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Impact of Credit Risk on the Performance of Russian Commercial Banks

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Abstract. This study examined the effect of credit risk on the performance of 85 Russian commercial banks during the period (2008–2017). This study used multiple regression to measure the effect of credit risk on the performance of Russian banks. The study found that the Performance indicators were affected by credit risk in five years out of ten. Credit risk contributed to the formation of performance indicators by 51% in the case of return on assets and 50% in return on equity. Also, the loan loss provisions to total loans ratio had a negative effect for 4 years because of the decline in credit quality in those years; the effect of total Loan to total assets was only positive in one year. Also, the study found that the effect of the ratio of loan loss provisions to total loans was negative and greater than the positive impact of the ratio of total loans to total assets because the impact of credit quality is greater and more important than the impact of its volume. The study concluded that the effect of credit risk on the performance of Russian banks is not a fixed effect but a changing one from one year to another, but in cases where credit leaves an impact on performance indicators this effect is often negative and significant. The study also concluded that the quality of credit has a significant and negative impact on performance indicators, but the volume of the credit has a limited impact.

Key words: credit risk; loan losses reserves; Russian commercial banks; return on assets; return on equity; multiple regression analysis; provisions loan losses; total loans.

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1. Importance of the Subject

Banking performance is a wide concept that encompasses many issues, such as competition, concentration, efficiency, productivity and profitability [1; 2]. The wide range of performance issues has resulted in a wide variety of banking research. However, there is no consensus among researchers on the most appropriate way to measure banks' efficiency. Much of the banking research focuses on bank profitability without taking risks into account that are as important as profitability. The study of banks performance and its relationship to risk is very important because of the impact of risk factors on profit in the long-term. In recent years, there has been a dramatic proliferation of research concerned with the assessment of risk impact on banks performance. Because of its practical importance, the topic of banks risk assessment has become a matter of great concern. More recently, the study of risk preferences on the efficiencies of banks have developed rapidly and its achievements have become a center of attraction [3].

When looking at profitability, one should also analyze the risks associated with the profitability indicators. Credit risk is one of the oldest and most important forms

of risk faced by banks as financial intermediaries. The topic of credit risk is not a new topic and researchers have written a lot about it. However, this topic cannot be considered an old one and there is no need to write about it because credit is the core of a bank's business and often accounts for 80 % or more of a bank's budget. A large part of the bank's returns comes from interest on loans, as lending is the main activity of banks. On the other hand, lending is the main source of credit risk. Therefore, credit is a serious threat to the profitability of banks [4; 5].

In a situation of high and increasing competition between banks, banks are struggling to survive and maintain an appropriate level of profit. This has led to an increase in banks' tendency to take excessive risk; this increased risk trend has led to the bankruptcy and failure of a large number of banks. On the other hand, risks do not necessarily lead to losses; risks may lead to high returns, too. Banks usually ignore the downside of credit risk if their returns are good and do not consider whether the impact of credit risk is positive or negative on returns. Credit risk may have a negative impact hiding behind profits, banks may be able to achieve higher returns than the returns that have been achieved, but credit risks have reduced these returns, especially because there is no consensus by researchers on the nature and the extent of the impact of credit risks on the performance of banks. Increased bank credit risk may lead to problems with liquidity and solvency. Credit risk is of additional importance because it directly affects the solvency of financial institutions, which is why credit risk poses a very high risk in financial institutions [6]. According to Chijoriga [6], credit risk has an additional significance compared to other risks because it directly affects the solvency of financial institutions so credit risk is considered a very dangerous risk in financial institutions. Credit risk is very dangerous because it can cause bankruptcy as the failure of a few customers to pay can lead to large losses [7]. The higher the bank's exposure to credit risk, the greater the bank's tendency to fall into a financial crisis (the risk of bankruptcy), and vice versa.

2. Degree of Knowledge and Clarification of The Problem

Banks are defined as financial intermediaries who borrow money from surplus spending units and lend deficit spending units. The nature of this intermediation forces banks face many financial risks, such as liquidity risk, operational risk, credit risk, interest rate risk and foreign currency risk, But credit risk remains the most important for banks because the core of banking is based on credit, which is the largest item in the banks' budget. Credit risk is one of the irregular risks that are determined internally and can be controlled through bank managements and credit policies.

