A REVIEW ON PERFORMANCE AND RISK IN BANKS

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Resumen: En las perspectivas económica y de gestión, una unidad reportera en todos los niveles debe hacer todas las medidas eficaces para recibir el máximo de beneficios que se acompaña de riesgos y rendimiento. La palabra de riesgo de hecho se lleva a cabo para aumentar el nivel de rendimiento en las unidades. Una de las principales partes de la economía en el mundo de hoy es el sistema monetario y financiero que los bancos están en la cabeza que se puede afirmar que hoy en día la economía puede Estar en niveles micro y macro y están bajo el control de los bancos. Este estudio, algunos de los factores que son eficaces en el rendimiento y los riesgos de los bancos se han considerado e investigado brevemente

Palabras clave: riesgo, rendimiento, bancos comerciales y gestión

Abstract: In economical and management perspectives, a reporter unit in all the levels should do all effective measures to receive maximum of benefits which is accompanied by risks and performance. The risk word in fact is conducted to increase the level of performance in the units .One of the main parts of economy in the world of today is monetary and financial system that the banks are in the head that can be stated that nowadays the economy can be in micro and macro levels and they are under the control of banks . This study, some of the factors that are effective on performance and risks of banks have been considered and investigated briefly

Keywords : risk, performance ,commercial banks and management

1. INTRODUCTION

Due to the continuous changes in the environmental factors and economic systems, different risks influence the financial structures of different institutes daily. Different institutes such as financial institutions and even the governments are encountered with special risks due to their performance. Generally, risk in the banking industry is divided into two main groups including financial and non-financial risks. Financial risks include market risk, credit and liquidity risks and also non-financial risks include functional risks, and regulatory risks. Credits risks are defined in

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the form of loss are related to the default of borrowers and the events that cause the decrease of the credit quality of the borrowers. In this simple define, many risks are hidden. The obtained credit risk is as the result of three risks such as 1) default risk 2) Value at Risk and 3) Risk Waste (receipt) (Bessis, J, 1999).

Many factors are involved in the investment risks of financial products that can be classified in three general groups including macro-economic factors, micro-economic and non-economic ones.

In order to the awareness of the utility and their desirability especially in the complex and dynamic environments, each organization needs to have a performance evaluation system. Lack of Performance evaluation system in an organization is considered as a kind of Failure to Communicate with external and in the external environment of the organization which will lead to aging and the dissolution of the organization (Adeli, 2005). Since the need for identification and management of different types of financial and banking risks has necessitated the existence of an international center- which is responsible for policy-making and announcement of the instructions related to the discussion of risks in organizations-, Bank for International Settlements with the abbreviated name (B.I.S), has established the Basel Committee that its main responsibility is to supervise bank capital status in the different countries. This committee is responsible for determination of standards related to the banks' risks.

2. RESEARCH METHODOLOGY

Required data collection of research is one of the main stages and due to its importance, sometimes the methods of collecting data are called survey methods mistakenly. The procedure of data collection is a beginning of a process that the researcher collects library and field findings and can deal with the information in the form of inductive method and compaction of data can be conducted with the help of classification and then will be analyzed and the proposed hypotheses will be evaluated. Finally, the results will be issued and the response to the research hypothesis is dependent on them. The methods of data collection can be classified generally into two groups: Library and field methods (Hafeznia, 2003).

In this survey, in order to collect the required theoretical data and also research background, the library method, i.e. studying and reviewing texts, theses, articles, and Persian and English technical books, and also internet sites, has been used (Sahmani Asl, Nikouei , 2014).

3. RISK AND PERFORMANCE CONCEPTS

For the definition of the risk, two viewpoints can be offered:

First view point: Risk as a kind of any potential fluctuations of economic efficiency in future.

Second view point: Risk as a kind of negative potential fluctuations of economic efficiency in future. In the risk of I.R.M an organization trend, risk with the first viewpoint has been considered. In the other words, both unpleasant (adverse) and pleasant risks have been regarded (Barzandeh, 2001).Generally bank risks are classified in four parts: Financial, operational, commercial, and Risk Case. Financial risks are in the forms of complete risks of commitment payment that if it is not managed very well, the banks will suffer from loss. Speculative risk based on financial arbitrage and in the case of arbitrage chance will lead to interest gain and other wise will have loss. The main types of Speculative risks are profit, currency rate changes and the market price.

Moreover, the financial risks have a type of complicated internal dependency that can increase the general risks of the banks significantly. For example, a bank that is dealt with the exchange and currency transactions with foreign countries is on the verge of currency exchange risks; but if the bank has an open situation of currency or does not consider the future commitments based on the time, will be on the risk of interest rate and extra cash risk. Functional risks are dependent on the organizational structure of a bank and the functions of internal systems including information technologies, other technologies, and following the policies and trends which can evaluate defraud and mismanagement. Commercial risks are related to commercial environments including macro economy factors, procedures, regulation and legal factors, payment systems and financial infrastructures. Singular risks are related to all the external risks; these risks can endanger bank functions in the case that are important or can weaken financial and capital status (Heniven Groening, and Sonia Brojovich Bratonovich, translated by Hassan Bakhtiari and Behroz khoda karami, 2011).

