MAIN FINANCIAL INDICATORS INFLUENCING ON THE RATINGOFUZBEK COMMERCIAL BANKS

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ABSTRACT

This article is devoted to investigating the influence of main financial indicators of banks in Uzbekistan on their international rating. In addition, it reveals the average level of influence of the considered indicators in coefficients. Conclude that focused policy on separate indicators of bank financial reporting can lead to rating improvement. Methods of comparison and econometric analysis have been used while modeling. The data has been compiled by the banks of Uzbekistan for 2012-2015.

Keywords: Banking, bank rating, rating of agency, bank indicators, quantitative indicators, impact of indicators

INTRODUCTION

News about the positive rating of commercial bank or the whole banking system in general attracts interest of local businesses and the population because it makes a direct impact on their daily decisions made on financial operations. Especially, it influences shareholders of bank and investors as well as to the decision adopted by the government and other large financial institutions. However, indicators characterizing the condition ofbanks involve peculiarities of different naturevarying fromthe simplest ratios, like the capital adequacy ratio, tothe most complicated like the rating index of leading rating agencies. Therefore, methods of information processing which can determine exact compliance of commercial banks to the assigned ratingsare of a great interest. This must enable comparison of the position of the exact bank among other commercial banks. In finance, rating - is considered to be the instrument of bank’s assessment (Hau et.al, 2013).

Banks’ ratings are developed by many agencies of the world. Potential investors pay a particular attention to the rating scores provided by three leading rating agencies. Such rating agencies as Moody’s and Standard and Poor’s each control over 40% of the world market of ratings. International rating agency Fitch Ratings which possesses 14% of the market of debt obligations closes top three (VTB info, 2007). Ratings of all these agencies are considered to be asexpert class,because techniques of their compilation or applied information are not available in open access. In spite of the fact that rating agencies publish quite detailed descriptions of the factors taken into account in case of ratings’ development, banks can guess only what specifically factors affected the rating score assigned by the agency and what change of indicators can enhance the bank rating. With respect thereto, main task of our article is to research interrelationsamong published ratings and available economic and financial indicators of commercial banks.Obtained result can reveal whether it is possible to make an impact on bank rating with the help of focused elements of the financial policy.

The main aim of the article is to detect precise directions or indicators which mostly influence on the level of rating assigned to the bank. Research methods as comparative analysis and econometric analysis are used in work.

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LITERATURE REVIEW

Ratings assigned by rating agencies are crucially important for the financial stability of a country. Ratings began to play an important role in attracting credit lines of international financial institutes for banks of Uzbekistan. After the recent global financial crisis there has been a decline of investors' confidence in ratings due to financial losses, and many countries, including Uzbekistan commenced to regulate the activities of rating agencies inside the country.

For example, assigning of the national rating and subsequent monitoring of this rating in Uzbekistan is carried out within the guidelines of the Central Bank of the Republic of Uzbekistan, the Uzbekistan Banking Association and the Ministry of Finance. Moreover, it should be noted that the Central Bank of Uzbekistan has a list of credit rating agencies, which allowed commercial banks of Uzbekistan to assign a rating.

A particular interest in researches related to rating agencies emerged after the adoption of the document "International convergence of capital measurement and capital standards: new approaches" by the Basel Committee on Banking Supervision (Basel II, 2004). This document contains methodological recommendations in the field of regulation of commercial banks as well as requirements for banks to assess the risk of lending at all levels of consideration of borrowers and central banks in assessing the activities of banks and requirements for financial regulators in the field of accounting of ratings assigned by international rating agencies.

However, some economists (Cannata and Quagliarello, 2010) criticized the Basel II requirements in their scientific papers work. In Uzbekistan on the basis of the Decree of the President of Uzbekistan PP-2344 "On measures for further increase of financial stability of commercial banks and development of their resource base" dated from May 6, 2015, normative documents of the Central Bank are made in accordance with the requirements of Basel III (Basel III, 2009).

Researches related to the theory and methodology of rating and construction of concrete ratings are diverse. They can be divided into two directions:

1) Opinion of commercial banks themselves on the rating;
2) Opinion of the external participants (government, investors, customers) on the rating.

