# Global Journal of Advanced Engineering Technologies and Sciences THE FINANCIAL EFFICIENCY EFFECT OF AGRICULTURAL BANK BRANCHES ON EXPECTED DEPOSITS EXPAND (2013-2014 FINANCIAL YEAR)

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## **Abstract**

The aim of this study was to determine the effect of the financial performance of agricultural banks to attract deposits expected, based on performance was the fiscal year ended 19/03/2014. The number of employees per branch to the people, the annual running costs Riyal to pay interest on bank deposits and deferred revenues as inputs and facilities to attract deposits in million £ million £ and the output of each branch defined. The results showed that the degradation of agricultural bank branches, 24 branches less than 17% of all branches of the Agricultural Bank of Isfahan province had one or 100%, effective treatment and other branches had been less than 100% is inefficient. 5069 Branch with 69 times the highest authority in assessing the effectiveness of the financial performance of the provincial branches and subsidiaries 5051 and 5067 and 5094 and 5100 with an order of the highest authority in assessing the financial performance of their just played. By a) deferred bank, b) insufficient income to expense ratio and resources c) insufficient deposit, d) additional ongoing costs e) branches inefficiency contributed surplus manpower. In addition, 75 to 79 percent of the financial performance of the branches of the Agricultural Bank in the light of the expected supply of deposits has been realized.

**Keywords**: DEA, financial performance, anticipated savings, bank branch.

# Introduction

Privatization of state banks, the establishment of private banks in recent years, adoption and notification of policies in relation to the banking system, recession-inflationary economic conditions and complex conditions of competition for banking activities has provided. Therefore, the conditions for the continuity and survival of banks' financial performance are essential branches. Management method requires a fundamental step in sustainability such as efficient methods of scientific - practical balance between inputs and outputs of the organization created to institutionalize efficiency and continuous performance appraisal of the action. It is obvious that the wants and needs what the plan is followed, by measuring the activity and through the use of scientific models and quantifiable, and finally designing and implementing a system of performance evaluation will be possible.

This requires increasing the effectiveness requires the recognition and measurement. Measurement; (1) which provides effective factors in improving the efficiency, (2) help in setting priorities and making decisions, (3) A comprehensive and effective management that helps identifying problematic areas (4) information to assess the impact of changes in the value and direct resources manager does. (Charnes, Cooper and Rhodes 1978)

The concept of performance for the first Koopmans (1951) Debro (1951) was added in 1951 to microeconomics. Empirical evidence indicates that all institutions are not always optimal point. Hence, all of them in minimizing the use of inputs with the assumption of constant product and technology level and are technically not supposed to face inefficiencies.

In recent years due to competitive activity in the field of money and credit on the one hand and professional activities of the Agricultural Bank of facilities and protection of investments, on the other hand the Agricultural Bank is faced with challenges. The main source of lending in the bank, deposits of natural persons. The main research question, how to choose or outputs data in the field of research on the literature of the branch performance evaluation, the necessary calculations for each of the DEA and econometric methods, evaluate results and to identify factors affecting branches and Finally, measure the efficiency of each branch of the deposit has been absorbed. This study was conducted in response to the following questions:

"The financial performance of the Agricultural Bank branch in the province is expected to attract deposits what is the impact?"

#### Literature

Borhani in 1998 studied the performance of 33 branches of Tejarat Bank in Iran. The inputs include human resources, fixed assets and remaining net balances of deposits and output facilities include net balances of Islamic contracts, net balances of loans and credit, the net balance of partnerships and investments, credits and balances guarantee. The results of this study showed that the average efficiency of 73% is commercial banks and the high correlation between income and the size of the branches there.

Abedi Far and Khataei 2000 used a trans-log production function to evaluate the efficiency of their Iranian banks. In this study, the number of employees, fixed assets, deposits and loans, bank deposits, private sector input and output volume of credit facilities to the private sector banks are the results of this study showed that the average efficiency of 80%.

Karimi 2002, effective 9 Iranian banks by using a cost function Cobb - Douglas studied. Inputs include labor, lease-purchase, installment sales, civic participation, exchange, futures; investment office, checking and savings deposits, time deposits, short-term and long-term variable and output facilities are Bank. The results of this study show that average labor efficiency is 75%.

Ghobadi 2003, to evaluate the 15 Iranian banks and DEA paid regression. The number of personnel, the volume of bank deposits and fixed assets as inputs and the per capita cost of personnel, average earnings were paid an average cost of office output model. They showed that DEA based on the average performance of commercial banks 57%, 37% private and 76% are specialized and in SFA, the average efficiency of commercial banks 24%, 30% and 52% of professional.

Huge Hussein and guides 2004, using data from 10 banks and commercial expertise has assessed Iran. The results show that the technical and economic performance of banks in 1378, more than two years and performance has been relatively stable allocation studied in three years. As well as specialized banks in terms of technical efficiency, allocative and economic conditions are better than the commercial banks.

