billion dollars in 1990 and 30.9 billion dollars in 1991. The outcome of this incorrect policy was the balance deficit of current account which reached 11.4 billion dollars in 1991. during years 1989-1992, the total imports increased to 100 billion dollars, while the average annual oil revenues were estimated about 15 billion dollars. In 1993, instead of three difference exchange rates, one exchange rate was determined by the Central Bank based on 1650 Rials per dollar. The new rate was calculated daily through floating administered system. Simultaneously, it was declared that no restriction exists for imports and all payments are done through L/C. In coming years, other measures were taken to stabilize the exchange rate but were not that successful. The policy of open doors led to further increase of foreign debts. The foreign debts of Iran which had reached 23 billion dollars by 1994, was unprecedented in the history of Iran. On the other hand, the volume of cash increased and consequently the inflation rate increased to 49.3% by 1994 and the growth rate of income per capita decreased to zero by 1994. Adopting incorrect policy of open doors during the First 5-year Plan, made the Rafsanjani government adopt the policy of excessive restriction of imports in his second turn of presidency. Upon execution of this policy, some of the foreign debts were repaid and the inflation rate decreased a little.(260)

When Khatami was elected the President in 1997, the oil price decreased and the oil revenues of Iran reduced for 20 percent. Considering the repayment of foreign debts which had reached 16.5 billion dollars until then, investment in industry and construction declined sharply and the economy experienced stagnation. The economic growth rate reduced to 3.1 percent in 1997 and even to less in 1998. The reduced oil price in global markets which had decreased the price of one barrel crude oil to about 9 dollars added to the foreign currency difficulties of the Country. This decreased the Iranian foreign currency incomes to 9.9 billion dollars in 1997 and consequently
added 2 billion dollars to the foreign debts. The volume of foreign currency reserves reduced to 3.7 billion dollars, the economic stagnation deepened and the inflation rate increased to 18.1 percent. The new relative improvement in economy which can be called the end of the period of reconstruction of war ruins and the beginning of new measures for reconstruction and modernization of economy in contemporary Iran actually started in 1999. During the two presidential terms of Rafsanjani, some war destructions were restored and, in spite of the big mistake of his government in opening doors and the maladministration of Central Bank in controlling foreign balances and thoughtless assigning of credit to importers without sufficient foreign currency support which led to unprecedented increase of foreign debts, the road was paved for unstable development and reconstruction of the economy. The period of reconstruction of economy, the same as that of the Shah's time, is closely connected to the increase of global price of oil and the consequent increased income of the government. As a result of the change in world market, the oil price reached above 30 dollars a barrel, the foreign debts for 3.7 billion dollars was repaid and the foreign trade balance of Iran which was mainly negative faced a surplus equal to 6.2 billion dollars. On the other hand, the budget deficit reduced in 1999 for 16% as compared with 1998 and the inflation rate declined. In 2000, the foreign currency incomes of the government increased again through crude oil exports and as a result the foreign trade balance of Iran improved and the exchange rate remained stable. The economical policy of the government, however, reduced the investments which, along with huge increase of population, increased the unemployment rate.(261) In the coming chapters, the writer will economically analyze the economic policies of the Mullahs especially in comparison with last years of Shah, based on the most important indexes and with the help of statistical diagrams, especially in the area of foreign trade. With the use of statistical methods, the writer will provide three short-term forecasts for some of the most essential economic indexes of Iran under three different scenarios.
4. Study of Statistical Data with a special view to Foreign Trade

In this part, the three past decades are statistically studied especially in view of qualitative and quantitative change in the exports and imports of Iran with regard to the most important relevant economic indexes. Based on the findings and in view to different economic, political and social characteristics, three scenarios for the future development of the Country are designed and statistical forecasts for the most important indexes provided. Before studying these scenarios, we study some of the determining factors in economy of Iran.

4.1 The Iranian Geography and Nature and its effect on Economic Changes

The geographical or natural conditions of a country affect the manner of economic growth. Overcoming natural impediments and making use of geographical and natural advantages are duty of economic experts and researchers. In order to overcome geographical and natural hardships, investment above international norm is needed and, on the contrary, by the optimal use of natural and regional advantages of a given area, less investment is needed for economic growth. The country of Iran is 16298.7 square kilometers wide. (26) As indicated in the historical study, in spite of all defeats and victories and ups and downs, the inhabitants of this land have relatively always played a determining role in West Asia and have greatly influenced and being influenced by the neighboring events, peoples and nations. The Iranian territory is located inside the desert belt of the Northern Hemisphere and is geographically placed in a belt line, the same as the plains in North Africa, Tibet and Turkistan.

The mountains of second geological age including Central Alborz and Kerman mountains and those of the third age, Zagros mountains chain and the 4\textsuperscript{th} age high peaks of Damavand, Sahand and Sabalan have protected Iran from changing into a desert land. The mountains provide for habitability and have changed the climate. The mountains in the north of Iran which start from Ararat mountains in Turkey and connect to Hindukosh in Afghanistan impede the humidity to enter central parts of the Country from the Caspian Sea and as a result, the north of Iran is green and wet with dense forests. The western mountains which also start from heights of Ararat in Turkey and
extend to Persian Gulf in the south help the conduction of humidity and fertile clouds into the middle regions of Iran and make dispersed forests grow. Other mountain chains also extend in direction of the Persian Gulf in the south to Pakistan and also the center and east of Iran.(263) In the middle of Iran which is surrounded by different mountain chains and is seen as a big belt, dry salty deserts exist. From the total 165 million hectares area of the Country near 51 million hectares are used in agriculture and the rest is uncultivable areas or covered by cities, villages, lakes and roads. From 31% cultivable land in Iran; the two northern provinces on the Caspian Sea coasts with an area of 5.5% of the overall area of Iran form more than 20% of the cultivable lands. The lands among heights in the northern and western areas can also be farmed but the hardships of low water resources and the sharp slope of lands cause problems. The soil of the fertile central plains also has the problem of irrigation and the water is sometimes salty.(264)

The Iranian climate is more Mediterranean and the eastern winds are the origin of rainfall. The specification of Iran is rainfall in the cold seasons and the long dry summers. Precipitation in west Iran is influenced by the weather in India. Finding water for agriculture has been one of the old problems in Iran and the concentration of population is based on availability of water, as in other civilizations. Average rainfall in Iran is 250 to 300 mm. i.e. one third of the world average which is 860 mm. The north of Iran near the Caspian Sea coast with 2000 mm. and Lute Desert in the center of Iran with a few mm. precipitation per year have respectively the most and the least precipitation in the Country. Overcoming this problem which since long has faced the inhabitants of this land with major hardships in agriculture has initiated the emergence and development of complicated irrigation systems including subterranean water canal. In short, the major problems for supply and use of water can be named as follow: low precipitation, improper distribution of precipitation over the country, improper time distribution of raining, sharp slope of mountains, difficulty of control and transfer of water, high temperature and rapid vaporization especially in central plains, low plant coverage and change of precipitations into flood and wasted water, severe abrasion of farmlands due to these floods, abundant sedimentation behinds dams which reduces their durability.(265) In the following diagram, the main watershed basins of Iran are divided into 6 areas including the Central Area, Persian Gulf and the Oman
Sea, the Caspian Sea, Hamoon, Urmia Lake and Sarakhs. The largest area belongs to the Central Area and the southern and northern parts of Iran. Central Area as the largest basin has a watershed of 823,000 cubic meters by itself.

The bankruptcy of the agricultural economy of Iran occurred after frequent raids of neighboring nomads on Iran and their immigration to this big plateau along with their livestock and especially through destroying or damaging the irrigation systems in some fertile regions. The necessity and importance of different irrigation systems including subterranean canals, dams, wells and canals for a large portion of agricultural lands not only should be emphasized in the old past, but even today, these systems are very important. For example, the Sistan lands in the center of Iran are irrigated through different canals and ditches and the excess water pours into Hamoon Lake. The lands of this region can be cultivated only by irrigation and as the land is flat, the floods threaten everywhere.

For irrigation and preventing overflow of water during the length of canals, dams had been constructed. The maintenance and renovation of dams are to the common benefit of all people and is not within the capability of farmers alone and needs supervision of central government. This example which became a source of crisis for the government during Reza Shah's reign indicates the importance of water and irrigation in the East, inter alia, in Iran and its role in
formation of the society and emergence of centralized systems. By ending the domination of nomadic neighbors over Iran and the security of large part of Iran except border areas from their attacks during the past 500 years (disregarding the short periods of attacks of Afghans and the First and Second World Wars), the conditions were relatively appropriate for reconstruction of agriculture economy of Iran. Some factors such as change in the global conditions, expansion of the territory of colonialism, losing domestic and foreign markets led to the emptiness of government treasury, administrative corruption and heavy tax pressures on rural people as a result thereof, the agriculture of Iran during the past 500 years, saved for short periods during Safavid dynasty, could not successfully renovate and reconstruct itself. In the present Iran, besides the natural difficulties, the improper use of water in agriculture and in the cities should be also considered. Change in the manner of using water resources in cities and industrial centers is of major significance. In spite of water shortage, the water consumption in Iran is higher than the universal. Using modern agriculture systems and extensive optimization of irrigation, inter alias, spray irrigation along with construction of dams, subterranean canals and wells may bring about positive changes in the agriculture of Iran who used to export some

**Diagramm 43 - volume of water obtained in main basins- billion cubic meters-DS**

![Diagramm 43 - volume of water obtained in main basins- billion cubic meters-DS](image-url)
products including grains until some decades ago and during the past few decades changed into a major importer of agricultural products. The process of renovation, improvement and extension of agriculture in Iran has, during recent years, found a relatively accelerating trend after a period of slowness and stagnation. In using water resources, the Persian Gulf and Oman Sea basin due to the high volume of water obtained and then the Central and Northern Area are important. The major difference between the volume of water obtained – and not the area of the basins- can be seen in the following diagram. The Persian Gulf basin with the volume of 166045 billion cubic meters water secures the first place in the Iranian Plateau.

Among the water catchments of Iran, the western part is of major significance. Karoon River is very similar to Tigris and Euphrates which were the cradle of Mesopotamian Civilization in view of abundance of water and the fluctuations of its water during the months of the year and that's why the first Iranian civilization emerged in this part under the rule of Elam government.(267) In spite of problems of precipitation in Iran, there are good facilities in view of water ways. In the south, Persian Gulf and the Oman Sea and in the north, Caspian Sea which is the largest lake in the world provide vast communication potentialities for participation in global markets. The other major geographical characteristic of Iran is its position as the transit route between Europe, Asia and Africa. This geographical location has provided major trading and transit potentialities for Iran. Since long past, i.e. about 7,000 years ago, a large part of the income of Iranian rulers and kings was obtained from the taxes received from domestic and international merchants. During the reign of Elamites in the south and center of Iran in the 4000 BC, the Elamite businessmen traded in India to the Central Asia, Africa and Europe. Workshops for mass production with skilled workforce existed for exports to neighboring lands. The spirit of tending to trade and the special capabilities of Iranians in this area has made Iranians among the oriental nations distinguished merchants, both in the long past and in present day. This specification of the Iranian economy should be viewed, among other things, as a reflection of the special geographical location of Iranian Plateau and the major share of its businessmen during the course of history in the West Asian commerce and also in the global business in some historical junctures.

Many of the urban civilizations in the east including those in the dry land of Iran are connected to their business and commercial functions.
The extensive relationships of Iranians with India and the location of the eastern and central parts of Iran on the route of Europe, Africa and Central Asia commerce on the one hand and the Indian Subcontinent on the other led to more bloom in most of the southern and southeastern cities. Being located on route of the Silk Road which extended up to China, changed the northern and central cities of Iran into lucrative cities. In the west, commerce with far and close western neighbors not only earned business incomes but developed the rural economy which was in close contact with the urban economy as well and these transactions even included the nomadic tribes in the Iranian Plateau. During the independent Iranian governments of Samanid and Buyids, business in the Persian Gulf was under control of Iranian sailors and the income of some of them exceeded the entire taxes earned by the kings and governors in some provinces. The industrialization of Europe and the beginning of colonization and dominance over world markets by the capitalist countries got a large portion of the share of Iran in global and especially regional commerce from the Iranian merchants and extended this dominance to the domestic economy by changing the economy of Iran into a single-product economy dependent on oil exports. This situation gave a parasite property to the Iranian commerce, i.e. the share of domestic agricultural and industrial products in trade reduced and the merchants mainly changed into importers and their natural inclination to business profit dragged them toward purchase of cheap foreign goods. Thus, they changed into brokers and agents of commercial and industrial foreign firms and earned only a small share of profit in the commercial process. As a result, the process of accumulating wealth for industrialization of Iran was very slow. The inevitable role of agency of Iranian merchants in this process of commercial transaction led to the destruction of small industrial units and manufacturers especially in textile industry. The outcome was that the relationship required between industrial capitalism and commercial capitalism which is the prerequisite for transcending from feudalistic economy to developed capitalistic economy was not created and the process of wealth accumulation in Iran was seriously damaged. Thus, on the one hand, the profit earned by Iranian merchants decreased and on the other hand, the profit of Iranian manufacturers, who were unable to compete foreign made cheap products, in the domestic market and consequently in the international markets decreased and the wave of bankruptcy embodied many Iranian manufacturers and factories.
By the expansion of commerce by industrial countries, first the waters of Persian Gulf its trade was taken from the Iranian merchants and fell in hands of the Portuguese, then the British and Americans. In the north of Iran, foreign trade with northern neighbors and in the Caspian Sea came under control of Tsarist Russia. Large fertile parts of Iranian Empire in Caucasus which, among other things, produced and exported silk were seized by the Russians and became part of Tsarist Russia. A large part of Central Asia and Afghanistan was separated from Iran and Iran practically came under business siege. A general view of the conditions was like this: In the south and east, the market of India, Afghanistan, Persian Gulf and Arab countries from Iraq to Saudi Arabia came under British coverage and then American control and on the other side, the Caspian Sea, Caucasus and Central Asia was under absolute control of Tsarist Russia. The future political changes in the region did not cause any considerable lucrative change in the business siege of Iran. The change of regime in Russia to Soviet Union, although reduced the heavy pressure of Tsarist Government, did not affect that much the improvement of Iranian foreign trade especially with Central Asia and Caucasus. Bad political relations with Iraq closed the ancient land route of business of Iranian merchants with the Middle East and Africa and only in the small states of the Persian Gulf, a pale fire of the old business remained alive. Upon initiatives of the British during the colonial period, the business route of Iran with her very old business partner, India, was put under British control.

In spite of all new efforts after the collapse of the U.S.S.R. toward expansion of regional economic treaties and toward development of trade in regional markets which had always been one of the bases of the Iranian civilization during the history, these challenges have so far remained futile and the extensive military presence in the region makes success in this area very difficult. During the present decades, in spite of all these hardships, measures are taken for the expansion of roads and the development of road, rail and marine fleet and the restoration and reconstruction of communicative routes in order to make optimal use of the unique geographical position of Iran, but the United States and England are especially active to prevent passage of transit routes and the oil and gas pipes of Middle Asia and Caucasus through the territory of Iran. (268) On the other hand, efforts are in process to improve transactions among the countries in the region. For example, the North-South Corridor agreement founded by Iran, India
and Russia can be named which has been joined by 10 countries until 2004 and includes Kazakhstan, Azerbaijan, Armenia, Syria, Belarus and Oman too and is expected to admit Turkey, Kyrgyzstan and Ukraine soon.\(^{(269)}\)

Another natural advantage of Iran is related to her mineral reserves. The mineral resources of Iran can be divided into four categories; construction raw materials, chemical mines, fuel and metal mines.\(^{(270)}\) From these four, oil and gas are the major underground resources mainly extracted for export which can help the foundation of economic infrastructures and overcome the backwardness with the help of international community. The Achilles' heel of Iranian economy is its single-product oil export basis and its failure to attain to developed multi-base economy. The first concession for operating oil, which gained universal importance since 1859 by the first oil wells in Pennsylvania, was granted in 1873 to a person named Reuter to whom the annexed contract along with the concession for establishment of Imperial Bank was assigned in 1908 and thus the Iranian oil industry began.\(^{(271)}\) The following diagram shows the change in oil extraction from 1913 to 2000. On this basis, the extracted oil during 20\(^{th}\) Century increased from 0.04 million ton in 1913 to 293 million tons in 1977, the end of Mohammad Reza Shah's reign. In spite of reduced extraction and export of crude oil near 400 percent after coming to power of the Mullahs and especially during Iran- Iraq war, it returned to its growing trend and the oil extraction was accelerated by concluding new contracts.

*Diagram 44 - raw oil extraction in million tons-DS*
The rapid increase of Iranian income through crude oil exports was not only the result of increased extraction especially in the last 10 years of Shah's Regime, but also the result of oil shock and sudden increase of oil price in global market. (272) Only during 1972 to 1977, the oil revenue increased from 1.9 billion dollars to near 21 billion dollars. After the Mullahs came to power, in spite of short-time decrease in extraction and export and also the reduced price, Iran achieved to increase her incomes step by step and earned 24 billion dollars in 2001, 19 billion dollars in 2002 and 23 billion dollars in 2003 through crude oil exports.

We will study the statistical changes in oil industry and their role in the economy of Iran in a separate chapter later.

4.2 Demographic Changes and Considerable Population Increase

The writer formerly indicated to some demographic changes in Iran. Based on historical data, we have faced two very extensive immigration waves in the Iranian Plateau. The first immigration was that of the Aryans in two intervals before the Christ which caused deep racial, cultural and economic changes.

The cultural influences of this immigration which led to intermingling of the ancient Iranian culture with that of the new immigrants have remained in some ceremonies and feasts of Iranians and other neighboring nations until today and have become part of the characteristics of cultural identity of the inhabitants of Iranian Plateau. The immigration of Aryans to this Plateau helped the cultural growth
and development of rural settlement and urbanization culture. Most of the researchers believe that Aryans were of farming and settled culture and had achieved notable advancements in farming before entering Iran. Recently, some researchers have brought the idea that the Aryans have been originally living in the Iranian Plateau and have emigrated from this land to other parts of the world including Europe. The second wave of immigration with the consequent demographic changes starts after the defeat of Sassanid Empire by Arabs and accelerates after a short pause by invasion of other neighbors, this time from the eastern nomads. The short period of Greek dominance following the victory of Alexander and the 100-year Arab dominance during the Omavid caliphate, placed a strong cultural, though a weak demographic influence. The second wave of immigration seriously transforms the demographic texture especially after invasion by Mongols, Tartars, Turks and Turkmen and thus the element of nomadism gains weight in the Iranian Plateau and it is assumed that in some historical junctures, nomadic life even supersedes rural and urban settlement. Following the violence and excessive slaughter and the misrule of the long-lasting governments of the nomads which were accompanied by physical elimination of some of the habitats of Iranians and compelling them to leave their homes especially in the Central Asia, a population substitution occurred and a large part of the eastern Iran changed into the habitat of Turks and Turkmen. The number of nomadic Turk and Turkmen tribes inside Iran also increased. On the other hand, in some parts of Iran such as Azerbaijan where proper rangelands could be found for grazing their animals, the nomads settle widely and even their language is extended. Demographic changes and radical intermingling especially in Central Asia, northwest and southwest Iran occurs. Following consecutive wars and destructions, the population in south and central Iran decreases and the population concentration in north of Iran intensifies. Generally, the population of the country is reduced. During the past five centuries after the Safavid dynasty came to power and revived the oil tradition of centralization policy, vast immigrations and demographic changes such as racial and cultural intermingling such as the past were not observed, except in the east of Iran and the Central Asia under Uzbek Turkmen raid and in smaller size in the north and southwest Iran. The Safavid kings began to control the influence of nomadic tribes in the governmental, administrative and military structure of Iran. The policy of settling nomads continued with some
ups and downs, sometime with military violence and sometime with economic and political clever tricks, until the second Pahlevid monarchy and implementation of agrarian reforms. As a result of these policies and also the expansion of capitalistic relations, demography of Iran changes again in the prejudice of nomads and in favor of urban and rural settlers. The number of nomads decreases and reduces to 2 percent of the total population of Iran in 1995.

Although some of the researchers of Iranian economy do not pay much attention to this change, it is important due to long and deep historical effects and its present impact on the economic, cultural and ethnic composition of Iran. A delicate economic approach to this change is still significant in the process of cultural and social intermingling of different ethnicities residing in Iran. The process of economic, cultural and racial integration of different ethnicities living in Iran has never been as quick as the few recent centuries. This complicated process has been, in the first instance, under influence of capitalistic relationships and development of urbanization and especially the creation of very big urban poles.

In addition to this demographic change, the population structure of Iran should be viewed in some other angles as well, because it is very important in the economic structure and planning. The population of Iran as that of many developing countries is increasing. Every year, more than 90 million people are added to the world population. In this process, the share of developed countries is reducing. Demographic issues are now a main concern in developing countries. Population growth in the Iranian Plateau which was reducing in a long historical period after the invasion by Arabs and eastern nomads and due to serious damages to the economic infrastructures and had reached from near 50 million at the time of Achaemenids to 8 million at the beginning of 20th Century, is not only increasing now but is more increasing that developed countries and even developing countries.

During 1892 to 2004, the population of Iranian Plateau has reached from 8.1 million to about 70 million. The quick population growth especially during the three recent decades after the Mullah's coming to power is extraordinary and in spite of reducing during current years, the population of Iran is expected to reach 90 million in 2022.(274). This trend has involved the economic authorities with problems such as employment, education, health and other relevant social and cultural phenomena. The highest annual population growth in this 111-year period relates to years 1977 to 1978 and especially the early
years of the Islamic Republic. The population growth rate decreased in later years from 3.9% and reached 1.5% in 1992 and 1.4% later.

Diagram 46 – population and mean annual growth -% -DS

The young population of Iran is related to the point already discussed, i.e. the rapid population growth in a short period. During the recent years, this trend has slowed down. The reason can be attributed to more extensive birth control which was looked down upon in the early years of the Islamic Republic based on religious beliefs and without consideration to its uncontrollable consequences. The general increase of the number of youth had made it difficult to plan for other age groups and has made determining priorities a complicated task. Another problem caused by the 8-year Iran-Iraq war is the excess number of women compared with men. This phenomenon is not specific to Iran and was observed in Europe after the First and the Second World Wars too. The following diagram studies some of the specifications of population growth in Iran and the pace of its young composition. In the population age pyramid in 1997, near 60% composed of the young people less than 24 years of age among which the largest shares with near 20% belongs to the youth between 15 to 24 years of age. If we adapt the change in population pyramid to the year 2004, we conclude that nearly 50% of the Iranian population is
between 13 to 31 years old and hence, the population of Iran is very young.

**Diagram 47 - age groups in million people in 1997-DS**

The process of urbanization in the East started earlier than in the West and the feudalistic cities of Iran were more populous and blossoming than their European counterparts. The urbanization process in Iran, however, was impaired by nomadic raids, especially the Mongols. The first period of serious urbanization after expelling the nomadic neighbors out of Iran and the establishment of independent Iranian government started with the Safavid dynasty. The collapse of feudalistic relations, heavy taxes on farming and farmers, lack of necessary facilities for agricultural production and above all, the expansion of capitalistic relations in Iran, made the farmers leave villages and immigrate to cities. The urban population of Iran which is specially concentrated in a number of large urban poles is still of a traditional and rural composition and has not yet adapted itself fully with the cultural requirements of industrial society. A large group of these traditionalist villagers who had newly dwelled in the cities were among the main supporters of Khomeini and religious movements and opposed the cultural changes and modernization of Shah's Regime. The unsuccessful agricultural policies both in the time of Shah and during the government of the Mullahs, increasing poverty and misery of rural people, efforts to settle nomadic tribes and the consequent immigration of rural settlers to the cities, incessant increase of birth rate in the villages which is more accelerating than in the cities and
where sufficient facilities for youth employment are lacking, were the other factors which accelerated the urbanization trend in Iran. This process can be seen in most of the Third World countries in a more or less similar form. In addition to internal changes, the admission of immigrants and refugees has also increased the urban population. The number of these immigrants in Iran is estimated 2.5 million people from which 1.8 millions are Afghan and 650,000 Iraqi nationals. (275) During 1957 to 1997, the urban population was incessantly increasing and doubled from 30% of the entire population to 60%. This process is still continuing.

*Diagram 48 - relation of rural and urban populations -DS*

Due to large investment in industry in the major urban poles during years 1967 to 1977, immigration from rural areas to the cities expanded considerably. The immigration points included East Azerbaijan, Khorasan, Gilan, Hamedan and Mazandaran provinces and the immigration destinations included Tehran, Central Province, Isfahan, Fars, Khuzestan and Kerman provinces which absorbed more than 50 percent of the population displacement in the Country. (276) In this regard, the religious city of Qom which gained a special position after the Mullahs experienced a higher population growth in the 10 years from 1967 to 1977. Next to Qom are the large cities of Tehran, Mashhad, Ahvaz, Shiraz and Isfahan who are mainly the major industrial centers till today.
The process of concentration in major urban poles continued after the fall of Shah. The population classification of cities between 1987 to 1997 shows that the highest increase rate is seen in cities with a population above 250,000 and then the cities between a population of 100,000 to 249,999 stand second. Cities and counties with a population under 25000 have either experienced a very little population growth or no considerable population change.
The conclusion is that population increase happened under the influence of some factors such as natural development of initial cities, immigration of villagers to cities, emergence of new cities with strong rural texture from within large villages. The rural characteristic of cities is a phenomenon observed in Iranian cities in different levels. For example, cities such as Abadan with 7% population growth between years 1966-1976, Shiraz with 5% and Rasht with 31% population growth had been left aside from the effect of this phenomenon to some degree. But in most other cities, the number of immigrating villagers was increasing. The immigration especially included the poor peasants who owned very little or no land at all. The difference of income between agricultural workers and peasants with small pieces of land on the one hand and higher wages in the cities encouraged this immigration. Furthermore, the inability of agricultural sector in attracting the increasing population of villages beside the change in the economic structure from the traditional feudalistic society to the capitalistic structure played a significant role in these changes. In the current years, the immigration from villages to the cities can be seen in the following diagram. The immigrant absorbing provinces in these years have been Tehran on top of the list with admission of nearly 2 million people and then Khuzestan, Khorasan and Isfahan provinces in the next places, respectively.

*Diagram 51 - immigrants entering some provinces in decade of 1987-1997* -DS
The result of these immigrations can be seen in the increased number of cities, towns and counties and central villages. In view of state divisions between 1987 and 2003, the highest growth rate is observed in the number of cities, then the number of counties and towns and at last the number of central villages.

*Diagram 52 – change in number of regions -DS*

In view of number, the number of central villages (large village acting as a center to a group of smaller villagers) is much more than the number of town, cities and counties. The large number of central villages, however, does not mean that their share in overall population is great, because they have little population.

*Diagram 53 - number of rural and urban regions -DS*
A look at the classification of number of habited villages (there are inhabited villages too) during 1987 to 1997 shows the larger number of middle-sized and small villages. The highest number belongs to villages with 100 to 500 inhabitants. In other words, most of the Iranian villages have a population between 25 and 500 and that's why in the recent years, debates are in process about optimization of agricultural production by connecting farmlands of dispersed villages (279). The increase of number of villages with the population of 1 to 24 and decrease in number of villages with population of 100 to 500 people is considerable in these 10 years.

The population concentrated in the rural areas of Iran in 1987 and 1997 is shown in the following diagram based on the size of the villages. Although the number of small villages is more, the population is more concentrated in big villages. As seen in the diagram, the majority of Iranian rural population is now concentrated in villages with above 500 population and the number of villagers living in small villages with less than 100 people is very little and economically insignificant. Thus, we are facing a process of centralization in the rural population of Iran, in spite of the vast area of the Country and the various climatic conditions.
The process indicated before is seen in the cities as well and is depicted more clearly in the following diagram. The rapid increase of population in villages above 1000 people and especially above 5000 people is considerable. A quick increase in population of small villages is also seen but the absolute increased number is insignificant.

The expansion of political influence among urban masses that were the motor of the 1979 Revolution and were mainly composed of lower social layers, i.e. rural immigrants was successful only if initiated by
those who understood their language and expressed their needs. In the two major mass movements of the past 50 years, the Oil Nationalization Movement in 1954 and the Revolution of 1979, the nationalists, communists and the clergy who led these movements, knowingly or unknowingly, had these characteristic, i.e. the high number of city dwellers with rural origin, in mind. The leftist Iran People's Party that was in close contact with masses between years 1942 to 1954 and who, in spite of being declared illegal, was practically leading the movement of workers, farmers and a large number of intellectuals and urban middle class, avoided direct reference to its inclination to communism in its memorandum of association because of this characteristic of the Iranian society and some of the leaders of its organizations showed religious tendencies. Khomeini also succeeded in attracting the masses of people more than his nationalist rivals because of using simple religious beliefs of laymen masses. Similar examples can be cited from other developing countries. In India where near 80% of the population were rural people, Gandhi had more advocates than the representative of nationalist bourgeoisie among the masses of people because he based his non-violent combat policy on the principle of AHIMSA which reflected the religious tendencies of masses of farmers. Gandhi succeeded to establish a strong bond between national Indian bourgeoisie and the great masses of farmers. (280) Even Nehru who was one of the most knowledgeable leaders of his time in the movements of developing countries and who used different philosophical systems in the political cause of India and who supported the economic plan of the National Congress Party for industrialization and attaining independent national development without major difference in income and providing equal facilities for all, did not enjoy the ability of Gandhi who talked in the language of people and out of minds of the people. (281)
A look at the changes in the number of family members draws a perspective of the present society of Iran. For this purpose, two time junctures, 1967 to 1977 in Shah's Regime and 1987-1997 in Mullahs' Regime have been statistically compared. Demographically speaking, the largest number of Iranians, before or after the fall of Shah, is concentrated in families with more than 7 members and generally in families of 4 and above. The large families of above 7 members are considerable and represent the still traditional texture in course of transition to capitalistic society.
A glance at the population growth of Iran among the families displays a more clear perspective from the changes of the social texture. During years 1967 to 1977, due to the growth of capitalistic tendencies and imitating developed western countries, the highest growth rate belongs to single-member families but at the same time the families with 7 members and more. Thus, modern tendencies were growing side by side the traditional way of the society. In the first years of Mullah's government and due to the extension of Islamic ideas and opposition to the use of contraceptives, an accelerating growth is observed in number of families above four members and especially 7 members and over. On the other hand, the least increase belongs to the single-member families. The economic difficulties as a consequence of irregular population increase forced the authorities of the Islamic Republic to put their unrealistic Islamic beliefs aside and, contrary to the policies of their early years of power and because of their inability to respond the demands of the young forces entering the labor market, reduce the speed of population growth. This trend can be observed by comparing statistical data of years 1987 through 1997. During these years, the highest growth is seen in the number of 3-member families and the number of families above 7 members reduces most of all. Hence, the process of demographic change in Iranian families gradually goes back to the years before the Islamic government.
The inevitable changes in the texture of Iranian society, in spite of dogmatic inclinations of the clerics and reducing the legal marriage age for girls, can be observed in the change of marriage age in rural and urban population. In this regard, contrary to the advices of the clergy who reduced the marriage age for girls, the average age for marriage among rural women has been increasing. Only among the urban women and under the influence of the religious atmosphere overwhelming during the first years of Mullahs' Regime, the average age of marriage decreased from 20.2 years to 20 years, but reached 22.5 years in the following years and this increasing trend of marriage age for women still continues. No considerable change has taken place among men in regard to the marriage age and both in the cities and the villages, the change is trivial. The older age of marriage is not merely because of disagreement of women with premature marriage, but is also a reflection of the financial hardships of the youth on way of forming an independent family. This is why some young married couples live in the husband's parental home or remain separate in their respective parental homes for a while and only after a few years succeed to being their independent conjugal life. The average age for marriage of men is 25.6 and of women 22.4 years. The average age of marriage in urban women is 22.5 years and a very minor difference is observed in the marriage age between rural and urban women.
The average marriage age among rural women is 22.3 years. The difference of marriage age between urban and rural men is more. The urban men have an average marriage age of 26.2 years and the rural men 24.5 years.

