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IMPROVEMENT OF RETAIL CREDIT RISK MANAGEMENT IN COMMERCIAL BANKS

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Abstract

The main purpose of the study is to develop proposals for improving retail credit risk management of commercial banks. The article examines the theoretical aspects of the organization of the retail credit portfolio of banks and its analysis.Also, in the process of developing retail credit products in commercial banks, the organization of risk management and minimization of retail credit risks by setting limits on problem loans were studied.

Keywords:*credit scoring, credit history, creditworthiness, retail credit, debt burden, credit risk, credit bureau, credit portfolio, scoring model.*

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INTRODUCTION

At the current stage of the development of the banking system and banking business in Uzbekistan, it is necessary to analyze the situation of the retail credit activity of commercial banks and improve the management of existing risks. Because, by the end of 2021, the retail credit portfolio of commercial banks amounted to 70 trillion soms, and its share in total credit investments reached 18%. The growth rate of the retail loan portfolio in 2020 was 127 percent compared to 2020, while the corporate loan portfolio grew by 113 percent and total loan investments by 118 percent. As of January 1, 2017, the share of loans granted to individuals by commercial banks in bank assets was 11.2 percent, and as of January 1, 2022, it was 18.1 percent.

For borrowers, bank retail loans have an undeniable social value, helping people improve their living conditions, turn personal savings into investments, and realize their entrepreneurial potential.

In the period before the global financial and economic crisis that occurred in 2007, the active spread of retail banking services was motivated by the decrease in profitability in other segments of the banking market and the existence of the retail credit services market for individuals that was not sufficiently absorbed by competitors. That is why, in the conditions of the unstable development of the financial market, banks face the problem of managing the quality of the portfolios formed, and the need to radically change the retail lending policy.

The increase in the share of overdue debts of individuals in commercial banks, the requirements for the adequacy of the bank's own capital and reserves for covering risks on retail loans are increasing. It is very relevant to study the theoretical approaches of retail lending in banks, to analyze the processes of development of retail credit products, to determine the risk appetite and to develop directions for effective management of credit risks.

An important feature of credit risks associated with retail banking is that they are fragmented. Therefore, the probability of default (PD) of one customer is not very expensive for the bank. Another important feature is that retail customers are usually financially independent from each other. The risk of agglomeration (concentration) is high because the corporate loan portfolio consists of economically interconnected corporations in geographic areas or industries .In general, retail loan portfolios tend to be larger and better diversified than "heavy" corporate loan portfolios.

Regulators accept the view that credit risk in retail banking is predictable. They will have to maintain a relatively low level of risk capital under the Basel Accords. Meanwhile, bank regulators need to analyze data on probability of default (PD) and loss given default (LGD), as well as exposure at default (EAD) for highly differentiated portfolio segments. The high predictability of credit losses in retail lending means that confidence in the expected loss rate is paramount in assessing retail credit risk.

Another key feature of the retail loan portfolio of many commercial banks is that the increase in the probability of default is often determined by changes in customer behavior, for example, categories that have financial difficulties and are unable to make minimum credit card payments.

This allows banks to take the following specific actions to reduce credit risk:

■ change the rules for managing funds given to existing clients to reduce risk:

■ changing marketing strategies and customer satisfaction to attract low-risk customers;

■ increasing interest rates for certain types of customers who are more likely to default.

LITERATURE REVIEW

The Basel Committee, which regulates international banking activities, defines retail portfolios as a portfolio of homogeneous loans:

■ consists of a large number of small loans of low value;

■ aimed at individual consumers or small businesses;

■ has very little risk associated with additional credit.

Examples of this include:

■ credit cards;

■ installment loans (for example, consumer loans, education loans, car loans, leasing);

■ revolving (revolving) loans (for example, overdrafts, loans secured by property with credit line features);

■ Mortgage for residential real estate.

The general loan portfolio of a commercial bank consists of retail and corporate portfolios. Corporate loan portfolio - includes loans allocated to legal entities. Retail loan portfolio - includes loans allocated to retail customers. Based on the customer classification system in commercial banks, banks can also include small individual entrepreneurs in the category of retail customers. In the practice of some banks, retail clients are individuals. Also, retail business is significantly stable and brings high profits. This helps universal commercial banks to avoid huge losses.