Some definitions have been presented for risk management like the risk terminology and of course all have similar concepts; the focus is on the process of risk management and we review the most important ones:

Risk management is the process of risk recognition, and its decrease to an acceptable level and finally

evaluating the results on the system (Gery Estoniboler et al. 2002).

Risk management manages the risks by controlling them and making provision for financial supports of loss, besides the efforts for controlling loss (Erique, 2010).

In today's competitive world, only those organizations and companies can compete and gain benefit that can pay attention to the needs of their customers and take their satisfaction in this regard; this issue will lead to customers' loyalty to the products and the offered services to the companies and organizations. Bank, as a type of organization that plays an important role in the development of economy, should offer services to meet the needs of the customers. More emphasis on the internal operational performance is needed in order to create competition in bank institutions. It means that it is necessary to determine an efficient way of functional evaluation that could connect all organization performance to the goals of the company (Jafernejad et al., 2010).

Therefore, since the main part of the economy of the country is related to the banks, it is obvious that the correct development and progress of the banks can increase their performance and this will lead to the progress of the economy and solving financial crises (Toloyi Ashlaghi, 2011).

In general, the performance is a kind of relative concept and shows the comparison between real and ideal performance. Performance is mainly suggested in three fields of engineering, management and economy. In the economy, the concept of performance is the very same concept of optimal devotion of resources (Alem Tabriz et al., 2009). Each of the organization uses a complex of inputs in order to produce the output, including products or services. farrel (1957) has introduced different methods of practical measurement of performance. He proposed that all the best performance of the existent agencies in that industry should be compared in order to measure the performance of one agency. Farrell has proposed 3 types of performance for the agencies (Faghih Nasiri et al., 2010).He has stated his opinion with a simple example of agency and with the use of two production factors such as fixed rate of efficiency and the minimum capital. Technical performance: This performance shows the capability of the agency in the maintenance of the maximum rate of production or using the minimum rate for obtaining the determined rate.

Devoted performance: this performance shows the capabilities of an agency in the use of optimal combination of production factors, considering their prices and minimizing the production expenses.

Economic performance: this performance is the multiply of technical performance in devoted performance.

Measurement methods of performance: In general the performance of one agency is measured through two parametric and non-parametric methods; in the following, the description of them is given:

Parametric methods: In parametric methods that are mainly on the basis of economy measurement and are used in the economy, at first, a functional form is considered for production. It should be noted that in parametric methods, except having limitation in the selection of production functions, there are other limitations too.

First, the units should have only one product; while it is possible that the units under consideration have several products. Second, making use of the least square method for the evaluation of the parameters of production function is not a complete form of production. It is because that the production function is the maximum possible production per each input; while the calculated function of this method does not give the maximum possible production in each input. The first estimated model through parametric method was presented in 1977 by Aigner, lovell and Schmidt, and also Meeusen and Van den broeck. Parametric methods are divided into two groups called random and certain methods.

Non-parametric methods: In an attempt to solve the problems of parametric methods, non-parametric methods were created. Farrell presented his first non-parametric method in 1957 for the determination of performance in the form of two inputs and one output (Bahirayi, 2012).

4. LITERATURE REVIEW

Sahmani and Nikouei (2016) in their article entitled 'effective factors on the performance and risk in commercial banks' have dealt with the concept of risk and performance in the banks in the first step and identification of the effective factors in the second step; in this article, the listed banks in Tehran stock market with the consideration of 5 inputs and 4 outputs were taken into consideration.

Fallah shamsi and Tehrani in an article entitled 'Design and explanation of valid risk models in the banking system of the country' in 2005, have investigated the performance of linear possible

models, logistic, and artificial-nervous networks for the prediction of credit risk of customers in banking systems. Predictor variables in these models are the proportions of financial rate of borrowers that have a significant relationship with credit risk and have been confirmed through appropriate statistical tests. With the use of financial and credit data of 316 customers of legal banks of the country, the mentioned models were designed and tested with performance test. The obtained results of this article show that the relationship between variables in the prediction model of credit risks is not Exponential and sigmoid function and exponential functions are the most proper prediction models of credit risk prediction and have the best performance for the prediction of credit risk that are related to artificial-intelligence networks and logistic models.

The investigation of the impact of risk on performance has been conducted with the use of network data envelopment analysis with the presence of unpleasant output by Abbaslu Nora et al (2011) and it has been proposed in this article that it addressed the impact of risk on evaluation of banks' performance by reviewing the concept of risk management. Evaluation of performance is one of the most important issues in the management that has been considered by the managers in the different institutions and organization. Because of the complexity of the issues and different effective factors in performance, using models that could consider different factors in decision-making, is necessary.