Saghafy and Saif (2005) identify and measure financial ratios and fundamental economic variables affecting the health and stability of the banking system are in Iran. They showed that these variables have on the health and stability of banks is effective.

Rostami and Qadirpour (2007), evaluate the efficiency of Iranian banks with their usual logarithmic function and regression. The cost function estimates the total cost of the dependent variable, the output volume in credit facilities as bank deposits, number of branches represents the inputs and technical changes. The results showed that the banking industry's average performance was 87%.

Syrian and Joiner (2008), to review the organizational structure, liquidity management tools and systems for measuring and monitoring liquidity as usual in the bank's liquidity management components. The results showed that the first step in the management of liquidity, liquidity risk measurement systems.

Kaveh 2009, evaluate the performance of Iranian banks to the DEA and the attitude has produced. Capital, number of employees, the operating costs of inputs and return on assets and deposits and fees and investment income are the outcomes of this study. The results showed that only 4 were efficient banks and private banks, with an average efficiency of 87%, had the highest performance.

Rostamian and Haji Babaei (2009), liquidity risk 2002-2007Bh Bank during the test process analysis Cox - Stuart and on the basis of calculating the value at risk model. They showed that liquidity risk during the period under review has been declining.

Mousavian and Kavand (2010), using the descriptive method shows that Islamic banks, due to lack of adequate tools for managing liquidity, maintain a high volume of liquidity. This is an opportunity cost to them. And finally, lowers the efficiency of the bank.

Darabi and Molaei (2011) studied the effect of macroeconomic variables of liquidity, inflation, capital preservation and profitability of GDP over the period 2005-2009 the nation's banks. They showed that between liquidity and profitability of the bank, a direct relationship is positive.

Hemmati and Esmaeel Nejad (2011) analyzed the Sinai Bank's liquidity gap. They showed that the liquidity gap year, banks are in good condition. Bank liquidity gap in the periods following a positive year and at intervals of one year due to maturities of long-term deposits is negative.

Divandari, Pourzarandy, Boghzyan and Naderi (2011) studied the effect of growth rate on the deposit facility rate, liquidity and return on investment in the nation's banks. The results showed that the bank's liquidity management and have been properly followed.

Welcome to Pham (2011), to review capital adequacy and risk management analysis and risk management in the Islamic banking system and the consequences of non-payment monitoring. He indicated that the liquidity risk of the participation of more than conventional banking. Mudaraba and Murabaha contracts on conventional banking but this risk is lower.

Hemati, Ghasemi Ali Abadi and Zakir (2012) showed that the annual growth rate affect liquidity and the monetary base and the money multiplier. The size of the multiplier is greater liquidity, to increase the liquidity needed in society there will be less need to increase the monetary base. They showed that the sensitivity of the volume of money in circulation to electronic money is high.

Gougerdchian and Mirhashemi Naini (2013), investigate the purchase of liquidity, cash flow matching of assets and liabilities and cash accounting transactions (GMM) 20 Iranian banks in the years 2001-2009 began. They showed that banks face before payment obligations by increasing its high liquidity assets, including securities increase.

Ahmadi (2013), evaluate and compare the performance of banks in 2010 and 2011 based on indicators of capital adequacy, asset quality, profitability, liquidity and other financial ratios presented. They showed that private banks with a loan to deposit ratio of 85% and a decrease in liquidity risk management resources and expenditures have been better.

Rangan and others, 1988 based on the 1986 sample consisted of 215 banks in the United States examined the attitudes of intermediate and non-parametric methods. The number of personnel and the value of fixed assets and total customer deposits inputs and construction loans, commercial loans and consumer loans and industrial output are in demand deposits. They concluded that the average performance of banks is 79%. And negatively associated with the combination of performance and versatile products and positively correlated with the size of banks.

Sebnouyan and Registers 1989, to collect data relating to the 1983 Bank of America 646, attitude and method of production using statistical parametric trans-log cost function, an estimate of inefficiency for banks and concluded that the average efficiency is 77%. And performance negatively correlated with the size of banks.

Ferrier and Lovell 1990, based on information from 575 banks in America in 1984 with a productive attitude and statistical parametric and non-parametric method using trans-log cost function have done your research. In the cost estimates, the total cost of the dependent variable number of personnel, administrative costs and costs of input supplies and the number of deposits, the number of current accounts and mortgages - the number of industrial loans and commercial loans are output results This study showed that the average efficiency of 74% based on parametric and non-parametric method is 79%.

Ali, Grabousky and Rangan, 1990, using Statistics 1986 322 Bank of America with attitudes and non-parametric method inefficient intermediary banks have been examined. The study put the number of personnel, the fixed assets

and total deposits of clients and output, construction loans, commercial and industrial loans, consumer loans and other loans and deposits. They showed that the average performance Banks is 83%.