We will systematize the reviews of the practice of risk management related to retail lending in banks and the existing approaches and methods of assessing the main components of credit risk.

The first attempt to empirically test the validity of these theories in modeling the probability of default by American borrowers was researched by Jackson JR, Kaserman DL. In this case, the research conducted on the American mortgage market was carried out and it was concluded that it is appropriate to use both theories to model the default probability of a mortgage loan. Empirical analyses mortgage confirms that the probability of loan default depends on the socio-demographic characteristics of borrowers, including their level of financial literacy, mortgage loan parameters and macroeconomic indicators.

In July 2004, the International Basel Committee issued the "International Convergence of Capital Measures and Capital Standards: New Approaches", later the Basel IIdocument . Under the IRB's approach, banks are only allowed to use their own models to estimate the probability of default by borrowers. It is also more development and advanced IRB approach to pass mean holds _ According to it, commercial banks are allowed to use their own models to estimate the main risk parameters necessary to estimate the demand for economic capital.

Among the main risk parameters, the Basel Committee defines the average annual default probability PD. This random variable is, which reflects the probability that the loan will not be repaid, i.e. default will occur. The probability of default is calculated separately for each borrower. Available to information based on, calculate PD enable There are many different models available, the main class of models used in retail lending is the class of scoring models . As a result of the application of scoring models, each borrower is given a certain rating that describes his ability to pay his obligations to the bank. A rating score is assigned to the PD using a special calibration. The probability of default assigned to a group of borrowers with the same score is essentially an estimate of the probability that borrowers in that group will default during the year.

Most of the models developed for assessing and managing retail portfolio credit risks are based on default data using the Basel Accord recommendations.

Bucay, N. and D. Rosen (2001) Retail of the loan portfolio to the sector based on model creates, in which networks between correlation is taken and their all of them common economic to variables dependence research done _ The relationship between the default rate for retail loans and economic variables was estimated using linear regression of the effect of the economy's aggregate default rate on the logit or probit change.

Rosch, D. and H. Scheule (2004) own in his studies retail credit portfolio housing mortgage, circulation loans and another credit to speciesseparated . The relationship between default and economic variables for each retail loan type was estimated at the individual loan level using a probit model.

Musto, DK and NS Souleles (2006) used customer behavior scores in a credit risk model of a retail loan portfolio. But they are one moon and next months between behavior at the ball the difference this debt receiver's " assets for profitability " as a factor takes _ They recommend that customer behavior scores be revised as each borrower updates and changes frequently.

Andrade, FWM and LC Thomas (2007) developed a structural model of credit risk of consumer loans. In this case, customer behavior is taken as a surrogate for creditworthiness. If customer's loan if the ability decreases and the next credit get point of view in terms of default surface will come said gave the conclusion .

DATA AND RESEARCH METHODOLOGY

Grouping, comparative and structural analysis, induction and deduction, analysis and synthesis and other scientific research methods were used in this article.

ANALYSIS AND RESULTS

In domestic economic literature, lending to individuals is mainly used in two terms. The concepts of "consumer credit" and "retail credit" for individuals are widely used. Although these concepts have common aspects, some authors use these concepts as synonyms, while others explain them separately. This creates uncertainties in the statistical and analytical processes for carrying out scientific research, evaluating the practices of commercial banks for granting loans to individuals.

In the practice of international banking, the word "Retail" also means retail, and these retail banking services also represent a set of services provided to individuals.

The distinctive features of the retail banking business are as follows:

1. that the amount of retail lending is small and standard;
2. that secondary sources of loan repayment are less important compared to the borrower's credit rating;
3. special technologies are used in retail banking business and credit cards are widely used.

Retail credit activity of a commercial bank is carried out on the basis of the principles of standardization, differentiation and publicness.

