CHAPTER I: INTRODUCTION
Chapter One: Introduction

Section I

1. Background:

A financial system refers to the whole gamut of institutional arrangements which help to mobilize financial surpluses of an economy and transfer them to areas of financial deficit. The financial system is the linchpin of a modern industry economy. The financial system promotes savings by providing a wide variety of financial assets to the general public. Savings collected from the household sector are pooled together and allocated to various sectors of the economy for raising production levels. If the allocation of credit is socially equitable, it can help to uplift weaker sections of the society and contribute to the speedy development of the backward regions of the country and in a bank-based economy; banks are such engines of growth which when functioning with a tremendous market drive achieve economic democracy and economic freedom for the nation, releasing in its wake a sea of positive changes. The banks through generation, mobilization and channelization of the economic potential of each and every citizen can create potent mechanisms for the economic welfare of the country. Banks can innovatively design policies and programs within the economic philosophy/ ideology of the state for effective achievement of economic goals.

The banking system recognized to have important ramifications for the level and growth rate of national income via the identification and funding of productive investments. This, in turn, expected to induce a more efficient allocation of capital and foster growth.

The importance of banks in any country lies on how banks efficiently work for the contributions in terms of economic growth and development of a country. If a banking system fails to achieve the defined objectives, then the economic growth and development cannot be achieved as per policy objectives of the plans. Prof. Oslon in his study mentioned that without efficient financial institutions, economic growth cannot be achieved with proper target and that will contribute for further failure of the plans. Many studies ("Hassan Zadeh, A. & Soltani, Z." (2005), Razavi (2004), Agha
Babaei & Motavaseli (2004), Bakhtiari, (2005), etc) have mentioned that Iranian banks suffer from a low level of efficiency due to their limitations in effective utilization of their deposits, their inability to terminate excess employees, the absence of competition among their staff, management and among banks in general, collection difficulties and their high cost of collecting their suspect and bad debts\(^1\). It happens because of monopoly of the government banks and absence of competition among the other financial entities. As mentioned in literature, efficient banking system is a major contributor for the development. In case of Iran, it seems absent. Therefore, it requires detailed investigations of banking as to why and to what extent it fails to contribute efficiently to the economy.

Enduring growth, in the context of a developing economy invariably requires that the economy be put to a trajectory of higher savings and ensuring, further, that the realized savings are channelized into productive investment. In this scheme of growth, the banking system has a dual role to play. The banking system acts both as mobilizer of savings as well as an allocator of credit for production and investment. Effectiveness of the banking sector’s contribution to the economic growth and development is broadly determined by its efficiency in the allocation of the mobilized savings amongst competing projects. If any banking system wants to create international appearance then it has to adopt standardized practices according to the international norms.

2. Basel Norms:

The Bank for International Settlements (BIS)\(^2\) is an international organisation which fosters international monetary and financial cooperation and serves as a bank for central banks. The BIS fulfils this mandate by acting as;

- a forum to promote discussion and policy analysis among central banks and within the international financial community

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\(^1\) “Iranian banks take steps toward becoming more efficient”, Iran Economy, Monthly Magazine, No.22, Dec. 2000, p.3.

\(^2\) The head office is in Basel, Switzerland. There are two representative offices, one is in the Hong Kong Special Administrative Region of the People's Republic of China and second is in Mexico City. The organization was established on 17th May 1930. Since then it has been helping the member nations on policy matters. The BIS is the world's oldest international financial organization.
• a centre for economic and monetary research
• a prime counterparty for central banks in their financial transactions
• Agent or trustee in connection with international financial operations.

The BIS has been promoting monetary and financial stability, which are key objectives of the organization. The Governors and other senior officials of the BIS member central banks meet bimonthly to discuss monetary and financial matters, which are instrumental in pursuing the goals. The various standing committees, which have been set up for the policy matters, support the central banks of the member countries to formulate the policy on financial stability by providing background analysis and policy recommendations. One of these committees is Basle committee on banking supervision that exchange ideas among the member countries. The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. It seeks to do so by exchanging information on national supervisory issues, approaches and techniques, with a view of promoting common understanding. At times, the Committee uses this common understanding to develop guidelines and supervisory standards in areas where they are considered desirable. In this regard, the Committee is best known for its international standards on capital adequacy; the Core Principles for Effective Banking Supervision; and the Concordat on cross-border banking supervision. The Standards Implementation Group (SIG) as one of Basel sub-committee was originally established to share information and promote consistency in implementation of the Basel II Framework. In January 2009, its mandate was broadened to concentrate on implementation of Basel Committee guidance and standards more generally.

The Basel II Framework describes a more comprehensive measure and minimum standard for capital adequacy that national supervisory authorities are now working to implement through domestic rule-making and adoption procedures. It seeks to improve on the existing rules by aligning regulatory capital requirements more closely to the underlying risks that banks face. In addition, the Basel II Framework is intended to promote a more forward-looking approach to capital
supervision, one that encourages banks to identify the risks they may face, today and in the future and to develop or improve their ability to manage those risks. As a result, it is intended to be more flexible and better able to evolve with advances in markets and risk management practices. The efforts of the Basel Committee on Banking Supervision to revise the standards governing the capital adequacy of internationally active banks achieved a critical milestone in the publication of an agreed text in June 2004.

Basel II: International Convergence of Capital Measurement and Capital Standards, sets out the details of the agreed Framework for measuring capital adequacy and the minimum standard to be achieved which the national supervisory authorities represented on the Committee will propose for adoption in their respective countries. This framework and the standard it contains have been endorsed by the Central Bank Governors and Heads of Banking Supervision of the Group of Ten countries.

The Basel II developed the comprehensive guidelines to promote and enhance market discipline for the banks. The guidelines comprise three “Pillars”. The Pillar-1 concerns a number of options for calculating banks’ minimum capital charge for credit, operational and market risk. The Pillar-2 concerns the supervisory review process. The Pillar-3 concerns measures designed to promote enhanced market discipline. In providing a wide range of approaches, Basel II introduces regulatory capital requirements that capture risks more fully and are sensitive to the differing complexity of international banks.

From above discussion, it can be concluded that the Basel II developed the comprehensive guidelines, which are very important to promote and enhance operational efficiency of banks in any country in the world.

3. Statement of the problem

The Iranian banks are controlled by the government under the constitutional law. Basically, Iranian banks adopt the Islamic Banking Operation under “usury free banking law”, which was adopted in 1983. The government dominates

the policy, credit, management and ownership. Having this arrangement, about 18.9 percent outstanding facilities of banking system was “budgetary outstanding facilities”\(^4\) in 2000; which must go to finance the government companies for various development plans and schemes at rate fixed by the government.\(^5\) Accordingly, banks follow the directions of the government and provide credit to government listed companies. Under this direction, banks can not adopt “optimal investment plans” to achieve full efficiency as 18.9 percent credit must be provided at below market rate of interest. Therefore, this arrangement may affect the operational efficiency and profitability of banks. In fact, for remaining part of facilities, also there is no competitive atmosphere between public sector and private sector. On the other hand, because of monopoly of system the allocation of facilities are not percolated at the optimal line.

