PRIVATIZATION AND EFFICIENCY (CASE STUDY: EFFICIENCY RANKING OF SEVERAL PRIVATE BANK TEHRAN BRANCHES BY THE SFA METHOD)

MAHDI ZAHED GHARAVI & HAMID ASAYESH

Faculty of Ayatollah Broojerdi University, Iran

ABSTRACT

Neoliberal economists are market-oriented and they know the market economy as the efficient economic. With efficient business active after the Iran and Iraq war and for reconstructing the Iran economy, neoliberal economist of Iran put the governmental business privatization and government miniaturization in their top policies and construction government afforded harshly for privatization and governmental foundations privatization located as the ninth and tenth government top policies. But there is no eminence and direct relationship between privatization and efficiency of institutions. Are really active private institutions work necessarily? In this order we analyzed the Eghtesad Iran private Bank's Tehran branches efficiency by using from SFA method. We found that all of the branches' working is deficient. So there is no eminence and direct relationship between privatization and efficiency of institutions and at least inefficient private institutions can be existed. As we can see efficient governmental institutions and governmental institutions privatization only is not the governmental institutions activities efficient. Development of civil society and society and newspapers' supervision on governmental institutions can be another way for governmental institutions efficiency.

KEYWORDS: Analytical Hierarchy Process, Efficiency, Baits and Cooli Model, Boundary Production Curve

INTRODUCTION

Neoliberal economists, neoclassical and contemporary institutional are market oriented and all believe that the optimal market institution system and the market's invisible hand allocate the scarce resources that have numerous applications among multiple and unlimited community better and in the best possible way. Although they are aware of a few cases of market failure and took a measure to slightly compensate the cases of market failure and the government is obliged to compensate and restore them. They relate to secrete of unsuccessful and deficient economy to the economic institutions and relate the deficient origin of economic institutions to the non-competitiveness of the economy and non-private economical institutions. Therefore, the competitiveness of the economy and privatization of economic institutions is related to the drug sting of inefficient economical institutions and unsuccessful economy and give a sentence to being competitive and the privatization of firms. They know the economic prosperity as a child of the competitive economy with numerous private firms. They believe that as the angel of the competitive economy and private institutions becomes economical, the devil of deficient and unsuccessful firms in the economy will disappear and the foundation will be abolished.

Their reasoning is that on the one hand , private firms in a competitive economy are competing together to achieve the maximum benefit and little mistakes that make the foundation of any business in a competitive economy , foundations of the stump is uprooted and toppled . Thus, each firm has no choice but to stay at any time spent in peak fitness and performance of the entire work and because any private firm in the economy produces an efficient competition,

the entire production will be efficient economy and consequently, efficient and prosperous economy and a total society that is economically depended on work completely, will act in the border of production facilities expanding continually. On the other hand, as for the first time, Albert Hirschman (1969) found that competition is a mechanism to reinforce firms. Because suppose the firm or competitive organization performance falls into a drop due to random and unknown reasons and not so inevitably undergoes the inevitable loss and not so durable that prevent the return to former levels of performance but provided that managers focus their attention and ability on this work . The downfall of firms and other organizations performance would reflect typically in absolute or relative degrade of quality performance or the offered services but in the competitive economy, the downfall of competitive firms just can show itself with the constant increase in the cost of the firm with quality and price of the product also due to complete information of consumers that leads to lower revenues and profits of competitive institution. The competitive institution needs profits to stay it and by reducing the profit of institution as a result of its performance drop cannot continue to be survived. So he/she tries to return her/his past efficient performance for her/his being and stay and this were the same important Albert Hirschman (1969) discovery that the mechanism competition is reinvigorating firms. Firms in competitive economic are aware of performance downfall and its weak points directly and exclusively of financial signs that appear within the firms and without any mediation on the part of consumers who are completely unaware of the firms' difficulties. The exclusive economic is based on the exclusive institutions and the exclusive institutions are not always vigilant and do not act and produce with the maximum performance continuously. Exclusive institutions can survive by inefficiencies too because the downfall of exclusive institutions' performance can reflect in raising prices and reducing product quality if consumers are more or less forced to purchase exclusive products of inefficient firms , consumers refusing to buy products of inefficient exclusive firms do not reduce their profits and do not inform managers about the deficiency of exclusive firms to be forced to produce and spend at the peak of readiness and border of efficiency . Mostly exclusive firms' managers pass the downfall of their firm's performance behind a veil of ignorance and relate the decrease of quality and raising the price of products firms to the factors out of their control. But if consumers informing of exclusive business performance downfall that have reflected themselves in higher prices and lower product quality, refuse to buy the product of inefficient firms and the modal extension of demand or the precious extension of product demand be high, the deficient exclusive economic firm will be removed from the economy and there won't be a mechanism for their reinforcement. Competitive firms are aware of the downfall of their performance with lower income and their profits and they try to return their past efficient performance for their being and stay but the exclusive economy with informed and sensitive consumers and with the precious extension or the high modal extension of products demand are deprived of the reinforcement mechanism of their deficient firms. Hence, the exclusive economy is more or less held with deficient exclusive firms or with exclusive firms that are on the brink of elimination and therefore the exclusive economy is deficient.

