The Relationship between Financial Ratios and Rating of Banks Case study: Banks Accepted on the Tehran Stock Exchange

Mohammad Hadi Asgari
Assistant Professor, Department of Business Management, Tonekabon branch, Islamic Azad University, Tonekabon, Iran

Maghsood Shalafi
M.A of Government Management, Chalus branch, Islamic Azad University, Chalus, Iran
Corresponding Author: dr_mh_asgari@yahoo.com

Abstract

Along with the growth and sustainable development, According to Flourishing organizations are the policy of concern to all managers. Banks are not exempt from this issue. In modern banking, there are several components that influence on financial resource mobilization and efficiency of banks and financial institutions. Identification and determine the effect relationship between these components with the success of the bank are important Issues which for the mobilization of financial resources.

The purpose of this paper is study of the effect of financial ratios on the Banks ranking that accepted in Tehran Stock Exchange for the period 1387 to 1391 using panel data.

Financial ratios used in this thesis are Capital adequacy ratio, Net Interest Margin ratio, Return on assets ratio, Return on Stockholder’s equity ratio, Cost to Income Ratio, Non-Performing Assets Ratio, Total Assets, Cash asset to Cash received from customer’s ratio and Deposit cash to total assets ratio.

Also, in order to showing the rating of banks is used Stockholder’s equity to assets ratio which is published by the Banker magazine as one indicator of banks' rating.

Based on the results, It can be stated that Capital adequacy ratio, Net Interest Margin ratio, Return on assets ratio, Return on Stockholder’s equity ratio, Cash asset to Cash received from customer’s ratio and the ratio of cash assets to total deposits have positive relation and while the performing assets ratio, cost to income Ratio and the Total Assets have negative relationship with the ranking of banks. Also it should be noted that three variables of Return on equity ratio, total assets and the ratio of cash assets to total deposits have no significant relationship with the index of banks rating.

Keywords: Financial ratios, Ratings of banks, the banking industry in Iran.
1. Introduction

Measure and evaluate of performance is essential for excellence of organizational activities. Performance evaluation is the main concern of managers in competitive conditions. Given that banks have a significant role in the distribution of financial resources in the field of economic activity, their impact on competition is very important (Berger and Bowman; 2008).

The banking is more important in Iran's economy. Because of the lack of the necessary development in the capital market, in the framework of the banking system, in practice, the banks are mainly responsible for the short-term and long-term financing. Bank's lending that form an important part of the financing operations, economically is important and always associated with some degree of risk, neglect in this area may lead to undesirable results for banks (Borhani; 1999).

The pressures of globalization and increasing growth of financial and credit non-bank institutions in recent years, have prompted that banks act with the creation of research centers and conducting research and continuous evaluation of their performance and re-organize them in order to improve in the domestic and foreign markets, to survive and compete (Safaei; 2011). Today, organizations (such as banks) have realized that they must be aware of the performance of their organizations to fit their resources and uses situation accordingly; improving the performance of the organization depends on this performance evaluation; Thus, performance evaluation, is a process that the organization and its units, have recognized its necessity and importance. If this process well designed and implemented and its results are properly used, will be efficient tool to achieve the organization's objectives and will help the efficient and effective use of resources (Ahmadi et al, 2011).

Therefore, one of the most important issues today that affects the performance of the banking system is discussions of focusing on the issue of rankings and trying to improve it, because focus on this issue could have a direct impact on efficiency and improving of financial performance of banks. However, due to the nature of financial ratios, as well as the need to consider factors affecting the rating of banks, the main question in this research is that what will be relevant of financial ratios and rankings index of banks accepted on Tehran Stock Exchange during the period 2008 to 2012?

So in this paper, by considering indicators of financial ratios and to portray it in the framework of data and apparent statistics, the impact of these indicators on the ranking indicator (capital assets) in the banks accepted in Tehran Stock Exchange has been studied, So that presented more appropriate guidance to planners and policy makers to make the right and fit decision with an accurate understanding of various aspects of financial ratios and some operational policies tailored to improving and manage them in the country's banking system.

2. Literature Review

Financial indicators and ratios are gathering, distributing and maintaining those information collection that are the basis for many of the actions, decisions, policies and reporting. Financial data analysis not only makes possible performance evaluation, but also justifies continues for policies and defined programs for the development of the activity of banks in the short-term and long-term periods in terms of increasing profitability. To measure the
The profitability of banks, as financial institutions increased and improving financial indicators in a period of activity, financial information and ratios will be useful and reliable. Records the use of financial ratio, has been represent the different applications in a variety of decision-making. The main reasons for using financial ratio in analysis is that financial information is expressed in the form of a short summary of ratios rather than detailed financial statement (Rezanejad; 2011).

