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**EVALUATE THE IMPACT OF PRIVATIZATION AND REGULATORY
INFORMATION ON THE COUNTRY'S BANKS PERFORMANCE**

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ABSTRACT

Today, financial institutions and fundamentals every country, among the most important economic growth and prosperity of the country depends on their development. Banks and financial institutions as a key element in the economy are responsible for important tasks. This study was conducted to examine the technical efficiency using data envelopment analysis and frontier function to assess the effect of privatization on cost efficiency model **Bytys and Gypsy (1995)** will be discussed. The research and application of econometric methods (coating method and stochastic frontier production function approach) by Frontier software has been estimated for the period 1381 to 1390 and a selection of public and private banks are estimated and the results are as follows:

The results show that the effect of privatization on bank fees variable is negative and significant and suggests that the privatization of the country's banks to reduce bank costs and increase their efficiency will be. Efficiency of banks in two ways SFA also suggests more efficient than state-owned banks are private banks. Of the average wage, monetary policy index, consumer price index, banking and financial indicators, the ratio of past due loans to total assets, bank branches and bank fees will increase and factors such as regulatory reform and privatization will reduce bank fees. Variable has no significant effect on the population. In other words, to increase the efficiency of public and private banks increased regulatory reform and privatization can be very helpful.

Keywords: Performance of Banks, Covering Methods, Stochastic Frontier Production Function Approach

INTRODUCTION

In the economics firm especially private sector accountability to the authority delegated to individuals who have been raised. Managers in the economic institutions against higher authorities and other stakeholders and the competent persons of interest in connection with the use of resources are responsive. On the other hand the expansion of commercial activity, public ownership of economic units, and complexity of the organization have caused the Management economic units according to their responsibilities and to achieve organizational goals and to ensure the proper conduct of all resources, more emphasis on evaluating the performance of their wards.

Response process is done using a variety of reports that can be evaluated according to the performance or operational audit noted. Operational Audit consists of three parts: efficiency, effectiveness and economy that measures the performance of one of the most important parts of it. Performance measurement in organizations, especially nonprofits do with progress of science and human knowledge has expanded. Today be seen in various fields such as accounting, economics, management and performance measurement and then measure the performance of different methods is carried

out, in this connection study of interdisciplinary needs. If using different methods to measure the effectiveness does not lead the same results is important, because selecting and applying the most appropriate method for measuring the efficiency of the performance evaluation is very important.

In this regard, one of the institutions that play an important role in the allocation of economic resources is banks and financial and credit institutions. In fact banks are mediated that receiving funds, from savings and loans were granted will investors. As the banks be more successful and better in the funds collected and granted to the investor, as well as the growth and economic development will be more. Thus, economic growth largely depends on the performance the banks and they play a vital role in this regard.

Problem Statement

One of the major issues that have been discussed in the economic literature, the measurement of efficiency units of various institutions, this result is important because in the current situation we are faced with a shortage of resources, it should be minimal and limited resources allocated in such a way that the organization or firm able to offer maximum production of goods or services through.

Performance measures have a long history of economic analysis is especially in today's competitive world it is more important. Since do this kind of analysis of the different units of the ways of understanding the strengths and weaknesses of subjects that the result can be represented in the form of adopting an appropriate policy and ultimately benefit the economy and society.

Reviewing the role of banks in the economy and societies as well as close interaction with other sectors of the economy and the institutions they serve in a wide gamut of people, and all types of individual measure and compare the bank's activities becomes necessary workability. Database performance can be measured and compared with an efficient bank as a template for other banks to provide them with proper planning to move toward optimal performance.

In this study we compared the performance of selected public and private banks, based on two criteria benefits and costs and also in the context of data envelopment methods and boundary function method is used. An important issue is the performance measure in evaluating the performance of problem banks. Bank managers need to measure the operating efficiency of banks are suitable pattern. According to the different patterns in relation to the assessment of banks' operating

efficiency is considered and Comparison of methods for measuring and evaluating the performance of a suitable model for evaluating the performance of bank branches in Iran and is the subject of this investigation. Unknown and uncertain aspect of this study was to compare and efficiency of banks in private and public banks and the rating is based on their performance.

Variables used in this study are as follows:

C = fixed assets + personnel cost and profitability indicators for banks (According to which of the models show significant works best in terms of the dependent variable).

W = average wage in a year

M = indicator of monetary policy (liquidity)

N = ratio of past due loans to total assets of the Central Bank

BI = Index stock

Cb = number of bank branches

POP = population

CPI = Consumer Price Index

Purpose of this study, is investigate the factors affecting the cost and profitability of public and private banks and evaluate the performance of banks and ranking them based on their performance and compare performance estimation techniques with each other. The research data for the period is 1380 to 1389.

Efficiency Concept

Today most countries, whether developed or developing their attempt to optimally exploit the limited resources in order to take advantage of their limited resources and capital. This is especially the case in countries that suffer from a lack of resources, are of extreme importance. One of the appropriate criteria in comparison is performance. The concept of performance is, success of the firm or institution to produce the maximum possible output from a given set of factors with proven technology. So that all inputs and outputs are measured accurately (Farrell, 260:1957). By definition of Farrell, the efficiency of a firm consists of three components: technical efficiency, allocative efficiency and economic efficiency (overall).