Alfaraji and Alyadi and 1993, with 15 branch data collection one of the largest commercial banks in Saudi Arabia's non-parametric method examined the efficiency of bank branches. This study branch organizations include the number of employees, the percentage of employees with a college degree, the average work experience of employees of the branch area index, the index of the highest authority, Decoration Price Index average annual salaries and other operating expenses include banking and output the average monthly net income, the average monthly current accounts, savings accounts mean, mean other accounts, mortgages, and average index for loans and number of accounts. They showed that the relative efficiency of 12 branches is 100%.

Sheldon 1994, with data collection from 1987 until 1991 due to the attitude and method of statistical parametric and non-parametric method using a trans-log cost function to estimate and evaluate the efficiency of Switzerland's banking industry. He showed that the average efficiency of 39% based on parametric and nonparametric 66%.

Kaparakis and Miller and Foulas 1994 5548 Bank of America in 1986 to assess the effectiveness of the mediation approach, trans-log cost function of statistical parameters and their effectiveness evaluated. Parametric estimation of the total cost of the dependent variable, interest-bearing deposits, number of employees, property and fixed assets, the annual average wage and the average cost of fixed assets and real estate and private lending institutions, real estate collateral loans, commercial loans, industrial, property and securities are output. The results of this study show that the average performance of banks is 88% and the efficiency is increased by increasing the size of banks.

Sherman 1995 used a sample consisting of 33 branches of Bank of America with a view of intermediate and non-parametric method to examine the efficiency of branches. The number of personnel, operating expenses excluding personnel expenses, rent and office infrastructure, inputs and deposits, withdrawals, collected Czech, Czech bank, Czech tourist, bonds, loans and term deposits, certificates deposits, is output. The results showed that of 33 branches and 23 branches are inefficient use of inputs than are needed.

Detich and Diwas 1996, for the period 1998-1993 efficiency 101 223 Bank of France and Bank of Spain's attitude and approach intermediate statistical parameters were evaluated using translog cost function. The cost function estimates the total cost of the dependent variable, loans, deposits and assets as output, per capita personnel costs, and number of branches are established. The results showed that the average efficiency of 88% and Bank of Spain Bank of France is 74%.

Resty 1997, for the period from 1992 to 1988 with data collected from 270 banks in Italy with an intermediate approach and parametric and non-parametric method performance using trans-log cost function to assess Italy's banking industry. The results showed that the average efficiency of 90% based on parametric and non-parametric methods based on 81%, and there is no significant difference between results.

Bavertal in 1998 based on Bank of America 683, relating to the years 1988-1977 due to the attitude and method of statistical parametric and non-parametric method using translog cost function study in America's banking industry. The results showed that the average efficiency of 30% based on parametric and nonparametric 83%, which is a significant difference between the two non-parametric methods of observation, became more stable.

Betis and Heshmati in 1998, for the period 1984 to 1995, 156 bank performance using statistical parameters using trans-log cost function to estimate the efficiency of the banking industry workforce Sweden have used. The cost function estimates the total cost of the dependent variable, the number of branches, total assets and years of public input and total loans, deposits and guarantees of their output. They showed that the average efficiency of 88% and a negative correlation with the number of branch performance and positive relationship with total assets of banks.

Liang, Yang and Sheng Wu 2002, BCC fuzzy version of DEA was working with triangular numbers. The main idea is based on the conversion of fuzzy BCC to certain linear programming problem using the method alpha cut. In this way, the problem of spatial planning will become. Instead of comparing the proposed method, the variable intervals are defined not only constraints but also gives satisfaction to the maximum efficiency value is stopped.

Chen, Yu Lin and Shio and 2003, in an article entitled "Review of a new approach based on the distribution of weights in DEA" In a recent paper by Ball and his colleagues believe that as a new method based on the distribution of weights in DEA provided A DEA model coefficients of variation (CVs) combines input and output weights, is proposed to improve the cleaning power of the DEA and the balance of input and output weights are used.

Lee and Suwon 2004, a combination of two bases of DEA and AHP to rank triangular fuzzy numbers (trapezoidal) use  $\alpha$  pay cuts. They weight the variables identified using the AHP model specified, then the input and output variables as input-oriented DEA models have to do a case study for a bank, estimated to have concluded that the integrated model of work Efficiency is greater than the individual models, DEA and AHP.

Freeze and Taki 2004, the performance of 289 banks from 15 countries in Eastern Europe with statistical parametric approach with trans-log cost function efficiency of the banks have been examined. In the cost estimates, the total cost of the loan as the dependent variable and output, deposits as inputs, input prices are per capita staff costs. The results showed that Estonia, Kazakhstan, Lithuania, Latvia, Slovakia and Slovenia, countries with average performance (86% - 75%), Terdamy, Hungary and Poland, countries average performance average (68% - 62%), Bulgaria, Macedonia, Romania, Russia and the Czech Republic and Ukraine, countries with low average performance (59% - 42%).

