

Possible changes in the performance of credit unions according to new Central Bank regulations

Using qualitative, comparative, financial and logical analysis, the influence of Central Bank regulations on the Credit unions in Lithuania is analyzed in this article. The aim of the article is to show a model, which allows to evaluate the influence of the changes that are affected by new regulations and supervision provided by the Central Bank for Credit unions. It presents the scenario that should be chosen to assure sustainable growth of a credit union.

Keywords: credit unions, central bank, regulations.

Remiantis kokybine, palyginamąja, finansine ir logine analizėmis, šiame straipsnyje analizuojama, kokią poveikį centrinio banko reguliavimas daro kredito unijų veiklai Lietuvoje. Straipsnio tikslas yra parodyti modelį, kuris leistų įvertinti centrinio banko vykdomos kredito unijų priežiūros ir reguliavimo pokyčių įtaką kredito unijų veiklai Lietuvoje. Modelis parodo koks scenarijus turėtų būti pasirinktas norint užtikrinti darnų kredito unijos augimą.

Raktiniai žodžiai: kredito unijos, centrinis bankas, reguliavimas.

JEL Classifications: G21/E58.

Introduction

Recent years were a tough challenge for the whole financial market and financial companies that worked in it. Financial crisis showed that even the banks that were considered to be big and safe can go bankrupt suddenly and cause immense confusion. When the financial system was started to be modified, it was noticed that there is a need for additional regulations, which were applied shortly. It is logical that additional regulation can influence

the activity of a financial institution. The **relevance** of this paper lies in the idea that additional regulation from the government on the credit unions might affect their performance negatively. Credit unions have a different attitude to governance, profit allocation and activity principles and because of that they caused more risk for the financial market.

Most of the banks, both of Lithuanian and foreign capital, offer services that are

Mantautas RAČKAUSKAS – master of Finance and banking at Vytautas Magnus University. Credit manager of Akademinė Kredito Unija. Address: A. Mickevičiaus g. 15-2, Kaunas 44310; phone: 00 370 662 21160; e-mail: mantautas@inbox.lt.

Kristina LEVIŠAUSKAITĖ – professor at Vytautas Magnus University, Faculty of Economics and management. Address: S. Daukanto g. 28, Kaunas 44246; phone: 00 370 37 327 854; e-mail: k.levisauskaite@evf.vdu.lt.

similar to each other. Credit unions offer very similar services and are a part of the same segment with commercial banks and saving institutions. Most of the funds in credit unions are the deposits from natural and legal persons, so all mentioned institutions can be called saving institutions (Saunders, Cornett, 2008). Commercial banks have always had wider range of services than credit unions where only most necessary services are offered. Additional services require more investments, more management of additional risks which also requires more expenses and more human resources.

At present, credit unions are working in very dynamic and changing environment: the loan market has been extended by “fast credit” companies, the leaders of interest rates in the deposit market are credit unions that are not members of the Central Credit Union of Lithuania (CCUL), so credit unions that are members of the CCUL system have to compete with banks for more favourable rates and better clients.

This challenge is even more enhanced by the emergence of additional regulations, which not only affect the performance of a credit union, but also cause the change of strategic plans. Because of that, indicators have to be monitored more closely in order to comply with the new requirements. This article analyzes the **problem** – how to evaluate the impact of the new Central Bank regulation on the performance of the credit unions in Lithuania. A model is needed to perform this evaluation which involves the main areas of the credit union that are affecting or seem likely to affect the key financial indicators of the performance of a credit union’s financial ratios. For this reason, causal and consequential relationship between certain characteristics and an

association should be found, how a single factor influences the variation of certain indicators, and what action should be taken by the credit union in certain situations according to new regulatory measures.

The object – the influence of new Central Bank regulations for the performance of credit unions.

The aim – to find out the features and performance characteristics of the credit unions and prepare a model that allows assessing the influence of the changes in supervision and regulation applied by the Central Bank for the credit unions in Lithuania.