Secondly, more than 10 percent of banking facilities are categorized as Non-Performing Assets (NPAs). This took place because of mismanagement of assets’ quality norms. The NPA is higher in the case of Iran because the proposals which are submitted to demand loans are not being evaluated properly. There is no clients’ creditworthiness classification mechanism in banking system. As a result, the higher NPAs have been found in Iranian banks. The management of banks are also reluctant to have evaluated proposals to select the best proposals for credit allocation. Such kinds of practices generally lead to increase the loss in the banks.

Thirdly, the inflation is high in Iran. It is in an average ranging from 19 to 25%. These figures are generally high in any economy. However the average deposit rate of banks for general depositors is below than the inflation rate. Therefore, the real gain from deposit to general depositors is negative. This happens because of faulty monetary policy that affects the deposits/ resource mobilization by the banking system in the economy. Such a phenomena in economic literature is named “Financial Repression”.

\(^4\) Includes facilities banks are obliged to extend according to Budget Notes. It is noteworthy that the numbers mentioned herein are based on banks’ ledgers, including budgetary facilities as well as profit and revenue receivables.

\(^5\) According to the 3\(^{rd}\) FYDP (2001-2005), government obliged to reduce the sum of directed or mandatory facilities from commercial banks by 10% annually.
Fourthly, despite having the international standards norms (Basel II Committee Norms) for the banking sector to make progress in credit and market discipline in the economy, the Iranian banks are lacking to adopt the standard practices fully. However, the central bank of Iran has been trying to adopt at least partially, so that banking sector will perform as per expectations. As a result, banks in Iran have been functioning below the expected line of efficiency. The banks always suffer from low level of efficiency due to their limitations in effective utilization of their deposits, inability to terminate excess employees, the absence of competition among their staff, management and among the banks in general, difficulties in collection of debt; as a result, banks run in loss. In addition to these, low capital adequacy, low rate of profitability and substandard methods adopted for risk management are contributing to weakness of the banking sector in Iran. Though the banking sector in other countries have been moving towards to adopt “the Basel II norms” for best practices and market discipline, the Iranian banks still failed to adopt the norms. The present status of the working of Iranian banks is somewhat in dormant conditions and ugly state of affairs. Such state of affairs is not expected in any country of the world as per international bank standard practices. Unhealthy practices must be rectified to compete with international banks, which make presence in more than one country.

Fifthly, the financial system of Iran is a closed financial system that has been controlled by government. So, financial liberalisation in the country depends upon the government policy for fulfilment of financial development and financial depth which lead to development of domestic financial markets that compete with international markets. If the Iranian financial system is liberalized by the government then, how Iranian financial system will behave that needs to be assessed.

Sixthly, the institutional arrangement of banking system in Iran is defective that prevents “discipline market mechanism” in the financial market. Further, this defective system affects the efficiency of banking. Therefore, it is necessary that how to restrict the unvalued or unhealthy environment in the financial system that requires to study.
Now there are several questions to study with the objectives of study like; why the Iranian banks failed to adopt the best practices for operation of banks and to increase the efficiency of the banks? Why did Iranian banks fail to adopt the international standard norms to increase the banking efficiency? Why banks failed to bring down the NPAs and increase their profitability? These are the questions that need thorough investigations. Therefore, it is necessary that one must look into severity of problems that banking sector in Iran are facing and very important for the development of banking sector in general and economic development in particular. So to get some answers of the questions, Data Envelopment Analysis (DEA) method will be used in this thesis. The detailed explanation about the method has been given in the separate section and chapter.

4. Need and scope of the Study

As it is already discussed in the statement of problems, the need of study about the banking efficiency and their performance arise due to underperformance and performance behind expected line in the banking sector. These caused underperformance operational efficiency and that led to low profitability in banking sector. Under such circumstances, banks cannot survive and cannot create competitive atmosphere among the different banking segments. This is one of the worries that hit the whole banking sector and further credit flow will be affected and finally, economy will get affected. Therefore, this study requires looking into and having a lot of attention to improve the banking efficiency and their profitability that will help the banking sector's sustainability in the country.

The scope of study is wide and long lasting, if it has been paid proper attention for efficient working of banks. There is wide scope for improvement in structural efficiency, organizational improvement, coherence in institutional arrangements etc. All these together will help to increase overall efficiency and performance of banking sector. Keeping this in mind, this study will cover ten state banks, which are controlled by the government and having more than 80 percent of the banking business in the country. This study will cover the efficiency and performance of ten state banks namely; Sepah Bank, Saderat Bank, Tejarat Bank, Melli (National) Bank of Iran, Refah Bank, Mellat Bank, Maskan Bank, Keshavarzi
Bank, Industry & Mine Bank, Tose’eh Saderat Bank. The study will cover the time period from 1995-2005.

5. Significance of Study

The study can suggest the various analyses to perform with better efficiency in the banking sector while functioning in the economy. In brief, this study will increase the wide significance in overall banking matter and will provides a good indicator of success or otherwise of a bank in a competitive market; secondly, it also reflects the potentiality for failure of a banking institution. The study will reveal which banks perform and operate efficiently and have a better chance of sustaining their business in the future.

The aim of the study is to assess the performance of banking sector in Iran and also to estimate as to how they are earning their potential profits (profit efficiency) over 1995-2005. This issue is important because the financial sector plays a major role as a key sector in economy. The financial sector has the large number of employers and contributors to the national economy in terms of value added overall services, accounting for over 4.5 percent of GDP. Furthermore, the issue of efficiency in banking is important at the micro and macroeconomic levels since efficiency has important policy implications. In the past, financial institutions used to enjoy local oligopolies and therefore make rewarding profits, but in recent years banking industry faces competitive pressure worldwide as the financial structure changes rapidly.

Furthermore, bank efficiency is a socially optimal target since it reduces the average cost of financial transactions and therefore enhances the society’s welfare. When a financial system is operating at peak efficiency, investors receive the highest risk-adjusted returns on their investments, and borrowers also minimize the costs of raising capital at a lower rate. With an efficient financial system, economic resources are allocated to the most productive investments. Another key reason to promote

\[ \text{All the detailed information, tables of variables and website address have been given at appendix no: I} \]
efficiency in the financial system is the importance of the financial sector to the industrial base.

6. Financial Systems

Iran has a bank-based financial system. The other countries have adopted the market-based financial system. However, Iranian banking system is not familiar with the market-based financial system. Why Iran has not adopted the market-based financial system requires study. Also, it is needed to study both systems to find out which system is best or both systems are good.

There is a close relationship between financial system and economic development of the country. Historians, like Gerschenkron (1962) explained a perceived relation between the differences in the pattern of economic development in Britain and the Continental European economy and the differences between bank-based and market-based financial systems. More recently, the differences in the relative performance of the Japanese and the US economy have led observers to conclude that bank-based and market-based financial systems may produce different growth patterns.