Bunin, Hassan and Vachtol 2004, the performance of 10 banks from 6 countries Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania between 1994 and 2002 with statistical parametric approach with trans-log cost function studied. The total cost estimate of the dependent variable, total loans, total deposits, total current assets and total current investment in fixed assets total non-interest expenses as output and interest expenses to total deposits as representative input prices the results of the study showed that the average performance of banks is 88%.

Bekaly 2004, used statistical information between 2000-1999 with an attitude by the method of statistical parameters using the trans-log cost function as well as non-parametric method to study the efficiency of the banking industry, Europe has the results of this study showed that the average performance based on parameter 85 % and 82% non-parametric method, and there is no significant difference between results.

Doo and the age of the 2005, optimistic and pessimistic views on the performance evaluation studies suggested that both efficiency and output in the form of a merger that measures the overall performance of each DMU. To do this in the name of a virtual DMU ideal (IDMU) is used.

Kasmido 2006, due to the specific characteristics of banks, macro-economic conditions and the structure of financial markets on the profitability of commercial banks in the United Kingdom from 1995 to 2002. They showed that there is a positive relationship between capital adequacy and profitability.

Glous 2006, banks in Latin America to investigate the determinants of profit margins. He showed that the spread of the branches due to higher interest rates associated with incompetent management and the need for more resources.

Wang and Chen 2006, due to internal and external factors (bank attributes, variables, macro-financial and financial structure) in a Macau bank by the banking industry for 15 years were studied. The result showed that: 1) Capital Bank has a positive effect on profitability. 2) assets has a negative effect on the performance of banks In addition, banks that have large deposit network, cannot reach the additional benefit of smaller networks. As a result, in relation to macroeconomic variables, only the rate of inflation is high correlation with the performance of the banks they found a positive relationship between inflation and bank profitability.

Lafond and Long 2006, a sensitivity analysis for efficient DMU in sharing Cloud Powered Cloud Powered strong and weak CCR model developed modified. To measure efficiency DMU located close to the screen or DMU that poor performance is weak compared to the cloud page to modify the border.

Malhoter and Singh (2009) studied the effect on the performance of electronic banking and the banking industry country risk in India. They showed that banks store a larger, more profitable and more efficient than non-banks store (traditional) requirements. Internet Bank has assets of more quality and costs are lower.

Yang and Cheng (2009), a comparative study of electronic banking services to young consumers in both China and the United States of America began. Based on the results of this study, factors affecting the development of electronic

banking variety of products reduce costs; provide 24-hour service and increase productivity and efficiency in banking. The main benefit of e-banking and convenience consider as its main benefit for customers and lower costs for banks were introduced.

Bordelio and Graham (2010) evaluate the effects of liquidated assets on bank profitability for a sample of banks in America and Canada in the period 1997-2009 using GMM GMM's model. The results show that the profitability of the banks that hold more assets are liquidated, improved.

Beten and Camille (2010), review their banking on the development of e-commerce. The study identifies economic prospects of electronic banking and its benefits compared with existing systems were investigated. Results showed that electronic banking, the chance to banks is due to the ignorance of the people in the operation of the services is very low.

Magnus (2010), the Bank of Ghana in 2007 evaluate the DEA and the intermediate attitude. The population of the investigation of 22 banks, including three state-owned banks and private banks and 11 foreign banks is 8. Research inputs, while the overall cost of deposits and loans, bills bought, of doubtful debts and investments, such as stocks, bonds and government transfers outcomes research.

Basel 2010, in an article entitled "Comparison of experimental and theoretical applications of DEA in performance evaluation, tried to document literature related to the study by comparing the theoretical and some experimental studies on the use of DEA in evaluation organizational performance, to provide a theoretical innovation from the research should be mentioned.

Montino (2012), identify the factors affecting bank liquidity by a multiple regression model (more than one panel) in commercial banks Romania in the years before the crisis to pay separately since the 2008-2010 crises. Results showed that the crisis, significant changes to the structure of the determinants of bank liquidity brings.

Salman (2013) examined the liquidity position and liquidity risk of financial institutions using three liquidity indicators include the proportion of liquid assets to total assets, financing to deposits ratio, maturity mismatch of assets and liabilities across the Muslim world and compare them with the conventional banks. He showed that Islamic Banking is evolving and yet greater risk.

Soleyman (2013) examines how the liquidity management of Islamic banks in Malaysia in response to changes in the use of dynamic panel data for 17 Islamic banks according to their internal and external variables. They showed that macro variables in the management of Islamic banking have affected.

Aqbada and Asoujy (2013) examined the impact of cash management and banking operation in Nigeria. Results showed that significantly affect a bank's liquidity management efficiently used in the bank's capital and a positive impact on its profitability.

# **Research Questions**

The aim of this study was to answer the following questions:

The size of the financial performance of each of the branches of the Agricultural Bank is the DEA method?