The first direction of research has the aim to design ratings and their critical analysis. The second direction ofresearch is devoted to testing hypotheses about the features and how to use ratings as an indicator. Our paper is more relevant to the second direction.

Evaluation of the predictive power and quality of ratings of three well-known rating agencies for the big banks was considered in the article ofHauet. al (2013). Authors in their research confirmed the fact that quality of the ratings depends on the state of their financial system and noted that different kinds of ratings are mostly informative in the period of financial crises. In their opinion, it is impossible to predict "default" based on the ratings, in case of investment rating of a bank. While assigning ratings the largest rating agencies take into account country differences in financial reporting requirements. Policy of agencies in relation to various factors also differs.

For example, Standard and Poor's evaluates the impact of bank size and country factors more rigorously than Moody's or Fitch. In many cases, bank's rating depends on the relationship between the agency and the bank, as well as on the value of rating and size and peculiarities of the bank's business. As the authors suppose, different forms of state support of banks

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(equity participation, government guarantees) do not make any impact to ratings of individual banks.

Many researches have been conducted on issue of effects of bank business on bank risks and profitability after the recent crisis. Beltratti and Stulz (2012), for example, found out that banks with higher capital adequacy of the I level and a high ratio of loans to the total assets experienced better performance on the initial stages of the crisis. Berger and Bouwman (2012) showed that during the crisis, high level of capital has resulted in raising the efficiency of banks, and volume of deposits and liquid assets brought higher returns.

Moreover, influence is also made by the factor of transparency and access to the information related to activities of banks. Impact of transparency and access ofinformation on the rating was investigated in the scientific of Van Roy (2006). Van Roy has found out that the amount of information available on web sites make a real effect on the bank rating, but only assigned by independent rating agencies. Banks which do not apply to rating agencies for a rating, but maintain a policy of wide disclosure of the information of its activities, significantly benefit at obtaining ratings.

The forecast of rating changes made according to the financial reporting data was researches in the scientific paper of Distinguin et. al(2013). Authors revealed that:

i. it's easier to predict the increase of the rating than its decline;
ii. indicator of bank's financial reporting is important to predict the dynamics but its significance differs for large and small banks;
iii. financial reporting indicators enable to make more reliable predictions of the perspectives of rating changes for banks involved in traditional loan-lending operations than for financial institutions dealing on financial markets.

Competition among rating agencies may also make an influence on rating quality. This issuehas been researched in work ofCamanhoet.Al(2010)and Bolton etl. al (2012).

As we have already noted, bank rating is assessed by the way of empirical calculations which combine financial and qualitative data in the overall rating index. In this regard, Hunjak and Jakovcevic (2001) proposed multi-criteria model of assessing bank efficiency. This model is based on the method AHP (Analytic hierarchy process), which illustrates comprehensive assessment of the quantitative data, internal and external factors. Scientific article of Doumpos and Zopounidis (1999) represents the research on data of Greek banks which provide a detailed description of the coherence of applying PROMETHEE II methodology. This method is widely used for comparing a multitude of alternatives on the basis of pairwise comparisons.

In addition, we will try to identify the most influential factors on the rating indicators of uzbekcommercial banks assigned by leading rating agencies in the world with the application of econometric methods.

METHODOLOGY

To develop econometric models we made a list comprising 17 commercial banks of Uzbekistan. All these 17 banks possess all necessary information and all of them were assigned with international ratings. It should be noted that all commercial banks of Uzbekistan are evaluated by international rating agencies. The financial reporting data for 2012-2015 as well as the rating indicators assigned by S&P, Fitch, and Moody's were applied to these 17 banks. The bank rating and the content of the data aren't demonstrated in figures because the author of the article has the obligation of the data non-disclosure. Rating values were transferred to digital values with the help of compliance of the letter rating according to Karminskiy article (2010). It is supposed that the higher value is, the higher rating the bank has. Undoubtedly, others may argue with such an approach of scaling ratings as it is possible that modeling can assume development of these scales in a different way. The use of these scales in given digital values can be justified with by the fact that a small number of banks has been taken into analysis. The numerical value of ratings assigned (average-rate)represents the dependent variable. Financial indicators of the bank statements provided by Ahbor-rating agency have been considered as the explanatory variables. All variables are of a quantitate nature.