Some studies conducted after the financial crisis [8–10] noted that (credit risk management, excessive credit and credit quality) were major causes of this crisis. Richard et al. [11] think that if credit risk management is weak in the bank, the problem accumulates from the application stage, then increases in the approval, monitoring and control stage. Since more than 85 % of banks liabilities are deposits from depositors and loans are considered the main source of banks' income, this makes the nature of banks 'work very sensitive, therefore non-performing loans are one of the main reasons for the failure of the banking system if credit risk is not analyzed and managed properly [12].

Credit risk is the probability that the borrower or counterpart will fail to meet its obligations under the agreed terms [13], or we can say credit risk is the degree of volatility in the value of debt instruments and derivatives due to changes in the basic credit

quality of borrowers and counterparties [14]. One of the main problems with credit risk is that the book value of net loans must equal the market value of total loans, However, in most cases, there is a discrepancy between the market value and the book value of the loans, This occurs when loan data is distorted by insufficiently reported loans, This distorted data could lead to incorrect results when measuring the performance of banks by traditional performance measures such as ROA, ROE, where banks with excessive credit growth will show high technical efficiency although they carry excessive risks. Thus, it is difficult to know the efficiency of a banking system through its credit growth without taking into account the credit risks.

According to Bobakovia [15], bad operations are no longer the main cause of bank failure, but non-performing loans are, and this is largely related to macroeconomic problems. The bank's ability to continue as a going concern and profitability is highly correlated with its ability to respond positively to losses from nonperforming loans. In the past, banks offering credit focused on loan guarantees. This has changed now: they have started focusing on assessing the borrower's ability to repay the loan. Some researchers believe that the difficult work environment in banks causes high psychological pressure on employees and this increases credit risk.

Credit risk management in banks can have a significant impact on the bank's continuity and existence. Credit risk management is an organized strategy that aims to control and reduce risks by using available resources so that risks are measured and attempted to control and reduce their negative impact. Through effective credit risk management, banks support their business success and profitability as well as contribute to systemic stability and effective allocation of capital in the economy [16, P. 873].

The first step in effective credit risk management is to know the impact, and the strength of the impact of credit risk on the performance of bank. From this point, our study is important as it forms the cornerstone in building effective credit risk management. This paper aims to analyze the impact of credit risk on the performance of Russian banks over a ten-year period (2008–2017) in order to answer two questions:

Is there an impact of credit risk on the performance of Russian banks?

If there is an effect, what is the type of this effect and how much is this effect compared to other factors?

The results of this study can enable Russian bank managers to understand how risk impacts on the performance of Russian banks, the type and strength of such impact. This would help adopt appropriate strategies that increase banks' efficiency in managing credit risk.

3. Literature Review

Risks are uncertainties which result in negative fluctuations in profitability or loss. There are many risks in the banking world that can be divided into two main types in terms of source: the first is systemic risk, which comes from an external source and cannot be controlled by banks; the second is an irregular risk which comes from an internal source and can be controlled [17].

Credit risk can be defined as those risks arising from failure to pay all or part of the services originally provided and their profits, or risks resulting from the inability to return profits from banking investments. In other words, credit risk is the risk arising from the bank not receiving the money it provided (cash flow) at the time of maturity. Credit risk is the first risk in order of importance because failure to meet obligations by many important customers can lead to significant losses that can lead to bankruptcy. The Basel Banking Supervision Commission [18] emphasizes

that loans are the most obvious source of credit risk, and it is mandatory that every bank around the world recognize the need to define, monitor, and control credit risk while determining how credit risk can be reduced. This means that the bank must maintain sufficient capital against such risks and be adequately compensated for the risks incurred.

It is difficult to determine credit risk in advance because this requires an assessment of the probability of default, depending on the context. Credit risk depends on many external and internal virtual events such as:

The internal events: Credit Policy and Loan Portfolio Management, the inability to evaluate the borrower's financial position before lending, excessive dependence on collateral, the bank's inability to follow penalties, etc.

The external events: state of the economy, commodity price fluctuations, exchange rates and interest rates, etc. [15].