The deposits are expected each branch is using econometric or regression?

The expected financial performance of the branches on the deposits of branches under review what impact?

Factors affect on the failure of any of the existing branches of the Agricultural Bank of which are in the province?

## Method

Investigation after the contract is used.

# **Population and sampling**

The study population is nearly 150 branch of the Agricultural Bank in Isfahan province, all of which have been studied by the census.

# **Analysis methods**

In this study, descriptive statistical methods for describing data, data envelopment analysis to evaluate the financial performance of the branches, linear regression analysis based on cross-sectional data to estimate the combined deposits of branches and ultimately the expected correlation analysis determine the relationship between financial performance and Pzb deposit branches were expected.

#### Research model

In this study, the performance of the branches is obtained from the following equation:

$Ej = max (z) = z_0$	j=0
s.t:	
y1oz0 - $\sum_{j=1}^{n} \lambda_j y_{1j} \le 0$	out-put-1
$y2oz0 - \sum_{j=1}^{n} \lambda_j y_{2j} \le 0$	out-put -2
$\sum_{j=1}^{n} \lambda_j x_{1j} \leq x10$	in-put-1
$\sum_{j=1}^{n} \lambda_j x_{2j} \leq x20$	in-put-2
$\sum_{j=1}^{n} \lambda_j x_{3j} \leq x30$	in-put-3
$\sum_{j=1}^{n} \lambda_j x_{4j} \leq x40$	in-put-4
$\sum_{j=1}^{n} \lambda_j = 1$	
$\lambda_j \ge 0$ $j=1$ n	

Where: Ej: the amount of the resulting efficiency of the i-th branch j and

k: 1, 2, 3 and 4 j: 1, 2, ..., 250

x1j: first input or the j-th branch administrative costs in million rials

x2j: second input or j-th branch or other costs in million rials

x3j: Third input or j-th branch personnel expenses in million rials

X4j: fourth inputs or interest paid by the j-th branch in person

: or facilities granted by the j-th branch in million rials

y3j: second output or deposits attracted by the j-th branch in Million Rials

## The Results

Describes the inputs and outputs are as summarized in Table 1.

Table1. Founding description

Variable Type	Description	Minimum	Maximum	Average	Standard Deviation
	Labors	3	22	5.225	3.745
Inputs	Current Cost	1280	18830	3469	3142
	Deposit Interest	1603	40207	8513	8105
	Bank's Delayed	0	9354	929	1710
Outputs	Loan Revenue	1627	58148	10463	12287
	Deposits	17705	305627	53501	70412

### **Determine the levels of performance:**

To evaluate the performance of each branch, the Data envelopment analysis and BCC model used and the results of the evaluation It is summarized in Table 2.

Table2. The Efficiency Evaluation with DEA

Code	Efficiency Amount	Situation	Code	Efficiency Amount	Situation	Code	Efficiency Amount	Situation
5001	100	efficient	5049	94.4	Non- efficient	5097	66.07	Non- efficient
5002	95.37	Non- efficient	5050	30.92	Non- efficient	5098	82.88	Non- efficient
5003	100	efficient	5051	100	efficient	5099	59.4	Non- efficient
5004	88.87	Non- efficient	5052	100	efficient	5100	100	efficient
5005	79.13	Non- efficient	5053	68.11	Non- efficient	5101	63.38	Non- efficient
5006	85.83	Non- efficient	5054	73.19	Non- efficient	5102	98.81	Non- efficient
5007	70.43	Non- efficient	5055	100	efficient	5103	62.12	Non- efficient
5008	100	efficient	5056	73.42	Non- efficient	5104	82.53	Non- efficient
5009	100	efficient	5057	84.49	Non- efficient	5105	57.04	Non- efficient
5010	100	efficient	5058	83.24	Non- efficient	5106	54.66	Non- efficient
5011	100	efficient	5059	69.91	Non- efficient	5107	57	Non- efficient
5012	88.11	Non- efficient	5060	67.61	Non- efficient	5108	55.29	Non- efficient
5013	100	efficient	5061	90.51	Non- efficient	5109	51.1	Non- efficient
5014	91.55	Non- efficient	5062	93.66	Non- efficient	5110	72.11	Non- efficient
5015	61.22	Non- efficient	5063	77.1	Non- efficient	5111	53.08	Non- efficient
5016	100	efficient	5064	87.05	Non- efficient	5112	41.38	Non- efficient
5017	86.4	Non- efficient	5065	91.84	Non- efficient	5113	87.67	Non- efficient
5018	86.73	Non- efficient	5066	100	efficient	5114	74.58	Non- efficient
5019	66.41	Non- efficient	5067	100	efficient	5115	49.61	Non- efficient
5020	94.3	Non- efficient	5068	55.4	Non- efficient	5116	79.73	Non- efficient
5021	92.84	Non- efficient	5069	100	efficient	5117	75.28	Non- efficient
5022	90.24	Non- efficient	5070	70.13	Non- efficient	5118	48.69	Non- efficient
5023	75.25	Non- efficient	5071	55.59	Non- efficient	5119	74.42	Non- efficient
5024	96.77	Non- efficient	5072	67.15	Non- efficient	5120	54.53	Non- efficient