1. The principle of standardization means the need for the developed technology of credit and retail services, which is recorded in the internal bank documents and must be performed by the participants of the credit process, while paying attention to the customer's requirements for credit products.
2. The principle of differentiation enables the formation of homogeneous groups of retail credit products, their reliable accounting and development in the direction required by the bank.
3. The principle of publicity ensures wide coverage of retail customers and sales of credit products as a result of a relatively small amount (in terms of money) of individual credit requests from customers of the retail segment.

Retail credit risk is the risk that borrowers will default on their obligations, that is, they will not pay interest and/or principal on the loan on time. Although many factors can lead to increased credit risk, the primary factor is the increased risk of default. It can put borrowers in financial trouble and reduce their ability to make payments.

The retail loan portfolio of commercial banks should use stress testing to determine how much damage they will incur under each of the worst-case scenarios when there are sudden changes in several risk factors. In this sense, in retail credit risk management, retail credit products can be viewed at 4 levels:

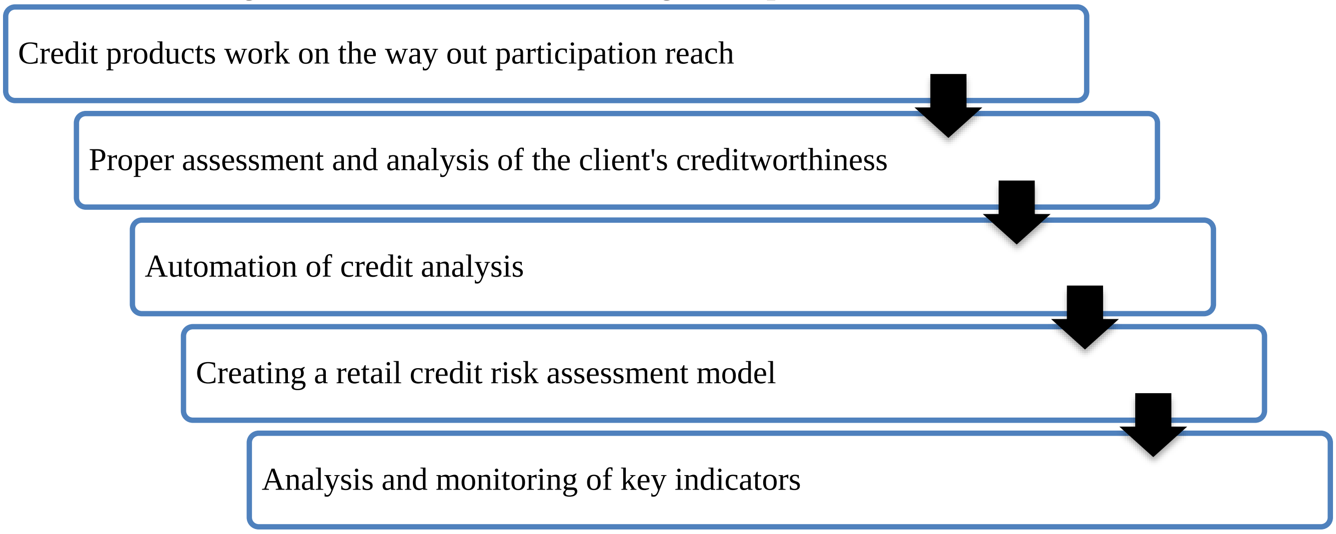
1. at the macro level - credit risk arises as a result of changes in macroeconomic factors and regulatory and legal conditions;
2. at the micro level - credit risk arises as a result of changes in the bank's internal procedure and lending rules;
3. at the individual level - credit risk arising as a result of insufficient knowledge and experience and other operational errors;
4. at the level of the client - the credit risk arises when the client does not fulfill his obligations under the credit agreement.

In order to effectively manage the risks associated with retail lending, it is necessary to identify the risks involved in the development of retail credit products.

Figure 1. Objectives of retail credit risk management

Lending to "Good" customers, ensuring optimal risk appetite, minimizing potential losses and optimizing the risk management process are important in effective retail credit risk management.