This view has been challenged by Laporta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) (1998, 1999), who argued that the legal system in a country is a primary determinant of the effectiveness of its financial system. An implication of this hypothesis is that the distinction between market-based and bank-based financial systems may not be of primary importance for policy.

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7 Among a financial system's major tasks is to mobilize resources for investment, select investment projects to be funded, and to provide incentives for the monitoring of the performance of the funded investments. A large body of theoretical and empirical research has analyzed how these tasks are performed in a market-based system, and how they are performed in a system where banks and other financial intermediaries play a major role.


Economists have a long debate on the advantages and disadvantages of bank-based financial systems which are found in Germany and Japan; in these countries, banks play a leading role in mobilizing savings, allocating capital, overseeing the investment decision of corporate managers and providing technical inputs on risk management. In market-based financial system such as England and the United States, security market share centre stage with banks for getting society’s surplus savings into firms, exerting corporate control and easing risk management. Some analysts while doing cross country study on bank-based and market-based financial system suggest that markets are more effective in providing financial services and the advantages of intermediaries. However, the debate on superiority is still continuing unresolved.

Implicit in the bank-based versus market-based debate is a notion of trade-off. To provide the analytical basis for this trade-off, corporate finance and development economics can be used. Many development economists argue that investment is the key to economic growth and they note that much more corporate finance can be raised from banks than equity sales even in the most developed markets. This view produces a pessimistic assessment of the role of markets as compared to role of banks in fostering growth. Moreover, many development economists [Modigliani and Miller 1958] noted that markets can destabilize economy that focus on banks and echoed stock markets as unimportant –and perhaps dangerous– sideshows. On the other hand, traditional corporate finance theory views debt and equity –and through this prism, banks and equity markets– as substitute sources of finance.

The bank-based view stresses the importance of financial intermediation in ameliorating information asymmetries and temporal transaction costs. According to

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12 Rose Levine, (2000),“Bank-based or market-based financial systems: which is better?” finance Department, Carlson school of management, University of Minnesota.
14 For discussion of development economics and its erroneous stress on capital accumulation, see Easterly and Levine (1999). For evidence on corporate finance around the globe, see Mayer (1980).
this view, bank-based financial systems—especially in countries at early stages of economic development—are better than market-based financial systems at promoting economic growth.\textsuperscript{16}

The market-based view stresses the importance of well-functioning security markets in providing incentives for investors to acquire information, impose corporate control, and custom design financial arrangements.

However, the financial service view does not conceptually reject the bank-based versus market-based debate. Rather, it emphasizes that both banks and markets can provide financial services that foster economic growth.\textsuperscript{17}

Asli Demirgue-Kunt and Vojislav Maksimovic,\textsuperscript{18} have found that the proportion of firms, which grow at rates that cannot be self-financed is positively related to the development of both the security markets and the banking system. Their results show that the stock market and banking system development on firms’ growth is closely tied to the level of development of the country’s contracting environment. Development of the financial system beyond that predicted by the contracting environment is not significantly related to the ability of firms to obtain external financing. By using several proxies, they found no evidence that the relative levels of development of the security markets compared to that of the banking sector affect firms’ success to external financing. Thus, there is no evidence found that the development of a market-based or bank-based financial system per se affects access to financing. R. Levine, [2000] made comparison study on bank-based versus market-based financial systems and come to conclusion as:

Banks, nonbanks and stock markets are larger, more active and more efficient in richer countries. Financial systems on average are more developed in richer countries. In higher income countries, stock markets become more active to banks.

\textsuperscript{16} Ross Levine, “Bank-Based or Market-Based Financial Systems: Which is better?”, Finance Department, Carlson School of management, University of Minnesota, 2000, P-4.

\textsuperscript{17} Ibid, P-3.

\textsuperscript{18} Asli Demirgue-Kunt and Vojislav Maksimovic, “funding growth in bank-based or market-based financial systems: Evidence from firm level data”
There is some tendency for national financial systems to become more market oriented, as they become richer.

Countries with a Common Law Tradition, strong protection of shareholder right, good accounting regulations, low levels of corruption and no explicit deposit insurance tend to be more market-based. Countries with a French Civil Law tradition, poor protection of shareholder and creditor rights, poor contract enforcement and high levels of corruption, poor accounting standards, restrictive banking regulations, and high inflation trend to have underdeveloped financial systems.

While comparing the relation of inflation types of financial system, it is found that:

"High-inflation economy is much more likely to have underdeveloped financial systems, but inflation is not strongly linked with whether a country's financial system is bank-based or market-based."^{19}

Huybens and Smith (1999) and Boyd, Levine, and Smith (1999) confirm that higher levels of inflation produce smaller, less active and less efficient banks and markets.\(^{20}\)

The financial sector may contribute to macroeconomic stability by insulating the economy from interest rate shocks, or more generally liquidity shocks. This issue appears to be particularly relevant for bank-based financial systems where retail rates play an important role (see Allen and Gale, 2000). Moreover, Kwapił and Scharler (2006)^{21} compare the Euro area and the US as examples of bank-based and market-based financial systems respectively and found that interest rate was substantially lower in the Euro area. Along these lines, Issuing (2002) argues that since

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relationship lending is relatively widespread in the Euro area, business cycles should be smoother.\(^{22}\)

In addition, it remains an open issue whether the establishment of long-term relationships between financial intermediaries and their clients represents an advantage of bank-based systems over market-based systems (Allen and Gale, 2000, 2004). Since, as has been discussed in the previous paragraphs about the financial sector, given the dominance of bank-based financial systems in most emerging markets including Iran’s banking system and the systemic importance of banks in the financial system, the banking sector continues to be the centre of attention for academia and policymakers alike. The share of financial services sector in Iran during last five years exponentially increased from 2 percent to 4.5 percent of GDP. However, the long term health of this sector may be at risk unless there is an increase in its efficiency and competitiveness. An efficient financial system is crucial for achieving sustained economic growth and prosperity in the country. Iranian banking sector has passed through many phases of transformation in recent decades:

- Islamic Revolution (1979) and after that Nationalization of banks
- The law for usury-free banking – restructuring and deregulation
- Banks privatization, reforms and liberalization and modernization of facilities

But Iran banking sector is still dominated by the Public Sector Banks.

7. Structure of Banking System

The structure of banking system in Iran has undergone through different phases. Particularly the banking system had different structure before Islamic revolution era and after Islamic revolution, Iran adopted the present banking structure to control over the credit flow into the economy. The banking system consists of the Central Bank (Bank Markazi), banks and Credit Institutions as follow:

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• Commercial Government-owned Banks: Bank Melli Iran, Bank Mellat, Post Bank of Iran, Bank Refah, Bank Saderat Iran, Sepah Bank, Tejarat Bank

• Near-Bank: Credit Institution for Development, Sina non-banking credit Institution

• Private Banks: Eghtesad Novin Bank, Karafarin Bank, Parsian Bank, Saman Bank, Sarmayeh Bank

• Specialized Government: Export Development Bank of Iran, Bank of Industry & Mine, Bank Keshavarzi (Agriculture Bank), Bank Maskan

Structure of Banks & Credit Institutes’ Supervision Department includes banking studies & regulations, off-site supervision, banks supervision and non-banking monetary institutions director.