4. Empirical Studies

Many researchers studied the impact of credit risk on banks in various ways; the researchers used several ratios to measure credit risk, such as Non-Performing Loan to Total Loans Ratio (NPL/TL), Loan Loss Reserve to Total Loans (LLR/TL), Loan loss reserves to non-performing loan (LLR/NPL), the capital adequacy ratio (CAR) and the ratio of bank loans to assets (TL/TA).

As concerning the impact of credit risk on bank performance, much research does not reach any clear evidence. (10) of previous empirical studies on the subject were reviewed. We found that:

- (7) of the studies found an inverse relationship (Ahmed et al [19]; Wijewardana and Wimalasiri [20]; Epure and Lafuente [21]; Kolapo et al. [22]; [Kodithuwakku [23]; Muriithi et al [24]; Ruziqa [25]).
- (3) of the studies found a positive relationship ([Ben-Naceur and Omran [26]; [Kurawa and Garba [27]; [Boahene et al [28]).

5. Methods and Approaches and Their Originality (Novelty)

This study used multiple regression to measure the effect of credit risk on the performance of Russian banks. The study uses return on assets (ROA) and return on equity (ROA) as indicators of banking performance; the study also uses the ratio of provisions Loan Losses to total loans (RRL/TL) as an indicator to measure the quality of credit risk and the ratio of total loans to total assets (TL/TA) as an indicator to measure the amount of credit risk. All data in this study were obtained from the website of the Bank of Russia. We think that the originality (novelty) of this study lies in 3 points:

Using two dimensions to measure the impact of credit risk, namely credit volume and quality of credit.

The large study sample which covered 85 Russian banks, whose assets constitute more than 87% of the total assets of Russian banks.

The long period of the study which covered 10 years.

Comparing the ratio of credit risk impact of banks performance with the ratio of other factors impact on the banks' performance.

6. Analysis of The Results

6.1. The Variables

Figure 1 shows the average total credit of the banks included in the study as the credit amounted to 70% of the banks' budget during the study period.

This study includes 85 Russian banks. Return on Assets (ROA) and Return on Equity (ROA) are used as indicators of bank performance, while the ratio of Loan Losses Provisions to Total Loans (RRL/TL) and the ratio of Total Loans to Total Assets (TL/TA) were used as indicators of credit risk.

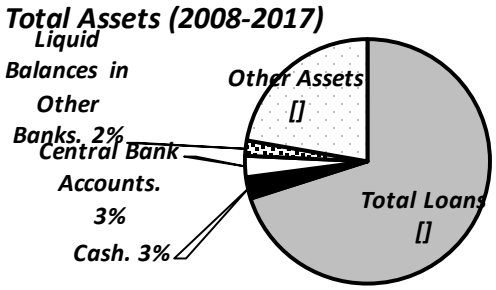

Figure 1. The Average of Total Credit (2008–2017)

Source: Design and Calculation by Author Using (Excel).

Data Source: Bank of Russia Website.

6.2. Research Hypotheses

The main hypotheses can be formulated as follows:

H_0: The Credit Risk indicators expressed by [(TL/TA) and (RRL/TL)] do not affect the financial performance indicators (expressed by ROA and ROE) in the Russian banks.

H_1: At least one of the credit risk indicators expressed by [(TL/TA) and (RRL/TL)] has an effect on at least one of the financial performance indicators (expressed by ROA and ROE) in the Russian banks.

6.2.1. Subset Hypothesis

Model (1)

H_0: the credit risk indicators expressed by [(TL/TA) and (RRL/TL)] do not affect the financial performance indicator expressed by ROA in the Russian banks.

H_1: At least one of the credit risk indicators expressed by [(TL/TA) and (RRL/TL)] has an effect on the financial performance indicator expressed by ROA in the Russian banks.

Model (2)

H_0: the credit risk indicators expressed by [(TL/TA) and (RRL/TL)] don't affect the financial performance indicator expressed by ROE in the Russian banks.

H_1: At least one of the credit risk indicators expressed by [(TL/TA) and (RRL/TL)] effect on the financial performance indicator expressed by ROE in the Russian banks.