Diagram 59 - average age of marriage-DS

The traditionalist, religious and totalitarian nature of the governing regime is not only reflected in the flooding trend of political immigration of Iranians who disagree with the Islamic government and whose number is estimated between 5 to 7 millions, but even the adherents to non-Islamic faith in Iran are not free from different direct and indirect pressures of this regime. A comparison of the number of Zoroastrians, Christians, Jews and other minorities between years 1987 to 1997 indicates the reduced population of the believers of these religions in Iran. Some of the believers of these non-Islamic religions have immigrated overseas, however, due to the rapid increase of population in Iran; the population of these religious minorities has also generally increased, although this fact has not been clearly reflected in the statistics. The justification for this paradox can be the pressures imposed by the Islamic Regime which makes some hide their true religion. In this 10-year comparison, the number of persons who have refused to declare their religious denomination has increased from 39753 to 89716, i.e. more than double increase.
4.3 Work and Human Resources under Capitalistic Growth

This chapter studies the composition of social groups and classes based on their function in the major economic fields. The signs of collapse of feudalistic relations appeared in the 19th Century especially during the Qajar dynasty. By gradual development of capitalistic relationships in villages as in the cities and the conversion of feudals and khans into major owners of farmlands, these signs became more remarkable and noteworthy. The Constitutionalism Revolution legally banned the old misuse system of feudalism but in practice did not bring about a considerable change in the economic system of villages. The reign of the First Pahlavid king was the period of rapid expansion of capitalistic relations and the increase of monetary and barter transactions in the villages and the end of the closed self-sufficient rural economy. However, Reza Shah, who himself became the biggest landowner of Iran, took a reconciliation approach toward feudals and avoided to create a deep transformation in the economic relations of villages and ending the feudalistic owner's share. The agrarian reforms during Mohammad Reza Shah's time responded this historic necessity and consequently the feudalistic relationships were completely eliminated step by step. The villagers either became landowners themselves or worked on the lands of private owners who were mostly the same old feudals on daily wage basis. The unclear and inefficient policies of agrarian reforms, in spite of developing modern capitalistic
relations, did not lead to a bloom in agriculture and even reduced the economic potentialities of villages to some degree. This process continued during the Mullahs' Regime as well. As a result, a large number of villages were gradually vacated and the number of inhabited villages today amounts to 60,000 villages or 48% of the total villages in Iran.(282) This is the first major change in the employment area in Iran. The second change in the field of labor and manpower refers to reduced number of farmers in the working population of Iran. This change is especially a direct result of the two factors indicated above, i.e. the elimination of feudalistic relations in villages and the lack of a proper occupational substitute and proper plans for modern agriculture on the one side along with the rapid expansion of capitalistic relations in the cities and emergence of large industrial and commercial poles in a small number of provinces, on the other hand. During years 1963 to 1978, in spite of rapid increase of population, the number of workers in agriculture sector who were mainly involved in pay work non-feudalistic jobs reduced. However, the number of workers in industry and servicing sectors has been increasing in the same years. Hence, in spite of the increase of total number of working population from 6.6 million in 1963 to 10 million in 1978, the number of people working in agriculture sector reduced from 3.6 millions to 3.2 millions people.

Diagram 61 - agriculture sector force and total workforce in thousand people-DS
The decreasing trend continued during the Mullahs' Regime as well to the degree that in 2002, the total number of people working in the three sectors of agriculture, hunting and forestry and fishing consisted only 26.9% of the entire workforce of 10 years and above, which is only 60% of those working in servicing sector and near 80% of the personnel of different industrial sectors. 

Diagram 62 - relative distribution of employees based on major economic groups-DS

The other economic index in the present century is the increased number of workers in different sectors of urban economy. Since long time ago and especially during the Sassanid dynasty workshops for mass production with above 100 workers existed in Iran. Craftsmanship and workmanship and in general, Iranian products, enjoyed high ranks in the world and had a good market until the Industrial Revolution in Europe and to the middle of the Safavid dynasty. The process of separating Iran from the line of pioneers of industry in the world started since the end of Safavid dynasty, i.e. about 300 years ago and this backwardness intensifies step by step. In the present thesis, the writer indicated four different renovation stages of Iranian economy during the 2 past centuries. The first phase which emerged mainly under advice of the distinguished viziers of Qajar dynasty did not last long and did not end in considerable economic improvement, saved for some limited changes. The second phase of economic renovation in Iran took near 20 years long and, as a result of efforts by First Pahlevid king, led to development of industries especially military industries and relevant fields, oil industry,
considerable increase in the number of industrial, commercial and servicing workforce. The rapid growth of working class in Iran was one of the reasons behind extension of the leftist Iran People's Party in the years following dethroning of Reza Shah. Mohammad Reza Shah began the third wave of reconstruction of Iran and consequently the number of workers in different sectors of urban economy increased. The increase of workforce in the industrial sector between years 1963 to 1978 was remarkable. However, the percentage of working population in the regional scale was low. As an example, the percentage of workers in economic units in 1975 was 30.9% which was equal to Algeria and Iraq but less than Kuwait and Qatar.(283)

In the oil sector, the number of employees increased from 36,000 to 60,000 during the said period and in the group of industries, minus oil, which included the major part of the working population, the number increased from 1.37 million to 3.38 millions during the said 15-year period. If the industrialization trend had not been interrupted, the same process could have continued until present. Thus, the increase of nearly 3 million working population between years 1963 to 1978 goes back to the industry sector workers and indicates the increase of number of factories and workshops. The third period of economic renovation in Iran refers to years preceding 2000 and is dealt with separately.

\[D 63 - \text{work force in industry sector in thousand people-DS}\]
When the Mullahs came to power and following the economic insufficiencies and chaos side by side the long war with Iraq, this process was seriously damaged and in spite of increase of Iranian population between 1978 to 2002 and reaching near 60 millions, the number of workforce in the industry sector did not increase proportionate with country demands and increased population and the Country faced a very serious crisis. According to an assessment, every year, 1 million people enter the labor market in Iran. On the other hand, incorrect economic decisions and the tendency to agency and mediating which shows itself in smuggling goods, has destroyed one million employment opportunities in the conditions of grave shortage of jobs. The widespread corruption and disorder in government and non-government organization is very well depicted in the fact that there are 110 illegal unsupervised jetties in part of the coasts of the Persian Gulf and some of these illegal jetties who are involved in trafficking goods into Iran have even received credit and budget from the Management and Planning Organization. Beside these problems, some other factors also deepen the labor market crisis in Iran including employment in young age, lack of sufficient educational facilities, participation of rural youth and adolescents in agricultural activities and home industries, using the young adults of poor urban families for increasing the family income and also the shorter working hours of men and women in Iran compared with developed countries which is a specification of the employment market both during the Shah's Regime and during the Mullahs'. As an example, the general working productivity in Germany has been 44%, in Japan 51% and in Iran only 30.4%. This crisis can be easily observed in the distribution of working population in year 2002. Among all working population of 10 years and above in this year, the workers in industry (manufacture) sector compose 18.2% of the entire working population. The share of employees in construction is 10.7% and then comes the water, power and water supply sector with 1% followed by those working in mining industry that form a small minority of 0.7% of all working population. It is interesting that in spite of the increased share of service sector during the three years of 1999 to 2002 from 42.2% to 43.9%, the share of industry sector has reduced from 20.1% to 18.2%. In the mining industry too, a small reduction can be seen and it is only the construction sector which shows a growth of 10.3% to 10.7%. This negative trend manifests the inability of Iranian economy in
responding the demands of labor market especially in industrial sectors.

*Diagram 64 – relative distribution of employees based on major economic groups-DS*

Another reflection of this historical change and the collapse of feudalism in Iran is the qualitative and quantitative growth of the new capitalist class in the economic and political life. The growth of capitalism in Iran has some specifications. Firstly, as a large number of capitalists were the same old feudals who carried many of the traditional elements and inclinations along, the feudalistic relationships survived for long side by side the modern economic relationships. The second characteristic was insufficient capital in hands of the new class and their financial inability to invest in expensive economic sections especially major industrial disciplines. This inability beside the traditional inclination of Iranians to business and also lack of economic and political security, repeated change of governments and policies, made the government investment in different industrial sectors more significant. The following diagram shows the number of employees in government and private sectors during 1957 to 1992. Although the speed of increasing workers in private sector is more than in government sectors, the absolute increased number in government sector is more and the growth coefficient is also high. This is mainly due to the increased
government earnings from crude oil export and large investments in different sectors especially industrial sector after 1987.

Two natural and historical properties strengthen the developing trend of government sector in the economy of Iran, first the oil resources in the Iranian Plateau and the huge income thereof which is concentrated at hands of the government and second the old tradition of centralized Oriental – Asian despot rule which needs economic pressure tools and control over the most important economic fields for survival. Besides these two characteristics, major displacement of ownerships and nationalizing large portion of properties, factories and institutions belonging to private sector after the coming to power of the Mullahs should be added. This ownership change which was a reflection of the popular wish and the result of people's hope for fair and just division of wealth among all social layers extended the government role in economy still more.(288) The issue of government and non-government or private economy in Iran can be hardly segregated. It can be generally said that a large part of the government sector which was under control of Shah, his court and his friends during the Pahlevid and is controlled by some clerics, their relatives and friends during the Islamic Republic, is actually possessed and used by the despot rulers under the disguise of government sector and they share the profits of these assets as if they were their private property, of course with some legal restrictions.
It seems that the challenge started after year 2000 by the non-governmental growing bourgeoisie inside the Country and assisted by the bourgeoisie outside Iran the capital of whom is estimated near 800 billion dollars and is intensely in process within the framework of reforms and by adopting the policy of apparent acceptance of Valayat-e-Faqih Regime or under democratic demands by putting the religious government aside and creating a secular regime, is actually an effort aiming at complete invasion of all economic trenches of current super-rich rulers of Iran or agreeing on a redistribution of assets and profitable key positions in economy.(289) However, the government sector in Iran especially the higher part of the government system can be assessed positive in some aspects as in some other developing countries in spite of the fact that it is intermingled with the interests of dependent capitalists and parasite-like corrupted businessmen. In some countries like India, Iran and Turkey where the capitalistic relations have grown to an intermediate level, no serious government control reaches the sanctuary of the private ownership of capitalists and the process of capital accumulation has reached a high level step by step.(290) In spite of all insufficiencies and governmental corruption, some of the economic decisions and the government control over economic sectors within the framework of government ownership, side by side the support of domestic private assets is in line with national interests. That is, sometimes useful economic decisions are made in regard to cooperation of state and private sectors for the control of domestic market against foreign capital. These policies, however, are not aimed at securing interests of lower social layers and reducing pressure on them but pursue the nationalization of some industries and economic infrastructures, concentration of new investments of government sector in industries needing huge capitals and the consequent government control and before anything show the efforts of government in defending its own interests and those of domestic capitalists against foreign capital, international exclusions and preserving natural and economic resources of the Country.(291) The rapid privatization of economic plants in the current years and the increased number of big capitalists in Iran can be looked at from two different perspectives. Firstly, that an important part of industrial units supervised by the government is facing deep crisis due to incapability of managers and dismissing specialists whose way of thinking is different from that the dominant ideology and the lack of coordination between different economic sections. This fact has put the authorities
of the Islamic Republic who have created government in the
government and devised the "Expediency Council" as an organization
above the government elected by the people and the parliament to
manage the economy, under pressure to adopt some decisions for the
betterment of economy and relieve from the increasing pressure of
unsatisfied masses of people. Conveyance of a number of government
factories and institutions to the private sector whose new owners are
the same former Islamic directors, has faced resistance by part of the
Velayat-e-Faqih system who wish centralized control over economy.
In spite of these disagreements, these conveyances are increasing day
by day.(292) Elimination of governmental capitalism which supports
Velayat-e-Faqih from the economic key points by forming the
"Foreign Currency Reserve Fund" to control the oil income
fluctuations and assigning loan by this Organization to the private
sector and also approval of new bills on restricting the largest
economic units under supervision of Velayat-e-Faqih such as the
"Mustazafan Foundation", has entered this internal combat between
different capitalistic factions of Iran into new stages. The second point
is that the Iranian bourgeoisie, whether inside the ruling class or
outside, has accumulated abundant capital and, not only in view of
financial capabilities but also in view of managerial power, work
experience and organization, has reached the level to undertake
administration of large economic units. Accumulation of wealth in
hands of private sector, in spite of all justice seeking slogans of
Velayat-e- Faqih Regime after the fall of monarchical regime, continued
with a higher pace than that of the Shah's time.
The economic data indicate that the goals of bourgeois- democratic
revolution of Constitutionalism which occurred 100 years ago for
eliminating feudalistic relationships and substituting democratic rule
of capitalism have now found their objective areas of materialization
by the qualitative and quantitative growth of bourgeoisie in Iran. The
flowing describes the quantitative growth of grand and petit
bourgeoisie in Iran during the past few decades, but it should be borne
in mind that a large number of those involved in government
industrial, commercial and servicing systems and the directors of
some of the charity foundations during both regimes of Pahleviid and
the Islamic Republic actually belong to the private sector. A look at
the number of employees between years 1957 to 1977 reveals the
considerable increase in number of government sector employees and,
in the second place, the small and big employers in Iran. The increase
in number of private sector employees, traditional unpaid family workers and the self-employed is much slower than the increase in salaried workers of public sectors and private employers. 

*Diagram 66 - growth and transformation in the structure of employees between years 1957-1997-DS*

Comparison of the 20-year changes in the structure of working population in Iran in a 20-year time juncture during Shah's Regime between years 1957 to 1977 and the same changes in the 20-year interval of 1977 to 1997 during the Mullahs' Regime is shown below. During the Islamic government, we face positive growth in the two sectors of employers and self-employed but a reducing trend in all three sectors of private sector salaried personnel, traditional family workers and the public sector. The highest decrease belongs to the traditional sector whose influence index on the national economy is rapidly decreasing. Reduced number of personnel in government and private sectors indicates reduced investments in industrial sectors and other job creating sections and also a reflection of the destruction and damage to a large portion of big industries during Iran-Iraq war in the years following 1979.

*D 67 - change in number of employees in economic groups-DS*
Now, the official statistics concerning employment in Iran which is a reflection the economic structure of the Country can be dealt with. According to economic experts, the actual number of unemployed population in Iran is much more than officially announced and shown below and this number is increasing. The forecast of the Third Economic Plan for 3% reduction is only true on paper, the same as the past programs.(293) Some official newspapers estimate the unemployment rate about 16.4% and more in 2003.(294) According to official statistics, employment rate in urban areas is 86.9% and in rural areas a little more, i.e. 88.9%. The general trend of unemployment during 1999 to 2001 has been rapidly increasing and has reached from 12.5 percent to 14.3 percent and then decreased to 12.3 percent in 2003. In 2003, the official unemployment rate has been announced to be 11.1% in rural areas and 13.1 % in urban areas. Part of this increase in the recent years goes back to the fact that a large group of adults and young adults have entered the labor market in these years which is in itself the result of unrealistic Islamic policy of banning contraceptives in the early years of the Islamic Regime. The major part however, goes back to the unclear economic policy and inability in accurate conduction of the financial and intellectual potentialities of the country.

Diagram 68 - % unemployment and employment-DS

Economic growth is not possible without support of specialists and their function in the most important economic organizations. The process of sending students abroad for further education began since
the Qajar time. (295) This process continued after establishment of specialized educational institutes and universities too and was accelerated even more during the Mohammad Reza Shah's time because of increased financial ability of the government caused by oil export revenues. When the clerics came to power and launched the Islamic despotism of Velayat-e-Faqih, the dismissal of all independent-thinking staff from the most important governmental and educational institutions started.

During the course of attacking intellectuals and those with ideas not favored by the governing regime, universities, as the most important resistance trench of Iranian intellectuals against retrogression, were closed for a few years under the name of "Cultural Revolution" and consequently, the administrative and educational system of the Country sustained deep and lasting damages. This event stopped the increasing trend of the number of experts and university graduates. By the end of Iran-Iraq war during which the narrow-minded clergy, quite cleverly and opportunistically, embarked upon a bloody suppression of the objection movement and banning all opposition parties and groups, the universities and higher education centers gradually re-opened and first, the children of the war victims and the advocates of the regime entered the universities. For example, in the largest wave of execution of the opposition which is unprecedented in recent decades and is known as "national catastrophe", after the end of the war and by direct order of Khomeini, near 10,000 of political prisoners a large number of whom university students were executed in a short period of time without any legal proceeding. (296) By the passage of time, the universities found a new atmosphere and by opening many governmental and private universities and higher education institutes, the stopped process returned to its natural growth. Thus, the number of graduates of educational institutions increased and their share in the working population also increased. The following diagram shows the relative distribution of 10-year workers and above in different sectors in year 2002. As it can be seen, the percentage of skilled workers in different agricultural sections, craftsmen and machine operators, technicians and experts is many times more than the percentage of simple laborers and the office clerks, legislative and managerial staff. The only exception is the larger share of servicing staff, salespersons in stores and markets which is in itself a reflection of the bigger share of servicing and mediation in the added value of Iranian economy.
4.4 Financial Indexes, Revenues and Costs, Inflation, Investments and Perspectives

The national income is calculated based on the sum of the value of goods and finished services generated by a nation in an accounting period or through the income generated and not necessarily received by the people and institutions domiciled in a given country in a specific period of time. (297) The national income is calculated in three ways of cost, production and income. In Iran, this task which is at the service of economic planning, was first assigned to Bank Melli Iran since 1960 and after one year, upon establishment of Central Bank, to the Central Bank of Iran. The procedure in this bank was the same as the central banks in developed capitalistic countries and the national accounting systems of the United Nations. (298) The national income of Iran in the fixed price of 1983 after the coming to power of the Islamic Republic is studied here-below. Until the end of the war, the national income faces ups and downs and its decrease especially
until 1982 is evident. This situation is mainly due to the war, expanded displacement of ownership of factories and private and state properties to the new government, huge political tensions, dismissal of many of the former directors and the bewilderment of new rulers in those years. Although the national income increases upon the end of the war, the income per capita reduced because of the conspicuous population increase and reaches from 309 thousands Rials in 1977 to near 200 thousands Rials in year 2000, i.e. more than 30% decrease.

Diagrams 70 – national income and national income per capita in fixed price, 1983-2000

One of the major demands of the Iranian people during the 1979 movement and may be the most important motive for their support of Khomeini was his justice demanding slogans. Khomeini stressed many times on the inequality and injustice during the Shah's time and emphasized on his aim for fighting economic – social discriminations. In order to provide a statistical survey of the changes following distribution of assets among different social layers after the Mullahs' coming to power, the Writer assesses the share of population decimals from the total income. This statistical survey reveals only a small portion of the present changes in this regard, because only a small portion of income is considered and the huge assets and wealth saved has not been included. However, the existing data embody traces of reality. Not much official statistics are available in this area. Based on the information released
in the press and according to the export reports and statements, the wealth displacement from lower layers toward the top and concentration of wealth has been more accelerated during the Islamic Republic than the Shah's time and a large number of Iranian people live under poverty line today. Based on the study of decimals from the governmental statistical almanac, a part of the asset displacement can be revealed. The following diagram shows that the bipolarization of the society is still pretty in process. According to some rulers, this capital concentration should have prepared the ground for further investment and economic growth especially in the industry sector, but this policy, saved for the few recent years especially after 2000 and even that in an insufficient scale, has not yielded desirable results. The higher profitability of trade sector compared with industrial sector and lack of necessary economic and political security and stability can be named as two of the most important reasons for unwillingness of investors for investing in production sections. Comparison of the decimals in urban areas only in years 1990 and 1994 shows that near 60% of the society earned only 31% of the total income and another 30% of the population about 69% of the total national income. 1/10th of the upper class urban population earn 30.7% of the entire income in the country and their share has increased from 30.3% to 30.7% in this short interval. In the 9th, 8th and 7th decimals, the process of capital transfer from these layers has been mainly destined to the 10th decimal who own the highest share in national assets and this is a reflection of the general trend of more accumulation of high capitals in the society. This process in still continuing and no measure has been taken so far to increase the share of the lower social layers. It is not unfounded that some economic experts claim near 40% of the entire population live on borderline of poverty.

Diagram 71 – composition of total income in urban areas-DS
As a large portion of the gross domestic production in Iran belongs to the government sector and – regardless of some short periods- the economy of Iran has been directed during the few past decades under the framework of 5-year plans and especially through crude oil export revenues, the writer studies the incomes and expenses of this section. The following diagram shows the share of government income from taxation section and oil & gas section between years 1972 to 2000. After the Islamic Republic, some kinds of Islamic taxes were also legalized among the most important of which one can name "Zokat" who plays a subsidiary role in incomes and is not reflected in the existing formal statistics.(301) The ratio of tax revenues between 1972 and 1979 (the year of Shah's fall) was first reducing and then found an increasing trend. The least amount of tax income compared with oil and gas income was earned in 1975. The increased share of oil in government revenues was due to the increased price of oil in global market. The reason for increased tax revenues in 1987 and years after was not a sudden considerable increase of tax revenues but the decrease of government revenues from exported oil and gas to 1/4th of the former year which in itself goes back to the oil crisis of Iran in those years. The reducing trend of government share from oil and gas revenues and increase of tax revenues started in 1997 and has been gradually improving ever since. The low share of tax revenues in Iran can be revealed through a comparison with developed countries. As an example, the share of taxation in G.N.P. of Sweden is near 50%, in United States 30% and in Japan 27%.(302) In Iran, however, only 30% of the planned tax can be received and most of the tax evasion is by the companies and guild units.(303) It is interesting that the Iranian
guilds and trade unions organize demonstrations in objection to paying tax. The cause can be attributed to the lack of an organized system and the incorrect information acquired by taxation departments along the extensive corruption and bribery in this government organization.

The following diagram shows another view of the share of the sub-sectors of tax revenues, oil and gas revenues and other income resources of the government in four time junctures. On this basis, disregarding 1987, and even that due to reduced oil income and not increased tax revenues, the share of oil in the total government revenues has been determining. A process which has afflicted the sick body of Iranian economy as a disease since the increase of oil export till now. However, the process of dependence to oil dollars is step by step reducing in the oil exporting countries in spite of the dependence of 1/3rd to 2/3rd of their economy to oil. It seems that this change is of a slower pace in Iran as in other oil producing countries which can be attributed to the Iran-Iraq war and the political and economic disorders.

A comparison of the details of tax revenues between years 1977 and 1999 reveals some of the specifications of the Islamic government in view of tax reception as compared with the time of Shah. In the categorizing of the share of different sections of companies tax, imports tax, income tax, consumption & sale tax and property tax no considerable change occurs in the government general budget. The
serious reduction of tax revenues in these two junctures, before and after the Mullahs' Regime goes back to the companies' tax and property tax. Only in two areas, i.e. imports tax and consumption & sale tax we witness an increased share in general budget which is in itself a reflection of the more expanded activity of service sector and mediator jobs during the Islamic Republic as compared with the Shah's time.

**Diagram 74 - tax revenues in public budget - cpm-DS**

![Graph showing tax revenues in public budget from 1977 to 1999]

In this concern, analysis of the government revenues from tourism is of special significance because Iran is one of the major countries in view of tourist attractions and abounds in historical relics and different tourist potentialities in the north and south, beside the Caspian Sea, the Persian Gulf and the Oman Sea. The neighboring countries like Turkey and some Persian Gulf states have invested greatly invested on tourism during past years and have gained some success. The Turkey's income from tourism in 2003 has been near 10 billion dollars(306) and the exchange of tourists between the two countries shows that every year 500,000 Iranian tourists travel to Turkey while only 20,000 Turks visit Iran.(307) Due to religious retrogression and the fear of authorities from presence of tourists with non-Islamic covering and also the managerial and planning disorders, not much has been done in this area. In the state budget, the share of costs on tourism is only 2.1 percent. The reduction of tourist income can be observed more clearly in the following diagram. During 1979 to 1983, the tourist income reduced from near 200 millions dollars to 22.6 millions dollars and it was only after the collapse of the Soviet Union and better conditions
for relationship with newly-independent states in Central Asia who maintain old historical bonds with Iran that the tourist incomes gradually increased.

Diagram 75 – tourist income in million dollars-DS

The number of tourists visiting Iran was increasing especially from 1987 to 2003. During these years, the number of incoming tourists increased from 85,801 to 1.6 million tourists. However, Iran is miles behind in tourist incomes from other ancient countries such as Egypt, Greece, China and India.

Diagram 76 – tourists coming to Iran-DS

Some changes in the expenses and costs can also be observed. Comparing investment in different sections in the general state budget shows the priorities in years 1977 and 2000. In 1997 budget, the first priorities belong to power, road and transportation, industries and
agriculture. The priority of state budget in year 2000 was first given to the oil sector a large part of whose establishments had been damaged during Iran-Iraq war and then to water and power. In year 2000, the highest increase in state budget went to business, tourism, oil and gas. Lack of attention to industry sector in government pays, shows considerable reduced investment in this sector.

Diagram 77 - change in the public budget of government based on economic disciplines - finalized payments in %-DS

![Chart displaying changes in the public budget of government based on economic disciplines](chart.png)

A comparison between the two historical junctures before and after the Mullahs from another outlook can also be provided. The priorities of general budget payments during Shah in 1997 were first the defense affairs and then the economic and social affairs. In 1999, social affairs took the first place and then the economic issues. There are some non-transparencies and non-clarities in government payments in social affairs. First of all, a portion thereof was supposed to be paid to inefficient institutions who are themselves economic giants such as the Mustazafan Foundation and so on and secondly, it can be assumed that part of the social affairs budget was remitted indirectly into the pocket of the collaborators and assistants of the Islamic Regime and their families under the name of helping the family of martyrs and war handicapped and other allies of the Regime who are themselves part of the salaried advocates and the nucleus of the suppressive force against independent groups. The reduction in economic section of the general budget of year 1999 as compared with 1997 is considerable and close to 25 percent which is an outcome of the limited investment therein.
A look at the fluctuations in the development costs and the budget deficit of the government between years 1972 to 1998 indicates a general increase of development costs in the years before the Islamic Revolution and the decreasing trend thereafter. Especially, in year 1988, the development costs of the government greatly decreased and reached its minimum. Both before and after the Revolution, the Iranian government has been nearly always facing budget deficit. The share of the budget deficit in comparison with all government costs increased in the immediate years following the fall of Shah and reduced for a short duration by adopting controlling policies. However, increased again and reached its maximum in 1989. The reducing trend of budget deficit which started in 1990 continued until 1996 and is still continuing due to increased payments in development sector. There seems no hope of a considerable change in this trend in the near future.(308)

Diagram 79 - fluctuations in development costss and state budget deficit in relation to all costs(%) - DS
A view of the actual consumption costs during years 1995 to 2002 sheds light on the general directions of costs. The defense affairs and social order absorbs the most budget and secures the first place in costs. Second come the economic affairs, municipalities and social services. The Iranian economy after 1979 was a war economy with devastating outcomes. The military expenses during the Iran-Iraq war imposed billions of dollars damage to the economies of both countries. Iran procured arms and ammunitions in expensive prices from the entire world including the United Stats.(309) Iraq also experienced economic collapse due to the war with Iran and then two other useless wars with the US and England and its foreign debts increased to the amount of 127 billions dollars.(310) Special attention to defense affairs and establishment of social order in the current years indicates the more disjointed relationship of people with the Mullahs' Regime and the need to more investment in these sections after the political tensions of the recent years.

Another reason for increased government spending in defense sector is the increased political tensions between Iran and US and the probability of military clashes in the region which has derived the Islamic Regime to invest in the manufacture of modern complicated arms.(311)

**D 80 – actual government consumption costs - billion Rials-DS**
The increased shares of different sections in government expenses during these years have been allocated to the three sections of housing and urban utilities, public services and education. Thus, after long-term inattention during the Iran-Iraq war and as a result of improved government incomes, especially through crude oil exports, the faces of the cities have changed to some degrees and some facilities have been provided to the people during the recent years.

Diagram 81 – change in the most important government costs - comparison of 1995 with 2001

The first efforts for organizing the financial affairs in Iran and investigating into the status of incomes and expenses and public budget dates back to 1912 when Shuster, an American financial expert, was appointed Treasurer General of Iran. He tried to adapt the old system practiced since the Sassanid era to the requirements of the day. In order to increase the incomes, he recruited near 12,000 corps and created a force called "Treasury Gendarmes" to organize the task of tax collection.(312)

The policy of employing foreign experts continued with some changes in the coming years as well. The amelioration of the financial hardships of the Country in a short historical period was related to the
increase of oil price in global market. Since 1972, the foreign currency incomes of Iran increased considerably and consequently, the foreign currency payments also increased based on the economic development plans. These economic plans tremendously affected the balance of current accounts. In the last economic plan of Shah, i.e. the Fifth Plan, the balance of accounts was still positive and Iran had no foreign debt and even lends money to foreign states. During the Islamic Republic, the current account balance is negative and as a result, the foreign debts of Iran especially during the war and the reconstruction of war destructions are increasing. Then, the balance of accounts gradually gets close to its former course. The most important specification of the foreign currency balance of the Country after the fall of Shah relates to increased share of non-oil exports. However, the income of Iran is mainly dependent on oil exports and from these incomes.(313) A large portion of the oil income during the years of war was allocated to the government through the banking system which was spent for providing basic needs of the people and the heavy expenses of war. After the end of the war, part of the income earned from oil and other government sources transferred to the private sector through the same banking system. Accumulation of capital in this sector is seriously considerable and its financial ability to stand those government policies which do not desirably secure their interests is increasing. One of the difficulties of the economy of Iran, among other things, goes back to attracting extended support of this sector for investing in the productive sector. In this direction, some steps have been taken especially during recent years but there is a long way ahead to reaching the set goals. A look at the growth of some banking system data, parts of the changes in this area can be assessed. A comparison of years 1997 and 2000 shows an equal increase in debt of government sector and cash funds of private sector. Thus, no considerable change has occurred in this area after the coming to power of the Mullahs. The speed of increase of the debt of private sector to the banking system is less than the speed of increase of the cash funds of this sector and it can be concluded that the cash funds available to the private sector have increased. However, on the other hand, the economic problems and disorders, political isolation and the 8-year war caused that foreign assets and foreign loans and credits do not show much increase in comparison with other sectors, contrary to the final years of Shah's reign.
The existing problems on the way of the improvement of financial structure in Iran, also goes back to the extraordinary increase of prices. High inflation side by side other economic disorders during the Mullahs' government depreciated the Iranian currency in 1995 for 46 times compared with 1975 (Shah's time). (314) High inflation rate helped the capital owners attain huge assets sooner and easier and encouraged them to abandon production activities and invest in business, services and construction sector. Stabilization of inflation rate in Iran led to increased interest rate in the banking system for attracting deposits, but even this was not effective because the inflation rate exceeded the bank interests. The increase of bank interest was to the prejudice of production sector, because this sector was unable to pay high interests for the loans received from the banks. This situation made the government pay subsidy to this sector but even this policy failed to materialize the set goals. The reason was that the granted loans exited the production activities in different manners and transferred to profitable business and mediatory sectors. Preventing inflation is one of the urgent needs necessary for the modernization and renovation of Iranian economy. During the recent years, measures have been taken to this end and plans are in process but they lack the required efficiency and persistency. Part of the problem relates to the expansive policies of the government and irregular increase of cash funds, so that the amount of cash funds has
increased for 1400 times during the past two decades and the prices for 190 times. Part of this process is the result of excessive borrowing of government from the Central Bank. The following diagram shows the growth of inflation rate in Iran. Between years 1976 and 1992, the growth of general index is increasing and thereafter, this increase finds an accelerating trend. In most years, the inflation rate grows more than 10 percent and in 1996 reaches near 50 percent. Since 1998 we face adoption of anti-inflation policies as a result of which the inflation rate stabilizes and decreases, however the inflation rate is still a two-digit figure.