To reach the aim, the following **tasks** are to be carried out:

- identify the basic principles of credit union operations;
- identify the reasons that influenced the Central Bank’s regulatory changes for credit unions;
- prepare a model that allows assessing the changes of performance in the credit unions after new regulations of the Central Bank;
- perform modelling of changes in a credit union performance using different strategies, according to the model;
- evaluate what decisions should be made to keep the financial stability of credit unions and to ensure safety of their member deposits.

The methods: to write this article, a variety of sources of information were used – scientific articles and literature, official statistics of the Credit unions, submitted and issued orders, regulations and other legal documents of the Central Bank of Lithuania that are connected with the analysis of the problem. Qualitative, comparative, financial and logical analyses have been used. Qualitative analysis helps to discern the current situation, not only numerical

values of assistance, but also to look into the legal and regulatory framework that influence the regulation of credit unions. The financial and logical analyses allow the insight into the union's budget and planning features, revealing how certain regulatory measures affect or may affect the union's activities in the future. A case study method is used in the research which enables to model a variety of situations and to evaluate the possible influence of the new Central Bank regulation on credit union performance.

Operating principles and differences of the credit union

A credit union is a specific banking model based on democratic governance and community co-operative principles. With regard to financial institutions, it should be noted that credit unions operate in a mixed financial sector in which there are several types of financial institutions depending on what they are focused on: investment banks, pension funds, pawn shops, insurance companies, „fast credit“ companies, savings banks, commercial banks and co-operative banks (credit unions). The main difference between all these financial institutions and credit unions is that credit unions are non-profit institutions, created and run by their members. Each entrant has to pay an entrance fee and to buy at least one union share, which enables him to have one vote at the general meeting held once a year. Union members can make deposits and the credit union lends these funds to others, but only to the members of the same credit union. Because banks tend to operate only where they are profitable to do so, major banks closed their branches in the provinces where it was

not profitable to provide financial services (Levišauskaitė, Kaupelytė, 2003). Mostly, credit unions have been created by people that are close to each other and are connected by some sort of common criteria, community, or profession, and the deposits of members have been lent to other credit union members.

Figure 1 shows how financial institutions are controlled. The main institution, which supervises, controls and licenses financial institutions, is the Central Bank. In Lithuania, this function is performed by the Bank of Lithuania. It supervises and gives licence to all financial institutions, including Central Credit Union of Lithuania and its 63 members – credit unions. If necessary, a credit union may apply directly to the Bank of Lithuania, and if there are default facts, the Lithuanian bank may impose penalties for each credit union separately. There are 75 licensed credit unions in Lithuania, of which 63 belong to the CCUL system and are members of the Association of Lithuanian Credit Unions. The 63 credit unions are united by more than 137 thousand members. Only the CCUL system member credit unions provide a wide range of services, such as e-banking, payment cards MasterCard, Maestro, accept payments for utility bills, and make local and international money transfers for the members. Other twelve credit unions operate as private companies which are engaged in financial activities and seek profit. All financial institutions in Lithuania are supervised by the Bank of Lithuania, but these 63 credit unions are in addition monitored and controlled not only by the Bank of Lithuania but also by the Central Credit Union of Lithuania. Each CCUL System of union is separate and not related to each other in any other way except being a member of the Central Credit

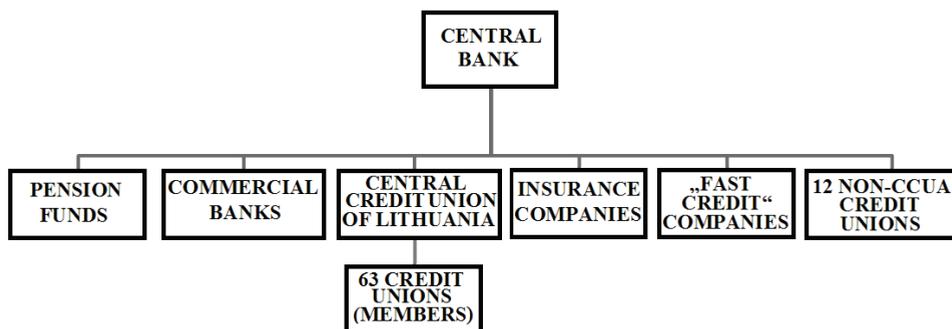


Fig. 1. The structure of financial sector supervision in Lithuania

Note: Prepared by the authors, according to the data from the Bank of Lithuania.