6.3. Multiple Regression Analysis

A general linear model of Multiple Regression is outlined in equation 1 where Y indicates the dependent variables, α the constant term, β the coefficient of the function and X are the independent factors.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 \quad (1)$$

By putting the study variables in the above equation, two equations can be formed where the dependent factors (profitability) which depend on the independent factors (credit risk), where ROA and ROE represent the profitability and (TL/TA) and (RRL/TL) represent the credit risk:

$$ROA = \alpha + \beta_1 (TL/TA) + \beta_2 (RRL/TL) \quad (2)$$

$$ROE = \alpha + \beta_1 (T\,L/\,TA) + \beta_2 (RRL/TL) \quad (3)$$

6.3.1. Testing(F) For the Suitability of The Research Models

To examine the suitability of the multiple regression models for analysis, by using

Table 1. **Variables Definition & Measurement Units**

The Variables	*Description*	*Abbreviation Variables*	*Proxy*
Dependent Variable (Inputs)	*Credit Risk*	*TL/TA*	*Total Loans / Total assets*
		LLR/TL	*Loan Losses Reserves / Total Loans*
Independent Variables (Outputs)	*Bank Performance*	*ROA*	*Income After Tax / Total Assets*
		ROE	*Income After Tax / Total Shareholders' Equity*

Source: Design by author

Table 2. **ANOVA, F-Statistic (2008–2017)**

Years	Model Name	Model #	F-Statistic	Sig. F-Statistic	The Decision	Years	Model Name	Model #	F-Statistic	Sig. F-Statistic	The Decision
2008	ROA	Model (1)	1.31	0.28	**Unsuitable**	2013	ROA	Model (11)	0.07	0.93	**Unsuitable**
2008	ROE	Model (2)	0.53	0.59	**Unsuitable**	2013	ROE	Model (12)	0.06	0.94	**Unsuitable**
2009	ROA	Model (3)	11.94	0.00	Suitable	2014	ROA	Model (13)	142.19	0.00	Suitable
2009	ROE	Model (4)	11.43	0.00	Suitable	2014	ROE	Model (14)	142.19	0.00	Suitable
2010	ROA	Model (5)	1.22	0.30	**Unsuitable**	2015	ROA	Model (15)	6.90	0.01	Suitable
2010	ROE	Model (6)	0.00	1.00	**Unsuitable**	2015	ROE	Model (16)	1.52	0.23	**Unsuitable**
2011	ROA	Model (7)	1.20	0.31	**Unsuitable**	2016	ROA	Model (17)	24.73	0.00	Suitable
2011	ROE	Model (8)	0.31	0.74	**Unsuitable**	2016	ROE	Model (18)	25.26	0.00	Suitable
2012	ROA	Model (9)	1.06	0.35	**Unsuitable**	2017	ROA	Model (19)	105.65	0.00	Suitable
2012	ROE	Model (10)	0.17	0.85	**Unsuitable**	2017	ROE	Model (20)	1.76	0.18	**Unsuitable**

Source: Design and Calculation by Author Using (Excel And SPSS Software).
Data Source: Bank of Russia Website

the distribution (F-statistic) test, one of the following hypotheses will be rejected:

H_0: The model is unsuitable; when the independent variables don't affect the dependent variables.

H_1: The model is suitable; when the independent variables do affect the dependent variables.

The decision rule as follows:

Accept H_0 If p-value (Sig. F) > 0.05

Accept H_1 If p-value (Sig. F) ≤ 0.05

From the analysis output in table 2, the results as follows:

Models (1), (2), (5), (6), (7), (8), (9), (10), (11), (12), (16) and *(20)*: values of p-value (Sig. F) > 0.05, So we shall accept the null hypothesis H0, that means At the α = 0.05 level of significance, there is not enough evidence to conclude that at least one predictor is useful for predicting the ROA or ROE; therefore, the models are unsuitable.

Models (3), (4), (13), (14), (15), (17), (18) and *(19)*: values of p-value (Sig. F) ≤ 0.05, So we shall refuse the null hypothesis H0 and accept the alternative hypothesis that means At the α = 0.05 level of significance, there is enough evidence to conclude that the predictors are useful for predicting the ROA or ROE; therefore, the models are suitable.

6.3.2. R-Square for The Appropriate Models (3), (4), (13), (14), (15), (17), (18) and (19)

R-square measures the strength of the relationship between the model and the dependent variable. However, it is not a formal test of the relationship. The F test of general importance is to test the hypothesis of this relationship. If the F test is significant, we can conclude that R-squared is not zero and the correlation between the model and dependent variable is statistically significant.