Foreign Studies

1 - Technical efficiency in Saudi banks, 2010, this study examines the technical efficiency of Saudi banks. The period 2007-1999 is used. Inputs include three case study 1) the total employed labor force, 2) fixed assets and 3) total deposits and outputs include: 1) loans to customers, 2) securities and 3) are interbank loans. Results indicate that Saudi banks from 2004 onwards have improved their technical efficiency of banks with foreign capital.

Bank Efficiency in Developing Countries: The Case of India, 2003, in this study, three

groups of sources for banks, including commercial banks, 27 public, 33 private commercial banks and 34 foreign banks in the two modes is calculated. In the first case the inputs to the model included two factors: 1) the cost of interest, and 2) non-interest expenses and outputs include 1) net interest income and 2) Non-interest income is. The latter inputs include 1) deposits and 2) the number of employees and the outputs include 1) Net loans and 2) Non-interest income. The results show that the average efficiency of banks in India are comparable to the average global efficiency and effectiveness of public sector commercial banks in private sector banks and foreign banks operating efficiency is lower than in India. The study recommends that the policy rationale underlying the increase in assets and branch staff to achieve efficiency gains and maximize the efficiency of private banks in India to the level of an international competition would have to continue.

Young Hoon (2006), in an article entitled models of stochastic frontier production group presents a stochastic frontier model. In this paper, rather than focusing on individual variables, the focus is more on specific variables. Also a parametric function coefficient of performance is creates. When this function was used to assess global data

models, especially some more variation in the use of the models offered in various nations.

Halo and Nagy (2004), 2459 branches of different banks in 25 EU countries of Europe during the years (1999-200) to determine the cause of the difference between the average technical efficiency of the banks have paid. Their basic hypothesis is to compare the efficiency of banks in Europe and the countries of the former Union Bank efficiency in the new Member States of the Union. Their findings show that the performance difference is mainly due to different causes of inflation, the level of foreign trade and its perspectives factors minor importance, such as the stability of macro policies and the structure of markets. In addition, they found that the older members of the Union for further communication, financial and fiscal relations more cohesive than the new member (s) have been more effective.

Borkiand Niazi (2003), an analysis of the most important laws have been revised during the performance of The Bank of Pakistan (2000-1991) was provided. They are using data envelopment analysis, efficiency of banks in the three state banks, private and foreign banks, the study found that the reform has reduced performance.

Bar et al (1999) evaluate the performance and productivity of commercial banks in America

during the years (1998-1984) and concluded that a strong and lasting relationship between inputs and outputs and the correct diagnosis in greater conformity with the results of the imagination is performance of bank branches. Moreover, their findings suggest that the effects of economic pressures in different conditions indirectly affect bank performance as a limitation on the performance of banks should be considered.

Sokovich, Halyka and Brnofsky (1996) in the evaluation of network performance in Slovakia is used from Data Envelopment analysis method. Their study on the introduction of appropriate indicators to assess the performance of bank branches and the impact of these measures on the results. Sherman in his article describes the method of data envelopment analysis and its application in the bank and the interpretation of its results is discussed. In addition, the weaknesses and challenges in this approach is to check in the bank.

Sherman and Gold (1985) in a study of 14 branches of the Bank of America by using DEA found that the main causes of inefficiency, inefficient, poor management, branch size, number of staff and operating costs.

Research model and study variables Model used in this study are as follows:

(1)

Now, with the logarithm of the cost function Cob-Doglas and add any combination of disruption (including inefficiency component) to the model we have:

$$\ln C_i = \beta_0 + \beta_1 \ln W_i + \beta_2 \ln M_i + \beta_3 \ln S_i + \beta_4 \ln N_i + \beta_5 \ln B_i + \beta_6 \ln Cb_i + \beta_7 \ln POP_i + \beta_8 \ln CPI_i + u_i + v_i$$

Variables

C = fixed assets + personnel costs (bank fees)

W = average wage in a year

M = indicator of monetary policy

S = number of personal supervision of the Central Bank in

N = ratio of past due loans to total assets of the Central Bank

BI = index of banking and financial

Cb = Number of Bank Branches

POP = population

CPI = Consumer Price Index

Using performance model SFA

Performance results using the SFA inputs and outputs of the previous section is as follows:

As the results show average private banks such as the Persians and the new economy than other state-owned banks are more efficient.

Stationary Test

Before Stationary all variables used in the estimation model is required to be tested. Stationary the results of the research variables.

Table 2 summarizes the results of static variables

Variables C = fixed assets + personnel costs (bank fees)

W = average wage in a year

M = indicator of monetary policy

S = number of personal supervision of the Central Bank in

N = ratio of past due loans to total assets of the Central Bank

BI = index of banking and financial

Cb = Number of Bank Branches

POP = population

CPI = Consumer Price Index

Using performance model SFA

Performance results using the SFA inputs and outputs of the previous section is as follows:

In order to select both random and fixed effect method of Hausman test is used. The fixed effects method is chosen.