According to the theory (Foster, 1986) reasons for using financial ratios are as follows:

1) Evaluating the trend of companies compared to each other and for a specific time period
2) Providing information to better estimate assumptions of statistical methods.
3) Test this theory that a ratio, is a good variable and can be used.
4) Examine empirical regulation evidence between financial ratio and estimate or prediction of interest variable.

The financial statements include a balance sheet, profit and loss statements, comprehensive profit and loss statements, and statement of cash flows, which is now considered to be the basic financial statements (Tehrani; 2010).

In banks, like other companies, the most important financial statements are balance sheet and profit and loss statements that often placed at the disposal of shareholders in a period of three months, six months, nine months and annually to be the evaluation basis of their investments process. Measuring the profitability and the activities of companies will be obtained from the contents of balance sheet and profit-and-loss statements (Alrabei; 2013).

a) Balance sheet

The balance sheet is reflects the financial position of a company in a given time. The report indicates spending on the one hand and on the other hand represents the resources that have been used for consumption. Consumption the same assets on the balance sheet include:

- Current assets (cash, short-term investments, accounts and receivable notes, inventory and deposits and advance payments),
- Fixed assets (land, buildings, machinery, vehicles),
- Long-term investments (buying stocks) and
- Other assets

And sources of consists of the debts and Stockholder's equity, Liabilities include:

- Current liabilities (accounts and receivables notes, pre-received)
- Non-Current liabilities (long-term debt and storage of staff redemption) are.

Stockholder's equity are the resources that belonged to shareholders, consisting of: capital, statutory and development reserves, accumulated profit (loss), spent of stock. And because the cost provided from the resources, total liabilities and equity are always equal with assets.

A balance sheet is one of the major financial statements in banks that continually show changes in the composition of assets and liabilities. According to the balance sheet, some items in balance sheet are more profitable and are more important than other items and should be more attention to them; such as direct investment and concessional loans from the foreign exchange reserves and statutory deposits that are profitable and items such as the cash margin and other assets are not profitable (Borhani, 1998).
b) Profit and Loss Statement
These bills represent a company's financial performance during a given accounting period in which the income statement is reported in different sections. In the banks profit and loss account using the accounts of income and expenditure shall be prepared that the bank net income or loss determined in a relevant period as a result. Bank income sources, compose from the various parts which mainly include income from the extended facilities and the delegated resources, means the types of long-term investment deposits and bank shares from the capital and bank savings and other property deposits; therefore, a part of the bank revenue has communal aspect and the share of bank and depositors' share of profit must first be determined and then net profit after tax will be the profit of period. This benefit in private and semi-private banks after the financial statement audit and determine the amount of dividend profit that will be given at a meeting of the General Assembly, is divided between the shareholders. Net profit is as one of the fundamentals and factors affecting the stock price of a bank in the capital market. Profit is one of the important items in the financial statements. McNeil has offered the following definition for the concept of profit and loss: “profit is the increase in shareholder net wealth, and losses include a reduction in shareholder net wealth.” (Rezanejad, 2010).

A firm's financial ratios are divided into four groups:
1. Liquidity ratios
2. Activity ratio
3. Debt or leverage ratios
4. Profitability ratios

On the other hand, now competition in the financial markets, is inevitable; investors are always looking for the market with the most appropriate financial features to minimize risk for them. Providing general information to individual and legal investors about the position of companies that operate in the financial markets such as the Stock Exchange, relative to each other, which is called "scoreboard", seems necessary (Gholizadeh, 2009). Thus rating agencies were created to compare companies and identifying financial situation and offering them to the public customers and provide context to select investors.

Grading systems are divided into two categories: internal and external. Internal grading by any bank or institution is created according to his models. External rating by reputable grading companies outside the bank performed. Credit analyst in a bank or a grading agency has considered many characteristics, including managerial and financial indicators as well as qualitative and quantitative indicators. In this regard, the analyst should ensure companies' financial health and the adequacy of profitability and cash flow to cover debt service obligations (Zekavat, 2002).