6.3.3. Testing (T) For the Appropriate Models (3), (4), (13), (14), (15), (17), (18) and (19)

To examine the suitability of the multiple regression models for analysis, by using the distribution (T-statistic) test, one of

Table 3. **The Total Divergence in The Dependent Variables, (2008-2017)**

Years	Model Name	Model #	R^2	Adjusted R^2	Sig.R	The Decision	Years	Model Name	Model #	R^2	Adjusted R^2	Sig.R	The Decision
2009	ROA	Model (3)	0.13	0.12	0.36	Suitable	2015	ROA	Model (15)	0.08	0.07	0.28	Suitable
2009	ROE	Model (4)	0.12	0.11	0.35	Suitable	2016	ROA	Model (17)	0.23	0.22	0.48	Suitable
2014	ROA	Model (13)	0.63	0.63	0.80	Suitable	2016	ROE	Model (18)	0.23	0.22	0.48	Suitable
2014	ROE	Model (14)	0.63	6.63	0.80	Suitable	2017	ROA	Model (19)	0.56	0.555	0.748	Suitable

Source: Design and Calculation by Author Using (Excel And SPSS Software).
Data Source: Bank of Russia Website

the following hypotheses will be rejected: Ho: the model is not suitable (when the independent variables don't affect the dependent variables). H1: the model is suitable (the independent variables do affect the dependent variables).

The decision rule as follows:

Accept H_0 If p-value (Sig. T) > 0.05

Accept H_1 If p-value (Sig. T) ≤ 0.05

After excluding the variables whose p>0.05, the alternative hypothesis (H1) is accepted for the remaining variables because of the values of p≤0.05. at the significance level α = 0.05, there is sufficient evidence to conclude that the slope (B) of the remaining variables are not zero, therefore, the variables are useful as a prediction of ROA and ROE in Russian banks.

Table 4 shows all the accepted models in the alternative hypothesis H1. The results of T-test can be divided into 3 groups:

1. Accepted models with the exception of the constant and the variable (TA/TL): Model (18).

2. Accepted models with the exception of the variable (TA/TL): Models (3), (4), (13), (14), (17), (18) and (19).

3. Accepted models with the exception of the variable (LLR/TL): Model (15).

The value of slope B in the table 4 represents the ratio of effect and the type of relationship between the independent variables and the dependent variable. In order to know the importance of credit risk indicators and its impact on performance indicators, it is necessary to determine its real value compared to all variables. Therefore, we multiply the value B by the mean of the dependent variables, this illustrates the value of its effect as compared to other variables. Table 5 shows the impact of risk indicators on performance indicators as values. We can observe the following:

- Credit risk affected performance indicators in five out of ten years, this shows the impact of credit risk fluctuating from year to year.
- Credit risk in four years had a negative impact and in one-year negative impact.
- The effect of the ratio (LLR/TL) was negative and greater than the ratio of (TL/TA) which did not affect only in one year limited positive effect. This indicates that the provisions Loan Losses were more influential than the volume of loans in other words that the quality of loans has a greater impact than the volume of loans on performance indicators.

In the Figure 2, it is possible to observe the ratios of the contribution of credit risk indicators in the formation of performance indicators over the ten years of the study, noting that the credit risk contributed to the formation