State economy is based on governmental agencies. Institutions and governmental factories are in the collective property of all citizens and managing them is in the hand of professional managers that their salaries are more or less pre-determined and fixed. Their income is not subject to performance, sales and efficiency of firms which they are responsible for managing them. If consumers refuse to buy governmental agencies' products, the income of managers of governmental firms will not significantly reduce and so managers with fixed and predestined income of governmental firms have not the profitable disturbance of governmental firm and enough motivation to work at the peak of readiness and extending the firm in border facilities of production. Citizens as managers of firms can make the motivation of efficiency to the firm's profitability in them by depending to pay the income of those who have been appointed to manage the firm. But it is very

difficult to design and deploy such an incentive system due to asymmetric information of managers and brokers. It's enough for brokers to claim that the poor performance results of external factors outside their control. Showing the false claims of the broker is extremely difficult and costly. The difficulty of managers monitoring (citizens) on the work and behavior of their agents are called "Manager-Agent problem" that causes the increased cost and decreased profits of the firm as a result of poor management. The manager – agent problem is the most main argumentation of contemporary neoliberal economists against governmental agencies. Another problem of the governmental economy is the problem of monitoring on governmental firms. Although governmental agencies are owned by citizens but citizens have no any motivate to take care of governmental firms and monitoring the performance of the hired managers in firms. Because any increase in profits as a result of monitoring the performance of the hired managers in governmental firms is given all citizens. While only citizens who have done the monitoring work have paid his fee. Costs such as the time and energy that are spent to investigate the company accounts, as a result, every person prefers to not spend his time monitoring of SOEs managers and get a "free ride" from others. If all citizens are intend to get a "free ride "from others, no one won't monitor the performance of governmental agencies executives. Another problem of the governmental economic is taking advantage of a flexible budget. Governmental firms are part of government and if they have a budget deficit or are on the verge of bankruptcy, the government provides their budget deficit and gives them a relief. SOEs can behave in such a way that their budget deficit be resolvable, restorable and flexible. So their life with the poor management is imaginable.

Neoliberal economists understand privatization in the framework of economic concepts and know it as a method to increase the efficiency of the production process of goods and services and increase business profitability and thus improve the efficiency and performance of economic through the passerby of improving the management and creating an incentive system based on self-interest. Though, privatization is deeply a political phenomenon. An organized phenomenon from the top which includes rearrangement of different society institutions aimed at giving priority to the interests of some groups and other classes. Privatization policy, a policy that is the most important component of the policy of economic liberalization and since the beginning of the eighties with the resurgence of conservative thinking and a new wave of globalization in the economic capital of the world gradually gained the upper hand. Iranian neo-liberal economists set the privatization policy of the economy at the forefront of policy recommendations to rebuild the economy after the war. The departure point of privatization policy in Iran after the revolution is the first development plan. Banking industry, insurance industry, the health sector and the education sector in the Iranian economy include institutions that after the war gradually became subject to privatization policy. Among the most important economical foundations of economy that Iranian neo-liberal economists emphasized on its privatization or private sector participation was banks and financial institutions of Iranian economy. Bank is of the most important economic institutions and the fundamental pillar of any financial economic system especially in Iranian economy in which financial markets did not spread and are shallow. Banks attracting people's scattered deposits can provide and mobilize financial resources for growth and development of their economy. If banks be efficient to attract , allocate and proceed the scattered deposits , the necessary conditions for economic growth and development will be provided otherwise not only the necessary conditions for economic growth and development won't be provided that will be critical . Therefore , Iranian neo – liberal economists emphasized on the economy Banking system for the efficiency of banks performance in Iranian economic to privatization of banks and private sector participation . Now our question is if according to the reasoning of the neo-liberal economists, state economical firms are necessarily deficient, can be concluded that private firms are necessarily efficient and if we must escape state economical firms should take refuge in private firms. Is there the solution of the deficiency of state enterprises to take refuge in private enterprises? Do

the privatization and the participation of private firms in the economy of Iran suffice to realize efficiency in the economy?