Union of Lithuania. There are stabilization and liquidity support funds in the Central Credit Union of Lithuania where all CCUL credit union members make payments, so in the event of liquidity or other problems, CCUL help and rescue its member credit union from bankruptcy, stabilize the troubled union by taking over the operation of its business and the appointment of its administrators. In this way, the Central Credit Union of Lithuania can help every member credit union without causing systemic credit union crisis or panic.

Similar principles of the credit union's operations also exist in other European countries: Ireland, Poland, Lithuania, Great Britain, Spain and other. There are fewer credit unions in Latvia than in Lithuania – only 34, and they have only about 26 thousand members in total (Mavrenko, 2011). Spain, as well as Lithuania, has a central credit union. There it is called “Banco Español Cooperativo” and unites 73 of the 83 credit unions of Spain. Credit unions are especially popular in Ireland, where they take a seven times bigger market share than credit unions in Lithuania. There are 409 credit unions operating in Ireland which unite 2.9 million members. There are 67 credit unions in Poland uniting 1.6 million

members. In all these countries, as well as in Lithuanian credit unions, there exist the same principles of management and membership. When people see how banks behave with service rates – increase them or introduce even new taxes, people often look for alternative banking services such as credit unions and refuse bank's services. As a result, a credit union welcomes new members while the banks directly imply dissatisfaction about the situation when people are leaving banks and are becoming clients of credit unions. It might seem that both, the research review of the payment cost prepared by the Bank of Lithuania (2012), and the comments of a Vice-President of the Board of the Bank of Lithuania, Raimundas Kuodis (2013), that “the management structure of credit unions is completely ridiculous”, show that the Bank of Lithuania is working to satisfy the interests of commercial banks, and does not try to be strict and fair adequately to all financial institutions, and new resolutions were applied without full understanding of the management and operational specificities of unions. Unfortunately, there are no studies or surveys made to find out the Lithuanian bank approach to commercial banks and credit unions, but despite this fact, in

foreign literature we can find that credit unions in the UK have a large – both public and commercial – banks support. Government maintains credit unions because they reduce financial exclusion, and banks do not consider credit unions as rivals, but transfer people there who cannot or do not want to serve them (Jones, 2001).

P. Lucas (2007), in a journal of credit unions published in EBSCO date base, says that credit unions have increasingly good prospects to grow and expand and become more competitive in the financial services' sector. When comparing banks to credit unions, it can be noted that there is a different culture and services in the credit union. Often a great number of members of a credit union know each other and have become members because of the recommendations of each other. Credit union managers support the immediate and intimate contact with a member and create cosy atmosphere, which is not comparable to the bank, which offers formal, sometimes unpleasant service. M. Klinedinst (2010) claims that credit unions have a number of advantages that can be offered to their customers over the banks, but one of the main reasons for this is how managers are doing their job and how they communicate with union members. Credit unions are trying to operate as efficiently as possible with the least possible costs, so they do not try to spend money on luxuries, but give more attention to the quality of service, along without attempting to overdo it, because a credit union serves only a certain group of people who share some common links. Also, for these reasons, there is no elite group of individuals in a credit union, who get exceptional conditions and different prices, which is often seen in the bank. Banks tend to protect and respect those customers who hold

large amounts of money in their accounts by providing them better value services and applying more favourable treatment to them than to other bank customers.

Meanwhile, all members of the credit union are equal, and all conditions are publicly available and all of them are the same for every member. N. Chilingirian (2012) argues that credit union members are more confident in their financial situation and can manage their personal finances better than other non-credit union individuals. M. Klinedinst (2010) also argues that credit unions have more competitive advantages over banks, even though the products in credit unions are very similar to those in banks. Each credit union has a membership restrictions, and has set its own admission criteria (Frame et al., 2002), which you cannot find in a bank. Credit unions play a vital and unique role in terms of financial exclusion as a result of increasing taxes and fees of banking services. J. F. Devlin (2009) describes the financial exclusion as unavailability of certain financial services. E. Kempson and C. Whyley (1999) distinguish several types of financial exclusion: availability, pricing, marketing, resources, and voluntary exclusion. J. F. Devlin (2009) argues that financial exclusion is affected by employment, income, marital status, age, education, and assets available. It should be noted that financial exclusion is very dependent on the country's financial situation (Xiao et al., 2006). This means that if a country's financial situation is improved, the exclusion will be less and vice versa – if the financial situation is more difficult, there are more unemployed people and those who receive welfare benefits in the country, the financial exclusion will be higher.