5025	69.06	Non-	5073	61.47	Non-	5121	57.96	Non-
3023	09.00	efficient	3073	61.47	efficient	3121	37.90	efficient
5026	100	efficient	5074	73.78	Non- efficient	5122	58.94	Non- efficient
5027	100	efficient	5075	75.71	Non- efficient	5123	43.2	Non- efficient
5028	67.1	Non- efficient	5076	72.17	Non- efficient	5124	79.23	Non- efficient
5029	63.69	Non- efficient	5077	53.06	Non- efficient	5125	71.46	Non- efficient
5030	77.01	Non- efficient	5078	90.15	Non- efficient	5126	42.42	Non- efficient
5031	73.36	Non- efficient	5079	68.93	Non- efficient	5127	59.23	Non- efficient
5032	83.08	Non- efficient	5080	83.63	Non- efficient	5128	75.93	Non- efficient
5033	75.17	Non- efficient	5081	100	efficient	5129	60.01	Non- efficient
5034	78.14	Non- efficient	5082	86.05	Non- efficient	5130	86.51	Non- efficient
5035	83.54	Non- efficient	5083	63.46	Non- efficient	5131	43.67	Non- efficient
5036	94.38	Non- efficient	5084	63.02	Non- efficient	5132	75.26	Non- efficient
5037	75.49	Non- efficient	5085	68.05	Non- efficient	5133	47.24	Non- efficient
5038	60.79	Non- efficient	5086	74.37	Non- efficient	5134	66.79	Non- efficient
5039	100	efficient	5087	68.05	Non- efficient	5135	57.28	Non- efficient
5040	63.75	Non- efficient	5088	74.37	Non- efficient	5136	56.36	Non- efficient
5041	70.68	Non- efficient	5089	100	efficient	5137	74.22	Non- efficient
5042	76.02	Non- efficient	5090	56.47	Non- efficient	5138	67.18	Non- efficient
5043	100	efficient	5091	78.92	Non- efficient	5139	66.89	Non- efficient
5044	76.69	Non- efficient	5092	79.1	Non- efficient	5140	55.77	Non- efficient
5045	92.65	Non- efficient	5093	83.63	Non- efficient	5141	46.87	Non- efficient
5046	100	efficient	5094	100	efficient	5142	100	efficient
5047	74.52	Non- efficient	5095	67.26	Non- efficient	***	***	***
5048	67.85	Non- efficient	5096	80.1	Non- efficient	***	***	***

As shown in Table 2, based on the results of efficacy to eliminate data envelopment analysis of agricultural bank branches, 24 branches less than 17 percent of total agricultural banks with possession of one or 100%, efficient are known.

# **Estimate of expected deposits:**

Deposits production function as the relationship between the deposits and the inputs of each branch consists of the number of employees, current costs, deferred interest paid on deposits are defined as bank and eventually combined with linear regression cross-sectional estimates and described in the number of 3 summarized:

Table 3. The Estimation of Deposits Function Parameters.

Variable	Coefficient	Standard Coefficient	Relationship
Constant	2338	0.0000	***
Labors	4350	0.143	Direct
Current Cost	2.127	0.076	Direct
Deposits interest	7.900	0.826	Direct
Banks Delayed	-2.493	-0.052	Direct

By inserting the parameters of linear parametric production function in attracting deposits were as follows based on the actual values of inputs, the branch deposits expected to be obtained.

Y2 = 2338 + 4350x1 + 2.127 x2 + 7.9x3 - 2.493x4

# The expected impact of financial performance on deposits:

The impact of the financial performance of subsidiaries on the expected deposit I paid using Pearson correlation coefficient and correlation spear and the results are summarized in Table 4.

Table 4. The Effect of Financial Efficiency on Expected Deposits.

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Relationship	Pearson Correlation Coefficient	Spearman Correlation Coefficient
Financial Efficiency and Expected Deposit	0.7512	0.7952

Based on Table 4, the results showed a positive relationship between financial performances and are expected to attract deposits and between 75 and 79 percent of agricultural bank branches of financial performance in light of the expected supply of deposits has been realized.

## Conclusion

The results showed that the degradation of agricultural bank branches, 24 branches less than 17% of all branches of the Agricultural Bank of Isfahan province had one or 100%, effective treatment and other branches had been less than 100% is inefficient. Efficient branches in the province according to the results of 5001, 5003, 5008, 5009, 5010, 5011, 5013, 5016, 5026, 5027, 5039, 5043, 5046, 5051, 5052, 5055, 5059, 5066, 5067, 5069, 5081, 5089, 5094, 5100 and 5142 and effective as other 118 branches of Agricultural Bank or the remaining 83 percent are non-evaluation.