Figure 1-1- Structure of Supervision Department in Central Bank of I.R. Iran

The aim of banking Supervision Department is to ensure the safety and soundness of banks and Credit Institutions through periodic and ad hoc inspections. The primary objective of the Banking Studies & Regulations Department is to design and formulate rules, regulations and frameworks which are necessary for exercising effective supervision on Banking and Credit Institutions; emphasizing risk-based surveillance. Also, in order to enhance quality of supervision on banks and credit institutions; the department is responsible for continuous survey regarding banking
developments as well as international banking, supervisory standards and procedures across the world and contribution to customizing them.

8. The Regulatory Mechanism

After the victory of the Islamic revolution in Iran the banking system is operating under the monetary & credit banking law, law Nationalising Banks, Usury free banking law.

After Islamic revolution in 1979 in order to protect national rights and capital, set the wheels of production in the country into motion and safeguard the deposits and savings of people in the banks, while accepting the principal of right and conditional ownership and inconsideration of the mode of acquisition of income of the banks, and the illegal transfer of capital abroad, the Iranian banks consolidated and nationalised.

So Iran nationalized its domestic banks in the December 1979. Since then, state-owned credit and saving institutions have held a dominant role in the financial sector. And according to Article 44 of Iran Constitutional Law, banking services have state ownership and also foreign ownership of the banks prohibited.

The Law for usury-free banking in Islamic Republic of Iran has mentioned different aims and duties as follows:

1. Creation of a monetary and credit system based on rights and justice (in an Islamic framework) for the regulation of proper circulation of money and credit towards economic stability and development of the country,

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23 Nationalisation of the banking system in Iran took place by ownership change to the government ownership as well as state-management regulations which according to article 43 and 44 banking system backed the Islamic government policies in following social justice of society.

24 Shirazi, Habib; “Iran: Banking Laws and Regulations”, Monetary and Banking Research Institute, 1996.

25 Recently by order of the supreme leader based on “article 44 reforms Plan” by expediency council, some reforms regarding to privatization of the government-owned companies took place and also a few banks privatized and they offered the public share in stock exchange.

26 Habib Shirazi, (1996 ); “Iran: Banking Laws and Regulations”, monetary and banking research institute - Tehran
2. Working towards the fulfilment of the economic aims, policies and plans of the government of the Islamic Republic, with the help of monetary and credit instruments.

3. Creation of necessary facilities for the spread of public co-operative movement and qard-al-hasanaah, through the attraction and absorption of surplus moneys, reserves, savings and deposits and collection and harnessing of the same for the creation of conditions and opportunities for work and investment, in pursuance of the fulfilment.

So Iranian government should be able to make the optimal combination of the justice and efficiency terms trade-off by establishing a regulatory mechanism, according to Islamic banking to fulfilment of those aims by restrictions in the structure of Iranian banking system.

According to the “usury free banking law” the Iranian banking is based on idea of profit/loss sharing mechanism like mosharakah mode, partnership or direct investment by the long-term facilities outstanding others are fixed agreed rates transactions like ijarah, or salaf or mark-up and so on. Qard-al-hasanaah or interest-free outstanding mode of facilities is through the basic justice aim of the Islamic banking system for helping the needy in the consumption loans.

In the regulatory mechanism of financial system the independence of surveillance institution regarding a decrease in transaction costs of system has an important role, and it is run by the central bank of Iran.

Two main index of independence of surveillance institution and monitoring power of the system measured by the inflation rate and central bank claims from public sector (Komijani, 2003). The double digit inflation rate and high volume of public debt to central bank indicates the low level of independence of central bank.

Based on the country’s general economic policies and priorities set, as well as taking into consideration its monetary situation, central bank of Iran shall formulate the general policy guidelines for credit and provision of banking facilities, for the term of each plan, whether five year or longer, with due regard to economic impact, so as to be submitted, subsequent to adoption by the currency and credit council, together with the bills and development plans to the parliament.
Also the central bank by:

- Determining the various fields for investment and partnership, with due regard to the economic policies approved by the council of ministers,
- Determining the minimum projected rate of profit (return) for the purpose of selection of investment or partnership projects,
- Determining the minimum or maximum share of the profit for banks in Modarabah, and partnership transaction and other modes,
- Determining the minimum and maximum amount of facilities provided by the banks, from the investment deposits and banks own resources,

These regulatory articles will fulfil the credit policy and monitoring the banking system operation.

The governance structure of the state-banks are so far from corporate governance arrangements and most likely to a centralized governing system by the general assembly of banks which is macro-level decision-making, will take place for each individual banks like decisions regarding reserves of each bank and approval of dividends, and nominate the members of board of directors of each bank on the recommendation of the high banking council which are most likely involved in the administrative affairs of the bank and not governing the individual banks.

9. Importance of Efficiency

The importance of efficiency in economic literature is tremendous in terms of concept, models, calculation and for framing the economic utilization of scarce resources in the economics. The term efficiency entails how to utilize scarce resources for best possible outputs. Accordingly the best combination of inputs is necessary to get best output from the combination. Therefore, to achieve the maximum output from the possible combinations, efficiency plays important role to achieve the defined goals.

Now the importance of efficiency in Banking Sectir will be discussed in the following paragraphs:
10. Importance of Efficiency of Banking Sector

In the modern economic theories, the financial sector plays vital role for economic growth and development of every country. A dynamic and efficient financial sector is essential for Macroeconomic decision-making regarding the fulfilment of economic policies of the government for development plans.

An efficient financial sector is necessary for the optimal use of financial resources of the country. Economic development can be achieved by using existing resources more abundantly without any change in the production process or by combining already employed resources in a better way.

The role and functioning of the financial sector expected to affect the functioning and productivity of diverse parts of the economy. Efficient financial intermediation should help in improving economy-wide resource allocation thereby promoting productivity growth all rounds [R. Mohan, 2005]. So an efficient financial intermediary by optimal allocation of the financial resources to the optimal economic sectors and optimal economic plans will raise the efficiency and productivity across the economy and conduce to higher economic growth.

In developing countries the financial system most probably are bank-based financial system, it means because of undeveloped stock markets and capital markets the majority of the resource-flow is in the banking system (85 percent of the value-added of monetary and financial institutions’ services is created by the banking system in Iran). So the banking system in these countries has vital role in financial resources allocation to the alternative investment plans with most priority plans based on the optimization of the alternative plans by investment plans evaluation techniques. So by allocation of the resources to the optimal investment plans with economic & social priority on the basis of market mechanism will conduce to the efficiency of financial resources allocation and maximum comparative advantage of the society then maximize the utility of the society, so will conduct the economic

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growth of the society. In support of this, Rajan and Zingales\(^{29}\) (1998) established a positive relationship between financial development and economic growth at the industry level. Similarly, Demirgüç-Kunt and Maksimovic (1998) concluded that at the firm level, firms in countries with deeper financial development are able to obtain more external funds and thereby enabled to grow faster.\(^{30}\)

In order to provide a better understanding as to how financial intermediation improves resource allocation, it is necessary to examine how banks function and perform. Intermediation always lowers the transaction costs as it distributes the work efficiency among the various hands and by that the activity of banks’ functions efficiently can be improved. The contemporary banking theory\(^{31}\) classifies banking functions into four main categories:

1. Offering access to a payment system
2. Transforming assets
3. Managing risk
4. Processing information and monitoring borrowers

In view of this classification, the definition of banks as the institutions, whose current operations consist in making loans and supplying deposits may seem to be over simplified.\(^{32}\) These studies of banking efficiency are essentially micro-economic in nature and seek to analyze the efficiency and productivity of banking systems. Such analysis is of relevance from the policy standpoint, because as the finance-growth literature suggests, if banks become better-functioning entities, this is expected to be reflected in safety and soundness of the financial system and ultimately lead to increase in the rate of economic growth.