Credit unions aim at reducing financial exclusion and establishing remote

checkouts in small towns. In this way, favourable conditions are made to increase the number of members, because most of the population of small towns, because of the need of financial services, become members of a local credit union. Special features of credit unions in the case of price exclusion are their low rates and fees for service, which are attractive and affect people. It seems that banks are trying to select best clients and keep only the richest ones who can pay high administration fees, while the clients with the lowest incomes are naturally eliminated. T. Stewart (2010) says that people tend not to change their habits so fast and to start using credit union services, but for it to happen there must be a significant shift or change.

To summarize, we can note that a credit union operating principles are completely different from those of a bank even though the services are very similar. There are also different values and goals. The analysis of a credit union activity can clearly show the community ideas, which are very distant for banks which indiscriminately seek profit. The uniqueness of credit unions is complemented by the fact that unions act where a commercial bank leaves gaps, which is very risky for the bank, because these gaps are left in the most sensitive areas of customer relation – service, quality, pricing and the attractiveness of the daily operations.

Changes of credit unions' regulation in Lithuania

When forming the financial system of the restored Lithuania, the need to recreate the credit unions that operated during the interwar period was raised. Until 2001, credit unions were founded and operated

separately by providing only savings and lending services. On the 23rd of July, 2001 under the Act of the Central Credit Union of Lithuania, in order to encourage co-operative banking system as an alternative to commercial banking, the Central Credit Union of Lithuanian (CCUL) was established. Since the independence till the present day, nearly 20 banks and over the same period – just two credit unions have gone bankrupt in Lithuania.

Recent upheaval in the Lithuanian financial market has been accompanied by a number of changes from the Bank of Lithuania by resolutions that tightened the existing requirements for the financial market and especially credit unions' growth and development. One of the objectives of this article is the research of the decisions of the Bank of Lithuania and their impact on credit unions' performance. Relevant regulations, which affect the operations of credit unions, will be discussed. Some of them are updated, others – completely new, but all of them are more stringent than the previous ones. It is likely that credit unions will have to re-orientate their activities to comply with the new regulations and operate profitably. Table 1 gives regulations from the Bank of Lithuania which were adopted when the financial instability in Lithuania's financial institutions began:

- 1) One of the first significant resolutions – Regulations of Responsible Lending. It has been adopted with the aim of promoting responsible lending practices for credit institutions, to keep market discipline and transparency in order to reduce systemic risk and poor real estate value, as well as the too rapid growth in the loan portfolio and excess concentration risk in the sector of credit institutions – all of this protect consumers from excessive financial burden and develop responsible credit

Table 1

Lithuanian bank resolutions in respect to credit unions

No.	Resolution No.	The name of resolution	Date of approval
1)	03-144, 03-175, 03-63	Regulations of responsible lending	2011.09.01, 2011.10.29, 2013.03.19
2)	03-184	Rules of authorization of becoming a member of a credit union's board of directors issuance	2012.08.17
3)	03-185	Rules of the examination of the directors of the supervised financial institution	2012.08.17
4)	03-220	The rules of calculating the liquidity rate and liquidity coverage ratio of a credit union	2012.10.19
5)	03-284	The credit union prudential requirements	2012.12.21
6)	03-285	The rules of calculating credit union prudential requirements	2012.12.21
7)	03-286	The rules of credit union's largest single borrower and largest loan calculation	2012.12.21
8)	03-13	General provisions for calculating capital adequacy	2013.01.24

Note: prepared by the authors, according to the data from the Bank of Lithuania.

habits, contributing to the financial system stability.

2) Rules of authorization of becoming a member of a credit union's board of directors issuance imposes restrictions on inexperienced individuals to become the main credit union. In the electoral year, the credit union, persons wishing to become members of the management bodies must apply to the Bank of Lithuania with the request to check the reputation and suitability of a candidate to the wanted post. Persons who do not meet the requirements of these regulations cannot stand for the post or become a member of the Board.