Figure 2. Retail credit risk management processes in banks



Variables supported by objective analysis are selected to assess the credit risk associated with the retail loan portfolio. Based on real data, the interrelationship between variables is considered and a credit risk assessment model is created.

The introduction of credit credit scoring in the activity of banks can be achieved by analyzing information about customers in a short period of time, saving costs related to the credit process, and minimizing the actions in this process. Also, fewer errors are observed due to the absence of the human factor.

The expansion of lending to individuals in banks, the increase in the types of credit services provided to them, leads to an increase in credit risks. This requires risk assessment and minimization in retail lending practices. We analyze approaches to credit risk assessment in commercial banks.

Table 1

Description of approaches to credit risk assessment

Approaches	Risk components	Ways to reduce risk
SA (standardapproach)	External ratings Control coefficients	A limited set of recognized risk-reducing factors
F-IRB (Foundation IRB, F-IRB	Determination of LGDs and EADs recorded by bank valuation of PD	Greater amount of recognized risk mitigation factors applied to PD, LGD, EAD
A-IRB (Advanced Internal Ratings Based Approach)	PD, LGD, EAD evaluated by the bank	A greater number of recognized risk mitigation factors applied to PD, LGD, EAD

Source:International Convergence of Capital Measurement and Capital Standards: Revised Framework

In commercial banks, it is allowed to use three methods of calculating credit risk in the order of increasing sensitivity to risk:

- fundamental approach based on indicators;
- standardized approach;
- an improved approach based on the risk change criterion.

Based on approaches to credit risk calculation in commercial banks, evaluation models have been developed by various experts, rating and auditing companies and are used in the practice of banks in risk management.

Banks have the following methods of analyzing the risks of the retail loan portfolio:

1. Assessment of portfolio quality. The quality of the loan depends on the period in which it is granted: The quality of the loans varies depending on the condition and conditions of the period in which they are granted.

2. Assessment of the life cycle of the loan. The life cycle of the loan refers to the change in its quality depending on the period that has passed since the date of its issuance. Based on historical observations, the actions of loans given in different periods of their cycle are evaluated.

3. Construction of transition matrices. The impact of factors on the parameters of the retail credit portfolio is under constant monitoring by the bank based on the quantitative assessment of this impact through a system of indicators describing each group of factors.

In addition to generally recognized indicators (portfolio dynamics; portfolio financing sources; portfolio interest income; portfolio interest margin indicator) indicators are analyzed to assess the impact of performance factors on the retail loan portfolio. In addition, the exchange rate, official and interbank interest rates, GDP deflator should be analyzed as exogenous factors. As a result of the analysis of changes in these indicators, it is possible to assess the degree of influence of the level of credit risks on the quality indicators of the retail loan portfolio.

To introduce limits in the case of an increase in the share of problematic and overdue loans in branches and branches of commercial banks . This will positively affect the minimization of credit risks and the improvement of the quality of the retail credit portfolio .

Problematic and overdue debts are overdue debts on the balance sheet based on the principal debt and percentage of loans allocated to individuals, loans in litigation. Commercial banks should introduce the practice of setting limits on the share of problematic and overdue debts in the total loan debt. This limit is the highest permissible limit of the regulatory indicator for NPLs, which is used to stop lending activities due to non-compliance with the established limits for the purpose of restricting lending.

The main goals of introducing limits on problem and overdue loans are:

-Prevention of the increase in the weight of problematic and overdue loans in the bank's loan portfolio;

- Ensuring the optimal balance between the bank's lending activity and the quality of the loan portfolio.

In order to achieve the goal of introducing limits, banks should perform the following main tasks:

- establishing constant control over the setting of limits and their implementation;

- clear distribution of tasks related to setting limits and control over their implementation.

CONCLUSION

It is beneficial to implement measures in the following directions to improve retail credit risk assessment modeling and portfolio quality:

increase transparency of retail credit business, encourage improvement and optimization of lending business process, and consider risks;

minimizing losses related to credit risk in terms of reducing potential losses by grouping borrowers into "bad" and "good" categories and allocating loans based on in-depth analysis;

Meeting regulatory requirements for central bank risk management standards and provision of adequate reserves.

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