To answer this question, the efficiency of a private banking branches in Tehran, the Iran's economy examined and the branches were ranked in terms of efficiency. This means that the current and potential efficiency of the branches was compared together.

The Concept of Efficiency

Concepts and Topics of efficiency in the compiled and systematic kind by Debbro, Kopmans' studies began and continued by Farrel's studies in 1957. To calculate the efficiency of each method, we should obtain the inputs and outputs and output function boundary (standard production function). The ratio of current output to standard output efficiency can be achieved.

Inputs and Outputs of the Bank

The nature of the inputs and outputs of each economic unit including bank depends on how define expectations and economic unit. By changing our definition of the bank, the bank will also change the nature of the inputs and outputs.

In view of manufacturing and services to banks, banks are like service firms. Bank services are such as holding deposits and providing the output of the bank and bank capital facility, bank input.

In view of the interfaces to the bank, the bank is an intermediary firm. Bank input is amount of deposits, labor and capital, and bank outputs, and its granted facilities.

In view of the bank's risk management, all assets and liabilities of its collapsed banks in terms of risk sources and facilities provided is bank output and facilities investment bank, bank output.

Frontier Production Function

To calculate the efficiency, we should compare the potential output of firm with the amount of the actual output. Production Function indicates the maximum output of recognized inputs.

The most common methods for extracting frontier production function to calculate the efficiency is parametric method (SFA) and nonparametric method (DEA). The common features of these methods is that in both methods the standard output (potential) yield of the units in the different times and then achieved the highest output for certain inputs . In these methods alone cannot achieve the efficiency of a unit in a given time. But they must be examined in different periods and the performance of a single function as an efficient product and was dealing with time-series data or compare the performance of a few units together and the best performance was one of the most efficient production units and dealt with cross-sectional data and in more secure conditions compare the studied units during different periods and dealt with consolidated data.

The calculated efficiency of these methods is a relative efficiency because it is a comparative conclusion method and the efficiency will be varied by changing the number of observations. The more scope of observations, the more reliable the efficiency indicators.

Econometric method (SFA) is based on econometric models and microeconomic theories. In this way, the production function is estimated according to the assumptions considered and then the efficiency of its unit is measured according to the production function. In the border estimation method, the border areas and border frontier will be

considered while n conventional econometric estimation methods are considered intermediate points. This method is achieved by continuous frontier production function. Conventional econometric methods to estimate the production function method is maximum likelihood (ML). Because Production functions are mainly linear and nonlinear functions are retained in the maximum likelihood method compatibility.

PRESENTING THE MODEL

Functional form used in this estimate based on the Cobb-Douglas function is generally as follows:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + v_{it} - u_{it}$$

Where, Y: logarithm of total banking facilities granted, X1: log area per branch, X2: the logarithm of the number of workers in each branch, X3: logarithm of total deposits per branch, Vit: disturbing element model.

Uit: the deficiency branch i at time t (4, 3, 2 and 1 = t, 34 and ..... 2 and 1 = i) due to the negative coefficient indicates that the increase in inefficiency reduces the facility.

The Estimated Model and Technical Efficiency of Bank Branches

Bank branch efficiency is obtained by dividing the actual output to its potential output, according to its input. Potential output bank branch is the standard facilities of each branch which estimates the frontier production function. We collected the two years data of 34 Tehran branches of a private bank to investigate the technical efficiency of some branches of a private bank in Iranian economy. Production function will consider Cobb-Douglas and econometric model with three independent variables are estimated with maximum likelihood method.

To estimate the parameters of the stochastic frontier production function to the maximum likelihood method was used frontier version 4.1 software. The program uses a three-step procedure having estimate the parameters of random stochastic frontier production function. These three steps are:

- Stochastic frontier production function parameter estimation using ordinary least squares that the estimation of all parameters of the model is unbiased except the prime.

$$\gamma = \frac{\sigma^2_u}{\sigma^2} = \frac{\sigma^2_u}{\sigma^2_u + \sigma^2_v}$$

- Looking for a two-step point for $\quad$. The initial approximation is unified to two decimal places. Selected values to search a point as earlier prodigals in a repeatable process are used to obtain the final estimations of maximum likelihood.