Data Envelopment Analysis (D.E.A) model is a kind of non-parametric method that can carry out evaluation in a comparative form. Due to the existing complexities in the organizations, the network data envelopment analysis has been used in this article. The analysis is conducted based on 3 models. The first model is without considering risk, then the model would be investigated with the consideration of risk and for the investigation of its impact and risk importance, weight limited models have been used. The investigation of 3 methods show that the model which uses risk with limitation of weight, has better and more logical performance compared to free risk models and risk models. Finally, the results obtained from each of the banks models have been analyzed.

Reza Khoshsima and Mohammad Nabishahikit-ash (2012) have written an article with the central aim of investigating the relationship between performance and risk in Iran's banking industry. In this survey, in order for the evaluation of performance and ranking banks, selection of optimal model and then recognition of credit risks, functional, and liquidity are effective on the performance of the bank structures that 2 approaches of parametric with the basis of economical and non-parametric factors with the optimal mathematical bases have been used. In this regard, 15 banks have been used as the statistical population of the study during 2005 to 2010. The results of the study show the differences between two parametric and non-parametric methods in the performance evaluation and bank ranking and comparative advantage of parametric method at S.F.A compared to non-parametric method of M.E.A. Furthermore, the results of the study demonstrated that there is a significant relationship between credit, functional, liquidity, and performance risks in the banking system of Iran.

Gonzales (2005) in an article entitled 'bank rules and risks with consideration of the main creating factors: an international comparisons of risks in the banks', and with the consideration of the number of bank branches and their personnel as inputs, investment and the amount of deposits as outputs have ranked the banks based on their performance with the influence of credit risk variables and total risk (D.E.A). This article has observed a significant relationship between risk and performance.

Chaldean (2.05) believes that different combinations of credit have different impacts on the different types of risks. He solves the problem of credit optimization by multi-objective programming method, through using objective function for different risks of credits. But his model lacks integrating of the risk and ignoring benefits is one of the commercial goals of banks .Riccardo and Kaloz in an article entitled 'application of data envelopment analysis method for the estimation of bank performance' in Brazil (2006) and with the consideration of 50 great banks in Brazil and use of the statistics of balance sheet variables of these banks, have evaluated the performance and comparison of these banks. The results of the study show the performance and advantage of D.E.A method in ranking and grading of the banks, compared to traditional ranking.

Pasiras (2008) in an article entitled 'Evaluation of technical performance and commercial Greek bank scale: the impacts of credit risk and international procedures' and with the consideration of the variables and determinative indices of bank risk with the consideration of the proportion of default loans to the input variables in D.E.A method has tried to state the relationship between risk and performance in the banking industry and has understood the significant relationship between these two variables .

Kalafavor (2008) has considered the consecutive multi-process of decision-making for the decrease of cumulative risk for the creation of multi-stage optimization of properties which is in harmony with the income goals. But the article does not have the possibility of progress. Kasmido & Zapendis (2008) have helped to the commercial banks in the management risk of interest rate by stimulation analysis of purposive programming method. But they did not conduct the analysis for other risks. Jerestre & Gribble (2009) proposed certain integrative method such as pseudo-Mont Carlo and dispersed net quarter method for random management models of property and debt. Cho & Li (2009) considered the goal of risk in the management of dynamic property and found that pleasant commerce strategy is on the verge of variance mean; but they did not have any limitative on income. Chio and Chen (2009) in an article entitled 'the analysis of Taiwanese Bank performance: mixture of both internal and external risks' have investigated the relationship between credit risk, market and functional risks the performance of banks. They used two methods (D.E.A) and (S.F.A) and calculated the obtained results, risk, and banks' performance and finally found a significant relationship between risk and performance.

Stephen Karanu (2010) in an article entitled 'performance in the banking system of Ghana, using D.E.A and S.F.A' has measured the level of performance of Ghana banks in 10 years between 1997 and 2006, using 2 models of D.E.A and S.F.A. He has used different hypotheses of D.E.A and S.F.A for the comparison of models and then he used both models in order to obtain the bank performance.

Chen and Young (2011) considered the optimized selection of stock based on Marcovids, the mean variance of the selection of portfolio in periodical switching models. Pachamanoa and Galpin (2013) presented the debit credit management modal based on strong optimization techniques.

5. CONCLUSION

Due to what stated in this study and with reference to the other research and related articles to this topic, it can be stated that the identification of intervening factors in performance for the identification and risk management is really important in the economic units. Because by recognizing them, the complete risk or risk of factors can be reduced, or due to the management strategies, they can be limited. But the most important point here is that since some parts of the risks in the systems, especially in the banking systems, cannot be managed and omitted, with the acceptance of the risk managing it, the increase in performance and ultimately gaining benefits for economic systems will be fulfilled.

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