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\(^{30}\) See King and Levine (1993a,b) and Levine and Zervos (1998) for correlation and Levine, Loayza and Beck (1999), Beck, Levine and Loayza (1999), Neusser and Kugler (1998) and Rousseau and Wachtel (1998) for evidence on causality. Also, Demirgüç-Kunt and Maksimovic (1998) show that firms in countries with an active stock market and large banking sector grow faster than predicted by individual firm characteristics. Rajan and Zingales (1998) show that industries that rely more heavily on external finance grow faster in countries with better-developed financial systems.


\(^{32}\) Ibid
The conceptual framework of banking efficiency was explained by Hamim Syahrum Ahmad Mukhtar et al.\textsuperscript{33}, in detail, they show that one can easily understand the banking efficiency in literature; the framework demonstrates what is needed and what you need to know in analyzing the banking efficiency.

As shown in the Figure 1-2, the conceptual framework is divided into five (F1-F5) steps. In substance, the figure spells out the steps one has to follow in order to measure the efficiency of a production unit.

In step one (F1), for example, one has to illustrate or identify the main objectives of the study, which is to examine the efficiency of the bank. The measurement of efficiency would enable us to know the status of the individual banks’ efficiency and how it is compared among them. It is noted that while extensive literature has been developed to examine banking efficiency in the US and Europe\textsuperscript{34} (Berger & Humphrey, 1997; Goddard, Molyneux & Wilson, 2001), there is only limited literature on developing countries (Elzahi Saaid, 2002; Hussein, 2003). Step two (F2) in Figure 1-2 shows the type of efficiency used in the frontier efficiency measurement, which are technical and allocative efficiency. The allocative efficiency can be further divided into two main types of allocative efficiency: cost and profit efficiency. We reiterate here that a producer or service provider is considered \textbf{technically efficient} if he/she can produce more outputs from a given set of inputs or use less input to produce a given level of output (Kumbhakar & Lovell, 2003). We also note that a producer or service provider is considered \textbf{cost efficient} if he/she is able to produce a given output at a minimum cost. Similarly, he/she is deemed \textbf{revenue efficient} if he/she is able to maximize revenue from the utilization of given inputs. In the same vein, he/she is regarded as \textbf{profit efficient} if he/she is able to maximize profit from the allocated inputs and outputs. Next, step 3 (F3) in Figure 1-2 shows the two general methodologies that are commonly used to measure efficiency. They are: parametric approach using econometric techniques; and, nonparametric approach utilizing linear programming method. Both differ mainly in how they


\textsuperscript{34} Berger, A. And D.B.Humphry, (1997), “Efficiency of financial Institutions: International Survey and Directions for Future Research”, The Wharton School, University of Pennsylvania,
handle the random error and their assumptions regarding the shape of the efficient frontier. Each of the techniques has its own strengths and weaknesses. The parametric approach has the advantage of allowing noise in the measurement of inefficiency. However, the approach needs to specify the functional form for the production, cost or profit function. Non-parametric is simple and easy to calculate since it does not require specification of functional form (Coelli, 2004). However, it suffers from the drawback that all deviations from the best-practice frontier are attributed to inefficiency since it does not allow for noise to be taken into account. Common parametric methods are the Stochastic Frontier Approach (SFA), the Thick Frontier Approach (TFA) and the Distribution Free Approach (DFA), while the common nonparametric techniques are the Free Disposal Hull analysis (FDH) and the Data Envelopment Analysis (DEA). Berger and Humphrey (1997) found that out of 130 applications, more than half used nonparametric techniques and 60 were parametric which suggest no approaches dominate the other. McAllister and McManus (1993), Mitchell and Onvural (1996) and Wheelock and Wilson (2001) test and reject the translog specification of bank cost functions, and suggest semi-nonparametric or nonparametric methods for estimating bank costs. In contrast, Bauer et al. (1998) have found nonparametric techniques do not meet some of their consistency conditions and therefore some cautions should be taken before using them. The examples of DEA and SFA models are discussed in the Appendix.

After the type of efficiency and the measurement techniques, one has to decide the input and output variables. Specifically, step 4 (F4) in Figure 1-2 demonstrates the decision that a service provider has to undertake before measuring the bank’s efficiency. Any decision made, however, will essentially be subject to banks’ treatment of the money they received from the depositors as well as the money they extended to the creditors. In relation to this, two main approaches can be found in the literature. They are: the intermediation approach; and, the production approach.

The production approach defines the bank activity as production of services and views the banks as using physical inputs such as labor and capital to provide deposit and loan accounts. While the intermediation approach views banks as the intermediator of financial services and assumes that banks collect deposits, using
labor and capital, then intermediate those sources of funds into loans and other earning assets (Sealey & Lindley, 1977). This intermediation approach is argued to be particularly appropriate for banks where most activities consist of turning large deposits and funds purchased from other financial institutions into loans or financing and investments (Favero & Papi, 1995).

In practice, the intermediation approach is the most widely used in the banking literature (Kwan, 2002). In choosing the appropriate approach, Berger and Humphrey (1997) suggested that the intermediation approach is the most appropriate for evaluating the entire bank because it is inclusive of interest expense (income paid to depositors), which often accounts for one-half to two-third of total costs. Meanwhile, he recommended that the production approach is more appropriate for evaluating the efficiency of the bank's branches because branches process customer documents for the banks as a whole.

In the intermediation approach it is obvious that the banking operation process produces joint-outputs. That is to say, banks produce different outputs from the same set of inputs. To give but one example, the same staff, office space and deposits and funds (for brevity, they are called inputs) are used to provide financial assistance to corporate or retail clients. At the same time they are used to conduct other business dealings like investment and trade, which generate returns for the banks and subsequently depositors.

Finally, after going through all the process discussed earlier, you will get the efficiency results (step 5 in Figure 1-2). A value of 1 or 100% indicates full efficiency and operations on the frontier. A value of less than 1 or 100% reflects operations below the frontier. The wedge between 1 and the value observed measures the inefficiency.