Shortage of financial resources for investment in key sectors of economy was one of the major impediments on way of industrial development and overcoming economic backwardness in Iran before the increase of oil prices in global market during the Shah's Regime. As a result of the increased government income during 1970s and as the government was not able to absorb the oil dollars in a short time, it exported capital and purchased shares of some of the foreign firms while investing on industrial plans inside the Country. However, foreign investment in Iran also accelerated and reached from 810 million dollars to more than 2 billion dollars. The noteworthy point was the gradual increase of investments in non-oil sectors. During the first period of assessment, i.e. 1962 to 1969, 92.8% of investments were in the oil sector and only 7.2% on other sectors. During the 7 years from 1970 to 1977, this relation changed in favor of investment.
in non-oil sectors and from the total of 2386 million dollars, 2233 million dollars, i.e. 93.6% was invested in non-oil sectors. The motive for investments in Iran, both in the past and in the present, is neither employment nor production for export by the use of cheap labor force, as in countries like South Korea, China and so on, but the first objective is to attain the domestic market of Iran and to achieve a superior position in competition with goods imported into Iran and the other producers who export their products into Iran. As an example, during 1973 to 1976 and as a result of higher oil price, Iran had become a very good shopping market for the foreign goods.(317)

After the fall of Shah, foreign investment in Iran reduced and gradually returned to its previous course only upon the end of Iran-Iraq war. Reduction of investments after the Islamic government came to power was mainly on the side of the United States. As the Iran-US relationships became more critical, the economic relations of United States with other Persian Gulf states increased. The expansion of relations between America and Arab countries is mutual. That is, from the 1.2 trillion dollars capital belonging to 200,000 Arab capitalists in 2001, the major portion is invested in United States and Europe especially in New York, Geneva and London and on the other hand, the United States directly invests 7.8 billions dollars in the Persian Gulf region in the same year. From the 1.2 trillion dollars capital of the private sector in the Persian Gulf states, 700 billion dollars belong to 85,000 Saudi citizens, 266 billion dollars to 60 UAE citizens, 163
billion dollars to 40,000 Kuwaitis and 65 billion dollars to 15,000 capitalists from Qatar, Oman and Bahrain. (318) It is interesting to see that in spite of the historical ancient relations of Iran with these neighboring countries who have such high cash funds, Iran has taken no serious measures for attracting them to invest in Iran or to supply her products in their markets and acts more as an importer of goods from the United States and other parts of the world through these countries. Only from year 2000 onwards, a limited inclination for counter-investment is seen. For example, the amount of foreign investment in Iran during 10 months in 2003 was 1 billion dollars while the entire foreign investment during the ten years from 1993 to 2003 had been only 3.8 billion dollars. (319) Beside the 1.2 trillion capital of the neighboring Arab countries some of which belongs to the Iranians residing in these countries, the capital of Iranians who live overseas should be also indicated. The capital of Iranians overseas is estimated about 800 billion dollars which can provide goods potentials for different economic sections of Iran, provided that the conditions for investment are improved and the investment risk reduced. A look at the foreign investment in economy of Iran during 1994 to 2001 can reveal the positive trend of investments after year 2000. Numerous domestic and international political tensions and the still insufficient and improper laws for attracting foreign investment caused that the major part of these capitals were not directly invested in Iran but were offered to the Iranian partners in form of financial facilities and loans. For example, the direct foreign investment in Iran in 2001 was only 16.7 of the entire foreign capital while 83.6% thereof was put at the disposal of Iranian partners in the form of loan. This fact itself is a reflection of the high risk of investment in Iran.

Diagram 85 - foreign investment in thousand dollars) -DS
During the recent years, the Organization for Economic Cooperation and Development (OECD) has reduced the investment risk in Iran from rank 4 to rank 3 and it can be expected that if no political tension occurred, the investment in Iran might be accelerated. (320) "Fich Institute" in England which is a universal financial ranking institute has promoted the perspective of long-term foreign currency liabilities and short-term Rial liabilities from B+ which indicates stable financial status to "+1". (321) This change of position goes back to the increase of oil revenues of Iran and the creation of a continuous current account surplus and further accumulation of foreign currency reserves due to increased extraction and export of oil and also higher prices of oil in world markets. What impedes granting the better rank of BB to Iran relates, among other things, to unclear economic plans and the challenges thereabout and also the unclear status of foreign currency reserves. Increased withdrawal from this fund during 2004 even made the MPs in the Islamic Consultative Assembly object and they asked for reduction of government withdrawal and increase of investment in productive job creating sectors. (322)

4.5 Change in the Industry, Agriculture and Servicing Sectors and the Effects thereof on the Domestic Gross Production and National Income

In this chapter, three sectors of Iranian economy including industry and mines, agriculture and services are statistically evaluated. In the mine section, we have not included the oil industries because oil has been separately dealt with in a specific chapter due to its significance and expansiveness for the Iranian economy as a whole and foreign trade in special. Before discussing these three sectors, we study the gross domestic production of Iran and the changes and factors effective therein. Based on the data of the Statistical Center of Iran, the gross domestic product in fixed prices of 1977 had a descending trend till 1982 and then gradually increased. The gross production per capita was rapidly declining till early 1990s and reduced from 334 million Rials in 1977 during the Shah's Regime to 192 million Rials in 1991, nearly 60 percent and thereafter reduced to 254.8 million Rials in year 2000, i.e. 25% less than the amount in year 1977. After passing through the crisis of the 1980s and the accompanying tensions, a relative amelioration can be seen and the economic growth rate of Iran
reaches 6% in 1992 which was the highest growth rate in the Middle East. General decrease in economic growth and production per capita indicates economic disorders, long-time Iran-Iraq war and the considerable increase of population during the past few decades.

**D 86 - total domestic gross product and per capita, -DS**

The fluctuations in share of oil in gross domestic production during 1963 to 1978 – Shah's time- indicates a rapid increase of the share of this sector in Iranian economy simultaneous with the increase of oil price in global markets so that oil became the determining factor in the economy of Iran. If oil had a share of only 12.3% in gross national production in 1963, this share increased to 34.7% in 1978, nearly triple and it even reached 50.6% in 1973. The industry sector with an increased share of 18.5% from 17.8% reached maximum share of 20.7% in some years but the share of servicing sector was declining and reached 34.6% from former 40% and in some years even reduced to 23.9% which is a reflection of the investments in industry sector through the oil revenues. Lack of attention to agriculture sector can be easily seen from the tremendous reduction of the share of this sector in gross national product which descended from 27.4% to only 9.2%, one-third of its previous share, during this interval. The outcome of this inattention to agriculture can be seen in the huge difference of income per capita or city dwellers and rural people. For example, in
1977-1978, the annual income in cities was 2100 dollars and in the villages near 1/3rd of this amount.(324)

A comparison of three junctures of 1977, 1987 and 2000 reveals some changes in the gross domestic production of Iran. During the 10-year interval of 1977 to 1987 when Iran was facing war and the serious social and economic disorders, the role of oil in gross domestic production greatly decreases and the share of industry, mines and construction sectors also decrease, but the share of agriculture and servicing sectors increases. This situation is a reflection of the inclination toward a closed domestic economy especially in agriculture sector, destruction of or severe damage to large part of industries during the war alongside the lack of any planning and inability in economic administration, foreign bans, losing oil markets and growth of mediatory. The disordered status of economy can be seen in the 8% negative growth of gross domestic production in 1986.(325) Between years 1987 and 2000, we face increase in the share of oil, industries, mines, water, power and gas but reduction in the share of agriculture, servicing and construction. This change of share in gross domestic production is the outcome of restoration of oil establishments and increased extraction and export of oil from the Iranian oil fields bordering Iraq and the consequent increased oil revenues as well as step by step operation of the damaged industries. The details of changes in three sectors of industry, agriculture and servicing and the effective factors thereupon will be separately discussed in the coming parts.
Diagram 88 - domestic gross product based on agricultural disciplines

4.5.1 Industry and Mines and its Growth Specifications

The first relatively modern industrial units in Iran were commissioned during the Safavid dynasty and their number increased at the end of Qajar and during Reza Shah's reign. The first wave of serious increase in number of factories goes back to the First Pahlevid king and the growing trend continued with an interruption during 1941-1943. The climax of industrialization however goes back to the final years of Mohammad Reza Shah and after the fall of Shah, this process is continuing with some ups and downs. Brazil and Iran are indebted for their growth to the raw materials and the determining factor in development of South Korea was its exports.(326) The industrial development in Iran can be viewed from different angles. First in view of its dependence to government revenues from crude oil export and secondly in regard to the effect of political changes such as regime changes and wars and thirdly in view of the dependent and mainly assemblage nature of most of the industries. Added value is one of the indexes which represent the industrial position and its changes. The first place in added value of industrial sector in the Iranian industrial plants belongs to the chemical products and material production. The industrial plans during the Shah's Regime for rapid growth of these industries were seriously impaired during the Mullahs' Regime and due to serious damages to the factories in the later years of Iran-Iraq war. The investment in petrochemical section and its downstream
industries was seriously impeded but is relatively improving after year 2000 and some development plans have been designed for this industry. (327) Second the petrochemical industries; the highest added value of industrial sector belongs to motor vehicles and production of basic metals which faced the same destiny as the petrochemical industries after the fall of Shah. As for automobile, the domestic market demand is estimated 1,200,000 cars and Iran intends to increase the car production to 1.5 units during the five year interval of 2003 to 2008 and to export 300,000 surplus cars to the world markets especially the countries of the region. (328) Iran and Turkey intend to become the major car supplier to the West Asian member countries within the framework of ECO. This market includes the West Asian and Central Asian countries. In order to reduce petrol consumption and use oil for exports and to process oil in the downstream industries on the one hand and also to maintain the domestic market against imported cars, Iran intends to make future productions with gas burning engines and is therefore trying to specialize the car manufacturing plants and develop gas burning engine technology. This plan however faces some oppositions. (329) Plans are also under discussion for steel production according to which Iran tries to increase her steel production capacity to 20 million tons until 2007. (330) In 2003, Iran produced 7.86 million tons steel while Turkey produced 18.29 million tons in the same year and secured the 13th rank in the world. The world production of steel during 2003 was 962 million tons with China as the first world producer (220 million tons) and Iran standing in the 21st place. (330)

Diagram 89 - added value of industrial works - DS

![Diagram 89 - added value of industrial works - DS](image-url)
The increase of added value of industrial workshops during 1997 to 2002, the same as years before 1979, belongs to large industrial plants which are specifically strengthened by direct government investment or which are connected with the increased foreign currency incomes through oil exports and, in recent years, gas exports. The growth rate of added value of industrial workshops with 10 to 49 personnel is trivial and the medium-size workshops with 50 to 99 personnel stand in the middle. The highest growth rate can be seen in large plants with above 100 personnel.

Diagram 90 – change of number of industrial workshops - comparison of 1997 with 2002-DS

As for the number of workshops, small workshops with personnel number of 10 to 49 are the most abundant. These workshops compose nearly 74% of the entire number of industrial workshops in Iran. The second rank belongs to large plants with above 100 personnel which make 15% of the total number and then the medium-size workshops with personnel between 50 and 99 have a share equal to 11 percent. In spite of some efforts after year 2000 to strengthen small and medium size businesses and industries through financial aids and banking system support- which is still under direct or indirect government supervision- and in spite of new inclinations for strengthening productive and generative private sector through assigning capital from the foreign currency reserve fund, no considerable improvement can be seen and most of the investments go to large governmental or government-affiliated industries.
In the process of industrialization of Iran, we do not observe a relative homogeneous growth in all parts of the Country. The growth of industrial plants in some major poles is witness to this claim. A glance at the number of industrial workshops in 2002 shows that the three provinces of Tehran, Isfahan and Khorasan have the highest number. Next with a relative equal number stand East Azerbaijan, Gilan, Ghazvin and Markazi provinces and the share of some provinces such as Kohkiluyeh, Ilam and Bushehr is very little and can be neglected.

Diagram 92 - number of industrial workshops of 10 workers and above in some provinces - DS
The share of different provinces in added value of industrial workshops clarifies this nonconformity and geographical inequality more. If the difference in number of workshops in Tehran Province is, for example, 5 times more than in Ghazvin Province, the added value is 7 times more. The share of provinces such as Kurdistan, Sistan va Baluchestan, Ilam and Kohkiluyeh va Boyrahmad in the added value of industrial workshops is very little and can be easily ignored. The high share of added value of industrial plants in the war-stricken province of Khuzestan in the Iraqi border which secured the third rank for this province is not due to increased number of workshops but to the oil and gas industries and some restored heavy state-owned industries remaining from the Shah's time.

*Diagram 93 - added value of industrial workshops of two workers and above based on part of provinces/ million Rials in 2002-DS*

The only positive point observed is the reduced pace of the gap between large provinces with more backward provinces in regard to establishing new industrial plants. It means that in provinces such as Semnan and East Azerbaijan the number of permits for establishment of industrial plants exceeds that of Tehran Province and in some less industrialized province such as Sistan va Baluchestan, Lorestan, Hamedan and Yazd we witness a relative increase in number of such plants. This process, however, does not still mean an increased share for the backward provinces in view of added value of the industrial
workshops in the total industries of the Country. The effects of this new change on the industrial added value can be studied further in the future.

*Diagram 94-number of establishment license of industrial workshops in a number of provinces- year 2003-DS*

As a large number of private workshops are, directly or indirectly, related to the economic institutions affiliated to government and the Velayat-e-Faqih system, no clear picture of the actual number of private and non-private workshops in Iran can be provided.

About the special role of government companies in Iranian industries the example can be cited that in 1995, in spite of the declared plan of government for 25% reduction of its share, the share of government companies grew for 20% during 1994 and 1995.(332) According to the existing statistics it can be said that the number of private sector workshops has been decreasing during 1007 to 2002 which reflects large number of bankruptcies and lack of required governmental support. A similar process is seen in the number of industrial workshops of non-private sector (governmental and semi-governmental sector). Especially from 1999 to 2000, we face a reduction from 1062 workshops to 915 workshops and, according to the latest statistical yearbook; the latter figure has remained unchanged until 2002. The policy of privatization and transferring governmental plants to the private sector in recent years might have played a role in this negative process.
Diagram 95 - number of industrial workshops based on the type of activity - DS

In 2002, the highest number of workshops can be seen in production of non-metal mineral products, food industries, beverages and textiles. Concentration of a large portion of private sector investments in the fields which need little specialized knowledge, such as the above three fields, and the considerable shortage of investment in the modern economic fields which can meet the domestic market demands and may be exported such as IT, pharmaceutical industry, medical services, aviation industry, telecommunication and power transmission which enjoy increasing significance in domestic and global markets, bespeaks of the inabilities of private sector and their serious distance far behind the craftsmen and investors of developed world. The positive point is relative attention of private sector to the petrochemical side industries such as production of rubber and plastic products which include the downstream plants beside the major upstream government industries. In case of organization, planning and appropriate support of these industries, a good potential for export to foreign markets can be seen in this field, in addition to supplying the domestic demand. If the plans are correctly executed, it can be anticipated that some of the plans for creating a large industrial zone in South Iran, Assaluyeh gas field, will be implemented during the Fourth Economic Development Plan. Alongside petrochemical industries, other gas consuming industries such as steel, aluminum,
clinker and mineral industries are also supposed to be established and private sector be employed side by side the government sector. The establishment of this large industrial zone is based on the assumption that the heavy costs of gas conveyance is reduced from the cost price of finished products so that the factories may be better off in global competition. (333) 

Diagram 96 - number of the most important industrial workshops in private sector of year 2002-DS

Even in the non-specialized or less specialized sections, the number of industrial plants of private sector is reducing. This negative trend is especially noteworthy in small workshops with less than 50 employees. This is the outcome of improper economic policies and the general inclination of the Mullahs' government to business and trade and their interest in gaining huge profits through incessant import of foreign goods without any attention to the negative consequences for small domestic businesses. However, a serious increase can be seen in the number of units with 50 to 99 personnel and especially in the number of large industrial plants with above 100 workers. No statistical data is available to the Writer on the direct and indirect share of the government system through government- affiliated institutions in the increased number of large private plants, however, it
can be guessed that part of the investments in these capital-consuming projects are by those close to the government-religious institutions and they share in the profits thus earned, whether legally or illegally. (334)

Diagram 97 - change in the number of industrial workshops of private sector, 1997-2002, above 10-DS

A look at the changes during 1997 to 2002 in forming gross fixed capital in machinery section shows the large and increasing share of government companies in this process. Even the formation of gross fixed capital of government which had reduced in 1999 did not continue and in 2002, it even superseded that of 1997. The growth rate of government companies and private sector in this area is approximately the same. During the recent years, the private sector in Iran has enjoyed the financial support of the government for investment in industrial activities more than before through different ways especially through the foreign currency reserve funds, although these helps are insignificant in the large scale of domestic market demands. Diagram 98 - change in the formation of gross fixed capital in machinery - billion Rials-DS
The inclination of private sector toward investment in non-specialized industrial fields can be shown by a comparison between the increased gross fixed capital in the two sections of machinery and construction between 1992 and 2002. During this interval, it can be observed that firstly, the increase of capital of non-private or public sector in machinery is times more than in construction which means that investment in industry by the government has been generally encouraged and increased. Secondly, a small positive inclination toward investment in industrial fields by the private sector can be seen which is, to some degree, the result of crisis and stagnation in construction sector and the reduced profitability of this sector on the one hand and increased financial assistances by the government on the other. However, the continuation of the more accelerated trend in formation of net fixed capital of machinery in public sector as compared with private sector, will widen the gap between these two sectors in the future, unless if proper decisions are adopted soon.

For the purpose of a comparison, we have compared 5 years from the Shah's Regime, 1972 to 1977, with 5 years in the Islamic Republic time, 1997 to 2002. The increase of added value of the most important industrial products of Iran during the Shah's time belonged to automobile industry, radio and television, electric appliances, miscellaneous industries, basic metals and cement, with little
differences. The automobile industry has the first place in the total value of industrial products in 1977 and then metals and other industries occupy the next positions.

**Diagram 100 - increase of value of the most important industrial products between 1993-1998-DS**

![Diagram 100 - increase of value of the most important industrial products between 1993-1998-DS](chart)

**Diagram 101 - value of the most important industrial products in 1977- billion Rials-DS**

![Diagram 101 - value of the most important industrial products in 1977- billion Rials-DS](chart)
The increase of production of the most important goods during the 5-year interval of 1997 to 2002 belongs to the automobile industries. From among 8 major products, 5 belong to automobile industry. This one-sided increase in the industrial production of the Country is due to longtime inattention to automobile industry and the resultant shortage and excessive wear of transportation means after the Mullahs came to power, in addition to disorder in planning and programming as an ordinary characteristic of the Iranian economy. In view of the number, production of sedan cars enjoys the first place and then comes the radio and television, tractor, van, minibus and bus production. It is not strange that Iran is trying to find a way to the regional markets in addition to supplying a major portion of the domestic automobile market and is expanding technical cooperation and joint projects with foreign car manufacturers. In order to attain foreign markets, Iran intends to establish production lines overseas, in addition to export of automobile and, as an example, a memorandum of understanding has been signed with a Russian car manufacturer by Automobile Industry Development Company for annual assemblage of 20,000 "Samand" cars in Russia.(336)

*Diagram 102 - % of increase of the production of most important commodities between years 1997 to 2002 - DS*
Diagram 103 - number of the most important industries in 1997 and 2002-DS

Beside this industrial production, the mineral industries also show a sensible growth during the few past years. The existence of different mines such as lead, copper, iron and so on has helped the craftsmanship industries in Iran since long past. Operating non-oil mines during the past decades has increased. The following diagram shows the quantity of extraction of the most important minerals during year 2000. According to this diagram, the highest extracted quantity belongs to sand, gravel and limestone which are used for internal use in construction. In view of weight, decorative stones and iron ore occupy the next places.

D 104 - the most important minerals extracted in year 2000-DS
4.5.2 Changes in Agriculture Sector

Some natural and social problems indicated before add to the hindrances of agriculture sector in Iran. For example, one can name the dispersion of villages, shortage of water and small size of agricultural land pieces. In spite of some agro-industries, the agriculture sector in Iran has not yet fully entered into the process of capitalistic production. The animal husbandry has, however, reached some advancements in this process by establishing modern animal farming and poultry farming units. The following statistical data show the quality of changes in agriculture sector in Iran. Although some development can be seen in some areas, the slow growth of crops production per capita indicate much difficulties in this part. This negative process which started since 19th Century, inevitably entered Iran into the group of foodstuff and agricultural products importing countries. The process of dependence to imports from industrial countries for agricultural products is not exclusive to Iran. This process can be seen in developing countries and especially in the third world poor countries.(337) Some progresses have been achieved in animal farming especially in poultry farming. Some agricultural experts hold that supply of protein needed by the domestic market from poultry and egg is more economical because of the climatic conditions of Iran.(338) In spite of disorders in the study of changes in Iran's agriculture before and after 1979, we observe some positive changes as well. During the Mullahs' rule, the traditionalism of the Islamic Republic and the rural origin of some of the new rulers and government officials and advocates of Islamic Revolution, were not ineffective to this end. After the fall of Shah, the Construction Jihad Organization was immediately formed where the youth mainly from low working class took part and undertook positive works in the rural areas in spite of their insufficient scientific capabilities. The Construction Jihad later changed into a ministry under the government and lost its popular self-autonomy and therefore faced the same destiny as other government organizations. To the face of all these insufficiencies, efforts for establishing economic infrastructures, expansion of roads, enhancing health and education in the Islamic Republic contributed to the increase of the added value share of agriculture in the gross national product. The efforts of youth lacking scientific and organized programming, however, could not yield desirable results and the disorders of agricultural economy and
incessant expansion of agricultural products import witness to this claim. As an example, in 2001, Iran was the second biggest world market for wheat after Brazil and imported 6.5 million tons wheat. The total annual wheat export in the world was 106 million tons during 1990s. It means that Iran alone imported nearly 6% of the entire wheat exported in the world and the major part of money paid for the import came from oil dollars. (339) Attaining self-sufficiency in wheat production in 2003 has received different approaches. Some believe that increase of wheat production to 14 million tons has been made possible by damaging other agricultural products and that the area under wheat cultivation has not increased during the 20-year interval from 1983 to 2003. Furthermore, these experts do not see wheat production in Iran economical.

Some government officials insist on increasing wheat production and emphasize that it is economical and see it important in the economic self-sufficiency plan of Iran not only in view of economic considerations but also in view of strategic significance. (340) Iran, who was a wheat exporter during the last century, intends to follow up this economic policy and attain the production of 18 million tons per annum through changing the organizational structure and creating an independent administration for wheat alongside effective farm management, applied researches, increasing production per area and provision of high quality seeds. (341) Even if this plan is accomplished, Iran will be only able to supply the domestic market because the population is highly increasing and will still be much behind to join the wheat exporting countries. The share of agriculture sector in the added value of the Country, in spite of all its good potentialities, is trivial. Neither the early steps in 1963 by Agrarian Reforms of Shah, nor the benevolent but rapid and sentimental measures taken by the youth after the Revolution succeeded to reduce the major dependence of Iran to the import of agricultural products and the success in this area is still limited. A look at the changes between years 1992 and 2002 shows the determining role of agronomy and horticulture in the added value of agriculture sector. The maximum added value of agronomy and horticulture was obtained in 1999 which was equal to 51198 million Rials in the fixed prices of 1998. since then, the added value of this sector has been reducing and did not change that much until 2002. The added value of other parts, compared with this part, is less and very insignificant after the animal husbandry and poultry farming which had a value of about
40% that of agronomy section in 2002. Forestry had an insignificant added value of 881 million Rials and fishery, in spite of abundant potentialities in the south and north Iran had an added value of only 1149 million Rials.

**Diagram 105 - added value of agricultural sector - DS**

The following diagram shows the added value of different agriculture parts during 1997 to 2002. The increase of added value of all parts of agriculture sector during this time juncture is 33 percent which is more than the increase of agronomy part (29 percent). In animal husbandry, poultry farming and especially forestry, we witness a higher growth than the total growth of this sector. The growth of forestry has been 152 percent and that of animal husbandry 43 percent. The problem in fishery section can be easily observed by the 10 percent decrease in added value of this section in spite of all natural suitable potentialities.

**D 106 - % of change in added value of agricultural sector - DS**
In the interval between 1998 and 2003, we witness no growth in agronomy and horticulture which have the first rank in added value among agricultural products in regard to the area under cultivation, whether dry-farmed or irrigated. The 29% increase in added value and lack of increase of area under cultivation may lead us to the conclusion that some measures have been taken toward optimal operation of agricultural lands. Interesting to know that, contrary to these statistical data which have been extracted by the present writer from the statistical yearbooks published by Statistical Center of Iran, the government officials in the Iranian mass media emphasize on considerable increase of the area under cultivation.(342)

Diagram 107 - change in the cultivated area (1000 hectares) - DS

In 2003, the first ranks among provinces of Iran in regard to the area under cultivation of agricultural products belong to Khorasan, Fars, Khuzestan, East Azerbaijan, West Azerbaijan, Kermanshah and Lorestan, respectively. The vast province of Khorasan with a cultivated area of 1571 hectares secures the first place. The cultivated area in province such as Yazd, Hormozgan and Sistan va Baluchestan is very insignificant due to natural conditions and lack of elaborated planning.

One of the climatic obstacles on way of increasing area under cultivation is the problem of water. From 1979 to 2003, the number of dams increased from 13 to 64 big dams and 82 other big dams are
under construction which are capable of regulating 11.3 billion cubic meters of water.(343)

*Diagram 108 - area under cultivation of agricultural products in 2003- thousand hectares-DS*

Increase of the area under cultivation of dry-farmed gardens, fruit gardens and sapling gardens indicates a growing trend in fruit gardens, although the area of dry-farmed gardens has remained unchanged. In other words, a large portion of cultivable lands in Iran have not been yet added to the agriculture span of Iran and major steps need be taken in order to return Iran to the lucrative days of agriculture some centuries ago. Considering the increase of population, well-though planning and appropriate implementation of such plans are necessary for the increase of agricultural products. But for instance, only 45% of the objectives set out in the agriculture mechanization part of the Third Development Plan were achieved. On the other hand, while the promises for increase of the number of agricultural machines in the Third Plan were not fulfilled, in the Fourth Plan, they promises to increase the number of tractors from 20,000 units to 50,000 units and combine from 1,000 units to 2,000 units.(344)
For a better understanding, we have compared the production of some crops and garden products in two 10-year periods before and after the Islamic Regime. In this comparison, the growth during the 10-year period is being studied not the quantity of product. According to this comparison between the 10-year period of 1967 to 1977 during the Shah's Regime and 1990 to 2000 during the Islamic government, the growth rate in production of wheat, cotton and beans is approximately the same in both periods. The growth rate of oil seeds, sugar beet and tea production during the Islamic government is less than half of that of the Shah's Regime and this contradicts the claims brought up by the Regime on agricultural self-sufficiency. In the years following 2000, some efforts have been taken to improve agricultural production and as concerns wheat, have succeeded in providing the domestic demand for this product. It should be reminded that in 1999, Iran was the biggest wheat importer in the world. Some plans for aggregating agricultural lands are under study for enhancing agricultural production which claim to be increase employment opportunities as its subsidiary goal, but it seems that the main objective is a revival of the agricultural plans during Shah's time called "Agro-industry Companies" as joint ventures of Iranian and foreign capitalists.(345)
The share of the added value of agricultural sector in the total added value of the Iranian economy has increased after the fall of Shah. The increase of the share of this sector has not been caused by increased production of agricultural products or expansion of cultivated area but by the decrease of share of the oil and industry sectors. The insufficiency in production of agricultural products can be seen not only in the agronomy but also in the fishing section as well. From the nearly 20% share of the agriculture sector in the national production, only 2% belongs to fishing in a country with large water borders in the south and north. According to the international studies carried out, the share of this section in the national production should have been about 6% but is less than 1% in Iran. Furthermore, the added value thereof has been reducing for 10% during 1997 to 2002. The following diagram analyzes the fishing and aquatics production during 1987 to 2003. The diagrams show that the maximum increase has occurred in domestic waters and then the northern waters which supply caviar fish mainly for export. In the south, we witness a lesser increase, although the water borders of Iran in the south, the Persian Gulf and the Oman Sea, is times larger than the water borders on the Caspian Sea. Although a general increase in fishing and aquatics production can be seen during these years, the growing pace is not desirable in view of the natural potentialities of the Country. The outcome of these insufficiencies, for example, is reflected in lesser consumption of
protein in Iran, i.e., the consumption per capita of chicken and fish in Iran is one third of the global consumption. (346)

*Diagram 111 - fluctuations in fishing and aquatic production, 1000 T-DS*

A look at the number of marine vessels in different provinces in year 2002 shows that most of them belong to the South region. In general, 92% of the marine vessels belong to Hormozgan, Bushehr and Khuzestan provinces. 74% of this number work in the Persian Gulf waters and 18% on the Oman Sea waters in Sistan va Baluchestan.
Province. The number of vessels in the northern waters on the Caspian coast in Mazandaran, Gilan and Golestan provinces is 8% of the total number of fishing fleet in the Country.

**D 113 - number of vessels in some provinces - year 2002-DS**

![Pie chart showing the distribution of vessels in some provinces](image)

During the 10-year period from 1992 to 2002, the number of small fishing vessels such as boat and launch increased but the number of large ships which can add to the share of fishing sub-sector in the overall added value of agriculture sector has decreased for about 40% and their very low number, i.e. 122 fishing ships in 1992, has reduced to 73 ships. Besides this decrease in number, the very low equipment of fishing boats and launches should be added. The fishermen work with low productivity in the same methods as of their forefathers away from the technical capabilities of the modern world. A look at these conditions can guide us to the causes for 10% reduction in the added value of fishery section.