3) Rules of the examination of the directors of the supervised financial institution determine qualifications and experience of the board members and the executive officer in the organization and execution. Such examination helps to assess the qualifications and experience of the person who seeks to hold management position. Examination can be also performed if the

Bank of Lithuania detects problems in a credit union and decides to perform the exam for its board of directors.

4) The rules of calculating the liquidity rate and liquidity coverage ratio of a credit union define what constitutes a credit union liquid assets and current liabilities, which are used to calculate the liquidity and liquidity coverage ratio.

5) The credit union prudential requirements constitute one of the most important and significant regulations which will make the largest impact on a credit union operations and growth. It sets minimum liquidity ratio for the credit unions with assets of over 15 million litas: if the annual growth of deposits is ranging from 15 to 25 % (inclusive), the liquidity ratio must be at least 40 %, and the credit unions, with the annual growth of deposits ranging from 25 to 50 % minimum liquidity ratio cannot be less than 50 %, and for the credit union in which the annual growth of deposits is more than 50 % liquidity ratio must be at least 60 %.

6) “The rules of calculating credit union prudential requirements” describe how the annual deposit growth rate is calculated. This requirement forces credit unions to control deposit growth by making dramatic changes in the interest rates in order to stop new deposits or if there is space to grow – dramatically increase interest rates in order to attract the required amount of the deposit. According to the same resolution, capital adequacy ratio is provided. It is based on the part of the loans granted to legal persons in the total loan portfolio. Credit unions which provide up to 20 % of all loans to associate members have to keep capital adequacy ratio not less than 13 %, those whose loans granted to associate members range from 20 to 40 % of total loans – not less than 18 %, and those whose loans granted to associate members represent more than 40 % of all loans – till the end of 2013 capital adequacy ratio cannot be less than 20 %, and since the 1st January, 2014 – not less than 25 %.

7) The Bank of Lithuania adopted a resolution on the maximum loan amount per borrower ratio. Maximum loan to a single borrower is limited to half a million litas, or 25 % of the credit union recalculated capital, depending on the fact which of the values is lower. However, according to the Bank of Lithuania, this requirement is not applied when the loan is granted to the farmer or to the client buying or building residential properties. Bank of Lithuania does not only set the maximum loan of half a million litas, but also restricts credit unions to give more than 300,000 litas loan without the consent of the Central Credit Union of Lithuania.

8) General provisions for calculating capital adequacy provide that the total amount of loans to related parties cannot exceed 1 million litas.

All these resolutions and their amendments will tighten the supply of loans and limit the provision of large loans. In the event of additional liquidity and capital adequacy ratio requirements, credit unions will have to be more responsible when borrowing and lending in order to meet the requirements of the Bank of Lithuania. It seems, that for further growth credit unions will have to change the investment directions and invest more in government securities, in order to ensure the necessary liquidity ratio. The analysis of previous decisions will allow preparing a model, which will enable the assessment of impact of these regulations on the growth of a credit union.

Model of the research

In order to make a study, a model was made that helps to assess the factors of credit union growth which affect the credit union's performance according to a new Central Bank regulation. The model consists of four parts: strategy selection, assessment of regulatory measures, asset allocation and the result. Research model is presented in Figure 2.

Deposit growth strategy of the credit union is analyzed in the first part of model. According to the current resolutions for the credit unions applied by the Bank of Lithuania, deposit growth is divided into four parts each of which have the assigned required minimum liquidity ratio. Certain liquidity ratio has different impacts on the credit union's business strategy, and if the credit union wants to meet the regulation it has to allocate its asset properly. Asset allocation among the current account in CCUL, investments in government securi-

ties, term deposits held in CCUL and loan portfolio is affected by the liquidity ratio.