Estimated efficiency model

After estimating stationary auto correlated variables to estimate the partial adjustment model Using generalized least squares. To measure the effect of privatization on the performance of banks and the results are as follows.

As shown in the above **Table 3** Results indicate that 73% of the amount of variables are the explanatory power of the model. It shows that the variables used in the model

explained 73% of the amount that in order to determine the coefficients of other variables into the model, the model must be Significant negative impact of privatization parameter indicates the cost of banking which implies that there is a continuing profitability of the banks due to privatization; variable interaction policy change is (Regulatory reform) have a significant negative impact that show the interactive effect of regulatory reform on reducing costs in the bank. The only means of increasing profitability competition between banks rather than stained corruption is rent-seeking pathways to risk presented; to stay in the industry to increase its competitiveness and efficiency goals. In other words, the rules of a market economy and the banking reform only affects the

competitive economy. Banks to increase their economic and financial indicators to beat competition and will ultimately lead to a competitive banking environment. Effects of other variables are also consistent with the literature and shows that the average wage factors, monetary policy index, consumer price index, banking and financial indicators, the number of branches and the ratio of past due loans to total assets of the Central Bank will increase the cost of banking and factors such as regulatory reform and privatization will reduce bank fees. Variable has no significant effect on the population. In other words, to increase the efficiency of public and private banks increased regulatory reform and privatization can be very helpful.

Table 1: Performance results using SFA

Average	Eghtesaden ovin	sepah	parsian	saderat	maskan	mellat	tejarat	melli	Year
16.33775	30.4	11	43.3	15.6	19.5	10.1	0.26	0.542	1381
34.3625	32.1	11	31.1	72.5	13.2	36.2	16.2	62.6	1382
31.625	30.6	18.6	29.5	42.9	11.6	10.5	96.5	12.8	1383
39.0125	33.6	28.5	17.6	81.1	57.3	20.2	56.6	17.2	1384
38.3	20.5	37.1	24.4	57.7	34.9	63.2	33.5	35.1	1385
48.6625	18.1	66.1	79.8	73.4	35.6	25.5	46.6	44.2	1386
49.4125	97.9	26	59.1	73.4	32.8	56.7	33	16.4	1387
26.03375	64.5	12.2	37.5	68.6	16.4	4.94	1.74	2.39	1388
25.2875	35	60	21	32.9	13.6	15.3	13	11.5	1389
25.1	13	39.1	21.4	46.5	12.1	10	48.7	10	1390
	37.57	30.96	36.47	56.46	24.7	25.264	34.61	21.3732	average

Source: Frontier Software Output

Table 2: Performance results using SFA

variable	Levin, Lin & Chu t stata	prob	Result
X	-9.40653	0.0000	I(0)
Y	-3.99500	0.0000	I(0)

Source: Research Findings

Table 3: Estimates the model

Variable	Coef	SE	T stat	Prob
Average wage	4.243057	1.542912	2.750031	0.0086
Indicator of monetary policy	1.202779	0.157858	7.619372	0.0000
Regulatory reform	-1.078399	0.278509	-3.872048	0.0004
The ratio of past due loans to total assets of the Central Bank	0.079536	0.036389	2.185738	0.0342
Consumer Price Index	0.089245	0.027411	3.255774	0.0095
Financial and Banking Indicators	0.119353	0.043808	2.724464	0.0067
Branches	0.635674	0.082385	7.715925	0.0000
Population	.4969543	.4234862	1.17	0.241
Privatization	-0.171681	0.022883	-7.502615	0.0000
R ²	0.733232	F Prob		0.000000
F Prob	9.923403	Durbin Watson		1.856710

Source: Research Findings

CONCLUSIONS

The effect of privatization on bank fees variable is negative and significant and suggests that the privatization of the country's banks to reduce bank costs and increase their efficiency will be. SFA method of calculating bank efficiency, also suggests more efficient than state-owned banks are private banks.

Regulatory Reform in the fitted model using cross-sectional data has a negative impact on costs.

It seems that a regulatory reform legislation that will increase the cost efficiency of banks, however, this can cause the reform to coordinate and control the banks and lead

banks to their main goals is this modification increases the stability and efficiency bank. According to the study, the following suggestions are offered: Due to the positive impact of regulatory reforms on cost efficiency improvements recommended The impact of these reforms on banks' cost efficiency analysis of allocating resources Office applications are studied Given the positive impact of privatization on the performance of the variable cost of banking. The most important policy proposed research move in the direction of privatization of banks to take steps in the direction of greater efficiency. Institutionalization of

regulatory reform, including reform of banking, asset management companies, Official support is important banks and banking supervisory authority.

The institutionalization of the banking system, resulting in higher performance is required., With the increased number of branches per bank branch to have easier access and the demand for

Open and communication technologies, including the development of e-banking on banks and enhances efficiency. Reduce costs and increase efficiency in different branches of a bank is a bank.

Protection of private sector in the creation of private banks and services to improve the quality and efficiency of the banking system to promote.

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