**D 114 - % of change in fishing vessels between 1992-2002-DS**

![Bar chart showing the percentage of change in fishing vessels](image)
4.5.3 The Service Sector and its Accelerating Growth

In this Chapter, we study the service sector and consider the share of its different branches before and after the Islamic Republic. The Islamic government strengthened the power of the bazaar in the government structure and thus expanded the mediatory activities and reduced the share of industry in the economy of Iran. The bond between the clergy and the bazaar which paved the way for this transformation in the structure of Iranian economy is an old relationship. Since long past, different relations in the form of marriage or partnership in trade has existed between the Mullahs and the Bazaar people. This religious caste supported the inclinations of the bazaar many times and ordered for the closure of bazaar upon instruction by Mullahs or acted as a powerful pressure tool to the governments by going on strikes.(347) The Bazaar chiefs, who were one of the financial resources of Khomeini's movement during the fall of Shah, strengthened their position in the Islamic government after 1979 and are influential in most of the economic institutions such as the Chamber of Commerce, Mustazafan Foundations, Economy Organization, Committees and so on. It can be said that they are in control of the economy and own a large portion of domestic market, exports and imports, saving and pawn funds and some production companies.(348) In spite of all this, the traditional influence of bazaar is weakening by the advancements in economic structure and the formation of new and modern capitalistic institutions. The high share of service sector in the gross national product in Iran is due to limited industrial growth, in addition to the reason just cited. The share of service sector decreased during 1963 to 1978 by the increase of oil prices and expansion of investments on industry.

In 1963, this share was equal to 0% of the gross domestic production but reached 23.9% in 1973. By the end of the investment on industrial sector with the aid of oil dollars and ambitious plans for industrialization of the Country which did not last long, the share of service sector in the gross domestic production gradually increased and in 1978, reached 34.6% which was only 5.4% less than the share in 1963.

The reducing trend in the share of service sector can be also observed in Potenzielle Trend Diagram as well.
Diagram 115 - share of service sector in domestic gross production(%) - DS

The damage to the industrial development of Iran after the fall of Shah which was caused by closure of factories, war, economic ban especially oil ban and reduced oil price led to a leap of investment in business and trade sector. Especially during the war, the domestic trade damaged the economy by speculation, smuggling and retail sale. The end of the war and return of conditions to normal procedure reduced the crisis to some degree, but it still lay like a nightmare on the sick body of the Iranian economy. What helped this parasitic function of the domestic market can be outlined especially in two areas. First that upon the end of the war, most of the natural consuming needs of the people which have been postponed during the war due to the policy of "war conditions rationing" needed be responded shortly. The flooding import of goods in a short period of time, legally or illegally, was the response to this need. Secondly, the ruined non-repaired industries of Iran were in such undesirable conditions that could respond to only a small number of these needs, even that in very low qualities. The result of these changes was the considerable increase of the share of services in gross national production. At the same time, the share of other sectors such as industries, oil and construction was seriously declining. The share of service sector which was only 35.4% in 1977 reached 54.7% in 1987 and it was only after restorations and reconstructions in the industrial and oil sectors that this share reduced in 44.5% in 1997. During these years, the only sector which seriously increased its share in the GDP
was the agriculture sector the increase of whose share was inevitable to provide for the first degree needs of people in the conditions of absence of sufficient currency for importing agricultural products.

A look at the sub-sectors of servicing group and their shares in the gross domestic production by comparing years 1997 and 2000 shows that the highest increase has happened in the sub-sectors of real estates, business, catering and hotel management. The total servicing sector reveals a growth near 50%. The real estate services in 1977 increased for Rls.705, 9 million Rials in the fixed prices of 1982 and in 2000, for Rls. 18341, i.e. 260 percent. The trade services also reached from 1047.2 millions Rials in 1977 to 1645 millions Rials in year 2000. The only section which experienced a reduced share in service sector was the sub-sector of services of the financial and monetary institutions, because after the fall of Shah the banks became governmental and their limited efficiency decreased by the outbreak of war and reduced financial capability of the Country. Due to lack of financial resources and bankruptcy of the war economy, the banks failed to provide sufficient services to different economic sectors including the service sector.
Lack of programs or incorrect planning in economic affairs and lack of sufficient employment for a country who enters a large number of young forces into the labor market every year and also the tendency of major portions of Iranian capitalism who seek their profit not in industrial investment but in business and trade, has increased the share of mediatory activities in the service sector. Legal and illegal importation of goods by businessmen and market people and the numerous hands involved in transacting these goods until reaching the end user is one of the problems of the sick economy of Iran. In 1992, the share of mediatory businesses in gross domestic production was only 0.34% of the GDP. In 2001, this share reached 2.38%, i.e. near 7 times increase and thus devoted the first place in comparison with other sub-sectors of service sector in the period under study. This increase can be manifested in the expanded import of smuggled goods. The volume of smuggled imports which is estimated near 4 billions dollars destroys the job opportunities in addition to wasting oil dollars. (349)
In the historical juncture of 1963 to 1978, although the share of service sector in GNP reduced but the number of employees in this sector increased more than two times. Although in 1963, the employment in servicing sector was twice the number in industry and agriculture, the employment in all three sectors of industry, agriculture and services at the end of the Shah's Regime was approximately the same and near 3 million worker sin each sector. 3 millions in agriculture sector, 2.8 millions in industry sector and 3.2 millions in service sector, and the oil industry did not have a large share in employment market. This process indicated industrial development of the Country along with inattention to the agriculture sector.
Inattention to industrial development and adoption of warring policy and the destruction of a large part of industries especially in the final years of Iran-Iraq war considerably increased the employment in service sector. The result was that the rather equal share of agriculture, industry and service sectors in 1978 reached 43.9% employment in service sector against 25.6% employment in agriculture sector and only 18.2% (about 40% decrease compared with service sector in 1978) employment in industry in 2002. The slow industrial growth and negative growth in some industrial fields affected the service sector and increased its share in the gross domestic production. Increase of the sub-sector of mediatory activities in the service sector in year 2000 and thereafter, however, is specially caused by incorrect policymaking and the profit seeking of a large portion of commercial and bureaucratic capitalism of Iran inside and around the Mullahs' government.

*Diagram 120 - relative distribution of employees based on major economic groups in 2002(%)*
Lack of economic plans, religious and factional narrow-mindedness in management of the Country during years following the fall of Shah brought about new problems in areas such as health, education and culture. As regards health and medical service, by the unreasonable continuation of Iran-Iraq war, not only a major part of capitals which should have been invested in key sectors of economy for offsetting the backwardness of the Country were spent on procurement of arms and ammunitions in expensive prices from global black market but also a large number of villages and cities were ruined and the limited health facilities destroyed. The war left millions killed and handicapped and the efforts of Mullahs years after the end of war were concentrated on returning the conditions to the previous status and to organize the disastrous situation. In education and culture sector, the dominance of religious dogmatic factions closed the universities and started an expansive wave of eliminating all those who had different ideas or thought differently from the education and culture scene. The reopened universities after the "Cultural-Islamic Revolution" admitted only the advocates of the Islamic ruling class or a small portion of former students. As an example the admission of students to higher education centers reduced from 56257 in 1979 to near 1/4th, i.e. 13045 students in 1981.(350) The mass media, press and the individual private life of people were under monitoring and surveillance of Islamic dogmatic forces. Music was banned, movies underwent political and Islamic censorship, the Islamic covering (Hijab) became mandatory, freedom of speech was totally lost and the prisons were filled with the intellectuals and all those who had different ideas and did not believe in the mainstream ideology. During a few years of terror rule, tens of thousands were killed under torture or were executed in the prisons.(351)

After reconstruction of parts of the ruins and in order to respond to the social needs, the radical policies were gradually refined and the reconstruction process started. In spite of all insufficiencies, some advancements occurred in these fields. This change is especially observed in higher education, literacy movement and after 1999 in limited freedom of press, movies, books and music and also individual freedoms and some other areas, in spite of the ups and downs and arrests and similar stories. To this list of problems, the extended use of
narcotics should be added which are easily accessible in low prices due to the neighborhood with Afghanistan. In Iran, 44 persons are arrested each hour for involving in narcotics business and during the past three years, near 1 million people have been arrested. In addition to cultural imbalance, lack of freedoms and the young composition of Iranian population, where 2/3rd of the population are under 25 years of age, unemployment is one the basic reasons for expansion of addiction to narcotics. (352) First, let's have a look at the health institutions in years 1987 to 2003. A large number of health institutes in Iran belong to the government sector. During the concerned 6 years, the number of health institutes affiliated to the Ministry of Health increased from 426 to 488 centers and the hospital beds from 56811 to 77300 beds. The share of private sector is insignificant and the number of private health centers increased from 117 to 120 centers only. The increased number of hospital beds and health centers are probably related to Army and Guard Corps and other law enforcement departments. This increase is considerable and has nearly doubled in the said interval. However, the health facilities are insufficient and this fact can be easily observed in the fact that in the entire country with above 60 million population, there are only 730 polyclinics and hospitals and only 110797 hospital beds. Thus, there is only one bed for each 631 persons. We do not indicate the undesirable quality of services, medical and therapeutic instruments and the unfair distribution of medical centers over the Country.

Diagram 121 - number of health institutions - DS
During the same period, the highest increase is observed in the number of physicians which is the result of improved higher education system after the first years of the Mullahs' rule. The number of physicians in 1987 was 10944 which increased to 21496 and thus there is one physician for each 3256 citizens. The number of paramedical staff and health workers has also increased.

Diagram 122 - increase of the number of health affairs workers between years 1987-2003 –DS

Measures have been taken to control illiteracy. The increased number of literates during the two periods of 1957-1977 (Shah's time) and 1977-1997 (Islamic government time) has been compared. In 1957, the number of literate population was 1911 thousands which reached 12877 thousands in 1977. The number of literate population in 1977-1997 increased from 12877 thousands to 41852 thousands. The 20-year growth of literacy of men and women during the Shah's Regime was 6.74 and during the same period under the Islamic government, 2.74, i.e. half of the former period. This figure has been 6.10 against 2.74 for men and 10.24 against 4.9 for women. In spite of this growth, the percentage of those who entered primary and secondary education in Iran was 43% which was less than the 55% in average of the region.(353)
After extensive "filtration" in universities and expelling everyone who had a different way of thinking and substituting them with trusted war handicapped and martyr families and returning a number of former students to the university classes, the number of higher education centers and students increased. During 1987 to 2003, the number of students in governmental higher education institutes increased for five times from 167971 to 809567 students. In spite of strict rules for admitting women to their desired fields of study, the girl students filled the university chairs and increased their share in higher education by passing the barrier of difficult entrance examinations. The number of girl students in these years increased from 49085 to 412848 students more than 8 times while the number of boy students in the same interval increased only a little more than three times from 118886 to 396719.

Thus, the number of girl students in higher education centers which was 69801 less than the number of boy students in 1987, increased so that in 2003, their number exceeded the number of boy students for 16129. The rush of women to the universities and their increased presence in all educational, cultural, artistic and economic areas in the years under study is a response to the anti-woman policies of the Islamic government. In order to employ students and higher education graduates who face the problem of unemployment, a plan was proposed in 2003 for the establishment of "Industry Corps" according to which the students of engineering fields can pass their two-year compulsory services in the industrial units and get practical work experience alongside their theoretic knowledge.(354)
Since long, the feudalistic patriarchal relationships connected with the Islamic tendencies, deprived women from much facilities in Iran. Prior to the Arab invasion of Iran, women were enjoying a relative equal status with men as emphasized in the "Avesta", the sacred book of the ancient Iranians and the archeological data also indicate that this equal status had survived until admission of Islam. (355) The first efforts to emancipate women from the double cruelty of the traditionalist-feudalistic society go back to the time of Reza Shah. His forceful policy of "removing Islamic covering from women" which was proved to be unrealistic, only aimed at apparent development of freedom for women. However, the role of women in the social and economic life improved during the Reza Shah's reign and this policy was seriously objected to by the traditionalist clergy. Mohammad Reza Shah adopted a softer policy toward this end but he also faced resistance and various objections of the clerics. The clerics objected the voting right for women and their objecting movement was temporarily put down by suppression and sending their leader, Khomeini, on exile overseas. By the stabilization of the Republic of Mullahs, some of the rights which women had secured during their 100 years of combat were lost and the policy of keeping women aside from some of the economic sectors was followed. The rights of women in marriage, judicial laws and so on reduced and the strict compulsory rules for Islamic covering (Hijab) were practiced. For more precise...
implementation of these retrogressive laws, a special army was also organized and regular police control was performed in the streets. In spite of weakening of pressures on women and political forces after year 2000, this trend still continues. In 2004 for example, only in one police act, 180 women were arrested in the streets who were accused that have not covered themselves in an Islamic manner. From these 180 women, 69 were delivered to courts. Furthermore, 1250 women were fined and the amount of fine is near 52 Euro. Those who undergo court trials are susceptible to up to 2 months confinement. On the one hand, the expansion of Islamic laws and assigning unlimited powers to men and the efforts to traditionalize people and on the other hand the inevitable social changes, awareness of people and the influence of opposing mass media, inside or outside the Country, led to serious tensions and social disorders. The prevalence of marriage between minor and very young girls with old men or married men besides poverty and unemployment is threatening the families and in some traditional regions especially villages have led to the murder of women on "honor" reasons and expanded suicide and suicidal burning of women. As an example, the women suicide rate in a southern province of Iran was 3.5% in year 2000. Expansion of prostitution and narcotics is another outcome of this traditional inefficient system. The Iranian women resist this inequality and in the present conditions, the women movement is one of the major bases for fighting the Velayat-e-Faqih, the religious narrow-mindedness and the Islamic Regime. One of these signs is the extensive presence of women in higher education centers. This fact along with the other factor, i.e. the young combination of population and difficulty of providing job for the large group of jobseekers, the ancient inclination of Iranians to gaining knowledge and the profitability of investment in education, made the Islamic Government to agree with opening of private universities and investment of private sector in this section. In spite of all dogmatism in control of education especially higher education during the early years of the Islamic Republic which suppressed all objections, finally the authorities decided to open the private university named "Islamic Azad University".

The Islamic Azad University established its branches in many small cities of Iran and although entrance examination is a pre-requisite for entering into any university, admission to Azad universities is easier but more costly. The number of students in private universities
increased from 5996 to 182009 students from 1987 to 2003. Thus, a large portion of higher education in Iran is at the hands of private sector. The number of girl students exceeds the boy students in private universities as well. In spite of increased number of university students, finding job after graduation is difficult and that's why many graduates are working in non-specialized fields. As concerns research, due to high inflation, the credit increase trend is evenly descending and the necessary facilities are not available to the specialists.(358)

Diagram 125 - increase rate of students in Azad university

The relative improvements in the past few years which are mainly due to increased oil revenues and some positive, though unstable, political changes after year 2000 can be shown in the improvement of some individual consumption indexes such as recreation, culture, telecommunication, social supports and transportation. This improvement is equal in other sectors such as health, housing, clothing and education. In spite of the considerable increase of the number of students, the share of education in individual consumption of the society as a whole in still insignificant.
Increased number of authored and translated books during 1987 to 2003 indicates a limited opener political space and reduced pressure of censorship and control of the Ministry of Islamic Guidance, the official censorship department of the Islamic government. During this period, the number authored books increased from 2593 titles in 1987 to 26622 titles, i.e. nearly ten times more and the number of translated books from 1030 titles to 7928 titles, i.e. approximately 8 times more. Increase of the number of libraries although yet far behind the developed countries shows a limited openness of the closed atmosphere of the early years of Islamic government and the increasing inclination of people to study and research.

*Diagram 127 – book authoring and translation-DS*
Imposing Khatami as the president by the absolute majority of votes in presidential elections and the defeat of the candidate of the retrogressive, Islamic conservative factions along with ever-increasing demands of people and the direct and indirect pressures to the government system, not only led to a transformation on the atmosphere of higher education centers and bringing out a large portion thereof from the hands of the Mullahs under the name of private open universities and also the growth of student movement and extensive objections among students, but also affected the press and other mass media as well. It should be remarked that the student movement has always acted as one of the main pillars of the combat of people of Iran to attain democracy, both during the Shah's Regime and during the Islamic Republic. The highest increase in the number of Iranian press goes back to real persons. The number of these papers one or a group of which are banned from time to time and some others are added reached from 218 to 490 during 1997 to 2003. The number of publications by government and affiliated non-government organizations and foundations has also increased in this interval, but the critical independent periodicals attract more readers.

The negative dossier of the Mullahs' regime, in spite of some political reforms, can be observed in the fact that according to the report of "Journalists sans frontier", Iran is one of the worst countries in view of freedom of press and by imprisoning 14 journalists in 2004, the Iranian government has been the largest prison for journalists in the Middle East. The Iranian authorities cause numerous obstacles on way of supply of paper for the press and have doubled the price of paper.
during one year in order to put the opposition media who have no governmental financial support under financial pressure. (359)

Diagram 129 - number of press based on concessions-DS

Although a large number of the press are published in Tehran, the growth rate of press in other cities is more during 1987 to 2003 and their number has reached from 164 to 451, i.e. nearly triple during the said period. The number of periodicals in Tehran has increased from 662 to 1350, i.e. nearly doubled. However, the censorship of press and banning one in a while and also the murder of writers which is known as "serial murders" are still continued in various forms.

D 130 - number of press based on place of publication-DS
In Iran, the art may have suffered from the dogmatism and the closed space more than any other aspect of the intellectual life of Iranians during the years of the Islamic government and has been hindered from any development. This narrow view included all art fields such as music, theater, dancing, poetry, fiction and so on. Some of the artists were imprisoned or executed. Some others isolated themselves and avoided to publish their works, directly or indirectly. Another group escaped overseas and faced numerous financial hardships in providing their daily bread abroad. This group either had to leave the scene of art forever or satisfy themselves with small artworks overseas. In spite of all these hardships, some progress has been made in some areas such as cinema and the demand of domestic market has added to the qualitative and quantitative development of cinema. The number of Iranian films produced reached from 40 movies in 1992 to 84 movies in 2003. Some of these movies are either censored or are never given the chance to go on stage and are shown only overseas. Some other films are displayed but under pressure of the narrow-minded factions, have to stop display after a short time.

*Diagram 131 - number of movies produced-DS*

In spite of all these narrow-mindedness and creating obstacles on way of producers and directors and other people involved in the film industry, the Iranian cinema has developed, although little, during these years of limited political openness. The limited nature of this change can be seen from the low sale of Iranian movies from 1987 to 1993. In this time interval, the total sale reached only an amount equal to 1403340 dollars. The increase of number of films sold is considerable and has reached from 2 to 30 movies. The number of
awards received in film festivals increased from 1 to 23 and, after the stagnation of the early years of Mullah's Regime, the Iranian cinema is making itself known in the universal levels. In 1993, the sale of Iranian movies overseas earned 136,610 dollars for Iran. In order to attain a share worthy of Iranian cinema and other art fields in the global scene, deeper changes in political atmosphere are needed.

5. Foreign Trade and its Importance in the Economy of Iran

In the past chapters, we studied the four phases of economic reconstruction in Iran. These four phases included the first phase at the end of Qajar dynasty, the 2nd phase during the 20-year rule of Reza Shah, the 3rd phase during the final years of Mohammad Reza Shah and the 4th phase or the period of endeavors toward modernization after year 2000.

In this part, first we consider the function and the historical and contemporary importance of foreign trade in the economy of Iran and then study the past three decades in view of statistics. The aim of this assessment is to compare the changes in the foreign trade in Iran with a look at the qualitative and quantitative combination of exports with and without oil, changes in the imports, major business partners of Iran and the quality of foreign trade balance during these years. In this study we will see that these changes have had major effects on the
conditions of the region and especially Iran as a large West Asian country the shadow of which is still visible.

5.1 A Look at the History of Foreign Trade in Iran

The separation of Iran from the group of developed countries of the world started from mid-Safavid dynasty and accelerated at the end of Safavid rule, i.e. about 300 years ago. This retrogression led to economic bankruptcy of Iran especially in the 19th Century. During the Safavid rule, although Iran was economically behind from the Western countries but the economy was well organized in many fields specifically during Shah Abbas time. Domestic and foreign trade as one of the financial pillars for administration of the Country and as an important support to the treasury improved. The annual income of Safavid government in mid-17th century, although less than that of the developed European states and although Iran was economically left behind, the distance was not so big. For about 85 years, i.e. from 1638 to 1725, the annual income of Safavid monarchy was between 650,000 to 785,000 Tumans which was only 2.5 times less than the annual income of England.(360) Following the gradual collapse of the economy of Iran during the past three centuries, the gross domestic production of Iran is now near to 1/7th of the gross domestic production of England in year 2000 and even this is mainly indebted to export of crude oil and natural gas.(361) These figures show the speed of economic bankruptcy and the wide gap between the economy of Iran and that of the developed countries. In addition to the domestic factors indicated before and those factors which will be dealt with later in this book, the change in domestic trade and especially foreign trade is also involved in destroying this balance and leaving Iran behind the line of advanced countries of the world.

During the Safavid dynasty especially the reign of Shah Abbas, the commercial routes on land and sea to neighboring countries and even faraway countries were extensively under Iranian control, in spite of the efforts of some newly industrialized European countries such as Portugal. However, the effects of the change in the global trading system and the change of balance of forces in favor of European countries was visible even during the blooming period of Iranian economy at the time of Shah Abbas. In 15th Century, Iran still had a blossoming commerce. The European merchants acknowledged that the silk and velvet fabrics of Khorasan equaled the textiles of Genoa
and the high quality of Yazd cloths was well-known. At the beginning of 17th Century, the quantity of silk entering Kashan for weaving exceeded the quantity of cotton which entered London. However, what has started in 16th Century led to the destruction or desolation of traditional business routes in the east in early 17th Century. The ports of Syria and other eastern coasts of Mediterranean Sea were emptied from the East Asian products. Silk and spices became scarce goods and only the products of West Asian countries including Iran were transported to these ports. The commerce in India and the Southeast Asia was gradually seized from the Portuguese and fell at hands of the British, the Dutch and the Spaniards. These business partners who had taken control of the markets and business routes founded the East Indian Commercial Company (Ostindische handelsgesellschaft) that was financially supported by their governments in large scales. Navy fleets and private armies were founded for military protection of the business and these military forces embarked upon piracy with the use of advanced arms and ammunitions. By adopting this militarization policy, the Portuguese were severely defeated in 17th Century by the East Indian Company who occupied the entire market of the east and the trade with other countries from India to the Far East and all these areas came under military – commercial covering of East Indian Company. This change deeply damaged the business in West Asia especially in Iran. The result of the new changes was that the trade balance of Iran became negative and the ratio of imports to exports increased step by step. The negative balance is especially seen in the relationships of Iran with England and Russia and the only country with whom Iran maintains positive trade balance in some historical junctures is the similar neighboring country of the Ottoman Empire. Good economic relations with Turkey who was the biggest political and economic weight, beside Iran, in the region, continued after the fall of Qajar and coming to power of the Pahlevi family. Expansion of economic relations with this western neighbor in the contemporary era especially goes back to the conclusion of Economic Cooperation Treaty in 1932 signed between Reza Shah and Ata Turk. The relations of Iran with Turkey are still important to both and continue within the framework of the regional West Asian organization of "ECO", among others. In spite of difficulties on the way, measures are in process to develop this economic treaty by eliminating custom barriers and forming the "ECO Bank of Commerce and
Development". The bases of this Organization are mainly founded on the facilities and capabilities of the two countries of Iran and Turkey. (366)

Furthermore, one other change also contributed to the crisis in foreign trade and consequently in domestic trade of Iran and West Asia and that was the discovery of another business route by Bartholomew Diaz in the end of 15th Century who turned round the Cape of Good Hope. Upon this discovery, a new business route was found between India and East Asia and Europe and thus many commercial merchandise such as spices could be transported without paying business profit to West Asian countries for transit. There was no need to make local merchants including Iranians partner in profit of these business and the vein of commerce in the Persian Gulf and the Red Sea was disconnected to a large scale. (367) Most of the regional wars in Iran, Ottoman and Egypt with the European business parties were on the matter of control of global business routes and restituting the past power to play a more significant role in global commerce and overcome the economic crises of the ruling systems in these countries. For instance, the merchants of Genoa, Pisa and Venice were interested in establishing business centers in Tyre, Haifa, Tarabulus, Antioch and Cyprus and get the trade in the region under their control. In Italy, the power of clergy and the commercial power struggled for destruction of Byzantium hand in hand and because of their victory, created Latin governments obedient to Pope in Jerusalem, Acre, Odessa, Greece and Cyprus. Due to these defeats, the splendor and grandeur of Isfahan, Baghdad, Cairo, Konya and Constantinople were lost. (368) The economic outcome of these regional defeats in West Asia was the economic bankruptcy and financial disability and reduction of the assets of big countries in West Asia, Iran and Ottoman. The efforts of Iranians during major domestic tensions after the fall of Safavid dynasty at the end of the 18th Century until coming to power of Qajar dynasty to come out of this economic crisis remained futile and the financial insolvency deepened even more. At the beginning of the 19th Century, the Middle Asia, India, Ottoman and Iran all were passing through this difficult stage. The control of the commercial rout of Iran to India was seized from Iran and the British themselves took control of business in Middle Asia by increased influence in Afghanistan which gradually ended in separating Afghanistan from Iran. The business of merchandise in Persian Gulf, India and the Far East came under control of British merchants and the traditional business route of
East and West lost their importance and in the Middle Asia, except Kabul who was a little lucrative, other big eastern cities such as Herat, Qandahar and Ghazni entered their economic fall. The only commercial route of Iran which was still open was the route to Turkey and Russia. The fight over control of commerce in Caucasian and Central Asian markets with a powerful neighbor such as Russia in the north was going on. Following two major military defeats of Iran against the Tsarist army in 19th Century, a large portion of the Iranian territory joined Russia and the remaining business routes with Russia, Caucasus and Central Asia also came under control of this Company.

Imposing new unfair regulations reduced the profitability of the small remaining part. Then, the Iranian economy remained dependent to Russia for some time and the dependence decreased gradually during Reza Shah time. Accumulation of capital in European countries which was partly the result of misuse of colonies and in Asia, their control over economic affairs of the countries from east to west and the military-administrative supervision on commerce in the Persian Gulf, the Indian Ocean and the Far East, was one of the reasons behind industrial development of these countries. The rapid industrial growth since the beginning of 19th Century and its sublimation into industrial capitalism in Europe and North America changed these countries to such powers that made any victorious challenge by underdeveloped countries who suffered from structural crisis of the transient period and the financial difficulties and increasing corruption of their government systems very difficult. The big economic crisis of Iran in mid-19th Century which was presumably related with the economic crisis in Europe, disjointed the already disrupted financial structure of the bankrupt government of Qajar even more and this bankruptcy process of foreign trade of Iran continued during the harsh social clashes and the Constitutionalism Revolution until the reign of Reza Shah. Since this date onwards, a serious historical change occurs in the composition of the foreign trade of Iran which embodies the entire structure of Iranian economy so far and that is the discovery of oil in Iran and the increase of its function not only in the foreign and domestic trade but also in all economic activities of the Country. Since the discovery of oil, the Iranian economy step by step converts into a single-product economy dependent on oil. The increased role of oil in the economy of Iran especially relates to the years after 1953 when the Shah returned to Iran and seized power through a military coup.
organized and supported by CIA. Until the fall of Pahlevid dynasty in 1979, the extraction of export of oil was mainly under the influence of an International Consortium in which the United States and England had the determining role.\(^{(371)}\) The more significant role of oil in economy of Iran can be, for instance, shown in the 3.3 times increase of its share in the gross domestic product during years 1959 to 1972.\(^{(372)}\) The dependence of Iranian economy to oil remained unchanged after the Islamic government came to power and the fluctuations of foreign trade during the current years are also related to the revenues from crude oil export and more recently export of natural gas and relevant products. In the next parts, we will study the three sectors of exports, imports and the trade balance of Iran and at the end, we will analyze some changes in the shipping industry in view of the importance of shipping in development of extraterritorial commerce because of the long water borders in south and north of Iran and more specifically the significance of the Persian Gulf in international trade.

5.2 Iran's Exports without Oil and its Difficulties

In the part on oil, the export of crude oil of Iran has been separately studied. In this part, we will mainly focus on the non-oil exports and speaking of oil revenues is only to portray a more clear perspective from the totality of transactions of Iran with the world. A look at the oil exports between 1974 and 2003 shows that beside fluctuations in oil income, the non-oil exports also have undergone changes. The oil exports, however, shows a general increasing trend after 1984. The growth of non-oil exports from 1974 to 1978, during the Shah's time, is not significant; however, the limited overseas market of Iranian goods was also lost after the fall of Shah. It took too much labor to regain some parts of this market after the end of Iran-Iraq war.\(^{(373)}\) The changes during 1984 to 1995 during which the non-oil exports increased from 350 million dollars to 5 billion dollars, although insufficient, can be assessed positive. Interesting to note that during 1991 to 1995, we face a reduction in the total income of crude oil exports and as a result, the non-oil exports were more encouraged in order to provide the foreign currency needs of the Country. However, the claim of the Iranian authorities about independence of Iran to oil revenues and rapid increase of non-oil exports during 1991 to 1995 is not verified.\(^{(374)}\)
Thus, by the increase of oil revenue from 1995 onwards, the reliance on this source of foreign currency becomes more and the quantity of non-oil exports is reduced. It is only in the few last years that we can see an increase in non-oil exports simultaneous with increase of oil export.

*Diagram 133 - non-oil and oil exports in dollars and % (billion dollars and percentage) -DS*

In order to compare with the Mullahs' government, we have chosen three junctures of 1963, 1973 and 1978 during the Shah's reign. The remarkable increase in these years is only due to oil exports and during this period the oil export revenues reached from 471 million dollars to 21.5 billion dollars, i.e. near 50 times more. The non-oil exports but shows an increase from 137 million dollars to 520 million dollars, i.e. less than four times. Inattention to non-oil exports in spite of the interest to rapid industrialization was one of the major shortcomings of economic policies of the Pahlevids, both of Reza Shah and Mohammad Reza Shah.

The disproportion between oil and non-oil exports can be more clearly observed in the following diagram. Slow pace of investment in industries to be able to function in supplying the demands of domestic market and reduce imports while entering new world markets reduced the share of non-oil exports in the overall exports gradually to reach from 23% in 1963 to 2% in 1978. These indexes during the Islamic Regime, as shown in the diagrams, are better although fluctuating. However, in comparison with similar countries such as Turkey and in the global scale, they seem very little and signify underdevelopment. The exports of Turkey in 2003 was near 39 billions dollars and South Korea exported near 162 billion dollars and had a positive trade balance of about 14 billion dollars in the same year.(375)

Diagram 135 - composition of exports in selected years - percentage
The disorders of the extraterritorial business policy of Iran and the lack of desirable trade balance after the fall of Shah can be also observed in the changes between 1992 and 2002. During this period, the net amount of exports has not increased but has even decreased from deficit of 5191 million Rials to deficit of 19172 million Rials in the fixed price of year 1998. A little improvement in non-oil exports can be seen in 1997 to 2000 and then again, the non-oil exports are reduced in 2001 and 2002 as compared with 1997.