Deposits that are longer than one month are not considered liquid. Loans are the most profitable area, investments in government securities are not as profitable as loans, but considered 100 % liquid. Money that is being kept in the current account in CCUL is also considered 100 % liquid, but is not profitable. Since the vast majority of assets are derived from deposits, interest rates adjustment can be used to control the amount of deposits. The loan portfolio is divided into portfolio for physical and legal persons. The Bank of Lithuania does not regulate loan portfolio of individuals, it just applies the requirements for

the maximum loan. Meanwhile, the loan portfolio of the legal entities is regulated by the Bank of Lithuania by setting three different capital adequacy ratios depending on the part legal entities take in the whole loan portfolio.

The fourth part of the model is the result of a credit union's performance in terms of deposit growth influenced by the strategic asset allocation decisions which were made in order to meet the liquidity and capital adequacy ratios. The best outcome, defining the performance of a credit union is return of assets. This ratio shows how profitably assets were invested in the credit union. The most profitable investment is loans, the least profitable – money

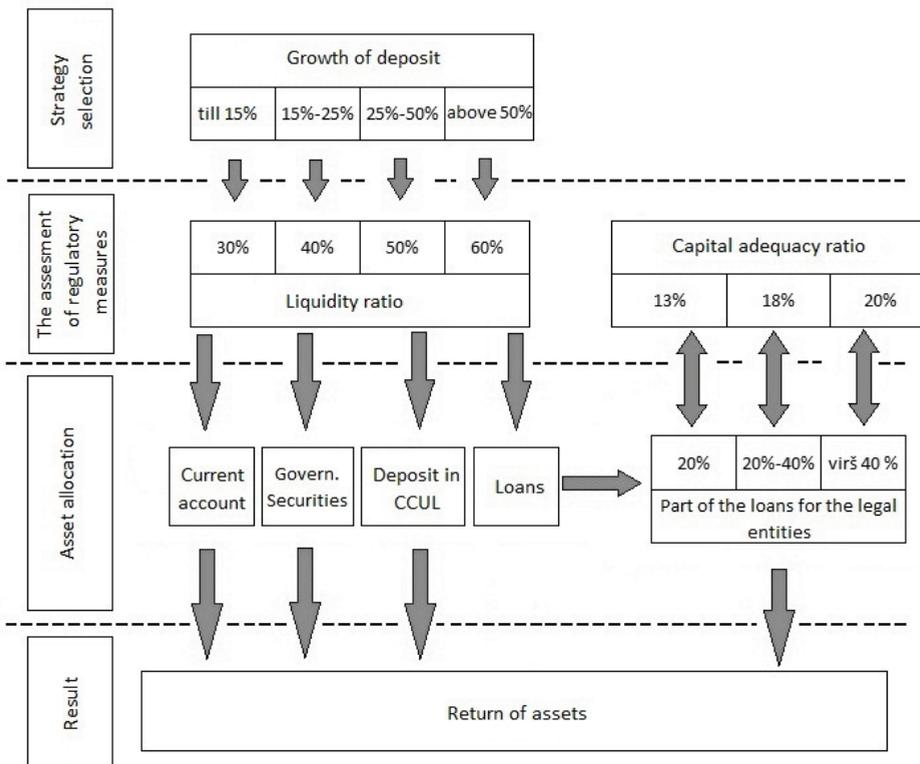


Fig. 2. Model of the research

Note: prepared by the authors.

in the current account. Asset return is influenced by profitability: it shows how profitable a credit union was, according to the new requirements and how the profitability changed after one year. The assets of a credit union showed how it was growing – how many new loans were granted and how the asset was extended. The part of government securities in the asset of a credit union influences asset return, as well. The change in the part of government securities reflects the impact of new regulations resulting from the increased liquidity ratio requirement.

This model allows not only to select the variables when predicting future data, but also to choose the strategic investment decisions that affect the credit union's performance. If historical data is analysed it can be seen whether, in a certain deposit growth, a credit union has chosen the right asset allocation scheme, and whether a credit union has met the new requirements, and whether incorrect decisions have been made. When we see the change in the credit union performance influenced by new regulations the same model can be used to

check the most advantageous scenario for optimal combination of growth and performance in a credit union.

Modelling results of a possible impact of the Central Bank regulations on the performance of Credit unions in Lithuania

The model was made using the data from Akademinė Kredito Unija of the 31st December, 2012. This Credit union used in the model is hypothetical, in order to have data to analyze past and model future changes. To find out how the new Central Bank decisions would have affected the tested hypothetical credit union in the past, research was carried out using analogous model prepared to assess future performance variations of the credit union.