In the process of modeling we have used the variables characterizing the volume of bank assets (act_vol), equity (own_cap), loan placements (cred-portf), volume of loans extended (cred_vol), volume of investments (inv_portf), deposits of legal persons in the bank (firm_dep), deposits of individuals in the bank (ind_dep), net profit by the total of the year, (net_profit), profitability of bank assets (act_profit), profitability of the equity (owncap_profit). Limited amount of use of independent variables is justified by the fact that while detecting the original data it was not possible to find other types of information about banks. The logarithmic form of variables in the model characterizes the transfer of amount variables into the percentage unit. Some independent variables were excluded from the model due to the fact that they had inappropriate values while testing by Dickey-Fuller tool, and in correlation analysis.

DATA ANALYSIS

The following table contains the results of econometric modeling of bank ratings for 2012-2015. The table contains the amounts of ratios at independent variables with significance reliability level at 5% and 10% levels.

	Variable name	*Explanation ratio*
1	cred_portf/own_cap	4.076%
2	log(firm_dep)	9.256%
3	log(ind_dep)	6.746%
4	log(inv_portf)	- 9.062%
5	log(net_porfit)	2.242%
6	owncap_profit	0.187%
7	act_profit	4.973%
8	others	63.459%

We can see that explaining ability of all the models is relatively low. It was obvious just before the analysis itself because we took into account only those variables which, according to the economic theory, most of all suit to the explanation of the dependent variable and those data which was accessible. Selected variables are only those that are calculated on the basis of financial statements, without taking into account other internal and external factors.

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However, rating agencies take into account also those factors.Search of financial factors making an impact on ratings open wide perspectives for the managers of banking institutions to improve their positions: if they knew, which factors are taken into account by rating agencies, they would concentrate their efforts namely on those directions of finance management» (Volkova and Lvova, 2016).

The determination ratio R^2 of the model obtained equals to 0.71 which proves medium relation between economic variables in this model. To acquire the opportunity to compare the models with different number of factors to make this number of factors not influence on R^2 statistics, adjusted determination ratio is usually applied. In our case the adjusted ratio amounts to 0.64. In regression Sum of squared residuals is taken in thesmallest value. Standard error of regression has been accepted as the closest to 0. The equality of probability of F-statistics to 0 can be considered as the most important factor characterizing the accuracy and reliability of the regression.The OLS model has been selected in case of the smallest value according to three criteria: Akaike info criterion, Schwarz criterion, Hannan-Quinn criterion. The Durbin-Watson stat criterion turned to be in ideal value. Regression analysis calculated in OLS method was checked by Gaus-Markovand other available assumptions.

DISCUSSIONS AND CONCLUSION

According to the results on the data analysis of banks of Uzbekistan we can make these following conclusions:

1. Selected variables justify the quality of rating assigned to the bank lowly and it is supposed that factors which haven't been accounted in the model, justify bank rating by the average –63.5%;
2. In conditions of Uzbekistan, the more legal persons and individuals have deposits in any concrete bank, the higher credit rating is awarded to this bank as a result;
3. Taking into account, that enterprises (or bonds) maintained in the balance of banks of Uzbekistan do not necessarily bring even an average profit for banks, it should be noted, that the higher investment portfolio the bank has, the lower rating it is assigned;
4. The higher the ratio of the credit portfolio of the commercial bank to its own funds is (the impact ratio is ≈4.076%), the higher rating the bank has;
5. In addition, the increase of the volume of the bank net profit for the analyzed year by 2% can make an impact of the rating assigned the next year;
6. Rating is almost not influenced by the size ofbank own capital available in overall bank turnover;
7. Quality of assets and their profitability are considered to be one of the influential factors in justifying the assigned rating.

On the basis of the research results it is possible to make conclusions and develop some recommendations to commercial banks of Uzbekistan. These recommendations are the following: (1) they should actively continue to attract free funds of the population and involve more legal persons served at these banks, (2) the shorter term current assets have, the more profit banks get and the higher rating they are awarded, (3) it is not recommended for banks to actively invest in securities of enterprises and be engaged in investment activities on the stock market, but, instead, it is better to do traditional banking business.

We have researched the evaluations of leading rating agencies in aggregate view (basically). The results could be more detailed if further researches on assessing the impact of main financial indicators on bank rating, each agency considered separately.

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