Diagram 136 - net exports in fixed prices of 1997 - million Rials

During the 10 years from 1992 to 2002, in fixed prices of 1997, we witness a reducing trend in all three areas of exports, whether non-oil exports, or oil, gas and gas fluids exports. Non-oil exports show a decrease rate of 11%, oil and gas a decrease rate of 23% and gas fluids a decrease of 70% in their value. The amount of export of non-oil products in 1992 has been calculated based on fixed prices of 1997 to be 54910 billion Rials and in 2002, only 48663 billion Rials. The difficulties on way of non-oil exports in Iran is also due to lack of high tech industrial sector to supply high quality products to the world markets.(376)
The abnormal status of Iranian trade balance without oil can be seen by a look at the total non-oil exports of Iran during 1975 to 1999. During this 24-year period, the traditional and agricultural products with 25.9 billion dollars are at the top and then come carpet with an amount of 14.4 billion dollars followed by industrial goods with 12.1 billion dollars. These are the only groups of commodities whose exports exceeded 10 billion dollars during this long period. Dried fruits, gas hydrocarbons, pistachio and raisin, iron, cast iron and steel occupy the next ranks. It should be borne in mind that some other countries with equal status of Iran, such as Turkey and Egypt had earned billions of dollars, while Iran, who has countless reserves of gas and oil and the possibility of investment in different sector with specialist manpower, has failed to achieve a noteworthy success even in the export of her traditional known merchandise. During this period, Iran has lost a large portion of the world carpet market to some newcomer countries such as China, India and Pakistan.(377)
The only little point of hope in this 24 year period is the change in the combination of export goods. If in 1978, traditional goods secured the first rank among the non-oil exports, in 1999, the first rank has been overtaken by industrial products which have promoted their share from 143 million dollars to 1588 million dollars. Such an increase is also seen in other sectors including iron, cast iron and steel, gas hydrocarbons, fresh and dried fruits, carpet and pistachio as well. As an example, in 2003, Iran succeeded for the first time to export alloy steel to Germany and Italy. (378)

The export of pistachio reached 816 million dollars in 2003. Due to the undesirable quality of products and the stricter approach of the European Community, Iran has been facing problems in the European markets and is trying to attract their cooperation by improving standard levels. In spite of this difficulty, Iran has succeeded to maintain her position in the global pistachio market by finding new markets and improved more modern marketing policies. (379)
In 2003, the first place in the export composition of Iran in industry sector in view of weight belongs to mineral products and then the chemical products and metals. In regard to the export of chemicals, we indicated the perspective and government plants for the future of Iranian economy in the part on oil. Programs are underway for export of metals as well. According to these data, steel production will increase to 20 million tons per annum until 2007 and plans are envisaged for export thereof.(380)
In view of the value in million Rials, the first place in exports during 2003, excluding oil products, belongs to textile industries with an amount of 7261616 million Rials followed by vegetable, mineral and chemical products.

Diagram 141 - ranking of the most important non-oil exports in million Rials in year 2003-DS
The major importers of Iranian goods in Asia are the United Arab Emirates, Iraq, Azerbaijan, India and China, in order of significance. The potential capabilities of Iran for supplying ECO member markets and the countries of the Persian Gulf Union are high. The Secretariat of ECO intends to provide for the conclusion of an agreement between ECO members for creation of a free commercial zone until 2015. On the other side, strategies for establishing common consortiums between Iranian and Turk companies are in the agenda of the Iran-Turkish cooperation. The volume of commercial exchange between the two countries increased from 1.2 billion dollars in 2001 to 2.3 billion dollars in 2003 and they intend to increase the amount of this exchange to 5 billion dollars in a short-time program. Due to export of non-industrial items especially gas to Turkey, Iran has an export of 1.7 billion dollars to Turkey against half a million dollars imports from Turkey and this situation is considered undesirable to Turkey. There are some difficulties on way of cooperation with the Arab countries in the region and the challenge over the sovereignty right of the three Iranian islands has acted as an impediment to all-sided cooperation. However, economic cooperation especially in the field of petrochemical industries is expanding and the Iranian Ministry of Petroleum has plans for major merges in the petrochemical industry, e.g., between Iran and Saudi Arabia.

Diagram 142 - the most important destinations of non-oil exports of Iran in Asia - million Rials - DS

![Diagram showing the most important destinations of non-oil exports of Iran in Asia from 1997 to 2003](attachment://diagram142.png)
Growth of exports during 1997 to 2003 is observed first of all in free zones and then in relation with Japan, Afghanistan and Pakistan. After the fall of Saddam in Iraq, the exchange between the two countries improved and it seems that the Iranian exports to Iraq will reach one billion dollars in 2004. If so, Iraq will be the most important importer of non-oil products of Iran in the world. Iran also works hard to enter and remain in the markets of Afghanistan and Tajikistan, the two countries with similar language and culture with whom Iran holds ancient historical relationships. Iran has no a large portion of Tajikistan market in her hands and has different plans for educating expert workforce, joint production, establishing factories for assembling industrial and consuming goods and manufacture of machinery including tractor and mini-bus in this Country.

The most important importers of Iranian products in Europe in 2003 were Germany, Italy, Spain and Russia. Exports to Germany in 2003 was 2262849 millions Rials, to Italy 1222494 millions Rials and to Spain, 770024 millions Rials. The relationship of Iran and Germany has an old history. Since long time ago, Iranian merchants were involved in exports not only to Germany but to other countries of the
world through Germany especially in Hamburg free port. The first book on the economy of Iran during the Qajar dynasty was also prepared by the Iranians residing in Germany and with the help of a German professor of national economy named Professor Franz Opperheimer in early 20th Century.(386) The writer has consulted and used the said book along with other economic data provided by European, especially British Iranologists in providing the economic diagrams of the said era. Among the European countries, the economic relations of Iran with Germany, Italy and Russia is extensive and especially business with Spain and Russia is considerable and increasing.

Diagram 144 - the most important importers of Iranian goods in Europe- million Rials-DS

A look at the years 1997 to 2003 shows an increase in export of the non-oil products of Iran to Spain, Russia, Sweden and Belgium more than other countries. However, in view of the net value of non-oil exports of Iran to Europe, Germany has the first place. The economic relations with the United States and England are not significant in these years due to political problems. Although many experts believe that part of the Iran- US transactions indirectly take place through Arab states in the Persian Gulf including the United Arab Emirates and part of the wide extent of extraterritorial trade of Iran with these small states belongs to Iran- US trade.
In order to develop the foreign trade, Iran emphasizes on membership in World Trade Organization. However, due to disagreement of the United States, Iran has not yet been successful to join the WTO, in spite of the fact that has, to some degree, fulfilled the two pre-requisites set by this Organization, i.e. reducing custom duties and eliminating subsidies.(387) Many authorities of the Islamic Government hold joining WTO a mean to eliminate the closed system economy and enter into a competitive economy and a way to reduce economic corruption. Another view holds that, because of the evident weaknesses of her economic plants, Iran will not be able to compete the low-cost high-quality foreign-made products and the enforcement of regulations of WTO will increase the imports and destroy the domestic industries.(388)
5.3 Increasing Imports and Changes in the Iranian Market

The difficulties on Iran in the area of extraterritorial trade do not limit to low non-oil exports. Slow economic growth, ups and downs resulting from political tensions, lack of proper plans and so on in different economic sectors especially in industry and agriculture side by side rapid population increase in a short period of time, has increased the domestic market demand for foreign products.

After three 5-year economic plans and on the verge of entering into the 4th plan during the Mullahs' government, serious challenges on way of development and deep-rooted factional disputes have not only filled the political atmosphere but the economic space of the Country as well. The fact is that the economy of Iran is dependent on the revenues of exported crude oil in all areas including imports and the single-product structure of economy has not considerably changed. As an example, the dependence of Iranian industries in 1993 was so that the import of minimum 15 billion dollars foreign products was necessary to turn its wheels. A glance at the Iran imports between 1974 and 1999 shows the dependence or close association of imports to the crude oil exports in its major lines. Increase of imports during 1974 to 1978, the Shah's time, shows this consistency in the same degree as of the following years. This increase which was a reflection of the increase of oil revenues is seen not only in Iran but in other oil exporting countries as well. For example, the export credit insurance of Germany for oil producing countries reached from 10 billion DM to 90 billion DM during 1975 to 1980 and its share in the entire export credits reached from 25% to 50%. After the end of Iran-Iraq war and the opening of Iranian gates to foreign products whose imports had been limited during the war and which were needed by the people, beside the unwise policy of the Central Bank of Iran in assigning large credits to businessmen without the required guarantee during the presidency of Hashemi Rafsanjani, the imports of Iran increased to near 60 billion dollars during 1992 and 1993. The outcome of this policy was increased foreign debt of Iran which, in view of some experts, exceeded 30 billions dollars. The effects of this untimely policy are still present in the economy of Iran and all governments which come to power try to decrease these debts and repay their interests.
A look at the Iran imports in million ton between 1931 and 2000 also reveals the same fact. The climax of imports in view of weight and value is related to the increase of oil price in global markets and this trend continues until year 2000 with some fluctuations related to the Iran-Iraq war, tensions in foreign policy of Iran and the needs of the national economy. In near future, no considerable change can be anticipated and if no regime change happened in Iran, the position of Germany and Japan who, after the fall of Shah, have substituted the United States as the biggest business partner of Iran, will not change that much.(392)

Diagram 147 - imports in million tons-DS

- The polynomial equation for imports in million tons is given by:
  \[ y = -0.0199x^2 + 1.5101x - 5.4256 \]

- The data points show a trend with minor fluctuations.
The most important imported goods to Iran between 1974 and 1999 are machinery and transport means in the first place and chemicals, foodstuffs, animals, iron and steel in later stages. Considering the new economic plans, the domestic needs of Iran to machinery may increase in the future as well. If the economic plans are not left on paper and if the scenario of political and economic disintegration and extensive crisis did not happen as in the early years after the fall of Shah, it can be expected that Iran may be able to meet some of its domestic needs in the area of foodstuff, chemicals, iron and steel. The first place among the most important imported goods in 1999 with an amount near 7 billion dollars belonged to machinery and transport means. Chemicals, foodstuff, iron and steel occupy the next positions.

The composition of imported goods can be also assessed in view of three quality groups. Between 1972 and 1999, the highest share belonged to mediatory goods which were used in production process of other goods or services. Mediatory goods if only used for supply of domestic market needs and if a considerable part thereof is not exported to earn the foreign currency spent for its import, it will not play an important role in improving the foreign trade balance of Iran.(393) The example of some Southeast Asian countries showed that by supporting domestic economic units and domestic-oriented
planning, this economic section can be given a proper position. After the mediating goods, consuming goods have the second position in composition of imported goods. The consuming goods are those directly reaching the consumer and have been always, during the Shah and the Islamic Republic, provided by foreign currency earned from crude oil exports and not from the export of non-oil products. The only parts of imported goods which can lead to economic growth if handled correctly are the capital goods which are durable and are used for production of new goods and services. This part, however, has had the lowest share so far in the composition of imports. The import of consuming goods and capital goods has been generally declining but the import of mediating goods has increased. In view of the fact that the mediatory goods in Iran are of consuming nature, it can be said that about 70 to 80 percent of the goods imported to Iran consume foreign currency and are aimed at final consumption. The share of capital goods which can potentially help domestic production and increase GNP and reduce the deficit of extraterritorial trade balance is insignificant.

D149 - composition of imported goods – percentage-DS

The changes of imports between years 1992 and 2002 can be viewed from another perspective as well. If we look at the three sectors of goods, services and transport freight we see that the goods compose higher share than services and freight. From 1998 to 2002, the import of goods increased from 30,000 millions Rials to near 70,000 millions Rials, nearly doubled. The share of the two other sectors is insignificant and less than 10,000 millions Rials, i.e. near 1/10th of the entire imports of Iran in 2002 in fixed prices of 1997.
The growth of value of imports during 1987 to 2003 refers first to the vehicles group and with a large distance, to optic instruments, mineral products, fats, machinery and wood pulp in further positions. The growth of all the said sections except road vehicles in this 5-year interval is relatively identical and near 250 percent. The import of road vehicles during these six years has been double that of the other sectors and has reached from 1539520 millions Rials to 28225193 millions Rials with a growth rate of near 500 percent. Reducing tariffs and relative freedom of import of this group of goods has helped this condition. Part of these imports refers to the orders of government and law enforcement departments.
In view of absolute value, the import of machinery which increased from 6844491 millions Rials to 51207375 millions Rials devoted the first place to itself. The next places are occupied by vehicles, ordinary metals, chemical products and natural pearl. Import of machinery and petrochemical products were aimed at improvement of output and production of some industries especially steel and petrochemical industries. (394)

Diagram 152 - change in the import value of the most important goods - million Rials - DS

In view of the weight, categorizing the most important imports of Iran based on the groups of customs tariffs shows high weight of mineral, vegetable, ordinary metals, chemical and food industries. The weight of other groups of imported goods such as fats, plastic material and wood pulp is near 1 million ton and less in 2003. By developing shipping companies, Iran intends to transport part of its export products by these ships and also enter into new regional and global transport markets. Thus, the expenditure of foreign currency revenues on transport has somewhat reduced and it is hoped that by follow up and new investments on shipping industry, this sector may reach profitability as well through receipt of freights in international transport. The major part of shipping capacity of Iran belongs to the Islamic Republic Shipping Lines (IRSL). In 2003, the capacity of this
Company has been 2939819 tons. The next positions belong to Iran and India Shipping Lines, Valfajr Shipping Lines and Caspian Sea Shipping Lines. If this program is successfully implemented by Iran, the foreign shipping companies will not be able to increase their share in the marine transport business in Iran. Under these development plans, the Aker MTW Werft Company in Germany has delivered 5 ships from the 6 cargo carriers ordered by Iran in the price of 205 millions Euros until 2004. (395) On the other hand, another Germany firm, IGM, intends to establish a full shipyard in Iran which will be the first big ship manufacturing plant in Iran. This shipyard will be larger than Warnemunder deck in north Germany. (396) The ship manufacturing industries of Iran, in spite of efforts carried out, are not profitable and most of them bear losses. From the total cost of manufactured ships, about 30% is spent inside the shipyards and the rest is provided from outside. (397)

Diagram 153 - import of the most important goods based on custom tariff in ton - year 2003-DS

In pursuit of the issue, we consider the two international business partners of Iran in imports, i.e. the European and Asian countries in more details. A look at imports from European countries shows that after Germany which has traditionally had a stable position, the other
positions, half important that of Germany belongs to Switzerland and then Italy, France, Russia and United Kingdom. German goods are highly reliable in Iran and the Iranian businessmen and statesmen give much importance to their relations with this Country. Some political positions by Germany, France and other European countries have been effective in attracting confidence of the Iranian authorities and opening the way of negotiations with Islamic dogmatic forces in Iran, not only in political but also in economic areas.

From these positions one can name of the clear opposition to American and British attack on Iraq after September 11. A position welcomed by the Islamic government of Iran. The result of this decision can be observed in expanded economic relations of Iran and France. By attracting French investors, Iran intends to multiply the volume of mutual trade in a 5- year program. In recent years, these relations have especially developed in auto industries.(398)

*Diagram 154 - imports in million Rials from the most important business partners of Iran in Europe - year 2003-DS*

The increase of share of European countries in imports to Iran from 1997 to 2003 is shown in the following diagram in million dollars. According to this diagram, France has increased its share in the Iranian market for 14% during this period and then Sweden with 13%, Italy and Ukraine with 10% come next. Germany that has the first
position in the net amount of exports to Iran stands in the sixth position and has increased its share for 8 percent. Ukraine is the only East European state who has achieved such growth. Although this Country has found a new market in Iran but the volume of its exports even in 2003 is only about \(\frac{1}{19}\)th of Germany and is much behind the other East European business partner of Iran, Russia which secures the 5th position with an amount of 6783996 millions Rials. The exports of Ukraine to Iran has been only 1531410 millions Rials. In regard to business relations with East Europe after the fall of communism, no considerable change has occurred except in relation with Central Asian countries who maintain old historic relations with Iran. The total imports from Europe in 2003 equals 970227544 millions Rials that is nearly 50% more than the second group of business partners, i.e. Asian countries.

*Diagram 155 - increased value of imports from the most important European countries between years 1997/2003 -DS*

The value of imports from Europe in 2003 totals to 61604461 millions Rials, i.e. the second position after Europe. The next positions belong to American Continent with 10339201 millions Tumans and Africa with only 1002973. The value of imports from Asian countries is mainly related to business with United Arab Emirates which was the biggest exporter of goods to Iran in 2003 with the value of 16714294 millions Rials with much distance to the second position. China has the second place with less than half the said amount and then come
South Korea, Japan, India, Turkey, Saudi Arabia, Singapore and Kazakhstan. Business relations with China has conspicuously improved and continues to grow.

**Diagram 156 - value of imports in million Rials from the most important Asian business partners in 2003-DS**

<table>
<thead>
<tr>
<th>Business Partner</th>
<th>Value of Imports (in million Rials)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>2003</td>
</tr>
<tr>
<td>Singapore</td>
<td>2003</td>
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<tr>
<td>Saudi Arabia</td>
<td>2003</td>
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<td>Turkey</td>
<td>2003</td>
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<tr>
<td>India</td>
<td>2003</td>
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<tr>
<td>Japan</td>
<td>2003</td>
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<tr>
<td>South Korea</td>
<td>2003</td>
</tr>
<tr>
<td>China</td>
<td>2003</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>2003</td>
</tr>
</tbody>
</table>

A look at the years 1997 to 2003 shows that a large portion of imports come through the free zones of Iran. The growth rate of business with China in these years is five times more than the growth with the first business partner of Iran in Asia, i.e. the Saudi Arabia. Although the absolute value of imports from this canal is very insignificant and near 203485 millions Rials in 2003, its growth pace should be expanding according to the plans. Free zones were mainly planned to launch non-oil exports of Iran but in practice they play a trivial role in this direction and during 2003, only 370227 millions dollars worth goods were exported from free zones. The highest growth in imports between 1997 and 2003 from Asia belongs to Saudi Arabia as the first place and then Japan, China, United Arab Emirates, Qatar, Kuwait and India.
5.4 Foreign Trade Balance, Difficulties and Perspectives

The total extraterritorial exchanges and some of its major indexes such as trade balance with and without oil, the total incomes of Iran during Shah and during the Islamic Republic in regard to oil and non-oil exports compared with the imports and some of the relevant negative and positive changes especially in years after 1990 are evaluated in this part of the study.

We formerly discussed the role of crude oil and gas exports in the single-product economy of Iran and also the structures and disorders thereof. The reflection of these disorders can be seen in the global transactions of Iran and the indexes of her extraterritorial trade balance as well. The business transactions of Iran with other countries during the 19th and 20th centuries have considerably increased. By increased oil price during the Shah's regime, these transactions became more significant and have so far undergone fluctuations
especially under influence of crude oil exports. Thus, the most important determining factors in global trade and the status of extraterritorial trade balance, the same as its role in other parts of Iranian economy, have been the dollars received for sake of oil in global markets. In other words, the extraterritorial trade balance of Iran is subordinate to oil exports and is therefore very vulnerable by any crisis in oil markets or tensions with neighboring countries or other countries, also by actions of international consortiums and oil cartels. Although the financial potentialities and foreign currency received from oil exports which is the determining factor in foreign trade of Iran has been more in the 25-year rule of Islamic Government compared with 25-year preceding period when Shah was in power, the economic achievements after 1979- which we partly studied before- were no better in many indexes such as gross national product and gross national product per capita, share of added value of major economic sectors such as industry in the economic growth, extraterritorial trade balance and also the social justice – an area so significant to the authorities of the Islamic movement under pretext thereof and by much promises for just division of incomes in favor of lower social classes, had succeeded to attract the support of large portions and the confidence of some of the political organizations. Except minor improvements in some of the economic indexes in years after 2000, the system has been facing serious insufficiencies. Vulnerability of the economy of Iran is not only related to its dependence to crude oil exports but embodies the entire structure thereof. Crisis in oil markets and considerable decease of oil dollars can hamper the 5-year economic plans of Iran and if continued may disjoint the structure of the economy. During recent years, Iran has taken some attempts to reduce this vulnerability. The first attempts were aimed at creating substitute products for crude oil and included planning for production and export of petrochemical products and so on. Efforts have been also made for discovery, extraction and export of natural gas and downstream products. By compiling the national 20-year economic strategy prepared with the help of a group of economists, some steps forward have been taken toward scientific planning, although this strategy suffers from insufficiencies and has received much criticism and entails serious conflicts between different power factions inside the governing system for its implementation.(399) Implementing some of these strategies, if accompanied by full support of domestic industries, can help increase
production in key fields, enhance gross domestic production and per capita, improve non-oil exports and reduce or rationalize imports of Iran and ameliorate foreign trade balance. In order to achieve these goals and prevent disillusionments of ambitious economic plans of Shah toward economic potentiality at the level of developed countries and entering the royal "gates of great civilization" the necessary economic, political and social structures and superstructures are not yet available and the feasibility of these plans are a matter of ambiguity. During past years, beside these changes, we witness the formation of foreign currency reserve fund which can be evaluated positively in its major directions. This fund has been formed for offsetting the effect of oil price fluctuations in global markets and the possibility of reduction in Iranian oil revenues which impact all the foundations of Iranian economy, directly or indirectly and also to support different sectors of economy. There are serious challenges going on about how to use this fund and the optimal method of using these reserves is not yet clarified.

Part of this dispute goes back to different approaches to development strategy. Some of the authorities emphasize on export development strategy and some others believe the true strategy to be substitution of imports. WTO has put the condition of choosing export development strategy for admitting Iran as a member state and, in spite of the internal disputes, the Islamic government moves on this direction (Donyay-e-Eghtesad Daily, Nov.10, 2003 – Export Development or Import Substitution Strategy).

In the next parts of this study, we will first discuss the changes of Iran exports and imports during 1978 to 2003 and then statistically survey the trade balance with and without oil and gas. All indexes related to extraterritorial exchanges, in spite of fluctuations after 1992 to mid-90s which are linked with oil price changes in global markets as well, show an increasing trend. The entire exports of Iran reach from near 6 billions dollars to near 28 billions dollars in 2003 and the total imports also increase from 11.8 billions dollars to about 24 billions dollars and the imports follow oil income fluctuations as a subordinate to exports. The fluctuations of non-oil exports also enjoy the same specification and also still have an insignificant role in the extraterritorial exchanges of Iran, increases from near 1 billion dollars to near 4 billions dollars. The non-oil exports for 2004 are estimated above 5 billions dollars and the oil exports more than the amount in 2003.(400)
The change in trade balance of Iran between 1989 and 2003 shows that, in spite of changes in the oil revenues and imports of the Country, a general improvement of this index can be observed. During these years, the trade balance with oil has increased more rapidly than the trade balance without oil and the linear trend of these two indexes also show this process. The trade balance with oil and gas improves from deficit near 4.6 billions dollars in 1989 to surplus of 4.4 billions dollars in 2003, but the trade balance without oil reaches from near 9.5 billions dollars to 18.4 billions dollars in 2003, that is a slow, though positive, growth. The policy of open doors in foreign commerce and incessant import of goods during the first years of presidency of Hashemi Rafsanjani which led to the import of near 60 billions goods only in three-year interval from 1992 to 1994 without necessary foreign currency guarantee, made the Islamic government seriously reduce imports. From 1995 to 2001, the total quantity of imports remained at the border of 10 billions dollars and in reached its minimum of 8.2 billions dollars in 1995. Since 2001 onwards, however, an accelerating negative trend is seen in both areas of oil and non-oil trade balance. The latest statistics reflected in Iranian papers
indicate return of extraterritorial trade of Iran to the procedure in years preceding 1995 when the trade balance with oil and gas faced a deficit of 5 to 10 billions dollars and without oil, a deficit of near 20 billions dollars. The economic hardships of Iran especially refer to inability in increasing non-oil exports parallel with imports and consequently, tendency toward oil and gas sectors and plans for increasing extraction and sale of these products in global markets to provide for this deficit is increasing. Increasing withdrawals from oil revenues saved in Foreign Currency Reserve Fund is one example of these hardships.(401) 

*Diagram 159 - trade balance with and without oil (Mio. $)--DS*

The past decade needs more scrutiny. The percentage of change in the most important parts of trade balance between 1992 and 2003 indicates 6% reduction of imports during this interval and total increase of exports for 51 percent. The exports of oil and gas of Iran during these 11 years increased from 16 billions dollars to 22.8 billions dollars, i.e. nearly 42 percent. The highest increase belongs to non-oil exports which reached from 2.6 billions dollars in 1992 to 5.3 billions dollars, i.e. 103 percent increase. This increase however is not sufficient against the increase in imports.
The balance deficit in 2003 is mainly due to machinery, road vehicles and then in half or less amounts to ordinary metals, natural pearl, chemical and plastic materials and optic instruments. The balance deficit in machinery equals 51207375 millions Rials and in vehicles 28225193 millions Rials. The role of goods such as food products, fats, textiles, wood pulp, stone products, living animals and wood is less. Skin, leather, shoes, hats and art crafts form a very small part of Iran's imports in 2003.

D 161 – balance deficit of the most important merchandise - DS
In the extraterritorial trade balance, the trade balance of Iran with most of the countries of the world is negative without oil. With none of European business partners who have the first place in foreign trade of Iran among the world continents, no positive balance is seen. The highest deficit in 2003 relates to Germany and then in a distance near half and less, Switzerland, France, Italy, Russia, United Kingdom, Belgium and Sweden. Iran exchange with Germany shows a deficit of 27339184 millions Rials and with Sweden, a deficit of 2670067 millions Rials. The balance deficit with some other trade partners such as the Netherlands, Austria, Spain and Ukraine is less and with Denmark, only a small deficit of 660627 millions Rials is seen.

Diagram 162 - trade balance deficit without oil in million Rials with the most important European countries in year 2003

The foreign trade of Iran with Asian countries especially neighboring countries show a smaller deficit and in few cases, a little surplus is also observed. On the top of the list of countries with whom Iran has negative trade balance- oil not included- are the Untied Arab Emirates, South Korea and Japan. The balance deficit with United Arab
Emirates is near 10917412 millions Rials in 2003 and about 40% less than the balance deficit with the biggest European partner of Iran, i.e. Germany. The balance deficit with India, Japan, Turkey, Singapore, Saudi Arabia, Malaysia and Kazakhstan is less than 4000000 millions Rials.

Diagram 163 - trade balance deficit without oil in million Rials with the most important European countries in year 2003-DS

Iran has non-oil positive trade balance of small scale only with some countries. On the top of the list of these countries is Iraq and then the Iranian neighbors of Azerbaijan, Afghanistan, Kuwait, Turkmenistan, Pakistan, Free Zones, Armenia, Qatar and Oman. The surplus of positive trade balance of Iran with Iraq equals 2264278 millions Rials in 2003, i.e. about 1/10th of the balance deficit with the United Arab Emirates which earned a profit of 10917412 millions Rials from Iranian market. It is not known if Iran can overcome this balance deficit even in relation to her close neighbors in a short period of time.
At the end of this Chapter, one of the economic difficulties of Iran in the field of foreign trade which relates to ship manufacturing industries can be indicated. One of the first kings who understood the economic and military importance of shipping in the Country during the past centuries was Nader Shah. For the purpose of commercial and military dominance over the Persian Gulf and he Caspian Sea, he appointed John Elton, a British engineer as the head of Iranian ship making. During his reign, one warship with 23 canons was navigated and in spite of oppositions of Russia and England, 20 ships were made for Iran in Surat port and delivered to the Iranian government in Bandar Abbas. However, the short-lived government of Nader Shah failed to materialize the Shah's dreams for creating a skilled navy fleet and the casual later efforts also reached nowhere.(402)

This process has continued to the present. During past years including 1987 to 2003, the number of ships increased and reached from 84 to 109 ships (nearly 30% increase). The quantity of cargo shipped during this period increased from 2277488 to 3280776, i.e. about 40 percent. The ships of the Iran Shipping company and other companies, which are mainly governmental or semi-governmental, are not passenger
ships but mainly function as cargo carriers (are especially dry bulk cargo carriers). The major capacity of Iranian shipping industry belongs to the Islamic Republic Shipping Lines. In 2003, the capacity of this Company was 2939819 tons, Iran and India Shipping Lines 310330 tons, Valfajr Shipping Company 3068 tons and Caspian Sea fleet only 25040 tons.

5.5 Foreign Trade and Economic Plans

Iran foreign trade during three past decades can be divided into three parts. The first part or the third phase of economic reconstruction of Iran during Mohammad Reza Shah's reign after increase of oil export revenues of Iran, the second part includes the changes in the foreign trade during major domestic and foreign tensions after the Islamic Republic including the 8-year Iran-Iraq war and the third part includes the years after 1999 or the years of working toward economic restoration and reconstruction. In the second part, especially last years, some war ruins were restored and the conditions got ready for gradual renovation of Iranian economy. For a more clear understanding of the ups and downs of foreign trade, the writer first studies the economic development plans in these three periods in brief. It should be noted
that the planned economy of Iran gets interrupted by the Islamic Revolution. The first economic plan after Mullahs came to power was mainly aimed at reconstruction of ruins and removing disorders, rather than reconstruction of economy. Thus, the first and the third period, i.e. during the Mohammad Reza Shah's time and the Islamic Regime after 1999, are of reconstruction nature where the first period is more distinguished than the third, because in the economic plans of the Islamic Republic the major investments are still in sectors ruined during the war or due to disorders of the second period and on the other hand, a codified agreed upon plan to be accepted by all or a large majority of economic authorities and to be guaranteed for enforcement has not been achieved. This is why the writer calls this period, the period of "efforts for economic reconstruction" in Iran.

Economic planning for developing countries is a mean for influencing the economic trend. In Iran, five economic plans were implemented during the Shah's reign from 1949 to 1978. Since the coming to power of Shah in 1942 until 1954, Iran was facing serious political tensions and the peace and stability needed for implementing economic plans were achieved only after the CIA supported Coup I 1954 and return of Shah to power.(403) Passing through political and economic crises of the years before and after agrarian reforms and the consequences thereof and then the rapid increase of oil revenues paved the way for the third phase of economic renovation of Iran and the fifth and last development plan of Shah between years 1974 and 1978 was a reflection thereof. During the four years of the first plan, new changes emerged in the economy of Iran the more distinguished ones were creating basic infrastructures such as expansion of roads, railways, airports and telecommunications. However, no considerable step forward was taken for industrialization. By four times increase in oil price during one year, we see a leap in expenses and incomes of the 5th development plan, compared with the previous ones. The fifth development plan of Shah included four sections: Development, defense, social and financial affairs. The budget needed for development plans was mainly provided by crude oil exports.