Table 4. **T-Statistic Values (2008–2017)**

Years	Outputs	Model #	Inputs	B	T Statistic	Sig. Tstatistic	The Decision	Years	Outputs	Model #	Inputs	B	T Statistic	Sig. Tstatistic	The Decision
			constant	0.01	0.13	0.01	Suitable		ROA	Model (15)	constant	-0.02	-2.57	0.01	Suitable
	ROA	Model (3)	LLR/TL	-0.06	-3.46	0.00	Suitable	2015			LLR/TL	-0.02	-0.95	0.35	**Unsuitable**
2009			TL/TA	-0.02	-0.81	0.42	**Unsuitable**				TL/TA	0.02	2.63	0.01	Suitable
			constant	0.07	2.66	0.01	Suitable		ROA	Model (17)	constant	0.01	2.56	0.01	Suitable
	ROE	Model (4)	LLR/TL	-0.34	-3.38	0.00	Suitable				LLR/TL	-0.04	-4.97	0.00	Suitable
			TL/TA	-0.12	-0.83	0.41	**Unsuitable**	2016			TL/TA	-0.02	-0.90	0.37	**Unsuitable**
	ROA	Model (13)	constant	0.04	5.61	0.00	Suitable		ROE	Model (18)	constant	0.07	1.93	0.06	**Unsuitable**
			LLR/TL	-0.35	-11.92	0.00	Suitable				LLR/TL	-0.39	-5.03	0.00	Suitable
2014			TL/TA	-0.08	-1.73	0.09	**Unsuitable**				TL/TA	-0.16	-0.72	0.48	**Unsuitable**
	ROE	Model (14)	constant	0.04	5.61	0.00	Suitable				constant	0.04	2.99	0.00	Suitable
			LLR/TL	-0.35	-11.92	0.00	Suitable	2017	ROA	Model (19)	LLR/TL	-0.27	-10.28	0.00	Suitable
			TL/TA	-0.08	-1.73	0.09	**Unsuitable**				TL/TA	-0.17	-1.92	0.06	**Unsuitable**

Source: Design and Calculation by Author Using (Excel And SPSS Software).
Data Source: Bank of Russia Website

Table 5. **The Impact of Risk Indicators and Other Variables on Performance Indicators. (2008–2017)**

Years	ROA	* Impact of Credit Risk Indicators on Performance Indicator (ROA)		** (Other variables) impact on performance indicator (ROA)	ROE	* Impact of Credit Risk Indicators on Performance Indicator (ROE)		** (Other variables) impact on performance indicator (ROE)
		B × (LLR/TL)	B × (TL/TA)			B × (LLR/TL)	B × (TL/TA)	
2008	0.91%	0	0	0.91%	3.47%	0	0	3.47%
2009	0.36%	-6.20%	-2.00%	8.56%	2.16%	-34.40%	-11.50%	48.06%
2010	1.09%	0	0	1.09%	6.25%	0	0	6.25%
2011	1.12%	0	0	1.12%	11.03%	0	0	11.03%
2012	1.82%	0	0	1.82%	12.08%	0	0	12.08%
2013	1.35%	0	0	1.35%	10.81%	0	0	10.81%
2014	-0.47%	0	0	41.73%	-4.34%	-34.60%	0	37.86%
2015	-0.27%	-2.10%	2.30%	-0.47%	-32.36%	0	0	-32.36%
2016	0.08%	-4.40%	-2.20%	6.68%	-1.48%	-39.30%	-15.50%	53.32%
2017	-2.53%	0	0	40.67%	-10.29%	0	0	-10.29%
Total	3.45%	-74.00%	-26.00%	103.45%	-2.67%	-108.30%	-34.60%	140.23%
Mean	**0.35%**	**-7.40%**	**-2.60%**	**10.35%**	**-0.27%**	**-10.83%**	**-3.46%**	**14.02%**

Source: Design and Calculation by Author Using (Excel And SPSS Software).
Data Source: Bank of Russia Website

of ROA and ROE51 % and 50 %, This reflects how important the impact of credit risk on the performance of Russian banks.

7. Main Results and Conclusion

This study examined the effect of credit risk on the performance of 85 Russian commercial banks between 2008 and 2017. This study used multiple regression to measure the effect of credit risk on the performance of Russian banks. Return on assets (ROA), return on equity (ROA) were used as indicators of bank performance, the provisions Loan Losses to total Credit Ratio (RRL/TL) was used as an indicator to measure the quality of credit risk and the ratio of total loan to total assets (TL/TA) as an indicator to measure the amount of credit risk.