- Apart from the intercept parameter values are considered ordinary least squares and parameters are modified based on ordinary least squares. Ordinary least squares estimation of random frontier production parameters is presented based on functional form of Cobb-Douglas function production in Table (1) and is as follows:

$$\ln Y = -4.02 + 0.47 \ln X_1 + 0.60 \ln X_2 + 0.95 \ln X_3 + V - U$$

Output Model: logarithm of monetary value credit facilities and established branch model: logarithm of the number of employees, branch, log volume of deposits, log area branch.

We did significant test model using generalized likelihood ratio test (GLRTS). Generally, this test is as follows:

$$LR = -2\{Ln[\left.L(H_0)\right/L(H_1)]\}\} = -2\{Ln[L(H_0] - Ln[L(H_1]\}$$

Where $L(H_0)$ Likelihood function under the null hypothesis values (H_0) and

$L(H_1)$ Is values likelihood function under the opposite hypothesis (H_1). LR is assumed asymptotic distribution (χ^2) with Degrees of freedom K.

$$LR \sim \chi^2(K)$$

The hypothesis (H_0) is Meaninglessness variables X_1 to X_3 :

$$H_0 = \beta_1 = \beta_2 = \beta_3 = 0$$

In this case we will have three constraints. Critical value (χ^2) is 0/05 at the significant level and degrees of freedom 3 equals 7/81.

Function parameters using stochastic frontier estimation results of the branch facilities in Table 1 are summarized.

Table 1: The Results of all Branches of the Method Parameters Facilities SFA

T-statistics	The Standard Deviation	Coefficients	Parameter	Variable Name
-1/78	2/14	-4/02	β_0	Fixed
1/07	0/44	0/47	β_1	Area Branch) X_1 (
1/56	0/38	0/60	β_2	The number of workers) X_2 (
5/90	0/16	0/95	β_3	The volume of deposits) X_3 (

Source: Research Findings

According to Table 2, the statistic is equal to 80/54 which is more than the Critical value $(\chi^2_{0095,3} = 7.81)$. So Meaningful model parameters are estimated to be monopoly.

Table 2: Parameters of Variance

T-Statistics	SD	The Estimated Coefficients	Variable Name
1/44	4/45	6/45	$Sigma - squared(\sigma^2)$
***8/5	0/10	0/85	$gama(\gamma)$
------	------	80/54	$LR\, test$

Resource: Research results

Analysis of Model Estimation Results

B Parameter represents the part of Area Branch on branch of bank facilities. According to estimation model, there is a direct relationship between area branch and bank facilities of branch. (B1=0.47)

One percent increase in area branch increases about 0/47 percent of bank facilities of branch B2 parameters

represents the direct impart of the number of branch personnel on financial facilities and bank facilities of branch (B2=0.95). As the effective factors on bank facilities of branch are fixed, one percent increases in the volume of bank deposits increases 0/95 percent of bank facilities of branch. In this model, deposits volume. Has the most impact on the amount of financial facilities, area branch has the lowest impact on the bank facilities of branch. After estimation the model, based on the estimated border function and the determined amount of standard facilities, we calculated the performance rate of each branch.

Table 3 represents the mean of the technical performance of bank branches per period of time.

Table 3: Mean of Performances of Bank Private Branches by SFA

Mean of Performance	Time Period
0/28	Year 2009
0/30	Year 2010

Based on table (3), the mean of technical performance of branches has increased during the time. Table (4) represents the performance rate of each branch in each time period.

Table 4: Performances of All Branches by SFA

Branch name	2009	2010
Branch of saadat abad	0/77	0/78
Branch of dolat	0/75	0/77
Branch of mirdamad	0/73	0/74
Branch of bazaar	0/65	0/76
Center branch	0/64	0/66
African branch	0/57	0/59
Branch of Dr fatemi	0/56	0/58
Branch of iran earth	0/53	0/55
Branch of pasdaran	0/51	0/53
Branch of yaftabad	0/47	0/49
Branch of bagh ferdos	0/46	0/48
Branch of piruzi	0/46	0/48
Branch of velenjak	0/34	0/37
Branch of aghdasiye	0/34	0/36
Branch of meydan ghazvin	0/30	0/32
Branch of sadeghiye	0/27	0/29
Branch of arike Iranian	0/22	0/24
Branch of janat abad	0/16	0/18
Branch of north Africa	0/15	0/17
Branch of rey city	0/10	0/12
Branch of mollasadra	0/09	0/10
Branch of jam-e-jam	0/08	0/10
Branch of tehranpars third circle	0/07	0/08
Branch of mellat ekbatan	0/04	0/05
Branch of azarbayjan	0/04	0/05
Branch of 30 tir (Tehran burs)	0/04	0/04
Branch of seyyed jamal aldin	0/04	0/03
Branch of shahid beheshti	0/03	0/04
Branch of gheytariye	0/02	0/03
Branch of rumi bridge	0/02	0/03
Branch of karegar shomali	0/02	0/03
Branch of ekbatan	0/01	0/01
Branch of argantin	0/01	0/01
Branch of meydan vanak	0/002	0/003