The most important factors behind the failure of economic plans of Shah which were analyzed by the present writer more fully in former chapters can be named as follows: lack of democratic institutions to supervise the plans and the absolute role of Shah in economic decision making, dependence of plans to the quantity and price of oil exports and the very serious effect of any change in oil status on the plans,
unrealistic and ambitious economic plans, increased poverty and unfair distribution of assets, large number of illiterates and newly-urbanized villagers, heavy military costs and costly policies for playing the role of gendarme in the Persian Gulf Region and the imbalanced growth of different economic fields beside increasing inflation. The fall of Shah was, to some degree, the result of these mistakes in his economic plans which revealed their outcomes in the last years of his reign. The first years after the fall of Shah was the period of harsh political tensions and the 8-year Iran-Iraq war. The first economic plan of the Islamic Republic was approved by the government 5 years after the Islamic Regime came to power but did not get the approval of the Parliament and remained only in the level of an incomplete first step. Until 1990, i.e. 11 years after the fall of Shah, all development plans stopped and the economy faced heavy expenses of war and its consequences and the temporary decrease in oil revenues. Provision of the needs of people through rationing and control of imports, encouraging agriculture for supply of some domestic needs and control of prices were the most important characteristics of the semi-war economy of this period. The first development plan of the Islamic Republic covers years 1990 to 1994. The major characteristic of the first plan after the Revolution was the heavy weight of non-productive budget and, in this view, was the opposite to the fifth plan of Shah. Thus, the foreign currency revenues of Iran from oil exports responds to the consuming needs of the economy. The result of economic disorders of the first years after the fall of Shah and continuing the futile war with Iraq and the extensive destructions of the Country which needed reconstruction, was nothing but consuming policy. This non-productive development plan mixed with unwise policy in the banking system and giving non-guaranteed credit to different sectors including the private sector and led to increased foreign debts of the Country to near 30 billions dollars in the entire history of Iranian economy. From this time on, repayment of debts and the interests thereof became a new problem on shoulders of the damaged economy of Iran and a major obstacle for the next governments in the Islamic Republic. Beside the unclear economic plans, executive defects in the works were also plenty. For example, during 1989 to 1993, in all sectors of the plan except services, water, power and gas, we faced deficit. The most disordered sector among all was the industry sector for which a 19.5% growth has been foreseen in the plan but only 7.6% thereof was materialized. In the area of
agriculture and oil, the shortcomings in execution of the plan were trivial which was due to the closed single-product economy. (405) The second development plan covers years 1996 to 2000. By adopting non-productive and consuming policy in the First Plan and importing goods and expanding the business sector during the 5 years of the first plan in exchange for spending oil income and receiving foreign loans, some of the primary needs of the society were responded and some war damages restored. (406) The need to reconstruction of destroyed industries and effort for increasing domestic production to respond to some of the needs of domestic market, while the repayment of new loans and further increase of foreign debts seemed difficult and the foreign banks and institutions were implicitly refusing to grant more loans due to financial inabilities of the government, made the government reduce its non-productive consuming budget in its plan and focus more on investment in industrial sector. In the Second Plan, the share of social and public affairs section has somewhat reduced and the budget of other economic sectors increased. (407) The considerable increase of industrial sector credits was not actually the result of direct increase in this sector but the outcome of displace of oil and gas credits from the development costs to the economic sector.

By executing the second economic plan, the process of reconstruction of war ruins and economic disorders after the Revolution continues and some of these disorders are offset with the help of oil exports. The theme of the third economic development of years 2000 to 2004 and the fourth economic plan which is in process of negotiations in 2004, is based on the strategy of export development functioning under the demands of the WTO, International Monetary Fund and the World Bank. (408) Hence, the strategy of industrial development for substituting imports which was reflected in the economic plans of 60s and 70s during the Shah's Regime and was also present in the first and second plans of the Islamic Republic, gradually changed and promoted to the dominant approach, in spite of unclear points in planning and factional disputes. (409) As for reducing customs duties and inflations, measures were taken in line with the demands of international financial and commercial institutions and in the process of privatization – in spite of its slow pace – about 300 billions Tumans of government stock were transferred to the private sector in 2003. It is envisaged to transfer 14, 000 billions Tumans in 2004 and the
executive steps for transfer of 800 billions Tumans thereof has been already provided.

A glance at the exports and imports and extraterritorial trade balance at the end of the four plans during the past three decades reveals a more clear perspective of changes. We face an incessant increase in export of oil and gas which plays the determining role in fluctuations of other indexes and the amount thereof has increased from 6.2 billions dollars at the end of the first Shah's plan to 14.3, 16.2 and 22.8 billions dollars, respectively, during the three plans of Mullahs. The trade balance at the end of the Shah's plan and under the effect of political tensions of the time was facing 4.6 billions dollars deficit and during the 1st, 2nd and 3rd plans of the Islamic Republic faces 1.2 billions dollars deficit and then 6.2 billions dollars surplus and 4.4 billions dollars surplus, respectively, at the end of the plans. Thus, in this perspective, the foreign trade generally improves and goes out of the crisis to some degree. As for non-oil trade balance, however, because no sufficient efforts take place to meet the domestic market demands and because the non-oil exports do not increase in the same pace as the imports, the deficit increases from 10.9 billions dollars at the end of the 5th plan of Shah to 15.5 billions dollars at the end of the 1st plan, 10.05 billions dollars at the end of the second plan and upon ending of the war and 18.4 billions dollars at the end of the 3rd plan. Thus we face a 70 percent increase in the foreign trade balance deficit in a 25-year interval. On the other hand, the non-oil exports increase during the four plans from near 1 billions dollars to 3.7, 3.4 and 5.3 billions dollars, respectively (nearly 4 billions dollars increase during 25 years). But simultaneously, the imports increase from 11.8 billions dollars to 19.8 billions dollars, mainly under effect of war, and then to 13.5 billions dollars and lastly with a rapid growth to 23.7 billions dollars at the end of the 3rd Plan of the Islamic Republic (nearly 11.5 billions dollars increase during 25 years). In other words, the deficit of trade balance without oil increased still more at the end of the 3rd development plan after the fall of Shah and 7.5 billions dollars (import increase for 11.5 billions dollars against non-oil exports increase of only 4 billions dollars during 25-year period) is added thereto during the 25 years under study. New statistics from periodicals bespeak of still further increase of trade balance deficit without oil and gas and no considerable change seems probable in the near future.
5.6 The Special Role of Oil and Gas in Foreign Business and in Economy of Iran

Oil was known in Iran since the time of Achaemenid Empire, 2500 years ago. Some of fire temples of the adherents of the ancient Iranian faith, Zoroastrianism in which fire is considered a special symbol, were constructed on oil wells and oil resources. An example of such temples can be seen in Masjed Soleiman, south of Iran. According to the report of a European tourist, 2000 years ago oil was used as a fuel in Mazandaran. (411) Iran has one of the largest oil reserves and after Russia, has the largest gas reserves in the world. The oil reserves of Iran were formerly estimated over 93 billions barrels and her gas reserves about 600 billions cubic meters. (412) Based on new discoveries, Iran has the second position in the world in view of both oil and gas reserves and intends to invest about 40
billions dollars in oil, 45 billions dollars in gas, 25 billions dollars in petrochemical industries and 20 billions dollars in power industry until 2030 in order to improve her universal position and domestic economy. (413) In spite of incessant extraction, the extractable oil reserves of Iran has increased from 59 billions barrels in 1980 to 130 billions barrels in 2003. (414) Establishment of oil industries in Iran is simultaneous with influence of industrial capital. England acquired control over Iranian oil resources when Iran was in the conditions of a semi-colonized country. The 1901 Contract between temporary government of Iran and the former Anglo-Persian Oil Company was one of the most harmful contemporary economic contracts of Iran. This Contract changed the former Anglo-Persian Oil Company in view of financial capabilities from a medium size company to one of the largest international companies. Discovery of oil in Iran entailed many expenses. After a group of useless drillings which imposed heavy costs, the British government directly added to its investment in oil excavations in Iran and became a partner in Burma Oil Company. By operating the oil wells of Masjed Soleiman, the time of profitability for England started. Then, the Anglo-Persian Oil Company was founded in which the British government invested two millions pounds and became the biggest shareholder. According to Article 81 of the Contract, the British Finance Minister or two representatives of him were supposed to be members of the board of directors. Clause 91 empowered the British government with the right of veto whenever the British interests were in danger. (415) From 1905 to 1932, the former Anglo-Persian Oil Company transferred more than 171 millions Liras net profit from the sake of Iranian oil to the British banks. The money received by Iran was 11 millions Liras, i.e. only 6.4 percent of that amount. The said Company was the absolute governor over 100,000 square miles lands of Iran and the Iranian government has right of any interference in the affairs of the Company and had no supervision on their operations. In 1934, the contract was revised. On the basis of the revised contract, the Anglo-Persian Oil Company accepted to pay 4 shillings to the Iranian government for each ton crude oil extracted and exported. This was only one-eighth of the real price of each ton crude oil which the Company used to sell in the Persian Gulf ports. Against this trivial increase of the share of Iran in crude oil exports, the former Anglo-Persian Oil Company extended the period of its concession for
operation of Iranian oil reserves until 1993. According to the former contract, the entire assets of the Company were supposed to be owned by Iran in 1962 and in 1933; approximately 52% of these assets already belonged to Iran. The new contract cancelled this provision but entered no change in the absolute sovereignty of the Company over the Iranian territory. This unfair contract severely damaged the Iran-English relationships during the coming two decades. As an example, the income and expenditures of Anglo-Persian Oil Company and the Iranian government in 1948 is indicated. In this year, while the share of Iran from oil exports was only the amount of 10 millions Liras, the net profit of the Company inclusive of the tax paid to the British Government was near 79 millions Liras, i.e. 8 times more than the income of Iran. If we add all the side incomes including indirect income of British government and the dividends paid to the stocks, this amount reaches 114 millions Liras which is 11.4 times more than the income of the government of Iran. Interesting to note that the country owning the black gold has an income from the total exports of its reserves equal to only one-third of the tax revenues received by the government importing the oil (profit of the Anglo-Persian Oil Co. is not included). The role of oil exports in the national economy increases step by step. An analysis of the government incomes in 1937 to 1949 shows that although the share of oil in government budget increases, still oil does not play a determining role in the economic structure of Iran. The share of oil in the total government revenues in 1949 was only 12.5 percent. The importance of oil exports in the economy of Iran can be seen in the accelerating trend of oil extraction. The process of converting economy of Iran into a single-product economy was similar to that in many developing countries in Asia, Africa and Latin America. As an example, in Latin America, for long time after independence of the states, any economic change was within the framework of single-product economy and export of raw materials against import of industrial products from the industrial countries. During 1913 to 1977, the oil extraction increased from 0.04 million ton to 293 millions tons and, in spite of rapid decrease during the fall of Shah and thereafter, continued to increase. The income of Iran also increased more rapidly than the quantity of extraction which mainly relates to increase of oil price in 1973 from nearly 3 dollars a barrel to 12 dollars a barrel, i.e. four times increase.
Side by side increase in oil extraction, the domestic consumption also increased especially from 1959 to 1995. The first place in consumption of oil products after 1979 belongs to gas oil and mazote. The consumption of kerosene decreased but that of gasoline increased
especially after commissioning of automobile manufacturing industries in the recent years. Due to lack of sufficient number of refineries in Iran, millions of dollars are withdrawn from foreign currency reserves fund every year to buy gasoline from overseas and supply to people in subsidized prices. The need of Iranian market to imported gasoline is estimated near 3 billions dollars per annum.(419)

By the development of domestic auto industry and increased import of foreign cars, the gasoline consumption is increasing and this fact made the MPs to approve the withdrawal of 1.3 billions dollars from the foreign currency reserves fund for the second half of 2005-2006 for the purpose of importing gasoline.(420)

A look at the extraction, exports and domestic consumption in 1986 to 2000 shows a relative reduction of domestic oil percentage in the total extracted oil. During these years, the domestic consumption has reduced from 42% to 34%. In order to reduce oil consumption in domestic market and sell it in global markets and also to use it in petrochemical industries, the government tries to substitute gas for petrol in vehicles and there are discussions going on about removing high consuming vehicles from the transport cycle and reduction or complete elimination of petrol subsidies. On the other hand, 37 plans
in the form of 350 projects are under execution for increasing domestic production of gasoline, but it doesn't seem probable that Iran will reach self-sufficiency in this field in the short run.

*Diagram 169 - fluctuations of extraction, exports and domestic consumption-DS*

In order to show the significance of oil in the economy of Iran, one can study the share of oil in gross domestic production during past years. The increase of oil price in global market side by side rapid growth in extraction and export of oil during the final years of Shah's reign increased the share of this sector for near 35.4% in 1977. This share had even reached 50% in 1973. The increase of oil revenues was not specific to Iran but included other oil rich countries as well. As an example, in 1978 the OPEC oil ministers approved a 10% increase in oil price, but the actual increase until 1979 was much more.

It should be borne in mind that the actual role of oil is much more than this, because the 19.3% share of industry sector in the same year was the result of huge investments made possible only through oil dollars.
Political tensions in foreign policy especially with the United States and the Iran-Iraq war, also disorders in economic policies not only reduced the extraction and export of oil but also decreased the share of oil in gross domestic production to 4.1% in 1987. During the war, the revenues of Iran decreased not only because of reduced oil exports but also because of the decreased price of oil from 34 dollars a barrel to only 5 or 6 dollars a barrel.(423) According to the information of the statistical yearbooks of Iran which included oil beside gas and other mineral ores under the mine sector, the share of this sector in the overall gross domestic production reduced during 1992 to 2002. This share reduced from 17.17 percent in 1992 to 10.27 percent.
A reduced share of oil and gas in the national economy of Iran can not be anticipated in the near future. The data on global market about increased need to oil export especially in the economy of countries like China and the increasing number of new markets for Iran's gas beside the discovery of new oil and gas reserves in Iran all indicate that the past process will continue in the years to come. The only new efforts which are not yet certain to yield desirable results are connected with the change in composition of oil products from export of crude oil to the export of petrochemical products and other industrial goods connected with oil industries. From these efforts one can name of the 77 downstream petrochemical projects presented to the investors.(424) On the other hand, Iran intends to increase the export of her petrochemical products to 4 billions dollars until year 2006.(425) The specific function of the Middle East in crude oil production in the world can be observed in the following diagram. In 2001, the Middle East region has the first place in the world with a production of over 20,000 barrels per day. The share of each of the other oil producing regions such as the Latin America, East Europe and so on is less than half of the production of this region.

*Diagram 172 - global crude oil production in year 2001 - thousand barrels per day*
A look at the identified crude oil reserves of the world also demonstrates the strategic importance of this region in supplying fuel to the world market. In this concern, the ratio of extraction and quantity of reserves in different oil rich countries is not the same due to various reasons including political considerations. As an example, Iran had the lowest share of production among the OPEC member states in 1980, in spite of her large oil reserves. This share improved gradually in the following years.\( ^4 \) The oil producing countries in the Middle East have the first place in oil reserves with a reserve of about 696261 millions barrels and then, with a huge distance, the Latin America occupies the second place with 123896 millions barrels and Africa the third place with 92797 millions barrels. The identified crude oil reserves in the entire world excluding the Middle East in 2002 is nearly 50% of the identified reserves of the Middle East region among which Iran has a special position and her economy cannot but undergo serious influence by this natural wealth.

*Diagram 173 - known crude oil reserves - DS*

Although during 1980 to 2001, the export of crude oil from the Middle East countries has decreased a little, compared with Europe, America and Africa, its first position in the total world exports has not changed.
that much. Serious reduction is observed in 1980s which is not irrelevant to Iran-Iraq war, but the export of OPEC members from then on has had an increasing trend. 

*Diagram 174 - exports (including re-exports) of crude oil in the world based on the region, thousand barrels -DS*

The first place in crude oil exports among OPEC members belongs to the Saudi Arabia which is a long distance ahead of other countries of the region with its 6036 barrels a day exports during 2001. Iran with 2446 barrels and Nigeria with 2089 barrels a day stand in the second and third places. By reduction of political tensions between Iran and the Untied States, it can be expected that Iran oil exports will increase. The increase of share of Iraq in global oil market and its return to its former position depends in the political events of the future years.
Although Iran has the second position in crude oil exports, she enjoys the first rank in view of increased export during 1980 to 2001. Next to Iran, Venezuela and Qatar considerably progressed in increasing their share in the global oil market. This improvement returns to reduced political tensions especially development of oil relations with West Europe and Japan and also termination of Iran-Iraq war during this period and new investments in oil industry.

**Diagram 175 - export of crude oil from OPEC countries in 2001-thousand barrels per day**

**Diagram 176 - growth of crude oil exports between years 1980-200**
Efforts for preventing direct export of crude oil and increasing the sale of oil products which could be more profitable was on the working agenda of different governments since the time of Shah. These efforts though did not bring about much success. The position of Iran among oil producing countries in regard to the production and export of oil products is undesirable. A glance at the export of oil products reveals the backwardness of Iran in comparison with other countries. Although Iran enjoys a high rank among these countries in extraction and export, but is only at the 6th place in export of oil products and her exports is less than countries such as the United Arab Emirates, Kuwait, Venezuela and Algeria. Saudi Arabia exports more than three times and Kuwait and Venezuela near twice as much as Iran. In the short run, it does not seem that the position of Iran may improve against the countries of the region. The Arab countries in the Persian Gulf region intend to invest 18 to 20 billions dollars in oil projects every year while Iran is facing difficulties in attracting capital from foreign countries.(427)

*Diagram 177 - export of oil products of OPEC member states in 2001- thousand barrels per day -DS*
What underlines the disorders and insufficiencies of plans of the Iranian statesmen in this area is the widening gap between Iran and other oil producing countries during 1980 to 2002. The highest growth belongs to Qatar and the United Arab Emirates and Iran, with a large distance behind, occupies the third position. The export of oil products of Iran increased from 141 thousands barrels a day to 308 thousands barrels a day during 1980 to 2002, while the United Arab Emirates has succeeded to reach from 20 thousands barrels to 308 thousands barrels a day during this same period. In order to improve the financial capabilities and attract foreign investment, Iran has, during the past few years, concluded new contracts named "buy-back" contracts with international consortiums. As the provisions of these contracts are kept confidential and are not disclosed even to official organizations such as the Parliament, no exact information is available of their details. Until 2002, 15 contracts had been concluded for development of oil and gas fields by which Iran has undertaken an amount equal to 22.5 billions dollars for refund of the original amount invested, interests, rewards and remuneration of foreign contractors. From this amount, 47% is allocated to the oil and the rest to the gas sector. These types of investments are considered a type of advance sale of oil in fixed prices and, regarding the rapid increase of oil price, seems to incur loss, contrary to the finance method. The authorities in the Islamic Republic emphasize on the superiority of these contracts for attracting new technologies and attaining higher share in oil exports within the framework of OPEC as advantages to justify this method of financing oil and gas development.

The opposing views hold truly that supply of capital in this sector as in the sectors which is done through finance has less undertakings and has so far provided financial needs of some sectors including petrochemical sector. On the other hand, concluding such contracts for provision of sale market seems unfounded, because the need of global market to oil and gas in increasing and there is no problem for the sale thereof. As for attracting technology also, considering the extensive capabilities in the world, these long-term commitments which means increase of foreign debts of Iran along with guaranteed cheaper sale of oil to the foreign investors cannot be justified. We cannot hope the increase of the export share of Iran among the OPEC members through concluding these contracts, because determining shares of oil producing countries in OPEC is not that much related to the type of contracts the countries conclude. On the other hand, due to disputes
that arose, near 3.3 billions dollars from the "buy-back" contracts remained unused in 2003.(428)

Diagram 178 - growth of oil products exports

A part of the low export of oil products in Iran refers to increased demand of domestic market and higher consumption in industries. Among the OPEC members, Iran with a domestic consumption of 1222 thousands barrels has the first place, followed by Indonesia and Saudi Arabia. However, the Saudi Arabia that has a domestic consumption near that of Iran has succeeded during the past years by necessary investments, to export 1083 thousand barrels during year 2001 in addition to meeting the demands of the domestic markets. The export of oil products of Iran in this year was only 308 thousand barrels, i.e. 28% that of Saudi Arabia.

Diagram 179 - consumption of oil products in OPEC member states in 2001 - thousand barrels per day

[Diagram showing growth of oil products exports between years 1980-2003]

[Diagram showing consumption of oil products in OPEC member states in 2001 - thousand barrels per day]
The production and consumption of Iran oil products in 2002 in five items of mazote, gas oil, kerosene, engine gasoline and liquid gas can be seen in the following diagram. Some other products such as aircraft fuel, lubricants, bitumen and so on are ignored due to their insignificant production. The share of domestic consumption of mazote, gas oil and kerosene is low and liquid gas and engine gasoline is near 50%. Considering the increasing market demand for gasoline due to rapid development of automobile industries and increased number of vehicles, quick measures to improve capacity of domestic production and prevent waste of the foreign currency earned from oil exports is of special importance.

Diagram 180 - production and consumption of oil products in 2002 - thousand cubic meters-DS

A comparison between years 1987 and 2003 shows the highest growth in domestic consumption of oil products to belong to engine gasoline and heavy fuel for jet and liquid gas. Mazote and bitumen has had lesser increase. Consumption of gasoline in these years has increased from 6738 thousands cubic meters to 18423 cubic meters, i.e. nearly 3 times more and the consumption of liquid gas has reached from 1957 cubic meters to 4345 cubic meters.
Insufficiency of refineries to meet the demand of domestic market and their low production which has led to limited export of oil products, can be easily observed in the change of crude oil as the raw material for these factories during 1967 to 2000. Increase of the capacity of refineries and the variety of products are more considerable in the years before 1979 as compared with the years of Mullahs' rule. This capacity increased from 26.1 millions tons in 1967 to 45.7 millions tons in 1980, i.e. nearly doubled. Due to improper plans, war destructions and the damage to refineries and especially the complete destruction of Abadan Refinery in Iraqi border which was, at a time, the largest oil refinery in the region seriously declined these industries. Upon the end of the war and after lapse of ten years, we succeeded to reach the capacities which existed before the Islamic rule and the quick increase thereof continued only until 1995 and thereafter, remained in the same limits with some fluctuations.

In other words, although the production of refineries increased, this increase was not proportionate with the extraordinary increase in population of Iran and the demands of domestic and international markets.
Although Iran enjoys large oil and gas reserves and oil industries play and important role therein, she imports millions of liters of oil products every year and return part of the foreign currency earned from sale of crude oil to its buyers. The following diagram showing years 1987 to 2003 indicates the reduction of imports of oil products from 1987 to 1999. Since the latter date, import of oil products gradually increased and reached 3808 millions liters in 2003. Demand for fuel in domestic market is still increasing.(429)

The positive point in this concern is attention to investment in petrochemical industries during recent years for the purpose of supplying domestic market and especially attain world markets for these products after a long interruption in the plans which started during the Shah's Regime. The political tensions, war and lack of
economic planning seriously damaged the development process of these industries which were founded before 1979. A look at the production and export of petrochemical products in 2003 shows that a large portion of products of fertilizers, poisons and chemicals are used domestically and the share of exports in the fuel part is more and near 40 percent. In view of production, fertilizers and poisons have the best place and in view of export value, fuels, chemicals and aromatics are significant.

Diagram 184 - exports of chemical products, 2003-DS

In view of the growth of petrochemical products in exports, chemicals are of the highest position and aromatics and polymers in the next positions. During 1997 to 2003, the export of chemical group increased from 332 millions dollars to near half a billion dollars and the information released in the newspapers indicate further increase after this year and new plans for increased production of all petrochemical products in near future. One of the plans of Iran is increase of methanol production in Assaluyeh. With the partnership of private and governmental sectors and cooperation of foreign including German firms and relying on large gas reserves in this area, Iran intends to become the biggest methanol producer in the world within 10 years.(430)
Iran not only has large oil reserves but also huge gas reserves the importance of which is increasing in the world. Based on the latest discoveries, Iran has the largest gas reserves in the world after Russia. The following diagram shows the change in exploration and discovery of gas reserves in the world between years 1980 and 2001. The information released by the Secretariat of OPEC indicates that in 2001, the entire world reserves were 178216 billions cubic meters and the reserves in the Middle East about 71356 billions cubic meters.

*Diagram 186 - known reserves of natural gas in the world and in the middle east, billions cubic -DS*
In spite of these large reserves, the share of Iran in the world market is not proportionate to her capacities. The share of Iran in the world gas market is less than Algeria and a little more that other OPEC members. By concluding new treaties between Iran and Turkey and China and by measures taken to enter into new markets in other countries such as India and West Europe and through investment in conversion industries of liquid gas for export, Iran is increasing her market share.

*Diagram 187 - natural gas supplied to OPEC market, billions cubic*

Although oil is still considered the most important fuel, increased demand for gas in the world markets during 1980 to 2001 is considerable. In 1980, only 1438914 millions cubic meters gas was supplied to the global markets which reached 2564235 cubic meters in 2001 which shows near 80% increase. The export of crude oil in the world increased during the same years from 29876 thousands barrels a day to 37330 thousands barrels a day, i.e. only 24.9 percent. This information show the ever-increasing importance of gas a future fuel in the world economy. In spite of large gas reserves in the Middle East, the share of these countries in global market is insignificant. The following diagram shows the large share of East Europe and North America in international market.
A discussion is going on about the use of natural gas in economy of Iran that is under expert study and includes optimal use of natural gas. Some believe that using gas for domestic consumption which increased after the Islamic government is not economical and it is better to be used for other purposes especially in service of export industries. Regardless of the issue of optimal use of natural gas, it should be said that measures have been taken for supply of gas to rural and urban areas. The following diagram shows the number of natural
gas consumers in Iran between years 1982 and 2000. The highest increase rate belongs to home consumption. Using gas in industrial sector is insignificant and the commercial sector has no big share therein.

*Diagram 190 - number of consumers of natural gas, 1000 family-DS*

In Iran, since long time ago, a large portion of the gas accompanying oil was burnt without any use. The statistics of years 1987 to 2003 indicate that the waste of this energy has been prevented since year 2000 and the waste has now reached zero. On the other hand, the quantity of gas delivered to National Gas Company and the volume of gas injected into oil wells have increased. The gas delivered to the National Gas Company has increased from 21900 millions cubic meters in 1992 to 76011 millions cubic meters and the volume of gas injected to oil wells due to the reduced power of gas of the wells, has increased from 17385 cubic meters in 1992 to 76011 cubic meters.

*Diagram 191 - natural gas consumption(million cubic meters) -DS*
The increasing importance of gas in domestic and international markets has been known more by discoveries of the past years and investments have also increased. Specially, the number of independent gas fields identified has increased during 1992 to 2003 and their production has reached from 66 millions cubic meters to 202 millions cubic meters. The quantity and growth rate of gas accompanying oil and the gas in distillation towers have not been considerable. During this period, the total gas from different gas fields increased from 132 millions cubic meters per day in 1992 to 288 millions cubic meters, i.e. more than twice increase. The number of cities supplied with gas or in process of gas supply between 1997 and 2003 is shown here which indicates a growing trend.

Diagram 192 - production of light gas based on production source (million cubic meter per day) - DS

<table>
<thead>
<tr>
<th>Year</th>
<th>Gas Mixed with Oil</th>
<th>Missile Gas</th>
<th>Gas from Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>30</td>
<td>40</td>
<td>65</td>
</tr>
<tr>
<td>1997</td>
<td>35</td>
<td>45</td>
<td>70</td>
</tr>
<tr>
<td>1999</td>
<td>40</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>2000</td>
<td>45</td>
<td>55</td>
<td>80</td>
</tr>
<tr>
<td>2001</td>
<td>50</td>
<td>60</td>
<td>85</td>
</tr>
<tr>
<td>2002</td>
<td>55</td>
<td>65</td>
<td>90</td>
</tr>
<tr>
<td>2003</td>
<td>60</td>
<td>70</td>
<td>95</td>
</tr>
</tbody>
</table>
5.7 Some International Comparisons in regard to Foreign Trade and other Economic Indexes

Studying the economic indexes in Iran does not by itself provide a clear perspective of the position of Iranian economy in the world and does not clarify its potentialities and its disabilities. In this Chapter, some of the indexes are statistically studied in the international level. First, we study some international comparisons of foreign trade and then analyze some other economic indexes. In regard to imports and exports and the trade balance, the two countries with similar potentialities as Iran, i.e. Turkey and South Korea and beside them, China who has recently experienced a quick economic growth are compared with one of the most successful countries of the world in view of exports, i.e. Germany in 2003.

The three countries of Germany, China and South Korea had trade balance surplus of 118.8, 34 and 14.2 billions dollars, respectively, and the two countries of Turkey and Iran had a trade balance deficit of 8.6 and 14.4 billions dollars, respectively. In the trade balance deficit of Iran, only the non-oil exports are included, because the other selected countries do not have considerable raw material resources or export and rely on the capabilities of their domestic and international economy. The quantity of exports of Germany, China, South Korea and Turkey with 610, 266, 162 and 39 billions dollars are of great distance to the trivial non-oil exports of Iran which is near 4 billions dollars. During the past years, China has increased its exports especially through Hong Kong.(431) Except Turkey, the other countries compared have achieved to gain a considerable trade balance.
with optimal use of the potentialities of their domestic economies, in spite of high quantities of imports. The very little share of Iran in international trade can be observed in the total volume of foreign trade of the Country without oil. This quantity is 4.5 times less than the weakest country compared, i.e. Turkey. Based on the report of World Trade Organization in 2004, the share of Iran in global commerce even if we include oil and gas, has decreased from 0.45% to 0.40% during one year and the total volume of global exchanges of Iran in 2003 has been equal to 61.7 billions dollars which gives this Country the rank of 41 among the 187 countries of the world. The largest part of the share of Iran belongs to oil and gas exports. In 2003, the total exports increased to 36.2 billions dollars and shows an increase of 29% as compared with 2001, thus promoting Iran to the 39th rank among exporting countries of the world. From the entire 7.5 trillions dollars world trade in which the United States has the first rank and its growth in China, Latin America and Africa has been remarkable during this year, 1.8 trillions dollars comes from export of services in which Iran has had no share at all. The biggest world exporter in 2003 was Germany with 748 billions dollars and the largest importer of good was the United States with 1300 billions dollars. In the global trade, Iran has the 14th position among Asian countries and in the field of exports, secures the third rank among the Persian Gulf states after Saudi Arabia and the United Arab Emirates with 88 and 65 billions dollars, respectively. Iran had an exports volume of 36.2 billions dollars and thus scored the third rank. The imports of the biggest oil producing countries, i.e. Saudi Arabia, United Arab Emirates and Iran in 2003 were 36.2, 36 and 25.5 billions dollars, respectively.(432)

Diagram 194 - trade balance and import and export, billion dollars

![Diagram 194 - trade balance and import and export, billion dollars](image-url)
The dependence of Iranian economy to oil and traditional goods and agriculture which shows the backwardness of Iranian economy can be easily observed in the small share of industry in the total exports as compared with selected countries of China, South Korea and Turkey. The shares of oil and agricultural and traditional products are 87.4% and 4.9% of the total exports of the Country, respectively. Industrial goods compose only 9.4% of the overall exports. The share of three industrial sub-sectors of finished products, machinery and industrial goods in the total exports of China is 34.6%, 33.1% and 17.1%, i.e. 84.8%, in South Korea 83.3% and in Turkey 68.3%.

