

Bank risk-taking profile and efficiency: evidence from Russia

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1. Relevance and research question

Over the past several years, Russian banking sector has suffered a lot of shocks occurred in economy. Many banks who managed to survive increased volatility had to review their risk-taking behavior. However, main share of penalties received by Russian banks from the regulator are still relate to underestimation of taken risks. Cited statistics raise a question about motivation of such behavior and its impact on profit and cost efficiency of banks. In this research author intends to measure common types of banking risks and evaluate their influence on the bottom line of the bank.

2. Literature review and hypothesis

Current approach to the efficiency assessment for financial institutions originates in the papers published in 90's [2], [3]. One of parametric approaches implied in frontier efficiency analysis - stochastic frontier approach (SFA) [4], was utilized in order to access the cost or profit efficiency of global [6], [7] and Russian banks [8],[11].

Approach to the assessment of risk-taking behavior of bank is based on the research regarding the application of Z-score [14], [9] and evaluation of credit risk [10], [11], [15], liquidity risk [1], [13] and capital risk [12] using accounting ratios. Author is going to check the relation of bank risk-taking behavior and its profitability indicated in [11] with enhanced variety of risk measures responsible for different types of risks.

3. Data and methodology

In order to measure the efficiency of financial institution, author intends to use the stochastic frontier approach (SFA) mentioned in the previous section. Part of model responsible for inefficiency term will be presented by the set of bank risk measures. In order to control the results for macroeconomic factors, author will supplement the model by the set of macroeconomic variables determined in corresponding research [5]. Research will be performed using quarterly panel data about the financial indicators of Russian banks for examined period 2009-2016 from the database "Banks and Finance" by Mobile agency.

The set of bank-level variables will be used to represent the level of risks taken by bank. Taking into account the results of previous research made in the relevant topic, author expect all of the risk indicators implemented in the model to have a negative influence to efficiency of the bank. Translog efficiency frontier functions described in considered literature [8] will be used as cost function and profit function. The main value added in this research is extended presentation of risk profile of bank along with the fact that author is going to consider the influence of risk profile to both profit and cost efficiency of the bank.

Источники и литература

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