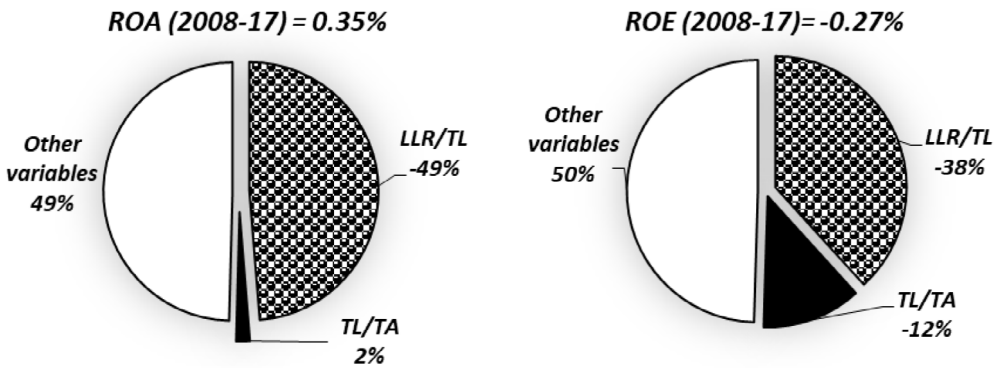

Figure 2. Ratios of The Contribution of Risk Indicators in The Formation of Performance Indicators
*(RRL/TL): The ratio of loan losses reserves to total loans.
*(TL/TA): The ratio of total loans to total assets

Source: design and calculation by Author using (Excel and SPSS software).
Data Source: Bank of Russia website.

The study found the following:

1. Performance indicators were affected by credit risk in five out of ten years, as the impact of credit risk on performance indicators in Russian banks was negative in four years and positive in only one year, This indicates that the impact of credit risk fluctuates from year to year, This is logical, as the volume of credit, the quality of credit, the credit policy and all factors affecting credit are not fixed, therefore the effect of credit on performance is variable according to the change in these factors.

2. Credit risk contributed to the formation of performance indicators by 51 % in the (ROA) and 50 % in the (ROE), this reflects the importance of the impact of credit risks on performance indicators, especially credit quality.

3. Loan loss provisions to total loans ratio (LLR/TL) had a negative effect for 4 years, this indicates a decline in credit quality in those years.

4. The effect of Total Loan to Total Assets (TL/TA) was only positive in one year, this indicates that the volume of credit had a positive impact in that year.

5. The effect of the ratio of loan loss provisions to total loans (LLR/TL) was negative and greater than the positive impact of the ratio of total loans to total assets (TL/TA), which means that the impact of loan quality is greater and more important than the impact of its volume.

The study concluded that the effect of credit risk on the performance of Russian banks is not a fixed effect but a changing one from one year to another, sometimes it does not leave an effect, sometimes it leaves an effect, but in cases where credit leaves an impact on performance indicators, this effect is often a negative and significant effect. The study also concluded that the quality of credit has a significant and negative impact on performance indicators, but the volume of the credit has limited impact.

Consequently, the study recommends increasing the interest of Russian banks in the quality of credit through the development of stricter credit policies. It has been proven that credit quality is much more important than the volume of the credit. Increasing credit quality will increase the performance of banks more than the increase in the volume of credit.

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Влияние кредитного риска на результаты деятельности российских коммерческих банков

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Аннотация. В данном исследовании изучалось влияние кредитного риска на результаты деятельности 85 российских коммерческих банков за период 2008–2017 гг. Нами использовалась множественная регрессия для измерения влияния кредитного риска на результаты деятельности российских банков. Исследование показало, что на показатели эффективности влиял кредитный риск в течение пяти лет из десяти. Кредитный риск способствовал формированию показателей эффективности на 51% в рентабельности активов и 50% в рентабельности собственного капитала. Кроме того, резервы на покрытие убытков по кредитам на общую сумму ссуд имели отрицательный эффект в течение 4 лет, поскольку из-за снижения кредитного качества в те годы влияние общей суммы ссуды на общую сумму активов было только положительным в течение одного года. Кроме того, исследование показало, что влияние отношения резервов на потери по ссудам к общей сумме кредитов было отрицательным и превышало положительное влияние отношения общей суммы ссуд к общей сумме активов, поскольку влияние кредитного качества является более значительным и более важным, чем влияние его размер. В исследовании сделан вывод о том, что влияние кредитного риска на результаты деятельности российских банков не является фиксированным, оно является изменяющимся эффектом от года к году, но в тех случаях, когда кредит оказывает влияние на показатели эффективности, этот эффект часто является отрицательным и значительный эффект. Исследование также пришло к выводу, что качество кредита оказывает существенное и негативное влияние на показатели эффективности, а объем кредита оказывает ограниченное влияние.

Ключевые слова: кредитный риск; резервы кредитных потерь; российские коммерческие банки; рентабельность активов; рентабельность капитала; множественный регрессионный анализ; резервы по кредитам; всего кредитов.

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