From above structural methodologies, which are shown in the figure below, one can arrive to indicate the efficiency index value that will be between 0 and 1 or 0 and 100%. In more details, value of 1 or 100% indicating full efficiency and a value less than 1 or 100% reflects operations below the efficient condition.
Figure 1-2 - Conceptual Frame Work of Banking Efficiency

F1: Objective - to measure efficiency of the banks

F2: Type of Efficiency
   - Technical Efficiency (Farrell, 1957)
   - Allocative/Economic Efficiency (Farell, 1957)
      - Cost efficiency (Berger & Mester, 1997)
      - Profit Efficiency (Berger & Mester, 1997)

F3: Estimation Techniques
   - Parametric Approach
     - SFA (ALS, 1977, MVB, 1977)*
     - DFA (Berger, 1993)
     - TFA (Berger & Humprey, 1991, 1992)
     - DEA (Charnes, Cooper & Rhoades, 1978)*
   - Non-Parametric Approach
     - FDH (Deprins et. Al, 1984)

F4: Definition of input/output variables
   - Environmental Variables
     - Regulatory-specific Variables
     - Bank-specific Variables
     - Production Approach (Cobb & Douglas, 1928)
     - Intermediation Approach (Sealey and Lindly, 1977)

F5: Efficiency Results & Findings
   - Previous Empirical Research
     - US & Europe (e.g. Berger & Humprey, 1997)
     - Asia & Middle East (e.g. Abd. Karim, 2001)

1. General Overview of I.R. Iran

This section gives the picture of general overview of Islamic Republic of Iran, so that general researcher will understand and come to know the present scenario of the country. The Islamic Republic of Iran (IRI) is one of the big countries in terms of area and population with rich underground and natural resources such as oil, gas, diverse mines with 70% of population are highly educated youth as a rich human capital in the Middle-East and Persian Gulf region. From long ago, since its strategic location in Persian Gulf and having underground resources, the country was become a crisis region that can prove as a threat to the security for the entire world.

Iran has the second largest population after Egypt in the Middle East and North African region. Most of its 69.1 million people are young. Larger numbers of increasingly well-educated women seek opportunities to participate at all levels of Iran’s labor market and civil society. According to the World Bank’s recent report, the country’s health and education indicators are among the best in the region.

i. Geography and Climate

The Islamic Republic of Iran covers, 1,745,150 square kilometres and is strategically located between Pakistan, Afghanistan, Turkmenistan, Azerbaijan, Armenia, Turkey, Iraq, The Persian Gulf and the Sea of Oman. It is five times size of Italy, and equals the total area of England, France, Germany, Belgium, Holland and Denmark combined. Due to its vast area, the country is subject to a broad array of climatic conditions varying from the sub-tropical to the sub-polar. The country’s diverse climate can be categorized within the following climatic zones:

---

35 Middle East countries includes: Algeria, Bahrain, Djibouti, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, U.A.E. and Yemen
36 Iran and Persian Gulf strategic location map has been given at appendix II.
37 Business Week, "Iran ... One of the world’s most strategically important countries", May 26, 1997
38 The relevant table and figure of middle east countries population has been given at appendix number II
39 World Development Indicators, 2008
40 Salehkhou. Ramin, "The Islamic Republic of Iran, Your Partner in Trade", The commerce printing & publication house, affiliated to the institute for trade studies & research, 1997.

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1. The lush Caspian littoral with its heavy rainfall and deep hardwood forests.

2. The snow covered mountainous regions which are subject to extreme cold and are centred on a triangular central depression. The western mountains of Iran, known as the Zagros range, run from the northwest to the southeast and span over 992km in length and 192km in width. The northern part of the triangle is covered by the Alborz mountain range, of which its highest peak, Mount Damavand, stands at some 5,699 meters.

3. The climate of the southern coastal region of the Persian Gulf which is characterized by its palm groves, low rainfall, high heat and humidity levels and moderately warm waters. (The Persian Gulf)

4. The climate of the central plateau with lengthy hot dry periods and barren, salty stretches of deserts.

About 11 percent of Iran’s land surface is classified as arable. The most productive agricultural land, bordering the Caspian Sea, makes up about 5.5 percent of the country’s total arable land area.

Figure 1-3- Geographical Map of I.R. Iran
ii. The Geo-economic Position and advantages of Iran

For some 1,800 years from 200 B.C to the 16th Century A.D. Iran served as a pivotal link for inter-community trading between the eastern and western hemispheres of the globe as manifested by the Silk Road, formerly the most important and well known trade artery in the world.

Today, as the world initiated the 21st century, the Islamic Republic of Iran’s position as a pivotal link between nations has again emerged. With the world now witnessing the increasing economic integration of nations, economic and technical factors are now the main impetus between inter-communal relations. The efficient movement of goods and services have become the pre-dominant themes and tools by which countries strive to develop their standards of living. Nowhere is this fact made clearer than by the geo-economic importance and special place that Iran holds in regional equations.

Because of its geographical position on the East-West junction, Iran’s access to important waterways such as the Persian Gulf, Sea of Oman and the Caspian Sea and their linkage via Iran to the former Silk Road land routes of Central Asia enable her to serve as a connecting bridge between Asia and Europe. This bridge has now once again become the focus of international attention and has created new geographic realities in the wake of the emergence of the Central Asia Republic and Caucasus following the dissolution of the Soviet Union.

This unique position is exemplified by the fact that only China shares borders with a minor part of Central Asia; Afghanistan is a completely land-locked country and Turkey shares its borders with Armenia and is itself reliant on Iran’s linking routes for its economic transactions. As such, only Russia and Iran share borders with the Caucasus and Central Asia, however Russia, unlike Iran, remains restricted by its historical lack of access to free warm water ports. It is within this context that the future integration of the Caucasus and Central Asia Republics into the international economic system will be reliant on Iran’s linkage routes. Not only will the nations of
Central Asia and the Caucasus gain access to free waters, but their rail networks will also be connected, via Iran, to those of North East Asia/Asia/Europe.41

The position of oil and gas as the most valuable commodity in international trade and the strategic significance of access to its supply shed new light on the geographical position of Iran; Situated between the Caspian Sea and the Persian Gulf, Iran serves as the most economically viable outlet for the export of the ample hydrocarbon resources of Iran's newly emerging, though landlocked, northern neighbors Kazakhstan, Azerbaijan and Turkmenistan. These three nations alone, who, with a combined total of 30 billion barrels of oil reserves and 220 trillion cubic feet (tcf) of gas reserves, are destined to become major players on the international market provided that proper export routes and markets are developed.

iii. Population and Demography

The international debate on population which began as part of the general discourse on development after the second world war had until recently been dominated by the demographic transition theory and its preoccupation with the consequences of the disturbed balance of births and deaths. Adjustment of rate of population growth is one of the important elements of development programming.

In 1991, according to an intercensal survey, the country's population was 55.8 million, and had grown at an annual rate of 2.5% since 1986. By the time the 1996 census was taken, Iran's population had risen to 60.06 million but the annual population growth rate had slowed to 1.47%. In 2006, Iran's population was 70.05 and had grown at an average rate of 1.6% per year since 1996. After one decade of high growth rate of population in Iran, it later decreased rapidly (figure 1-5).