Then the compound based on linear regression analysis and cross-sectional data using SPSS software to estimate of expected deposits per branch of Bank of agricultural inputs for each branch, including the number of employees, operating costs pay interest on bank deposits and deferred respectively. The results of this assessment showed that bank deposits per branch deferred inverse relationship between other factors have been correlated with the deposit of each branch.

Using an estimate regarding the expected deposits per branch by branch in production function estimated replacement value of real institutions, real deposit and calculated and compared to the expected error or deviation was calculated based on the percentage of deposits expected.

Finally, the impact of the expected financial performance of the deposits using Spearman and Pearson correlation analysis was performed with the criteria and the results showed a positive relationship between financial performance and attracting deposits had been expected.

# References

- 1. Abedi oven, P. and Imam Hussein Mahmoud, (2000), estimate the technical efficiency of the banking industry in Iran, Iranian Journal of Economic Research, No. 6, pp. 63 to 84.
- 2. Ahmadian, A., (2013), evaluating the performance of banks in the portfolio of assets, liabilities, gains and losses in the years 2012 to 2013, the Institute for Monetary and Banking.
- 3. Alfaraji, F., Elidie, S. (1993), "Process improvement through performance measurement: the halanced Scorecard methodology", *Work Study*, Vol.50 No.5, pp.179-188.
- 4. Ali, R. Grabouski, M. and Rangaun, R. (1990), "An evaluation of Alberta hospital efficiency", *Annals of Brithish Colombia Medical Association*, pp. 46-48.
- 5. Aqbada, p. and. Asouji, N. C. (2013), "A procedure for ranking efficient units in data envelopment analysis", Management Science, Vol.39, pp.1261-4.
- 6. Azimi Hosseini, Anita and guides, Abraham, (2004), the banking system's efficiency using data envelopment analysis (DEA), Journal of Economic Research, No. 20, Ss1-26.
- 7. Bessel, O. (2010), the performance Based management handbook: establishing and integrated performance management system, vol.2, pp.1613-1627.
- 8. Bauertall, J. (1998). The Practice of Social Research. 11th edition. Belmont, CA: Wadsworth Publishing.
- 9. Bettis, R.D. and Heshmati A. (1998), "The use of categorical variables in data envelopment analysis" *Management Science*, Vol.32 (12), pp.1613-1627.
- 10. Bekkali, Z. (2004), "Evaluating the productive efficiency and performance of us Commercial bank", *Managerial Finance*, Vol. 28 No. 8. pp. 3-25.
- 11. Bonnin, R. D. Hassan, A. and Wachtel, W. (2004), "Some models for estimating technical and scale in efficiencies in data envelopment analysis", *Management Science*, Vol.30 No.9, pp.1078-1092.
- 12. Borhani, A., (1998), evaluating the performance of the branches of Bank of Commerce, Master's thesis, University of Allameh Tabatabai.
- 13. Bordileo, U. and Graham, M. (2010), "Integrated performance measurement system: an audit and development guide", The TQM Magazine, vol. 9No. 1, pp. 522-534.
- 14. Beten, N., Kamill, M. (2010). *Measuring and explaining management practices across firms and countries*. Discussion Paper Series Centre for Economic Policy Research London, No. 5881.
- 15. Chen, A.D., Yu, Lin, L. (2003), Strategy and Structure, the MIT Press, Cambridge
- 16. Charnes, A. W.W. Cooper, and E. Rhodes (1978), "Measuring the efficiency of decision making units", *European Journal of Operational Research*, Vol. 2, pp. 429 -444.
- 17. Dewoo, S. J., Sanchell, M. (2005), "Soft systems methodology in action", *Journal of the Operational Research Society*, Vol. 44 No. 44, pp. 333-334.
- 18. Daraei, M., and Molaei, M., (2011), the technical performance of Mellat Bank, master's thesis, Bu Ali Sina University in Hamedan.
- 19. Debreu, G. (1951). The coefficient of resource utilization. Econometrical, 19(3):273–292.
- 20. Detyich, K., Divas, B. (1996), "The new society of organization", Harvard business review, PP.95-108.
- 21. Divandari, Ali, Ebrahim Mhmdpvrzrndy, Albert Bghzyan and rare A., (2011). "Design templates and application of risk assessment and determination of optimal currency portfolio." Journal of Monetary Economics 2, 3: 203-218.
- 22. Face, David, Joiner, M., (2008), new methods of financing and liquidity management in the banking, Islamic banking seminar Proceedings of the nineteenth, Tehran, Institute of Banking, S247-231.
- 23. Ferrier, M.J., Lawell, K. (1990), "The measurement of producyive efficiency" *Jornal of Royal Statistical Society*, Series A, 120, Part 3, pp.81-253.
- 24. Freeze, W., and Tuki, N. (2004), "The changing basis of performance measurement", *International Journal of Operations and Production Management*, Vol. 16 No.8, pp.63-80.
- 25. Glause, B. (2006). The Good Life: How Managers Made the Modern World?, *Colombia Business School Hermes Magazine*, Winter 2004.
- 26. Ghobadi, S., county, H., (2003), the impact of the merger on the performance of banks in Iran, Journal of Economic Sciences, No. 5, pp. 103-120.