Efficiency of rating systems need some infrastructure in the money and capital market, So if they practically do not realize, thus such systems cannot have a positive effect on performance of institutions in the money and capital market. One of the prerequisites for efficiency of rating systems is transparency in financial markets. This means that companies are obliged to disclose their financial information in accordance with legal requirements in the form of audit systems. Among the various indicators, three indicators, the capital base of the bank, the assets and the ratio of capital to assets, have been most widely used in the banks ranking. In this study, the ratio of capital to total assets as an indicator for showing ranking of banks is used.
3. Previous Research

Rama Murthy 2013, studied the rankings bank using financial ratios for banks of Persian Gulf Cooperation Council during the financial crisis, the results show cash management and successful control of bad loans are from functions and important financial management practices in banks that are to follow the successful performance during the crisis.

Ray Barrel 2013, in a study used the Logit regression analysis to examine the extent to which banks' rankings reflect the credit risk of banks. The studied variables are the profitability and credit risk in America and Europe during the financial crisis of 2007 and 2008.

Herald et al 2012, in a study have examined the effects of competitive markets, bank properties, the scope of their activities, the laws of countries and the quality of the banks rankings in the years 1996 to 2011, by using time series method. The results show that the amount of investment has the greatest impact in quality the rankings of banks.

Marco Stringab and Spyros Pagratisa 2009, in a study provide the model for banks with higher risk and structured approach to the assessment of bank creditors. For this purpose, examined the impact of financial indicators and macroeconomic variables and the results indicate that When there is credit expansion and the economic performance is strong, the ranking of banks also tend to rise.

Bagherkord et al 2011, in a study, evaluated the efficacy of bank branches, determined the reference branch and has provided solutions for inefficient branch and ranking the efficient branches by use of DEA in 30 bank branches of Sistan-Balochestan province. The results show that the absence of proper distribution of human resources leads to Inefficiency of some branches.

Mohammad Reza Rostami et al 2011 have assessed the financial performance of accepted banks in Stock Exchange by applying the logic topsis in the DEA method. In this study, utilized from the criteria of profitability, liquidity, capital adequacy and asset structure and have used financial ratios associated to each criterion for evaluation the financial performance of banks and to evaluate the performance has used the logic of topsis in DEA and with the introduction of two ideal and anti-ideal decision units have evaluated the performance of each banks to the two decision units. From the perspective of ideal decision-making units, the banks of Kar Afarin, Mellat, and Parsian have had minimum distance and Saderat Bank has had maximum distance from the ideal. From the perspective of anti-ideal decision-making units Saderat bank has had minimum distance and Kar Afarin has had maximum distance from the anti-ideal. They more accurately assess banks by combining the results of two ideal and anti-ideal views by relative proximity index; which represents the Kar Afarin Bank in terms of financial performance in 2009 has been the best.

Mahdi Fallah et al 2011, in a study assessed the effectiveness of Sepah Bank branches using BCC and CCR models, with input and no input nature for all branche. The results show that 53 branches in the CCR model, 23 branches in the BCC model, and 72 branches at the BCC model and 11 branches at the BCC model without input was introduced as efficient in 2008 And in 2009, respectively 46 branches, 51 branches and 15 branches has been introduced as efficient.
4. Research Hypothesis
Hypotheses include:
- There is a significant relationship between capital adequacy ratio and grading of banks.
- There is a significant relationship between the ratio of margin of net profit and grading of banks.
- There is a significant relationship between the ratio of return on assets and grading of banks.
- There is a significant relationship between the ratio of profit from special value and grading of banks.
- There is a significant relationship between the ratio of cost to income and grading of banks.
- There is a significant relationship between non-operating assets ratio (outstanding loans to impure loans) and grading of banks.
- There is a significant relationship between the ratio of liquid assets to cash received from customers and grading of banks.
- There is a significant relationship between the ratio of liquid assets to total deposits and grading of banks.
- There is a significant relationship between the ratio of total assets and grading of banks.

5. Research Methodology
The research method is applied-analytical and in terms of technical is documental. Thus first, theoretical arguments and empirical studies are collected by library method and then taking into account the considerations and changing circumstances, the model and appropriate analytical pattern will be selected.
To collect information about the review of literature, library methods such as books, magazines, scientific and research papers and for collect information related to hypotheses, provided data by the Central Bank in Banking Conference in 2012 as well as information of Stock Exchange organization is used. The population consists of all banks listed on the Stock Exchange market. The population of this paper is the following banks: Ansar, Eghtesade Novin, Kar afarin, Mellat, Parsian, Pasargad, post bank, Saderat, Sina. To analyze the data obtained in the study of software Eviews 6, will be used. The data were analyzed using statistical data for the period 2008-2012 about the variables, in econometric model (Panel combined data method) and using software (Eviews, Excel).