The same comparison has been conducted in regard to value of the exports in billion dollars in 2003 and displays the weak position of Iran among the selected countries more conspicuously. From Iran, 1.4 billion dollars agricultural and traditional goods and only 2.7 billions dollars industrial goods are exported. The share of industry in exports of China is 225.7 billions dollars, South Korea with special share of chemical products equal to 136 billions dollars and Turkey with

<table>
<thead>
<tr>
<th>Country</th>
<th>Finished Products</th>
<th>Semi-Finished Products</th>
<th>Chemical Products</th>
<th>Textile Products</th>
<th>Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>34.6</td>
<td>57.6</td>
<td>17.1</td>
<td>17.8</td>
<td>8.3</td>
</tr>
<tr>
<td>South Korea</td>
<td>33.1</td>
<td>22.9</td>
<td>24</td>
<td>21.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>87.4</td>
<td>87.4</td>
<td>87.4</td>
<td>87.4</td>
<td>87.4</td>
</tr>
<tr>
<td>Iran</td>
<td>9.4</td>
<td>4.9</td>
<td>9.4</td>
<td>4.9</td>
<td>9.4</td>
</tr>
</tbody>
</table>

The table above shows the composition of exports of selected countries in % in year 2003.
special share of textile products equal to 26.8 billions dollars. The distance of industrial exports of Iran which mainly relates to the oil dependent industries, i.e. petrochemical industries is large even with the exports of the neighboring Turkey.

*Diagram 196 - exports in billion dollars-DS*

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>South Korea</th>
<th>Turkey</th>
<th>Iran</th>
</tr>
</thead>
<tbody>
<tr>
<td>finished</td>
<td>92,1</td>
<td>93,6</td>
<td>45,5</td>
<td>28,9</td>
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<tr>
<td>products</td>
<td>88,1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>machinery and so on</td>
<td>45,5</td>
<td>28,9</td>
<td>13,5</td>
<td>9,4</td>
</tr>
<tr>
<td>finished</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>machinery and so on</td>
<td>13,5</td>
<td>9,4</td>
<td>9,0</td>
<td>8,4</td>
</tr>
<tr>
<td>semi-finished</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>traditional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The foreign currency reserves and foreign debts of selected countries show a picture of financial status in comparison. Due to oil resources, lack of extensive presence in international trade and adopting semi-closed policy, Iran has less foreign debts compared with other countries. Only China with foreign currency reserves of 220 billions dollars in 2003 against 170 billions dollars foreign debts has a financial surplus of 50 billions dollars. The maximum payment balance deficit belongs to Turkey with near 95 billions dollars and then South Korea with 8 billions dollars which is not that considerable with regard to foreign trade balance surplus of 14.2 billions dollars. Iran has near 3 billions dollars financial reserves against 7.4 billions dollars foreign debts and thus, the foreign trade balance of Iran is 4.4 billions dollars. In spite of abundant oil and gas resources, Iran has not been able to eliminate her foreign financial balance deficit or accumulate a surplus for times of emergency such as oil market crises.
In view of gross domestic production, Iran belongs to the group of countries who have an intermediate position. In other words, the gross domestic production of Iran in current prices in, say 1999 with 238554 millions dollars is much behind countries such as the United States, Japan, England and Germany and as an example, about 11% of the gross domestic production of Germany with a sum of 2112061 millions dollars. On the other hand, it is higher than most of the underdeveloped African countries and, for instance, is twice more than that of Egypt in the same year. As indicated earlier, this relative better status as compared with very backward countries is not caused by growth of economy but by the oil reserves and foreign currency earned from crude oil exports and, during past few years, from natural gas exports. In other words, if we exclude the share of oil and gas in the economy of Iran, it can be said that the gross domestic production will be half of the present amount, i.e. around 120 billions dollars equal to very underdeveloped countries of the world.(433) In spite of abundant resources, the gross domestic production per capita of Iran in international scales in very little. Reduction of production per capita is especially due to two factors, first economic insufficiencies and second increased population of the Country. The result is that the production per capita in Iran is only 10% that of Japan and about 38% of South Korea, a country with no oil or gas resources. Although gross
domestic production of Iran is higher than oil producing countries in the Region such as the Saudi Arabia and the United Arab Emirates, the production per capita in the United Arab Emirates is 19700 millions dollars, i.e. 6 times that of Iran and in Saudi Arabia twice as of Iran. This fact bespeaks of higher welfare level of both countries in regional comparison. On the other hand, the statistical data and information released by the government are not reliable and differences are seen in this area. As an example, according to the Statistical Center of Iran, gross domestic production of Iran is 30% more than the neighboring Turkey, while according to information from other sources, Turkey had a gross domestic production of 238 billions dollars in 2003(434) and Iran only 148 billions dollars ,i.e. 60% that of Turkey.(435)

**DT 198 - gross domestic product in selected countries of the world in 1999-DS**

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP per capita</th>
<th>GDP in current prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>34276</td>
<td>4346919</td>
</tr>
<tr>
<td>United State of America</td>
<td>32778</td>
<td>4199162</td>
</tr>
<tr>
<td>Germany</td>
<td>25749</td>
<td>2112061</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>24323</td>
<td>1441786</td>
</tr>
<tr>
<td>France</td>
<td>24267</td>
<td>1432364</td>
</tr>
<tr>
<td>Italy</td>
<td>20355</td>
<td>1171005</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>19700</td>
<td>50396</td>
</tr>
<tr>
<td>Spain</td>
<td>14939</td>
<td>595943</td>
</tr>
<tr>
<td>South Korea</td>
<td>8871</td>
<td>411648</td>
</tr>
<tr>
<td>Argentina</td>
<td>7735</td>
<td>282910</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>7095</td>
<td>139383</td>
</tr>
<tr>
<td>Mexico</td>
<td>5036</td>
<td>490247</td>
</tr>
<tr>
<td>Venezuela</td>
<td>4312</td>
<td>10222</td>
</tr>
<tr>
<td>Brazil</td>
<td>3525</td>
<td>592989</td>
</tr>
<tr>
<td>Iran</td>
<td>3445</td>
<td>238554</td>
</tr>
<tr>
<td>South Africa</td>
<td>3067</td>
<td>131127</td>
</tr>
<tr>
<td>Turkey</td>
<td>2813</td>
<td>184761</td>
</tr>
<tr>
<td>Thailand</td>
<td>2000</td>
<td>123986</td>
</tr>
<tr>
<td>Egypt</td>
<td>1307</td>
<td>87173</td>
</tr>
<tr>
<td>Russia</td>
<td>1257</td>
<td>183815</td>
</tr>
</tbody>
</table>
If we look at the foreign sources for a regional comparison and study the gross domestic production of some countries beside their foreign debts, the status of Iran is much more negative than what portrayed by domestic data. In 2002, among 6 following selected countries, Turkey and Saudi Arabia had a production nearly double that of Iran and the amount of their foreign debts is also more. As for foreign debts of Iran, a positive trend can be seen in the years after 2000 which is due to increased oil prices in these years.

*Diagram 199 - foreign debts and GDP of a number of countries in 2002, billion dollars -DS*

According to foreign resources, the conditions are different as regards the gross domestic production per capita as well. The following diagram shows the production per capita of 6 selected countries of the region. According to this diagram, United Arab Emirates, Israel and Saudi Arabia have the first to third positions and Turkey, Iran and Egypt with a much less production per capita occupy the next positions. The actual growth rate of gross domestic production in this year as compared with other countries of the region is undesirable and -1% (for instance Saudi Arabia had a positive growth rate of 2.2% and Israel 3.8% in the same year) and on the other hand, the annual population growth rate is positive and equal to 2.7%. The growth rate improved in the later years.
Including the oil and gas sector in gross domestic production and in industrial sub-sector indicates a more proper position for Iran than the other three countries with a share equal to 19% in agricultural production. In the service sector with a share equal to 54% of gross domestic production is at similar level with China, South Korea and Turkey with figures equal to 52%, 41% and 58%, respectively. In the industrial sector also, the backwardness of Iran is reflected. The share of industry sector in gross domestic production in China is 52%, in South Korea 41%, in Turkey 27% and in Iran 26%. If we exclude the share of oil and gas which accounts for a large portion of the gross domestic production of Iran, the share of industrial sector will become much less. If we consider the assessment of international economists who hold that near 2/3rd to 1/3rd of the gross domestic production of oil producing countries in the Middle East is provided from oil and gas, the more real proportion of the three sectors will be as follows: Industry sector, 13% (half of the 26% share mentioned above), agriculture sector 25% and service sector 60%. This assessment underlines the inability of industrial sector if Iran in comparison with selected countries even more. (436)
The gross domestic production can be also looked at in view of the share of taxes therein in the world scale in 2003, because it has been one of the problems of the economy of Iran in providing governmental budget and overcoming dependence to crude oil and gas exports revenues during the few past decades. A look at the four selected countries of Germany, China and Turkey and Iran shows that the share of tax revenues in gross domestic production of Iran is a little less than half of that in Germany and Turkey and a little more than in China whose economy is still mainly governmental. As for tax on private
institutions, with a percentage of 25%, Iran is at the same level of other selected countries. This index is 25% in Germany and 30% in Turkey and China. The salary tax is 54% in Iran which is more than Germany (49%) and China (45%) and Turkey (40%). The bigger problem of Iran is the lack of an organized, centralized, modern and uncorrupted system for taxation of private sector. The result is that government plans for receipt of taxes do not come true and a deficit of 8,000 billions Rials is foreseen for the year 2004.(437)

Diagram 202 - taxes and GDP in some countries-DS

In agriculture sector, production of grains, potato and beans can be dealt with in 2001. Comparing with major producers of these 3 agricultural products, such as China, the Untied States, India, Russia, France, Brazil and Germany, the production of Iran is insignificant, although production per capita is higher than some of these countries. Comparing with a developed country like Germany who has a population near that of Iran and an area much less than Iran, the production of grains in Iran is only about 20% that of Germany which shows the unused potential of Iran.
Comparing Iran with similar countries such as Turkey and South Korea shows that in all three areas, i.e. production of grains, potato and beans, Turkey has a superior position than Iran. During 19th Century and its business transactions with the Ottoman Empire, Iran usually had a trade balance surplus and one of the major items exported to this Country was grains. The production of this product in 2001 in Turkey was 25571 tons, i.e. more than twice that of Iran (11909 tons). Better organization of agriculture in Turkey can be seen in comparison of two other items, potato and beans, as well. Turkey has a production of potato nearly 80% more than Iran and produces more than three times beans as does Iran.

Diagram 203 - comparison of some countries of the world in production of three agricultural products(tons) - year 2001-DS

In the area of production of different meats, the same shortages and backwardness can be seen in an international comparison with the advanced countries of the world; however Iran has a slightly better
condition than similar countries like Turkey and South Korea. The need to serious improvement of agriculture can be seen in comparing Germany and Iran in view of production of different types of meats as well. Germany with a population the same as Iran, has more than 4 times meat production. In comparison with South Korea, Iran has a little less total production but a superior position in production of domestic poultry, fresh milk and egg. Production of different types of meat in 2001 has been 1589 thousands tons in South Korea, 1490 thousands tons in Iran and 1372 thousand tons in Turkey.

DT 204 - production of meat, milk, egg and honey in different countries (thousand tons) - DS

<table>
<thead>
<tr>
<th>production of meat, milk, egg in different countries (thousand tons)</th>
<th>egg</th>
<th>milk</th>
<th>meat 1</th>
<th>meat 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>19884</td>
<td>9570</td>
<td>65161</td>
<td>13287</td>
</tr>
<tr>
<td>United States of America</td>
<td>5080</td>
<td>75025</td>
<td>37741</td>
<td>16748</td>
</tr>
<tr>
<td>Brazil</td>
<td>1538</td>
<td>22580</td>
<td>15161</td>
<td>6395</td>
</tr>
<tr>
<td>Germany</td>
<td>890</td>
<td>28300</td>
<td>6469</td>
<td>866</td>
</tr>
<tr>
<td>France</td>
<td>1047</td>
<td>24890</td>
<td>6341</td>
<td>2077</td>
</tr>
<tr>
<td>India</td>
<td>1906</td>
<td>35000</td>
<td>4917</td>
<td>595</td>
</tr>
<tr>
<td>Russia</td>
<td>1945</td>
<td>31980</td>
<td>4518</td>
<td>778</td>
</tr>
<tr>
<td>Argentina</td>
<td>325</td>
<td>9600</td>
<td>3995</td>
<td>971</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>629</td>
<td>14717</td>
<td>3266</td>
<td>1562</td>
</tr>
<tr>
<td>South Korea</td>
<td>460</td>
<td>2339</td>
<td>1589</td>
<td>425</td>
</tr>
<tr>
<td>Iran</td>
<td>600</td>
<td>4000</td>
<td>1490</td>
<td>860</td>
</tr>
<tr>
<td>Turkey</td>
<td>715</td>
<td>8600</td>
<td>1372</td>
<td>618</td>
</tr>
<tr>
<td>Japan</td>
<td>52</td>
<td>221</td>
<td>97</td>
<td>65</td>
</tr>
</tbody>
</table>

In production of sheep and goat, Iran has a relatively known status in international level. In comparison with following selected countries, Iran has the third rank in production of sheep (53000 thousands sheep), the third rank in production of goat (25200 thousands goats) and the 11th rank in production of cattle (7000 thousands cattle). The production of poultry (chicken and rooster) can be also evaluated desirable in a global comparison, because Iran has a production twice that of Germany and her place in the world is better than France, United Kingdom, Turkey and South Korea.
Later, indexes such as illiteracy rate, infant mortality rate, number of researchers and bureaucratic efficiency index of Iran in 2002 are compared with some other countries. The same as other indexes, the position of Iran in literacy rate (66%) is undesirable compared with the other countries of the Region. This rate is 95% in Israel, 79% in Turkey and 71% in the United Arab Emirates. In this regard, the position of Iran is a little better only from Saudi Arabia and Egypt and is much behind the developed countries of the world.
Regarding the share of government credits in gross domestic production in insurance and hospital beds and health services supply, Iran is in a lower level compared with similar countries and is much behind the developed countries of the world. The share of government credits for insurance from gross domestic production is 12.1% in Germany, 4.5% in Turkey, 2.7% in China and only 1.5% in Iran and in this regard, Iran has a little better position only in comparison with South Korea (1.3%). Conditions are the same in health services supply. With the rate of 0.9 polyclinic for each one thousand people, Iran is in the lowest position. This rate is 1.3 per each thousand people in Turkey and South Korea, 1.7 in China and 3.6 health centers for each thousand people in Germany. The study of hospital beds also reveals the same improper place in international scale. In Iran, there are 1.6 beds for each thousand people, in Turkey, South Korea, China and Germany, this figure is 2.6, 6.1, 2.4 and 6.7 hospital beds for each thousand citizens. The difference in quality level of clinics should be also noted. In Iran, quality of services of medical centers is undesirable, compared with other countries.
The reflection of insufficiencies in health sector can be seen in children mortality rate. In this regard, Iran is still in the level of underdeveloped countries and is much behind developed countries such as Japan, Germany and Untied States and even South Korea and Untied Arab Emirates. In the comparison of these selected countries, India, Brazil, China, Turkey and Iran has the worst mortality rate of children. The birthrate in Iran is also high and after Saudi Arabia, Iran has a growing population in regional and global level. The population increase in recent years has become slower in Iran; however it is still very high in international scales.(438)
Further need to experts in different economic fields can be understood by a comparison of human indexes in the area of research. The number of researchers per million populations in comparison with developed countries such as Japan and Germany is very insignificant and less than 20%. Comparing Iran with similar countries gives a much superior position to South Korea and an inferior position than Iran to Turkey. This comparison is only a quantitative comparison. In a qualitative comparison, the gap between researchers in Iran and in advanced countries become still wider and deeper.
In spite of some changes in the years following 2000, Iran does not have a proper position in the area of mass media and press. The number of radio, television and telephone sets in Iran is 281,163 and 155 sets for each thousand people, respectively, which is less than the other compared countries especially in regard to television and telephone. The number of daily papers is also limited and is very little in comparison with countries of similar population like Turkey, South Korea and Germany. During 2003, 32 daily papers were published in Iran and in the said three countries, 57,150 and 349 daily papers, respectively. The circulation of Iranian papers compared with similar countries is less and furthermore, the government censorship and banning papers from time to time, arrest, detention and prosecution of journalists also add to the problems of journalism in Iran.
One of the major problems of developing countries is the low efficiency of governmental and bureaucratic system on the one hand and extensive corruption in all bodies of the government on the other. The problem of Iran in this area goes back to previous decades. In 19th Century, Orientalists and travelers from Western countries have spoken of the deep corruption in the government system of Iran and called it one of the reasons for lack of required efficiency in the ruling system. A similar procedure is seen in some other countries like Turkey. The corruption in Turkey is so expanded that, according to some experts, one fourth of the economic of this Country, i.e. near 60 billions dollars is under control of illegal groups and mafia bands.(440) According to a study of bureaucratic efficiency index carried out in 6 groups, Iran along with Egypt and Pakistan are placed in the worst group with the lowest efficiency and Turkey, Saudi Arabia and Brazil in the second group. The best countries of the world in view of bureaucratic efficiency are Japan, England and United States and then France, Germany and Israel.
In this chapter, three scenarios for a short-time prediction of some of the economic indexes based on statistical data and with due consideration to future economic conditions of Iran are presented. In Iran, the idea of forecasting economic changes and planning for future of economy started predicting started in 1949 with the implementation of the 7-year economic development plan, but faced serious problems since the very beginning.(441)

The most important economic forecasts were discussed in the time of Shah. Relying on the oil revenues, Shah promised entering into the "Great Civilization" within a short period of time by rapid investments in infrastructures especially steel, copper and aluminum industries, decks and jetties, automobile and tractor manufacturing factories. Beside these programs, huge investments on construction of six nuclear power plants added to the scope of these ambitions. By operation these power plants, in Shah's words, Iran was supposed to change into a big industrial power.(442) The economic, political, social and cultural nonconformities in the Shah's policy showed that his wishes were not based on reality. Upon seizure of power by Mullahs and the consequent severe economic disorders, the new inexperienced authorities who filtered specialists and experts in a wide extent, finally came to understand the importance of planning and efforts for economic planning based on economic forecasts and social demands started again. These plans and economic forecasts were, however, rarely successful. For example, in 1992, only the agriculture, carpet, handicrafts and mineral industries were somewhat successful according to the foreseen plan but only about 15% of the plans were

<table>
<thead>
<tr>
<th>Bureaucratic efficiency index in some countries</th>
<th>9-10</th>
<th>7.5-9</th>
<th>6.5-7.5</th>
<th>5.5-6.5</th>
<th>4.5-5.5</th>
<th>1.5-4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>France</td>
<td>Argentina</td>
<td>Korea</td>
<td>Brazil</td>
<td>Saudi</td>
<td>Arabia</td>
</tr>
<tr>
<td>England</td>
<td>USA</td>
<td>Germany</td>
<td>Israel</td>
<td>Kuwait</td>
<td>Portugal</td>
<td>Spain</td>
</tr>
</tbody>
</table>

6. Three Scenarios for Predicting Changes in Foreign Trade and Economy of Iran
materialized in other important parts related to export of industrial and pharmaceutical products.(443)

By emergence of serious economic problems and extensive dissatisfaction of people and after reconstruction of Iran-Iraq war ruins, new steps were gradually taken for more precise assessment of problems and for planning to solve those problems. From among these measures, one can name of the "Economic Organization Plan" proposed by Khatami government in February 1989. The characteristic of this plan was using views of a large number of economic experts including experts outside the government system. The plan went beyond government organizations and departments and closed rooms.(444) Although these plans and economic forecasts are still far from reality, at least they show that less mistaken paths are now treaded. "The 20-year Economic Development Plan" defined by the Velyat-e-Faqih in 2004 for the economic future of Iran intends to change Iran into "the most capable economic power in West Asia".

Although this plan is not as ambitious as the Shah's plans who wanted to change Iran into one of the biggest economic powers in the world and to reach Iran to the gates of "great civilization" in a short interval, similar ambitious and unrealistic elements can be identified therein.(445) As an example, a 14% growth rate for gross domestic production and reaching the level of developed industrial countries of the world has been predicted in the 20-year economic plan approved during the Shah's time for years 1973 to 1992 which is clearly impractical.(446) Economic, political, social and cultural nonconformities and heterogeneities of the government of Mullahs are similar elements which make achieving the set goals difficult. Economically speaking, the Achilles' heel of the Islamic government is its heavy dependence to oil revenues as before and reduction of foreign currency revenues from oil export can seriously impair the national economy and leave a major part of the plans unaccomplished on paper. Furthermore, serious challenges exist on the issue of industrial strategy of the Country, manner of its implementation, position and status of Iran in the process of economic globalization, function of government and the developing trend of private sector and the opposing view of some economists in Iran in disagreement with economic orientations of statesmen in the fourth economic development plan shows theses ambiguities.(447)

The writer has evaluated the future changes in the Iranian economy based on three different scenarios and according to which has
presented a short-term statistical forecast for the most important economic indexes. These three scenarios are as follow:

1- Scenario of economic liberalism with Mullahs
2- Scenario of economic liberalism without Mullahs
3- Scenario of tension

Especially in the first and second scenarios, forecasting economic changes is based on two specifications of the economy of Iran. The first specification is the major role of oil in economy and in the present short-term and long-term plans. The second specification is the dependence of Iranian economy to the powerful government sector and even the dependence of private sector to the government. The special role of oil in economy of Iran has been separately dealt with in previous chapters. As shown in these assessments, no serious change has happened in regard to dependence of economy to oil, in spite of all plans so far. The revenues of Iran from oil exports in 2003 has reached near 24 billions dollars which is about 80% of the entire exports of the Country in this year. Furthermore, considering the gas reserves of Iran and the approved plans for export of gas to countries of the region, new foreign currency incomes will also add to the government fund in this sector. According to the forecasts, Iran will have between 15 to 25 billions dollars income during the next 20 years only through export of gas to Turkey. Negotiations continue for gas piping to other regions and reaching agreements for gas supply with countries like China, Kuwait, India and Pakistan and also for the export of gas to European countries including Austria.(448) In predicting indexes, the major role of government in the economy of Iran should be underlined. According to present assessments, the government has control over about 75% of the entire economy. The volume of government costs to the gross domestic production has reached 80% during the Third Economic Plan while most of the experts recommend it should change and reach 15 to 30 percent. Thus, in spite of plans and forecasts, only 45% of the projects for assigning government companies to the private sector were implemented in 2003 and this example can be generalized to other plans as well.(449) Increase of oil price during recent years and higher foreign currency revenues from oil exports and the consequent new investments in different economic fields especially industry sector with huge investment costs, has not reduced the major role of government sector in the entire economy of Iran, in spite of
efforts toward privatization and accelerated rate of assigning economic units to capitalists. In addition to these, what causes problems on way of the thinning of governmental economy is the fact that assigning government policies to private sector is a purposeful process which leads to the formation of new concessions and new exclusions and therefore reduces the competitiveness of domestic products with similar foreign products. As an example, the largest government unit assigned in 2004 was Khuzestan Cement Factory which was sold to the Social Security Organization, i.e. a subsidiary government organization in the price of 2060 billions Rials. Such examples are observed in other companies as well.(450) Thus, the government companies are conveyed to public institutions and organizations and attracting private capitals to the industrial sectors is prevented.

The cause should, among other things, be sought in the ancient structure of oriental-Iranian despotism. The Iranian statesmen, bureaucrats and theoreticians – of whom Nezamolmolk, the powerful vizier of Seljuk kings is a distinguished representative, knew centralized control over economic affairs by the government as a determining factor to guarantee national consistency and protect royal dynasties against domestic opposition and foreign neighbors.(451) Iranian despotism which is a special form of Oriental despotism has not yet changed much in its nature. Both named specifications, i.e. dependence of economy to oil and the determining role of government in economic structure, are remarkable in both regimes of Shah and the Islamic Republic, but in different forms. The memory of hundreds of years dominance of nomadic neighbors on the Country which was more than anything the result of decentralized feudalistic economic system and lack of a centralized government with high economic powers and authorities is still fresh in minds of the Iranians. The fear of destruction of unity and disjointing of the multinational country of Iran and separation of new parts from this territory – the last experience of which goes back to about 150 years ago – is a nightmare not only to the government and non-government authorities, heads of political parties and groups but also to the simple citizens as well.

The events in the East Europe after fall of Communism especially in the Balkans and the harsh political tensions in neighboring countries of Afghanistan, Iraq and Turkey and the new policies of American statesmen within the framework of expansion of militarism add to the historical and traditional concerns of Iranians. The other point is the
6.1 Statistical Theories for Economic Forecasts

Economic forecasts gain significance day by day. For example, 65% of American companies believe that marketing forecasts are of special importance to them and 95% of these companies regularly use forecasts for programming their activities. (453) Forecasts are important in planning and preventing or reducing mistakes and if used properly can help the profitability of economic units. (454) As for forecasting methods, two general systems can be named, quantitative methods and qualitative methods. From among the qualitative methods one can name of Delphi Method, representative assay and expert assay methods. Qualitative methods are more appropriate for very large areas and long-term scenarios. From among quantitative forecasting methods, we can name of the two methods of Time series model and causal model which have been used in the present study in the time series model section of univariant model. Quantitative methods are based on statistical data in the past and statistical forecasts can be offered with their help in different methods. Quantitative forecasting methods should be continually combined with qualitative methods and conform to the new changes. That's why there are many combined methods of quantitative and qualitative forms. In univariant model, there are different models including naïve Extrapolation, Moving Average, Exponential Smoothing, ARIMA Model and Trend Model. From among these forecasting methods, Trend Model has been used for the most important economic indexes, i.e. gross domestic production and the share of its sub-sectors and also the most important foreign trade indexes based on the statistical data of 1998 to 2003 and a short-term forecast until 2007 has been presented accordingly. Beside this quantitative forecast, the Writer has, based on his qualitative assessment of the economic status of Iran, added special positive and negative coefficients to the forecast of
some indexes to give this evaluation a qualitative dimension as well. In Trend Model, the statistical components are always offered in an equation affiliated to the time factor and the time unit is used as the variable depending on the type of the equation. The method selected for this forecast was the method of linear equation (Linear Trend Model) which is more frequently used in economics and is more common than other models.

Model: \( X_t = a + b.t + U_t \)

Prognosis: \( X_t + v = a + b \cdot (t + v) \).

In this model, the forecast equation is a line which is determined based on the statistical data in the time span under assessment. Parameter \( a \) is fixed and parameter \( b \) shows the direction of the forecast line. Parameter \( b \) is determined by Smallest Square Method. This forecast model has been presented in the three following scenarios for gross domestic production and its sub-sectors including agriculture, industry, oil and gas, water and power, construction and services based on the statistical data of the Statistical Center of Iran between years 1998 and 2003 for the four-year span of 2004 to 2007 and has been combined with various negative and positive coefficients based on the qualitative assessment of the Writer.

The same model has been used for forecasting years 2004 to 2007 in the said three scenarios in the areas of imports and exports and foreign trade balance with oil and gas, foreign trade balance without oil and gas and also based on statistical data of the Central Bank of the Islamic Republic of Iran. Statistical forecasts are based on the statistical data in the two following tables.

**DT 212 - Gross Domestic Productions (%) - DS**

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>13.57</td>
<td>15.86</td>
<td>13.85</td>
<td>12.91</td>
<td>12.42</td>
<td>12.30</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>17.12</td>
<td>16.11</td>
<td>18.12</td>
<td>17.60</td>
<td>18.60</td>
<td>18.50</td>
</tr>
<tr>
<td>Oil and Mining</td>
<td>11.80</td>
<td>11.46</td>
<td>10.18</td>
<td>10.27</td>
<td>9.22</td>
<td>10.25</td>
</tr>
<tr>
<td>Water, electricity, gas</td>
<td>1.86</td>
<td>1.65</td>
<td>1.58</td>
<td>1.44</td>
<td>1.17</td>
<td>1.44</td>
</tr>
<tr>
<td>Construction</td>
<td>5.10</td>
<td>4.02</td>
<td>4.56</td>
<td>6.33</td>
<td>6.26</td>
<td>5.45</td>
</tr>
<tr>
<td>Services</td>
<td>49.80</td>
<td>49.91</td>
<td>50.63</td>
<td>50.31</td>
<td>50.86</td>
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<tr>
<td><strong>G.D.P</strong></td>
<td>311123</td>
<td>322701</td>
<td>329103</td>
<td>348888</td>
<td>364566</td>
<td>375666</td>
</tr>
</tbody>
</table>
6.2 Scenario of "Economic Liberalism with Mullahs"

In the scenario of economic liberalism, we have forecasted the economic indexes with the assumption that the Islamic Regime is in power and the process of connecting economy of Iran to the global economy and change in economic structure or "economic liberalism" continues with the same existing parameters. This process started step by step since the presidency of Hashemi Rafsanjani and continued with some changes during the presidency of Khatami. The assessment is based on the assumption and the possibility that the conservative forces led by Rafsanjani or Khamenei, "Velayt-e-Faqih", or other ruling authorities may preserve the most important political and economic tools of power the same as now by relying on non-democratic institutions such as the "Council of Guardians" and "the Expediency Council" and so on and prevent the reformists to take power. Based on this probability, the changes in the most important economic indexes of Iran in the short run are forecasted. The statistical forecast includes the gross domestic production and the sub-sectors of agriculture, industry, oil and gas, power, water, construction and services on the one hand and provides a short-term forecast until year 2007 for the exports, imports and foreign trade balance of Iran on the other hand. In this scenario, we have forecasted in the area of gross domestic production and its sub-sectors without considering any special coefficient only based on the information available on years 1998 to 2003. If the process of changes during the past 6 years
continued with the same speed, we will face a growth of about 14% in gross domestic production within 4 years and in 2007, the gross domestic production can reach from 375666 billions Rials of 2003 to 431311 billions Rials. The share of sub-sectors will have a positive growth in industry, construction and services and a negative change in the fields of agriculture, oil and gas and power and water. The most positive change can be expected in the construction sector and the most reduction of share in the gross domestic production in water, power and agriculture sub-sectors. As the construction sector has undergone many fluctuations during 1998 to 2003, it can be presumed that actual change in the share of this sector will be less than the statistical forecast presented and instead, the share of oil and gas, services, agriculture and industry will practically increase a little. 6% annual growth for gross domestic production is envisaged in the Fourth Economic Development Plan but according to the available statistics, the gross domestic production has had near 12% growth during the five years from 1998 to 2003 and if no serious change in economic policies of the government did not occur, the statistical forecast without probability constant about 14% during the four years from 2004 to 2007 should be closer to reality.