Based on table (4) and due to the average performance of each branch during two years, the saadat abad branch was the most performance with the average performance of 0/77. This means that this branch is not performable in 0/23. By reducing 0/23 of its inputs and increasing the technical performance, its reaches to this level of its out puts. The most performable branches after Sadat abad are successively Dolat, Mirdamad and Bazar, and the least performable of the branches is the branch of Vanak square. Importantly, the first 9 branches in the above table whose performances were more than 0/50 were all the primary and old branches of the private bank. Thus, it can be said that the history of the bank has positive impact on its performance.

RESULTS

Al though neoliberal economists believe that the governmental agencies are hot necessarily performable, and private agencies are necessarily performable, their philosophy on deficiency of the governmental institutes and agencies belong to all citizen but they do not have the ability and motivation of controlling the employees and activities of these agencies. The citizen has little information about the behavior of the governmental agencies' directors, so they cannot control the agencies.

But we observed in the case study that economic agencies are not performable in Iran. So we should investigate its reason. We cannot believe in the direct relation of privatization and economic performance because the three logics that were implemented by neoliberal economists, is true about the big agencies of private segment. In most cases, the employed managers direct the big institutes of private segment and their shave holders are sporadic. The private agency that is directed by the employed managers, and its shareholders are so much and also sporadic and they are the owner of the part of that agency, has the same problems as the governmental agency has. In both private agencies there is the manager problem, the employer problem and free r.dp, because the shareholders, information about the director behavior of the private agencies is little and each share holders has little control ever these agencies.

The flexible budget is not pore governmental agencies only. The private institutes are important politically because military and health care industry confronts problems with the flexible budget and these industries are under the government support.

The private agencies known that if they are significant enough, they can take advantage of the flexible budget and also there is no threat in using this budget fully. In Early 1980s in U.S.A, the automobile manufacturer of Chrysler confronted financial problems and it was saved by the help of the republican party of Ronald Reagan who was a pioneer of neoliberal economics. On the other hand, the successful examples of government firms can be referred to. For example the most famous of the French factories are the Renault automobile manufacturer, telephone equipment factory, Alcatel tele communication, glass factory, saint Goten building materials and Tills electronic defense industries. These governmental factories were the pioneers of French technology and industrial development but the years between 1986 to zoo. They were dedicated to the private segment.

On the other hand, after the revolution of the jear 57, the Iranian capitalists didn't find Iran as a proper way to accumulate their wealth, so they left Iran and immigrated to the foreign countries. The war between Iran and Iraq caused the economics of Iran to become governmental thus; the government controlled and managed pillars of Iran economy and economics agencies. After the war ended, to reconstitute Iran economy, neoliberal economists suggested privatization of Iran economy. But capitalism was established in Iran. This capitalist class was half dependent upon the government and

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they bought governmental and public agencies with a cheap price. The nature of Iran capitalism is governmental and it is retire and owes to the government. As a result, they do not care to performable tasks, unlike the private capitalists. Whenever it confronts a problem, it can be easily saved by the help of government. In addition, the private agencies belong to the governmental capitalists and they can work without any perform ability.

Thus, the Iranian neoliberal economists, logic about the performance of the private agencies and non per formability of the public and governmental agencies are theoretically deficient. The capitalists in Iran are governmental and are reinterring to the government, so they can continue working without any per formability.

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There are good and bad governmental institutes. There may be a good solution or not. Both governmental and private agencies confront the same problems. Privatization leads to both good and devastating results. In general, privatization in Iran is difficult.

CONCLUSIONS

Institutes and agencies are considered as having natural monopoly. The industries requiring big and venture some investments and the agencies which offer essential services, should be governmental, unless the government provides and discipline. But in under developed countries like Iran capital market and legislation have a weak nature. The government has little ability in taxation. In the country's privatization of the important agencies based on scattered stock selling cannot solve the problems of the governmental agencies. In privatization you should be careful of the fact that the governmental agency be assigned to a proper buyer with a proper price. And also that agency should be the follower of proper laws and legislation.

In the other hand, the governmental agencies can be improved without any privatization and by the development of civilization, more control and free press. Privatization is not an only way to valise the per formability of economy.

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