6- Statistical analysis and hypothesis testing
In this part of the research model is estimated using panel data techniques. Based on panel data econometrics literature, it is necessary that before estimate the model using F Limer, data homogeneity and thus the using of the method of panel data estimation be tested. Also, as previously mentioned, for selecting the appropriate estimation method between method with fixed and random effects, Hausman test statistic should be used. This research model is as follows:
First, the test of normality of data should be done. For this purpose, the Jark-Bra test was used for normality of data. This test for variable hysteresis of ranking of banks in each of the banks was tested and the results were studied, which represent the normality of data. Table 1 shows the statistical properties of normality test for index of banks Rankings. If JB (Jark-Bra coefficient) be smaller of chi-square of table with degree of freedom 2 at 95 percent confidence interval, so represents null hypothesis is confirmed (normal distribution). In general, if the skewness and kurtosis are not in range $(2, 2)$, distributed data are not normally.

\[
R_{it} = \beta_0 + \beta_1 TCR_{it} + \beta_2 NIM_{it} + \beta_3 ROA_{it} + \beta_4 ROE_{it} + \beta_5 CI_{it} + \beta_6 NPA_{it} + \beta_7 LCST_{it} + \beta_8 LD_{it} + \beta_9 TA_{it} + U_{it}
\]

After testing normality, in order to obtain permission to use panel data estimation method, F test is done. F test results are presented in Table 2. F test results for this function indicate significance for using panel data rather than aggregated least squares method.

Table 2. The results of the significance of fixed effects against integration ordinary least squares method

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>The probability value (PV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>0.0000</td>
<td>(29,146)</td>
<td>265.208436</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>0.0000</td>
<td>29</td>
<td>716.941883</td>
</tr>
</tbody>
</table>

Source: research findings

Also the results of Hausman test statistic to select the appropriate method for estimates show that using of method with fixed effects compared to random effects, is an appropriate method to estimate the model. The results of these tests are presented in Table 3.

Table 3. Results Hausman test for the selection method with fixed and random effects for the first model

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>46.625983</td>
<td>4</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: research findings

As we have seen, the result of Hausman test statistic implies that the most appropriate method for estimating model on panel data is method with fixed effects. The results of the research model using fixed effects are presented in Table 3.
9 banks accepted in Tehran Stock Exchange constitute a statistical sample of this study. The study period is 2008 to 2012.

Table 4. Results of model estimation by method with fixed effects in E-views.

(The dependent variable R: ratio of capital to assets (the index of ranking of banks)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>The estimated coefficients</th>
<th>statistics Level</th>
<th>Significance level (Prob)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCR Capital adequacy ratio</td>
<td>0.070</td>
<td>2.07</td>
<td>0.040*</td>
</tr>
<tr>
<td>NIM the ratio of margin of net profit</td>
<td>0.086</td>
<td>2.57</td>
<td>0.011*</td>
</tr>
<tr>
<td>ROA the ratio of return on assets</td>
<td>0.19</td>
<td>1.65</td>
<td>0.0993**</td>
</tr>
<tr>
<td>ROE the ratio of profit from special value</td>
<td>0.101</td>
<td>0.43</td>
<td>0.6701#</td>
</tr>
<tr>
<td>CI the ratio of cost to income</td>
<td>-0.026</td>
<td>-3.25</td>
<td>0.0014*</td>
</tr>
<tr>
<td>NPA non-operating assets ratio</td>
<td>-0.07</td>
<td>-2.22</td>
<td>0.0274*</td>
</tr>
<tr>
<td>LCST the ratio of liquid assets to cash received from customers</td>
<td>0.010</td>
<td>2.90</td>
<td>0.0042*</td>
</tr>
<tr>
<td>LD the ratio of liquid assets to total deposits</td>
<td>0.072</td>
<td>1.153</td>
<td>0.2648#</td>
</tr>
<tr>
<td>TA the ratio of total assets</td>
<td>-0.381</td>
<td>-0.177</td>
<td>0.8615#</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td></td>
<td></td>
<td>0.82</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td></td>
<td></td>
<td>2.11</td>
</tr>
</tbody>
</table>