*Diagram 214 - Forecast of the Sub-sectors of Gross Domestic Production(%) – "Economic Liberalism with Mullahs" -DS*
In the second part of this scenario, we forecast the exports, imports and foreign trade balance of Iran with oil and gas and without oil and gas. The statistical forecast of imports has been calculated without considering a special probability coefficient and with regard to the 5-year changes of 1998 to 2003, it can be anticipated that its amount will increase from 23.7 billions dollars in 2003 to 31.1 billions dollars in 2007, i.e. a growth near 30% during 4 years. For the export of oil and gas, a special growth coefficient of 10% has been calculated beside the statistical equation of forecasts. Extensive investments in the years following 2000 and new plans for discovery, extraction and export of gas and oil of Iran and also general trend of oil price increase in world market can yield results in the short run. On this basis, it can be expected that oil and gas exports may increase from 22.8 billions dollars in 2003 to 25.9 billions dollars in 2007. A 15% growth rate has been considered for non-oil products.
exports which especially returns to new investments of Iran in petrochemical section and its side industries. On this basis, it can be expected that non-oil exports of Iran will increase from 5.3 billions dollars in 2003 to 10.9 billions dollars in 2007. Considering the changes said, it can be expected that the trade balance deficit without oil and gas will increase from 18.4 billions dollars in 2003 to 20.1 billions dollars in 2007 and thus the dependence of economy to gas and oil exports will remain unchanged. The positive trade balance inclusive of oil and gas may improve because of the growth of oil and non-oil exports, in spite of growth of imports, and reach from 4.4 billions dollars in 2003 to 5.7 billions dollars in 2007.  

Diagram 216 - Forecast of imports and exports of Iran – "Economic Liberalism with Mullahs" -DS
6.3 Scenario of "Economic Liberalism without Mullahs"

The second scenario is based on the assumption that the role and power of non-democratic organizations such as the Expediency Council and the Council of Guardians and also the role of the religious leader "Velayt-e-Faqih" are reduced without intense political and economic tensions in a rather peaceful procedure and the reformists change into the decisive force and the determining factor in the political and economic life of the Country with their reliance to legal elected institutions such as the Islamic Consultative Assembly (Parliament) and the government elected by such a parliament or by
joining other opposition forces and the masses of people. If this happens, the policy of domestic and global economic liberalism the advocates of which are present in both conservative and reformist factions will be widened and deepened upon victory of the reformists. Assuming this possibility in mind, the writer presents a short-term forecast for the most important economic indexes of Iran.

Since after year 2000, some of the sources of power such as the Parliament and Presidency – of course with limited powers- fell in hands of the reformists and as no serious difference is observed between the general economic strategies of these reformists with the conservatives supporting the Velayat-e-Faqih Regime, no considerable changes in domestic economy and foreign trade can be anticipated if the reformists succeed to stabilize their position and it can be assumed that the indexes will mainly remain within the framework of growth observed between 1998 to 2003.

On this basis, the forecast on sub-sectors of oil and gas, water and power, and construction is assessed within the same framework as that of the first scenario and only in the service sector, a 2% negative coefficient comparing with the scenario of "Economic Liberalism with Mullahs" and a 7% positive coefficient in industry sector against the linear equation of forecasts (Liniare Trend) are considered. Thus, the share of service sector in gross domestic production will reduce from 50.93% in 2004 to 48.12% in 2007 and the share of industry will increase from 18.5% to 25.98% during the same period.

This assessment is based on the assumption that by putting radical and dogmatic Mullahs aside, some displacements will happen in the economic management and, by employing the specialist forces a large number of whom are now outside the government due to different ideologies and ways of thinking, the quality of management and planning will improve. On the other hand, the economic bans against Iran will be removed and by attracting foreign capitals and part of the capitals of the Iranians residing overseas which is estimated about 800 billions dollars, the investment especially in industry will improve. The result of such conditions in forecasting short-term changes in gross domestic production is that a special growth coefficient equal to 4% is added to the forecast equation based on statistical data of 1998 to 2003. Thus, this index will increase more rapidly than the first scenario and will increase from 375666 billions Rials to 491711 billions Rials, i.e. near 30 percent.
Diagram 218 - Forecast of Sub-sectors of Gross Domestic Production(%) – "Economic Liberalism without Mullahs" -DS

fluctuations of sub-sectors of GDP in liberalism without Mullas in percentage- from statistical forecast of 2004

Diagram 219 - Statistical Forecast of Gross Domestic Production – "Economic Liberalism without Mullahs" -DS

change in the GDP in liberalism without Mullas in billion Rials- from forecast of year 2004

The result of improvement of economic conditions inside the Country and reducing tensions in foreign policy is calculated in the indexes related to imports, exports and trade balance. As for oil and gas exports, regarding the huge investments during 1998 to 2003 and the
predicted government plans especially in the Ministry of Petroleum, and also the dependence of Iranian economy on oil besides the limited share of Iran in OPEC, it cannot be expected to observe a considerable positive change, compared with the scenario of "Liberalism with Mullahs", in the oil and gas exports in the short run. Therefore, this index is predicted based on the statistics of 198 to 2003 without special coefficients, the same as the first scenario. The outcome of attracting capital to Iran and increasing share of industry has been reflected in the index of non-oil exports and imports. The special growth rate of non-oil exports, i.e. 35% (against 10% coefficient in the first scenario) has been calculated beside the forecast equation of Liniare Trend and consequently, it can be expected that this index will increase from 5.3 billions dollars in 2003 to 18.5 billions dollars in 2007. Growth of industry sector will be closely connected with the import of capital goods and industrial machinery. In this sector, beside the Liniare Trend forecast equation, a growth coefficient equal to 2% has been calculated. As we have considered a higher growth for non-oil exports compared with imports, a surplus of trade balance with oil has been calculated for 11.2 billions dollars and for the trade balance without oil and gas, a trade balance deficit of 14.6 billions dollars until 2007. Both indexes reflect improvement of foreign trade compared with the first scenario.

*Diagram 220 - Forecast of Imports and Exports of Iran – "Economic Liberalism without Mullahs"* -DS
6.4 Scenario of Tension

In the third scenario, the short-term economic forecast is based on the assumption that the clashes between "conservatives" and the opposition forces inside and outside Iran leads to severe tensions, extensive riots and strikes and disjoint the economy of the Country for a short while. The clashes during the past few years have shown that the conservatives led by "Velayt-e-Faqih" who have all the suppressive organizations under their control, are not willing to leave their unlimited powers easily. The problems facing the opposition is currently as follow: On the one hand, the non-reformist opposition forces have been severely suppressed during the past 25 years and their publications have been banned and therefore, they lack considerable practical power in Iran. On the other hand an extensive unity between the wide spectrum of forces opposing the Velayat-e-
Faqih Regime is lacking inside and outside Iran and the different groups are mainly wasting their energy on disputes over assessment of the present conditions and their role in the future government of Iran rather than reaching a unity so urgently needed. In case of coordination between opposition forces inside and outside Iran, victory over the police-military regime of Velayat-e-Faqih seems possible in the short run, because of the extensive disagreement of the people and their opposition to the Mullahs. The other factor which may increase the possibility of tension is related to the American foreign policy and the possibility of military attack on Iran.

In case the scenario of tension come true, as shown by the indexes after the second world war and also after 1979, we will face a negative trend approximately in all sections of the economy. The severity and length of such a trend is more dependent on political rather than economic parameters.

In calculating forecasts under scenario of tension, we have evaluated the share of all sectors except the agriculture and service sectors negative. The reason is that as a result of economic disintegration, the share of industry, oil and gas, water and power and construction in the gross domestic production will reduce due to insecurity, the same as the first years of Mullahs' Regime and during the Iran- Iraq war, and the focus will shift to domestic economy. Due to lack of sufficient foreign currency to import products needed in the Country, the agriculture sector that – contrary to some Latin American, African and Asian countries is mainly independent from global market and is a supplier to the domestic market, will add to its share. Economic insecurity, insufficient production of domestic industries and lack of supply of market demands through foreign products imports will lead to further expansion of trafficking and mediating jobs and it can be expected that the share of this sector will also increase. Beside the forecast equation, we have considered a positive growth coefficient of 10% for the agriculture sector and 5% for the service sector. Thus, the share of agriculture sector in gross domestic production will increase from 12.3% to 14.34% and the share of the service sector from 50.93% to 62.18%. A 5% negative coefficient is considered beside the forecast equation for oil and gas, water and power and construction sectors and for the industry sector which will be harmed more than all, a negative coefficient of 15% is calculated. This change will be reflected in the gross domestic production as well and considering the 15% negative coefficient beside forecast equation based on statistics.
of years 1998 to 2003, it can be expected that the gross
domestic production of Iran will decrease from 375666 billions Rials
in 2003 to 237521 billions Rials in 2007, i.e. near 35% reduction.

*Diagram 222 - Forecast of Sub-sectors of Gross Domestic
Production(%) - "Tension" - DS*

*Diagram 223 - Statistical Forecast of Gross Domestic Production –
"Tension" - DS*
A 10% negative coefficient has been considered beside forecast equation for oil and gas exports, because the need to Iran's oil in the global market due to the second position of Iran among OPEC members beside the necessity of supplying primary needs of the economy during tensions, the same as years before 1979, will make the statesmen put the export of oil and gas in their agenda. In view of the writer, the present conditions of Iran and the world, will not lead to a repetition of the conditions during Mosadegh after the Second World War and complete interruption of oil exports. Based on this calculation, it can be anticipated that the income of Iran from oil and gas exports will reduce from 22.8 billions dollars to 15.3 billions dollars during 2003 to 2007. As for the imports, due to crisis in domestic economy and reduced oil revenues, we have considered a 10% negative coefficient in addition to the forecast equation and therefore, the imports of Iran under this scenario will decrease from 23.8 billions dollars in 2003 to 22.1 billions dollars in 2007. It can be imagined that the composition of imported goods will also change and instead of capital goods and machinery, finished necessary products will be imported. Also due to insecurity and political tensions, an important portion of oil dollars will be spent, openly or secretly, for procurement of military items. As for non-oil exports most needs will be supplied from domestic market and the exports will greatly reduce due to disorder in domestic industries and considerable reduction in production of factories. For the non-oil exports, beside the forecast equation, a 30% negative coefficient has been calculated and consequently, it can be expected to decrease from 5.3 billions dollars in 2004 to 1.9 billions dollars in 2007 and the determining share in exports will not be industrial products but rather agricultural and traditional products such as dried fruits, rugs, caviar and so on. The reflection of this process will be a deficit of foreign trade balance with oil and gas and the increase of foreign trade deficit without oil and gas exports. Thus, the trade balance without oil and gas will reach from minus 18.4 billions dollars in 2003 to minus 20.1 billions dollars in 2007 and the total trade balance inclusive of exported oil and gas will reach from plus 4.4 billions dollars in 2003 to minus 6.7 billions dollars in 2007 and the amount of foreign debts will increase.
Diagram 224 - Forecast of Imports and Exports of Iran – "Tension" - DS

fluctuations of exports and import in scenario of tension in million dollars- forecast for 2004

Diagram 225 - Forecast of Trade Balance with and without Oil – "Tension" - DS

fluctuations of trade balance with or without oil in scenario of tension in million dollars- forecast of year 2004
7. Guidelines for Foreign Investors, Exporters and Importers

Iran is one of the populous countries and a great market in West Asia. Iran has special economic, political and cultural influence on the changes and markets of the region. In spite of economic difficulties, Iran can be evaluated a rich country because of abundant oil and gas resources who will enjoy good stable financial resources in the coming decades. The conditions for bilateral and multilateral economic cooperation are improving and what shadows the development of these relationships depend on the type of government, probable political instabilities and extensive dissatisfaction of people with the non-democratic Islamic regime. What adds to the importance of economic role of Iran in the region relates to her special transit position and historical relations with the countries of the region. For these reasons, to the foreign investors, Iran can be a mean to neighboring markets as well. In view of change of laws, measures have been taken toward demands of World Trade Organization, World Bank and International Monetary Fund the reflection thereof can be seen in reduction of custom duties, reduction of subsidies, privatization of some banks and insurance firms, providing facilities for foreign investors, privatization of economic units, reducing inflation, relative stabilization of exchange rate, repayment of part of foreign debts, increase of the foreign currency reserves, efforts toward changing labor laws, reducing government budget deficit and increase of tax revenues. The reaction of international agencies to these measures is positive. For instance, Organization for Economic Cooperation and Development (OECD) has reduced the investment risk in Iran and the International Financial Institute "FIJ" has promoted the rank of Iran among the world countries and assessed the financial status of Iran as stable.(456) In case the scenario of "Liberalism with Mullahs" happened, investment in Iran during the next few years will be especially in the following sectors. For the execution of these plans, the statesmen and influential figures in economic sector mainly rely on cooperation of European countries and it can be anticipated that German, French and English firms be called for cooperation. Largest investments will go to oil and gas sector. In order to improve the economic position inside and outside the Country, Iran intends to invest near 40 billions dollars in oil, 45 billions dollars in gas, 25 billions dollars in petrochemical industry
and 20 billions dollars in power sectors until 2030. Major competitors of west European countries in these fields are Japan, Russia, China and India. The implementation of these plans are intended to improve the foreign currency incomes of Iran through oil and gas export on the one hand and to increase industrial products especially petrochemical products due to better economic infrastructures, on the other. Iran needs the experiences of major European companies including German companies for development of petrochemical establishments and hopes to attract their cooperation. The degree of progress of government plans in industries, services and agriculture is mainly dependent on oil and gas export revenues and therefore, the changes of these economic sections will remain subject to oil and gas sector as before. However since nearly 80% of the economic activities in Iran are under government control and especially the oil and gas sector is mainly controlled by the leadership system and the Ministry of Petroleum, it can be said that most of the major foreign economic contracts in near future will pass through this canal.

As concerns industry, in addition to development of petrochemical industries in Assaluyeh Industrial Zone in the south of Iran, the authorities, especially in the Ministry of Petroleum, intend to establish a huge complex of downstream factories of these industries in the region for which financial support by relevant ministries has been even envisaged. Private sector, semi-government sector and governmental sector need foreign cooperation and investment in execution of these projects and it is expected that a major part of machinery and services needed in these factories will be imported from European countries. Besides these plans, two other sectors also need special attention for economic cooperation. The first sector is automobile industry in Iran. Automobile industry in Iran underwent new changes after 2000 and different measures have been carried out for improving production quality, increase of number of products and planning for seizing a share in the automobile market of the regional countries including members of ECO. New investments in this sector can be expected and import of foreign machinery and services is significant. As for import of foreign automobiles to Iran, no clear decisions have been made so far and this issue is a matter of conflict among governmental organizations, legislative bodies and car manufacturers. However, it can be expected that by improving quality, increasing production and
reducing the price of Iran made cars; import of foreign cars will be facilitated. Beside automobile industry, increase of steel production is in the agenda and it is decided to increase the domestic production from near 8 millions tons in 2003 to 20 millions tons per annum and to this end, government and private investments are welcome. (458) One of the major business partners of Iran for the import of machinery and services will undoubted be European countries, especially Germany. The old common cooperation with Krup company can pave the way for such new cooperation. In addition to the said large industries which are mainly affiliated to governmental departments, medium size and small industries also are in urgent need for reconstruction and renovation. Most of these factories are of old production lines due to economic disorders after 1979 and the consequences of Iran-Iraq war and their products are not of desirable quality. The need to reconstruction and renovation of these units a large number of them possessed by subsidiary government institutions such as "Mostazafan Foundation", is urgent under the policy of open doors demanded by WTO, World Bank and IMF. Reducing custom tariffs for imported goods which are of lower cost and higher quality in comparison with domestic products has made the authorities of the Islamic Republic confront new problems. The bankruptcy of some of these factories is anticipated but the growing need to jobs for the unemployed young population forces the statesmen to improve production lines in some of these factories by means of new investments to produce goods compatible with imported ones. For this change, the same as other sectors, necessary machinery and services needs be imported. The most important sectors which need improvement in their production lines in the medium size and small industries are metal and non-metal production, food technology and textile factories which have been expanding in recent years. (459) Other plans in other industrial sectors such as IT, pharmaceutics, medical services, aviation, telecommunication and power transfer are in the agenda the manner of execution thereof is in disguise.

In the service sector, a more active participation of foreign companies in the field of banks and insurances can be hoped. In some service sectors such as tourism, no considerable foreign investment will occur if the scenario of "Liberalism with Mullahs" came true because of their religious fanaticism. However, if the scenario of "Liberalism without Mullahs" came true, it can be expected that domestic and foreign investment for tourist attraction may increase the same as in
Turkey and consequently, acceptable tourist centers will be built for foreign tourists. If so, employing the services of foreign firms will be inevitable. As for expansion of the activity of foreign banks and insurance firms, some of the laws inspired by the Constitution have been amended as required by international financial and commercial organizations and some other changes in the future are probable. In this regard, both major political factions in Iran, i.e. the "Conservatives" and the "Reformists" agree on basic lines and therefore, relatively similar changes can be expected under any of the two scenarios of "Liberalism with Mullahs" or "Liberalism without Mullahs".

The major step toward changing the Constitution was taken by the Expediency Council in 2004 in relation to Principle 44 for the privatization of the structure of Iranian economy. According to Principle 44 of the Constitution, foreign trade, banking, insurance, radio and television, post, telegraph and telephone, aviation, shipping and navigation, road and railways beside major industries and mines, power supply, dams and water supply network could exclusively be under public and governmental ownership. The outcome of these new decisions is that for the first time after 1979 a memorandum of understanding for the investment of World Bank in Iran was signed in 2004. On the other hand, activity of private sector in banks has expanded and movements for cooperation with foreign banks can be seen. Founders of some of the private banks are owners of industries, construction and installation companies and consulting engineers. Taxes are reduced to attract foreign capitals and get their trust and the single exchange rate program was implemented. However, the lack of necessary political stability hinders rapid growth of international financial cooperation. On the other hand, in order to reduce the government debts and the budget deficit, measures have been taken for sale of stocks of banks and insurance firms in the Stock Exchange, beside the sale of stocks of government factories. The possibility of participation of foreign capitals in Iranian stock markets is yet limited, although the increase of domestic transactions in Iranian stock exchange is considerable in the international scale and, for instance, has secured the fifth rank in the world in 2003.(460) As before, the agriculture sector of Iran will be less important for international cooperation than other sectors. The reason can be attributed to the closed economy of villages, insufficiency of irrigation system and low output of a large part of farmlands in international scale, shortage of
water and low precipitation. In spite of these difficulties, in some parts of Iran including southwest, north and center of Iran where there is sufficient water and precipitation, foreign investments were made before 1979 in large agro-industry units. This process stopped for about 2 decades and now, by new efforts to enlarge the farms and expand activities of private sector, attracting foreign investment in agriculture sectors it is gradually becoming possible. In addition to activity of foreign companies in large agro-industry units, it can be expected that the needs of Iran to machinery, equipment and services for constriction of dams, roads, water supply and irrigation will be expanded by predicted programs. Economic cooperation with foreign countries especially Germany for the improvement of water operation technology in Iran is expanding both in view of quantity and quality. Government investment, e.g. by Ministry of Energy for infrastructural projects of water in large cities, treatment and drainage of water in Iran with the cooperation of foreign companies are in the agenda. Economic cooperation in animal husbandry has a more clear perspective than in agronomy, because renovation and cooperation of private sector in this sector shows more development. Relative improvement of agriculture sector during the past few years has been indirectly reflected in the medium size and small industries of Iran. The necessity of improving production lines of food industries and their development as indicated before necessitates import of machinery, equipment and services. On the other hand, as the agriculture in Iran has not yet modernized and the domestically produced tractors and agricultural machines do not respond to the domestic market demand, increased import of such items can be also predicted with regard to government plans.

As for the exports, no considerable change in composition of goods can be expected. The same as before, the determining part of Iran exports will be oil and gas. According to the government plans, it can be expected that under the scenarios of "Liberalism with Mullahs" and "Liberalism without Mullahs", the export of gas and oil will increase. In case of the scenario of Tension, crisis in the global markets can be expected followed by further increase of oil price. Since in the future years, investment in gas sector has been foreseen more than in the oil sector, it can be expected that Iran will look for new customers in Europe for the sale of gas and its products. The aim of Iran is on the one hand quality and low cost production with the use of domestic advantages to attain a larger share of the world market.
On the other hand, Iran has expanded cooperation with other regional producers to control global prices. In the industrial sector exports, highest increase can be expected in petrochemical products which has been increasing during the past years. For importers in European countries, these products can be important and therefore a comparison of the price and quality of export commodities of the petrochemical industries of Iran with other international exports can be useful. An increase of agricultural and traditional exports of Iran such as dried fruits, caviar and carpet is expected but the percentage thereof in the total exports may increase according to the plans aiming at increase of industrial exports. One of the cases of dispute between Iran and the European Community is the issue of pistachio export. According to European experts, the Iranian pistachio does not have the required international standards and therefore its imports to Europe during past years has decreased. By the new measures taken in Iran, it can be expected that they will meet the requirements demanded by the Europeans and therefore, the European importers can continue import of high quality and sanitary pistachio from Iran that is currently the largest pistachio exporter in the world. No considerable export can be expected from Iran in service sector. Some plans are in process for some fields such as IT the actualization thereof depends on the follow up by the government authorities. Some efforts are under way for export of educational services by expanding activities of private universities of Iran named "Azad University" outside Iran especially in the Persian Gulf region. On the other hand, some services such as engineering, utilities, construction, health, oil and gas technology, dam construction and road construction services which are mainly private and have developed relatively high expertise, have been offered by the Iranian companies overseas especially in neighboring countries. However, these services are not still at the level to be widely used by companies in Europe and are therefore mainly of regional significance. Only in some fields, Iranian companies can compete the European companies in bids and tenders in the Persian Gulf, West Asian and Central Asian countries.

8. Facilities for Economic Improvement in Iran and some Conclusions

There are different outlooks among Iranian and International economic researchers on how to improve the economy in developing
world. Some of the economists and authorities in these countries are more inclined to economic independence, while other experts have a more extroversive outlook. The second approach has found many fans after the fall of communism among the former communist states. The advocates of introressive economy look at the determining role of economic independence in view of its political consequences. The dominance of this approach among experts and some political authorities in developing countries returns to aggressive colonial policies of the past centuries in these countries. This approach emphasizes on complete control over economy and natural resources, progress in concordance with national interests, eliminating interventions from developed capitalist countries in the domestic economic life of these countries and the end of misuse through foreign trade and the change of this relation to foreign economic relations based on mutual interests and the independent selection of economic policies by these governments. The way out of the problems is seen in the following policies among others:

- Ending the influence of exclusive concessions in the economy and nationalizing institutions fueling such influence
- Effective control over the operation of foreign capital and establishing new egalitarian relationships with them
- Concentration of key centers in hands of government sector, foundation of national economy and applying the methods of planning for progress
- Control of the activities of domestic capitalism and conducting it toward national interests, increasing productive investment and using local capital toward founding national economy
- Government control over foreign commerce and monetary system and control of parasitic uses of wealth accumulation
- Solving the problem of land and ending feudalistic and pre-feudalistic relations by developing cooperatives and supply of manpower for new industries.(461)

The discriminative colonial policy of developed capitalist states intensified the inclination to the above extroversive approach among economic experts and politicians in developing world. According to one survey, only during 1750 to 1810 that was the most important development period for British capitalism and accumulation of capital, an amount of 500 millions to 1 billion pound was transferred to England only as colonial income from Indian sources in addition to
the initial capital earned in wars and by usurping low social layers of England. The income earned from unequal trade with India should be added to the above amount. On the other hand, the income per capita in India reduced to one third from 1850 to 1900 because one fifth of the British expenditures were provided from the revenues in India.(462) The colonial policy of capitalist countries has undergone major changes but the process of transferring assets from third world countries to the developed world through international exclusions continues in modern ways. Before collapse of communism, some experts in the communist states and some third world countries talked of a shortcut called "non-capitalistic way to development" and its transcendence to governmental – socialistic economy. This theory which has an anti-capitalistic theme is based on the ideas of Lenin, the founder of the Soviet Union who believes that capitalistic development can be left incomplete or interrupted on the basis of a certain level of capitalistic relationships and then the socialistic economic relations based on collective ownership can be gradually substituted. The governmental class base that enters the path of non-capitalistic development is not the domestic bourgeoisie but the democratic revolutionary and anti-capitalistic forces.(463) Some experts divide the developing countries with distinguished anti-colonial position into four groups: The first group are the countries led by national capitalism and this leadership has anti-colonialist characteristics. The second group are the countries where revolutionary democrats composed of petit bourgeoisie; peasantry and proletariat are in full command and complete leadership. The third group where the communists and revolutionary democrats form the major force of the front and the leadership and the fourth group where the control of everything is in hands of communists.(464) The non-leftist and non-communist leaders in the third world countries who were treading the path of "non-capitalistic development", changed position before or after the fall of communism and returned to the capitalist development path. Both in countries who entered the path of capitalism since the very beginning and the countries who joined the global capitalism system later, the nationalist characteristics of national bourgeoisie are evident. In some countries, nationalism which has bourgeois – feudal foundation is inclined to religion and stabilizes its foundations by expansion of tribal, ethnic, religious, sectarian and religious, ethnic or racial prejudice and hatred. The pan-Islamic movement which was growing before the clergy came to power of
Iran and was led by the Saudi Arabia and some other countries had a more anti-communist character until the fall of the Soviet Union but has developed anti-capitalistic characteristics during the past two decades. This specification has a historical root in the East. The fights of the West Asian people in previous centuries, fist against the crusaders, then against the Ottomans and later against new foreign forces including British, French and Spaniards have been, in some periods, organized under the flag of Islam.

In the policy of capitalist countries toward the developing countries especially in West Asia, a tendency to preserve the backwardness and the ancient remnants including religious retrogression is clear. This tendency is mixed with the problems of the transition period in developing countries in the Far East, transition from old relationships to modern capitalistic relationships. These problems can be attributed to the following factors among other reasons. First that, deepening capitalistic relationships ends in expanding economic inequality and poverty of a large group of people and the reaction of petit bourgeois and peasant layers against this new phenomenon in the form of a religious combat is the most common way to resist. Secondly, in most developing countries of the East, a secular overwhelming ideology has not been powerful enough to close doors to the traditional, superstitious religious ideology in most cases. Thus, the conflict of ideologies and beliefs between retrogressive and modernist forces remains ambiguous and the amendment of religious ideology as in Europe in its new forms, i.e. Protestantism, Deism and so on does not occur. To conclude, the bourgeois ideology as a system of ideas and a set of definite standards cannot stabilize itself fully, not only in Africa and Asia, but even in a developed country like Japan. It is not unjustified why Nehru compares Gandhi, the leader of Indian movement, with Medieval Christian saints. The fact is that none of the religions of the East including Islam, Buddhism and especially Hinduism have faced fundamental bourgeois reforms. Thirdly, a large number of intellectuals, whether bourgeois theoreticians or leftist revolutionaries, have been and still are facing problems in establishing relationship with a large portion of workers and peasants, craftsmen and different rural layers who are still deep under traditional beliefs and who are mainly of a rural background. In Iran also, a major part of representatives of bourgeoisie and leftists such as the National Front and Iran People's Party were not capable of establishing proper
relations with the masses of people especially during the past three decades. The fourth and may be the most important factor is the special form of capitalistic growth in the countries of the East. As a case study, the classic sample of India will be a good example. In the second half of the 19th Century and following a series of riots, the British Regime set back against the farmers in some areas and then started to control the old trade apparatus of India and supported a group of local capitalists who later occupied the top positions in the industrial capitalism of India. This policy had some outcomes; first that the businessmen affiliated to the colonial system changed into industrial capitalists without leaving their parasitic function aside. Secondly, the usurers, speculators and merchants purchased stocks of British and Indian companies and became stockholders and thirdly, the landowners became industrial employers without having to disconnect themselves from feudalistic and semi-feudalistic relationships. This process was a different process with that in Europe which has transformed the ancient backward ideologies. In the capitalistic countries of Europe, the formation process of industrial bourgeoisie was that businessmen directly controlled the production or the producers changed into merchant and capitalist. This radical way of economic change requires radical change in old and religious ideologies. In India, in Iran and in many other countries in the East, the capitalists who participated in industrial and commercial activities, remained landowner as well and continued to enjoy the extensive advantages of feudalistic and semi-feudalistic relations. The major cause for disagreement of bourgeoisie in oriental countries including India and Iran with the implementation of agrarian reforms- contrary to what happened after the French Revolution in France- was this different process of economic changes and emergence of capitalism.(467)

The reflection of these general difficulties in industrial growth of developing countries in Iran was that, during the first, second and third phases of its reconstruction, i.e. during Qajar, First Pahlevid and Second Pahlevid regimes, the decaying feudalistic relations and traditional bazaar gradually lost their power but this was a difficult process continually hindered by reconciliations and coalitions between modern capitalists and traditional landowners and merchants. The serious elements inclined to preserving the backwardness and the remaining traditions of religion which was connected with the justice seeking tendency of the people, can be seen in the anti-Shiite Babist
movement during the Qajar, the Islamic clergy during the Constitutionalism Revolution and the Khomeini movement during Pahlevid. The rapid industrial growth during 70s which was mainly caused by oil dollars, the traditional structures were severely damaged. The Revolution of 1979 was, on the one hand, an effort by the lower social layers wishing justice and social welfare and on the other hand an effort by the traditional groups, middle class and part of the commercial capitalists and the bazaar of Iran under the leadership of Mullahs and relying on religious dogmatism for preventing modernization of the society. By the end of the war and the return of economic and social trend into ordinary conditions, the process which had started in the seventies and which has been interrupted since 1979, once again continued and was especially accelerated after year 2000. In view of the writer, the traditional structure of the Islamic Regime will undergo considerable changes in the near future which will be of special economic consequences. This process may be intensified by new changes in the region as well. Super-structurally, two approaches can act as the ideological support for these changes. The first possibility is the possibility of a cultural renaissance in Islam to adapt itself to the new and modern needs of the society. Politically speaking, such a renaissance will consequently require gradual change within the government of the Mullahs, elimination of Velayt-e-Faqih and despot religious institutions such as the Council of Guardians and so on. The second option is to return to the pre-revolution views and employing the ancient non-Islamic Iranian culture to reduce the influence of the Mullahs and dogmatic clergy in the political, social and economic life of the society. Three important indexes in the intellectual life of Iranians have been involved in their endeavor toward independence during the past few decades. First, reliance on national and ancestral values especially pre-Islamic values with a tint of ancient monarchies, second; reliance on religion as a source of national unity and third; the inclination to leftist egalitarian movements. The achievements of universal, especially European, culture have functioned as catalyst in all three approaches, although its influence in the Iranian religious movements has been less than in the other two. Contrary to the years after the Second World War when the leftist beliefs were one of the determining currents and the leftists had the most organized forces in Iran, they don't currently have considerable capabilities in the short run, due to domestic and international conditions, although their influence may develop under
semi-open political conditions, because of economic, political and historical reasons and especially the poverty of the masses of people. As concerns the religious forces, we can say that we have not yet experienced a religious renaissance as that of Europe. The signs of such a religious renaissance can be observed among the Islamic forces of the opposition during the recent years and after the failures of the Velayat-e-Faqih Regime, however, their traditionalism and conservatism diminishes the hope for such a transformation. In case of a renaissance in the Islamic beliefs and if the Islamic opposition forces stop conservatism and traditionalism and if these forces succeed to dominate the dogmatic elements, the survival of the Islamic Republic for some longer time can be deemed probable. Otherwise, in view of the writer, the fall of the government of Mullahs, if peaceful, will be in the form of scenario of "Liberalism without Mullahs", and if not peaceful, in the form of the scenario of "Revolution and Tension". The writer has formerly presented the economic effects of each of these scenarios on the most important economic indexes.
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