When looking at the historical data in Table 2, it is impossible to maintain that deposit growth in the credit union has been steady or had increasing or decreasing growth tendency. Deposit growth

Table 2
Assessment of changes in Credit union during 2007 - 2012, from the perspective of the new requirements from Bank of Lithuania

Ratio/variable	Change during the period				
	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
Deposits	16.7 %	-1.1 %	20.3 %	19.6 %	26.7 %
Loan portfolio	14.2 %	-20.5 %	6.8 %	22.2 %	43.2 %
Part of Government securities in the assets	11.5 %	17.9 %	24.8 %	23.5 %	20.6 %
Assets	20.7 %	-14.0 %	25.9 %	21,0 %	28.4 %
Profit	22.9 %	-99.0 %	160.9 %	-50.6 %	236.0 %
Asset return (1 % recommended)	0.4 %	0.0 %	0.5 %	0.2 %	0.5 %
Liquidity	51.3 %	37.9 %	54.6 %	41.2 %	39.8 %
Old liquidity requirement	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %
New liquidity requirement	40.0 %	30.0 %	40.0 %	40.0 %	50.0 %

Note: prepared by the authors, according to the data of the Bank of Lithuania and Akademinė Kredito Unija.

Table 3

The characteristics of modelled situations

Situations	Growth of deposit		Required liquidity ratio
	Chosen growth	Name of the growth	
1 situation	45 %	High	50 %
2 situation	27 %	Exceeded	50 %
3 situation	23 %	Conservative	40 %
4 situation	14 %	Low	30 %

Note: prepared by the authors, according to Bank of Lithuania.

slowed during the crisis (at that time even decrease was observed), and in the subsequent years the growth of deposits was recorded which could be attributed to the conservative growth. In terms of the loan portfolio, it may be noted that it declined until 2009, and then every year the loan portfolio growth rate increased. With the increasing amount of the deposit, total assets of the credit union increased as well.

It should be noted that four of the five cases analyzed in the credit union would meet the required standards of the Bank of Lithuania if they were introduced back from 2007. Only in the last period of 2011/2012, the credit union would not meet the liquidity ratio requirement, which is provides in a new resolution. In order to meet this regulation, credit union would have to refuse loans and invest more in government securities. As we can see in the Table 2, namely in 2012, the share of government securities in assets decreased significantly. Because of the drastic changes in the credit union's income fluctuation it is hard to set a specific asset return trends, however, the return on assets never exceeded the one-half percent limit over the analyzed period.

When looking at the results, we can summarize the analysis and say that the credit union did not have a specific deposit growth strategy in the absence of

standards or judgments that would define certain limits of growth. In this case, it can be assumed that both deposits and loans were granted and given in accordance with changes in the market and there was no internal strategy to inhibit the growth of deposits, which had to be followed by active investment decisions, responsible lending and regulation of the liquidity ratio so that it would be as small as possible, but safe from the boundary of the required minimum, thus ensuring the maximum possible return on assets. Recently adopted resolutions will force credit union to choose one of the different deposit growth strategies, which will be subject to different standards of liquidity.

Four situations were tested (Table 3) by simulating different credit union deposit growth in the future. Each of the four situations were analyzed in order to meet minimum requirements of the Bank of Lithuania, and to keep a safe margin of the minimum required ratio. As a base the actual data from 31st December, 2012 of Akademinė Kredito Unija was chosen. Because assumptions may differ when modelling certain situations, several different scenarios are chosen to show possible alternatives of analyzed variables distribution.

This research is focused on growth of deposits in the credit union. At first historical data was analyzed, that allows to

identify how the deposits grew in the credit union, and how credit union would meet the requirements if current regulations would have been applied at that time. In order to assess how the credit union would meet new requirements in the future, different situations were modelled – when the growth of deposits is up to 15 %, when the growth is between 15-25 %, when the growth is just over 25 %, and the final situation – when the growth of deposits is higher than 25 %, but less than 50 % (Table 3). Deposit growth of more than 50 % will not be modelled, because it would be illogical for the credit union to comply with 60 % liquidity ratio, which would show that the credit union board is incompetent by taking so many commitments and not changing interest rates inside the credit union to stop new deposit-taking.