According to Salehi-Isfahani (2005)42 the most important socio-economic event of the last century in Iran is the transition from high to low fertility. In 1986 the age structure of the number of children was the highest, but in 2006 the age pyramid

42 Salehi-Isfahani, Djavad, (2005), “Human resources in Iran: Potentials and Challenges”, Iranian Studies, Volume 38, Number 1
probably has its narrowest base of children and it will be same for next twenty years and after that there is a chance of increasing this number.\(^{43}\)

Figure 1-5- Population of Iran, 1881-2006

![Population of Iran, 1881-2006](image.png)

Source: statistical center of Iran

Figure 1-6- Growth rate of population of Iran, 1881-2006

![Growth rate of population of Iran, 1881-2006](image.png)

Source: statistical centre of Iran

a. The Gender Structure of the Population:

The sex ratio in Iran decline from 107 in 1966 to 103 in 2006. This decline attributed to: 1) More attention to health of mother and child before and after delivery and

\(^{43}\) Statistical Centre of Iran, I.R., Annual Reports and Household Censuses since 1980 till 2006

29
decrease in mortality of women. 2) Increased men mortality during the imposed war. 3) Immigration of men more than women to other countries.

**Table 1-1 - The gender structure of population, 1966 – 1996**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (thousands)</th>
<th>Sex ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Men</td>
</tr>
<tr>
<td>1966</td>
<td>25,789</td>
<td>13,356</td>
</tr>
<tr>
<td>1976</td>
<td>33,708</td>
<td>17,356</td>
</tr>
<tr>
<td>1986</td>
<td>49,445</td>
<td>25,281</td>
</tr>
<tr>
<td>1991</td>
<td>55281.7</td>
<td>28304.8</td>
</tr>
<tr>
<td>1996</td>
<td>60,055</td>
<td>30,515</td>
</tr>
<tr>
<td>2001</td>
<td>64978.4</td>
<td>33355.7</td>
</tr>
<tr>
<td>2006</td>
<td>70097.9</td>
<td>35616750</td>
</tr>
</tbody>
</table>

Source: statistical centre of Iran

b. **Distribution of Population in Rural – Urban Areas:**

From 1956 to 2006, urbanization increased from 31.41% to 66.67%. Many factors contributed to the growth of the country’s urban population in the last 50 years, including urban migration, the settlement of tribal people in newly constructed townships, the spontaneous expansion of villages into towns, and the development of existing villages and other settlements in peri-urban areas. Many of these changes also resulted in further expansion of major cities.

**Figure 1-7 Changes in total population, rural and urban, 1996-2005**

Source: statistical centre of Iran

30
c. Distribution of Age and Gender of Population

Iran's population had become considerably younger from 1976 to 1986 because of the increase in the fertility rate, but this trend has undergone a steady reversal in the two last decades, resulting in an improved population structure.

These demographic shifts mean that the country's potentially active population, having jumped from 25.4 million in 1986 to 33.7 million in 1996 and 47.6 million in 2006. This substantial increase in the workforce will soon translate into a high demand for jobs and one of the greatest challenges Iran has to face.

Figure 1-8- Structure of population of Iran in 1996

Source: statistical center of Iran

According to the national census of population and housing conducted in 1996, 50.9% of population of Iran was men and 49.1% was women. According to initial result of the national census of population and housing conducted in 2006, this structure is constant.

Figure 1-9 shows life expectancy at birth, during 1960 to 2000 the life expectancy at birth increased 20 years in average for total population of society so that is clearly improvement which is because of health care services and diet.
Fifteen years ago, the Government of Iran embarked on a comprehensive program to develop its human-resources capabilities. These efforts have enabled Iran to increase enrolment ratios, extend educational opportunities to the poorest regions of the country, and reduce gender gaps in all levels of education. Consequently, Iran is well placed to achieve the MDG\textsuperscript{44} target with regard to eliminating gender disparities. Similarly, youth literacy rates increased from 86 percent to 94 percent over the same period, rising significantly for girls\textsuperscript{45}.

Table 1-2- Literacy Rate Adult, male and female and total (% of age 15 and above)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy rate, adult female (% of females ages 15 and above)</td>
<td>41.03</td>
<td>56.15</td>
<td>66.06</td>
<td>70.4</td>
<td>76.80</td>
</tr>
<tr>
<td>Literacy rate, adult male (% of males ages 15 and above)</td>
<td>63.09</td>
<td>74.27</td>
<td>79.87</td>
<td>83.5</td>
<td>88.01</td>
</tr>
<tr>
<td>Literacy rate, adult total (% of people ages 15 and above)</td>
<td>52.31</td>
<td>65.53</td>
<td>73.06</td>
<td>77</td>
<td>82.44</td>
</tr>
</tbody>
</table>

Also labor force participation rate is one of important components of human development indices especially female labor participation rate in developing countries is very low. According to the figure below the labor force participation

\textsuperscript{44} Millennium Development Goals
\textsuperscript{45} http://www.worldbank.org/countrybrief/Iran
ratio is around 60% which reveals female labour force participation after 1990 increased dramatically from 20% to 40% on 2006. So it can interpret by the high share of higher education involvement of female in the society so most of the female participation is in the professional careers which need high education.

Figure 1-10-Labour Force Participation rate

Source: WDI- 2008

Table 1-3-Human Development Index

<table>
<thead>
<tr>
<th>Year</th>
<th>Iran</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>0.566</td>
</tr>
<tr>
<td>1980</td>
<td>0.57</td>
</tr>
<tr>
<td>1985</td>
<td>0.61</td>
</tr>
<tr>
<td>1990</td>
<td>0.65</td>
</tr>
<tr>
<td>1995</td>
<td>0.694</td>
</tr>
<tr>
<td>2000</td>
<td>0.721</td>
</tr>
<tr>
<td>2001</td>
<td>0.719</td>
</tr>
<tr>
<td>2002</td>
<td>0.732</td>
</tr>
<tr>
<td>2003</td>
<td>0.736</td>
</tr>
<tr>
<td>2004</td>
<td>0.746</td>
</tr>
<tr>
<td>2005</td>
<td>0.773</td>
</tr>
<tr>
<td>2006</td>
<td>0.777</td>
</tr>
<tr>
<td>2007</td>
<td>0.782</td>
</tr>
</tbody>
</table>

Source: UNDP – Human Development Reports

<table>
<thead>
<tr>
<th>H. Human development index 2007 and its components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human development index value, 2007</td>
</tr>
<tr>
<td>Life expectancy at birth (years), 2007</td>
</tr>
<tr>
<td>Adult literacy rate (% aged 15 and above), 2007</td>
</tr>
<tr>
<td>Combined gross enrolment ratio in education (%), 2007</td>
</tr>
<tr>
<td>GDP per capita (PPP US$), 2007</td>
</tr>
<tr>
<td>Life expectancy index, 2007</td>
</tr>
<tr>
<td>Education index, 2007</td>
</tr>
<tr>
<td>GDP index, 2007</td>
</tr>
<tr>
<td>GDP per capita (PPP US$) rank minus HDI rank, 2007</td>
</tr>
</tbody>
</table>
1. Political Structure of I.R. Iran

i. System of Governance (Political System)

On February 11, 1979 a diverse coalition that included the clergy, merchants (bazaarist), liberal reformists, leftists and students, among others who were led by Grand Ayatollah Ruhollah Khomeini ended the monarchy of Shah Mohammad Reza Pahlavi in Iran. Shortly afterwards, on March 1979, Iran became an “Islamic Republic” following a carefully worded referendum which gained 98.2% of the vote. Known as Islamic democracy, two kinds of democratic states can be recognized in the Islamic countries. The basis of this distinction has to do with how comprehensively Islam is incorporated into the affairs of the state.