Source: by researcher (output of E-views software)

Interpretation of the coefficients obtained from estimating the models are presented in Tables 4, include:

By increasing the capital adequacy ratio to the amount of one unit, index of ranking of the bank (R) will increase to the 0.07%. This is a positive and significant coefficient at the level of 95 percent, in the model estimation. Since the capital adequacy index is the ratio of Stockholder’s equity to risk assets, the results show that by increasing the Stockholder’s equity or risk assets of a bank, the ability of banks will increase and its rank and position will improve. The results are consistent with the results of the Articles Ray Mobile (2013), Rama Murthy (2013) and a Charkhi Sahlabadi (1991).

The ratio of net profit margin has positive and significant effect (in level 95 percent) on the index of banks ranking. In other words, by increasing the per unit margin of net profit, bank ranking will be improved to 0.08 units. With increasing the margin of net profit and the profitability of the bank, the bank’s ranking and degree will improve.

Ratio index of return on assets (ROA), with index of ranking of banks has significant and positive correlation (at 90% level). In other words, by increasing per unit in ratio index of return on assets, bank ranking will be increase to 0.19 units. This result is consistent with the theoretical foundations and outer realities because banks with a higher Ratio of return on assets are in a better position in the ranking.

The results of estimated model showed that the ratio of profit from special value (ROE), with a ratio of capital to assets that shows status of ranking the banks, has the positive relationship but without meaning.
The rating index with the ratio of cost to income that is from financial ratio, has significant and negative relationship at the level of 95 percent; in other words, with increasing operating costs or reduce bank operating revenues, efficiency of the banks will decreased and consequently its rating will fall. This result in a paper from Sahlabadi in 1991 has also been approved.

The results of estimation of model show that Non-operating assets ratio has a negative and significant relationship with the ratio of capital to assets that is index for ranking of banks. In other words, since the lower amount of this ratio (the ratio of overdue loans to impure loans) shows higher quality in assets, the results confirmed the claim. This means with increasing outstanding loans or decrease in impure loans, quality of bank assets will decrease and bank ratings will decline. The results of studies of Murthy (2013) and Marco Stringab and Pagratisa (2009) confirmed the result.

The ratio of liquid assets to cash received from customers has positive and significant effect on the ranking index of the bank is in level 95 percent. As previously noted, this index is equal to ratio of current deposits to the amount of deposit withdrawals by customers. So whatever the percentage is less, bank liquidity will be more and there will be more vulnerable and rank and position of banks will be reduced in the ranking. The result is consistent with the results of the study Rostami et al (2011). Results of estimation of the model show that the ratio of liquid assets to total deposits, has a positive relationship but without meaning with a ratio of capital to assets that shows the situation of ranking the banks. The results are consistent with the results of Murthy articles (2013).

The index of total assets has negative relationship without meaning with an index of ranking the banks (the ratio of capital to total assets). In other words, with increasing the index of total assets in amount of one unit, the index of ranking the banks will decrease in amount of 0.38 units. Since the index of total assets in turn is one index for ranking the bank, with increasing this index is expected that bank ratings will improve. But given that the ratio of capital to total assets in this study is intended as an indicator showing the ranking of banks, with the increase in total assets, the denominator of the ratio of capital to total assets increased and the index of rankings will be reduced. But this connection is without significance in this study.

6. Conclusions and findings

In today's competitive environment that organizations' survival depends on the quality of stakeholders' decisions, evaluating the performance has considerable important and will play an important role in improving the performance of organizations. Performance evaluation should be comprehensive such that all aspects of organizational activity be associated with their performance and reflect the decisions role of managers in achieving the objectives and performance improvements. Given the key role of banks as one of the most important pillars of financial and economic in any society, it is important to evaluate the performance of this financial institution.

One of the main methods of financial analysts in evaluating companies is the using of their financial statements. Analysts take company's financial statements and with comparable
measures will analyze them. One consequence of the evolution of accounting is the using of financial ratios for analysis and decision making. The emergence of the ratios related to the nineteenth century, and since then analysts develop and promote the financial ratios (Hasanzadeh and Banab, 2009). Financial indicators and ratios, collect, distribute and maintain information collection, which is the basis for many of the actions, decisions, policies and reporting. The analysis of financial data not only enables performance evaluation, but justifies continues defined policies and programs for the development of the activity of banks in the short-term and long-term periods in the context of increased profitability.