- 27. Gugrdchyan, A. and Mir Hashemi, S., (2013), a test for the management of liquidity in the banking system, a series of articles in the twenty-second annual conference on monetary policy and currency.
- 28. Hemati, Hassan and Ismail race, M., (2011), the Bank's liquidity gap analysis Sinai, master's thesis, University of Qazvin.
- 29. Hemati, Nasser, Ghasemi Ali Abadi, M. and Zakir, M., (2012). Assessment of the monetary base and the multiplier effect on the liquidity of the country's development of e-banking, Islamic banking conference proceedings of the twenty-third.
- 30. Kaparakiss, W.A., Miller, N. and Fullas, N. (1994), "A note on the use of categoriables in data envelopment analysis", *Management Science*, 34(10): 1273-6.
- 31. Karimi, M., (2002), evaluation of the performance of banks using the cost, master's thesis, University of Isfahan.
- 32. Kasmido, J. (2006). "The origin of strategy", Harvard business review November December, pp.139-144.
- 33. Kaveh, M., (2009), evaluated the performance of the branches of bank branches efficiency assessment methods and provide suitable pattern, Accounting Research, pp. 77-92.
- 34. Koopmans, T. C. (1951). An analysis of production as an efficient combination of activities. In Koopmans, T. C., editor, Activity Analysis of Production and Allocation . Jhon Wiley and Sons, Inc.
- 35. Laufond, H., Longe, P. (2006), "The fall and riseoff strategic planning", Harvard Business review, January-Februrary, pp. 107-108.
- 36. Liang, J., Yang, G. and Dshengwu, V., (2002), "Business performance measure and alignment impact on strategy", International journal of operations and production management.
- 37. Li, J., Swoun, W. (2004). The Economic Of Bank Privatization (Journal Of Banking & Finance, 29).
- 38. Malhouter, M., L., Singue, p. (2009). Public Management, Vol. 81. No. 10, pp. 12-19.
- 39. Nagnous, I. (2010), "The performance measurement revoluatin:why now and what next?",Inteanational Journal off Operations and Production Management,Vol.19 No.2.PP205-228.
- 40. Montino ,A. (2012), Inteanational Journal off Operations and Production Management, Vol.15 No.4.PP80-116.
- 41. Mousavian, Syed Abbas, scouring, M., (2010), liquidity management in Islamic banking, Islamic economy of knowledge, (3), S35-64.
- 42. Pashaei Pham, R., (2011), The Role of the provisions and principles of the Basel Committee on banking systems, Proceedings of the Twenty-third Islamic banking conference.
- 43. Rangaun, R, Alexander, N, Li, J. (1988), "Integrating strategy with performance measures", Mnagement Development Review, Vol.9, Number 6,pp.13-15.
- 44. Resti, J.J. (1997), "Notes: categorical outputs in data envelopment analysis", *Management Science*, 39(3): pp.384-386.
- 45. Rostami, A. and Qdyrpvr, H., (2007) evaluate the performance of Iranian banks using logarithmic functions and regression, master's thesis, University of Ahyaz.
- 46. Rostamian, F. And Haji Babaei, F. (2009). "Bank liquidity risk measurement model using value at risk (Case Study: Saman Bank"), financial accounting and auditing.
- 47. Saghafy, Ali and Saif, V. (2005) Identification and measurement of financial ratios and fundamental economic variables affecting the health and stability of the banking system; Computer Research Center of Islamic Sciences, economic journal.
- 48. Salman, A. (2013), "The strategic states model: optimum strategies to reach high performance ",management Decision ,39/6,pp.441-447.
- 49. Sheldun, K. (1994), "Strategic performance evalution: descriptive analysis", Industrial Management and Data System, 101/8, pp.390-399.
- 50. Sebnoian, S. and Register, J.F. (1989). Strategies in Business, New York: John Wiely.
- 51. Sherman, S. (1995). Strategies in Business, New York: John Wiely.
- 52. Soleiman, R.E., (2013), "Relating Strategy, Structure and performance", Journal of Workplace Learning, Vol. 10, Num.2, pp.58-75.
- 53. Wong, K., Chen, L. (2006), Strategis Management and Business Policy, Fifth Edition, Massachusetts: Addison-Wesley Publishing Co.
- 54. Yonge, T., Cheng, P.(2009), "A Survey and taxonomy of strategy- related of performance measures for Manufacturing", International Journal of Operations and Production Management, Vol.16 No.3,pp,42-61.