1. A democratic state which recognizes Islam as state religion, such as Malaysia, Pakistan, Algeria or Bangladesh. Some religious values are incorporated into public life, but Islam is not the only source of law.

2. A democratic state which endeavours to institute Sharia. It is also called as Islamist democracy. Islamist democracy offers more comprehensive inclusion of Islam into the affairs of the state. Islamist democracy is a highly controversial topic.  

The Islamic Republic is a unique form of government where “Islamic” and “Republican” structures run parallel to each other. For example, while there is a president as the head of the executive branch, there is also a supreme leader as the head of state; similarly, regular courts are matched by revolutionary courts; the army by the revolutionary guards; there is an elected Majles (parliament) but also an appointed Guardian Council, which serves as the upper house of parliament; etc.

The fundamental concept of this Islamic government is modelled after Ayatollah Khomeini’s ideas of the rule of the jurisprudent (velayat-e faqih). This means that the state is to be guided by a learned religious jurist who rules in the absence of the Twelfth Imam or messiah. Ayatollah Khomeini, endowed with unique popular and religious authority, headed the Islamic Republic as the first Supreme Leader up to his death in June of 1989.

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46 www.wikipedia.com
The arrangement of each institution and political body in the Islamic political structure is such that makes it vertically and horizontally accountable. Even the supreme leadership is subjected to a system of checks and balances through the elected Assembly of Experts, a body that appoints and has the power to dismiss the supreme leader. Therefore, Iran's system of government may be acknowledged as a blend of democracy and theocracy, with authority derived from the constitution enacted in 1979 and revised in 1989.

Within the political structure, there are three branches of authority under the chief of state or supreme leader: the judiciary, the parliament and the executive. While the top law-making body, the Majles, and the president are elected through universal suffrage, the head of the nation, the Supreme Leader, is an appointed religious leader; albeit an elected body, namely the Assembly of Experts, appoints him. In appendix II we have given in details political power arrangements and governance structure of country by chart to reveal the place of every part of political powers and constitution in the Islamic Republic of Iran as an Islamist Democracy society. By this study one can understand that country's political structure is democratic which is naturally restricted by the theocracy of Islamic sharia. With absolute majority (more than 98 percent of population) of society which is Muslim has chosen the society's political structure and regulation. So except some theocratic restriction on economic and business activities but other than these the society is democratic and economic activities are running under liberty of people and property rights with respect to public, government, cooperative and private property rights.

Section IV:
1. Methodology of Research

i. Objectives of Study

- To study the government policy under the acts and how structural arrangements affect the operational efficiency and profitability of banks in Iran. (Chapter- V)

- To examine the proper structure, function of Iranian banks to compete with international financial markets. (Chapter- V)
To examine the monetary policy and its implementation to control inflation that affects deposit/resource mobilization by the banking system in Iran for the improvement of the efficiency of state banks. (Chapter- V)

To examine the efficiency of banks that are still lacking to adopt the standard practices. (Chapter- VI)

To examine the various type of efficiencies like technical efficiency in constant return to scale and variable return to scale which are including management efficiency and also scale efficiency. (Chapter- VI)

To evaluate and order the banks according to their performance and efficiency indices by using DEA method. (Chapter-VI)

To make suggestions for the improvement of the efficiency of banks by exemplifying the Malaysian and Bahraini Islamic banking practices successfully. (Chapter- VII)

To study the status of NPAs (Non-performing assets) in Iranian banking system and to determine the efficiency of state banks operating in Iran.

ii. Research Questions

There are several questions, which are important in this study and need answers. As this study is related to understand the banking system in Iran, therefore, this study will focus on various issues that are related to banking system and its efficiency. For the study, a set of research questions that are related to statement of problems and objectives of study have been finalised accordingly as; how the government policy affects the operational efficiency of bank?; why NPAs are high in Iranian banks?; how monetary policy adversely affects deposit/resources mobilization by banking system?; why Iranian banks have not adopted standard practises as per international standards?; are there any structural, functional and managerial problems in the banking system and are there possibility to improve the banking function related problems and to improve the banking efficiency?; does privatization affect Iran's banking system efficiency? All these research questions will be attempted to be
answered in respective chapters by using various data sets from central bank of Iran as aggregate data of banking sector both assets side and liability side, published or unpublished financial statements of the Iranian banks and annual reports to indicate the performance of banking system. In addition to this data set, the Data Envelopment Analysis (DEA) method will be used for estimating the efficiency indices of banks. DEA method will be discussed separately in chapter three as methodology of research.

iii. Hypotheses

i. Principal hypothesis of this study is that:

“Efficiency of banking system in Iran is decreasing.”

ii. Secondary hypothesis:

- The Privatization of Banks has positive effect on efficiency of Banking System in Iran.
- The Efficiency of Banking System has positive and significant effect on Macroeconomic Performance.
- There is a negative and significant relation between banking system efficiency and government budget deficit.

iv. Method of Analysis

The analytical method employed in this study uses macroeconomic rather than microeconomic analysis as the basic technique in the case study. In chapter five, by utilizing the macro level data with descriptive methods, we will try to analyse the banking sector performance and causality of different factors on inefficient operation of the system and also find out the structural & regulatory challenges in terms of institutionalism approach. By discussing this, one can find out the strength and weakness of the system and accordingly its threats and opportunities. Secondly, this study in the micro level or firm level will be supplemented by the efficiency indices of individual banks and discuss about input/ output variables involving on efficiency indices of particular banks by reasoning logically based on economic efficiency literature. The details of research methodology have been discussed in the chapter three.
v. Chapter Scheme

This research thesis is divided into seven chapters as follow:

- The introductory portion of backgrounds, needs and scope of study, significance of study, statement of problems and objectives of study have been discussed in chapter one as “Introduction”.
- The review of literature has been discussed in chapter two.
- Chapter three deals with methodology of research, specifically this chapter discusses the Data Envelopment Analysis (DEA) method.
- The status of economy of Iran will be discussed in chapter four.
- In chapter five the banking system operation and performance in Iran has been discussed with Islamic Banking approach.
- Chapter six gives findings and results by analyzing employment of DEA methodology to measuring the efficiency indices of individual banks in diverse model specifications.
- Finally, chapter seven will discuss conclusions and also suggest the specific policy recommendations to improve the efficiency in banking system in Iran.