Since the purpose of this paper is to examine financial ratios on ranking the banks, the results indicate that the following assumptions for the period 2008 to 2012, in the bank accepted on Tehran Stock Exchange, is approved.

Due to the positive effect of capital adequacy index on the rating of banks, it is suggested that bank managers to identify and rank the risk of our customers return to our facilities or in other words to reduce credit risk to keep appropriate ratio between capital and risk in their assets and thus maintain their capital adequacy index at the level specified by the central bank. Also these customer ratings and credit risk reduction can also reduce the outstanding loans to gross loans and therefore improve bank ratings by reduce idle assets.

The results show that the increase in profits can improve rank of banks. Therefore, strategies to increase profitability in the banking system that means increase of revenues (operating income, revenue from Commission fees and conversions and commission of monetary services such as issuing remittances and Brva) and cost reduction can be placed on the agenda bank managers. Also worth noting is that the index increasing profits leads to increasing return on assets (ROA) and ratio of return special value (ROE) and helps to improve bank ratings. Therefore, by increasing profitability, improving of many of the indicators and financial ratios performance will be possible

- The quality and acquisition process of income in a financial institution is highly related to how to manage the assets and liabilities of the institutions. Acquisition Income in a financial institution must be profitable, so that supported asset growth and raise the ability of Savings in the organization is to enhance the rights of shareholders. The good earnings performance will be leaded to increased confidence of depositors, investors, lenders and the public sector to the institution.

- Control the liquidity is one of the important responsibilities of bank's management. The use of short-term funds in long-term investments will face the bank with this risk that investor account holders may be Applicant of their funds and this point force banks to sell their assets. Banks should have sufficient liquidity to meet the demand of depositors and lenders till attract the public's confidence towards themselves. Banks need to have an effective asset and liability management system to minimize non-compliance maturity in assets and liabilities and optimize their return. Also liquidity with profitability have counterproductive relationship, therefore, financial institutions should establish the right balance between liquidity and profitability.

- Given that quality programs and increase of internal power of banks in total, will show their effects on the financial statements of banks, But efforts to improve the quality of the bank's internal structure, plays a significant role in the assessment of banks and draw a bright horizon for it.
7. Research limitations

Since the of this research and with this workload and information (check all financial ratios) for the first time is done in Iran, enough information to estimate the model provided Hardly and on the other hand due to the lack of internal and external sources, providing materials (especially to achieve an index ranking Banker) was associated with difficulties, As well as lack of access to some explanatory notes to the contained financial statements in the Library of the Central Bank, collecting the data confronted with limitations. Not being or incomplete information of some banks and that some of them were not accepted at this time on the stock exchange led some of them to be removed from the Statistical Society. However it is hoped that given the importance of this issue, all necessary measures be taken for data collection and more precise information.

8. Suggestions for future research

- It is suggested that in future research based on presented patterns, similar models is estimated at the level of the entire banking system and the financial markets and Also a wider range of ranking indicators as the dependent variables for the various models be used that that Of course, the lack of adequate information and comprehensive is as one of the biggest problems posed in the field.
- Also one of the things that can be helpful in determining the ranking of banks, the subject is bank overdrafts of your current account with the Central Bank. Because of that this implies the lack of proper management of resources and expenditures and also mismanagement of liquidity of related bank, therefore it can be considered as an indicator of the bank performance.
- This research can be done individually for banks and selected branches of any bank till the impact of each factor of the financial ratios on the ranking the banks identified and studied more precisely. This requires existence of statistical sources of long-term time series for each bank.
References


Ahmadi and et al, 2011, “Functional analysis of data envelopment analysis in the development and evaluation of the banking system”. Third National Conference on DEA.

Bagherkord and et al, 2011, assessment of Bank branches efficiency by the method of data envelopment analysis, case study: one of the Sistan and Baluchistan Province banks, Third National Conference on DEA.


Foster, George, PH.D, 1986,”Financial statement Analysis”.


Herald Han, Sam Langfield and David Marques, 2012, bank credit ratings: what determines their quality?


Safaei Ghadi; Olaei, 2011, assessment of the Urban branches efficiency Keshavarzi Bank in Mazandaran by using data envelopment analysis, Third National Conference on DEA.


Zekavat, S.M., 2002, the models of customer credit risk Export Development Bank of Iran, Tehran.