Abstract

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 define objectives, then the economic growth and development cannot be achieved as per policy objectives of the plans. Prof. Osln in his study mentioned that without efficient financial institutions, economic growth cannot be achieved with proper target and that will contributes for further failure of the plans. The numbers of studies ("Hassan Zadeh, A. & Soltani, Z." (2005), Razavi (2004), Agha Babaei & Motavaseli (2004), Bakhtiari, (2005), etc.) have declared 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, difficulties in collection, and their high cost of collecting their suspect and bad debts. It happens because of monopoly of the government banks and absence of competition among the other financial entities. As has mentioned that efficient banking system is major contributor for the development, in case of Iranian banks, it seems absence. Therefore, it requires detailed investigations of banking as to why and to what extent it fails to contribute efficiently to the economy.

Ten banks efficiency indices are calculated, interpreted, and discussed, which covers the Post-Revolution, after the country passed the political instability during Revolution(1975-1980), eight year war with Iraq (1980-1989) and reconstruction (1989- onward) in the Islamic banking industry in I.R.Iran. This study analysis is based on originally collected data with detail items. The secondary data from financial statements (balance sheet and profit/loss statement) of 10 government owned banks, including 4 specialized banks (Keshavarzi bank, San’at o Ma’adan bank, Maskan bank, and Tosaeh Saderat Bank), and 6 commercial banks (Saderat bank, Sepah bank, Terjarat bank, Melli bank of Iran, Mellat Bank, Refah Bank) which cover more than 85% of the banking business in country, are collected, interpreted and discussed.

This period represents reforms policy period along with macroeconomic stability, after long period of political instability, war, and reconstruction in the country. This period can also
represent the performance of banking sector based on management efficiency in the more liberalized economic and marketization policy in economic atmosphere of the country. When the decision was made to open the markets for national and international competitiveness with objective of strengthening the banks efficiency and soundness to enter the WTO, by privatization policies and open the entry of private as well as foreign banks to market. Therefore, respective period will cover the feedback of reforms policy in banking sector of country.

In this study, non-parametric Data Envelopment Analysis (DEA) has been used to examine various bank specific technical efficiencies. There are many advantages of this method are given by economists and banking analysts. Input orientated approach of DEA under Constant Return to Scale (CRS) and Variable Return to Scale (VRS) is used for the Technical Efficiency measurement of the commercial and specialised banks. In this study, scale efficiency and Return to Scale which commercial and specialised banks operate is also estimated.

In this study, we adopt an output-oriented approach, which could be somewhat consistent with the current environment in Islamic Banking industry in Iran where many banks have been competing for providing improved services and better incentives to their customers, the period of data is used from 1995 to 2004, because the some banks data for the year 2005 and onwards are not available, therefore the windiap 2.1 software cannot generate the efficiency indices results.

Since Islamic banking is based on interest-free principles, the variables adopted are based on the banking system operation whereas four input variables and three output variables which followed by review of many studies on banking efficiency and their variable selection.

The input vector includes: (1) labour [LABOR], the number of full-time employees;(2) physical capital [PHYCAPIT] the book value of premises and fixed assets; (3) total deposits [TOTALDEP], the sum of demand deposits and term-investment deposits(4) number of Branches [BRANCHES]. The output vector includes: (1) total loans [loans] including all type of loans and mode of financing which outstanding based on Islamic modes (2) investment securities [INVSECUR], including investment on government securities and central bank securities, (3) gross profit [PROFIT] the bank profit before tax reduction.
The results indicate that the overall average technical efficiency under (CRS) levels of Islamic banking operations in I.R. Iran increased significantly from 1995 to 2004. Further, the technical efficiency (VRS) is steadily increasing, while Scale Efficiency and Technical Efficiency (CRS) have been fluctuating during the study period. However, all efficiency scores including TE (CRS), TE (VRS), and SE had improved during the period of research, which can be consistent with the financial development and reform policy on banking sector of country.

Most of the specialized banks at several years were efficient; especially Sanat o-Madan Bank for all ten years was efficient among the operating banks in system. Among commercial banks, Saderat Bank was efficient in recent years (2003 and 04) and in fact the technical efficiency indices for most of the commercial banks are improved during respective period. This improvement trend of efficiency indices are consistent with reform policies that has undertaken by government and central bank in regulation aspect as well as ownership and openness of system which will lead to more competitive atmosphere.

In variable return to scale by taking into account the scale effect of operation factors it has revealed that Melli Bank of Iran as state bank of Iran and biggest commercial bank which handling most government accounts and payments was fully efficient bank and it is interesting to note that again in this model of TE (VRS), Sanat o-Madan bank is efficient bank among specialized banks with smallest scale among the others. the average technical efficiency (in variable return to scale) score for specialized banks were high as compare to commercial banks for year 1996, 97, 98, 99, 2000 and 2001 while for years 2002, 2003 and 2004 in most of the commercial banks TE (VRS) raised. And also most of efficiency indices indicate improving trend during the respective period for commercial banks.

Sanat o-Madan bank is scale efficient for all years of respective period, and also Tose e’ saderat bank was scale efficient bank for all years except 2000. These two specialized banks are smallest banks which their operation is like investment banking and by professional staffs doing PLS (long-term investment) contracts and evaluating the investment plans as well as monitoring the partnership plans. According to outputs of DEA in 2004 only Saderat bank, Refah bank, Sanat o Madan bank, and Tose e’ Saderat bank was chosen optimal scale according to scale economy theory and others all were oversized and decreasing return to scale.