A high-growth study showed that the growth of the credit union is completely useless, because the credit union is starting to operate at a loss – it cannot issue enough loans to generate revenue. If there is a higher growth of deposits, the credit union is forced to invest more in government securities. If the deposits in the credit union would grow more than 50 %, it will have to keep a liquidity ratio that is higher than 60 %. This would mean that the credit union generally is losing its purpose of credit institutions – giving loans and becoming an investment company, because a huge part of the money will have to be invested in government securities.

Exceeded growth scenario study showed that the credit union, after entering the other growth segment beyond the threshold, should reduce lending and increase investment in government securities. It should also avoid keeping liquid funds in the current account, which would reduce its profitability. Inability to control deposit

growth does not allow faster increase in the loan portfolio, but stops its growth, because a credit union must maintain a higher amount of liquidity.

Conservative growth scenario study has shown that even after applying higher capital adequacy and liquidity ratio requirements, the credit union can make more profit. Although the credit union's assets grow less, and the share of government securities in total assets is higher, the credit union's return on assets can be higher.

Low growth situation showed that the credit union is not required to grow rapidly and collect new deposits in order to be profitable. The results demonstrate that if the credit union is attracting deposits at lower interest rates, it does not only win lower interest costs and lower interest expenses, but because of lower liquidity ratio it can invest less in the government securities and increase its loan portfolio in the short term, and then maintain its growth at a slower rate and assure sufficient interest revenue. There is no guarantee that the loan portfolio risk at that growth would be low, but the total interest return from loans would be much higher than the return from government securities, so the credit union would earn remarkable profit, which would determine the return of assets that is close to recommended.

Conclusions

Theoretical and empirical analysis of the influence of new Central Bank regulations for the performance of credit unions allowed determining how serious the problem of the research is. This analysis helped to implement the established goals and objectives when achieving the aim of the article – to find out the features and performance

characteristics of the credit unions and prepare a model that allows assessing the influence of the changes of supervision and regulation applied by Central Bank to the credit unions in Lithuania. To summarize, the following conclusions can be made:

A credit union business is unique not only because of its management principles, but also because of the service rates. Credit unions are non-profit organizations, and their aim is to seek benefit and general welfare for its members, so they are similar to banks just when talking about the services provided, but the principles of activity and operation are essentially different.

During recent years, a number of resolutions were adopted: regulations of responsible lending, rules of calculating the liquidity rate and liquidity coverage ratio of a credit union, a credit union prudential requirements and the rules of calculating them, the rules of a credit union's largest single borrower and largest loan calculation, general provisions for calculating capital adequacy and other. Their aim is not only to introduce additional control of the credit union, but also to strengthen the requirements that are already more stringent than the requirements for the banks. These decisions directly affect the choice of a credit union's growth strategy and influence its performance. The performance of credit union can be identified by analyzing changes in profit and profitability, asset growth and part of government securities in total assets.

A model was created to support the research. The model consists of four parts: strategy selection, assessment of regulatory measures, asset allocation and the result. This model allows not only to select the variables when predicting future data, but also to choose the strategic investment decisions that directly affect the credit union's

performance. When analyzing historical data it is possible to see whether, in a certain deposit growth, the credit union has chosen the right asset allocation scheme, and whether the credit union would have met the new requirements, and whether incorrect decisions have been made. The model helped to indicate the changes that might happen in the credit union at a specific deposit growth.

According to the results of the research it can be said that the Central Bank regulation has influence on the credit unions' strategy formation and its performance. Different deposit growth was simulated in four different situations, so the credit union had to make different strategic investment solutions to meet the requirements posed by the Bank of Lithuania. The results have shown that the *high-growth* strategy is completely useless, because the credit union is starting to operate unprofitably – it cannot issue enough loans to generate revenue. The *exceeded growth* scenario study showed that the credit union, after entering other growth segment beyond the threshold, should reduce lending and increase investment in government securities. The *conservative* growth scenario study has shown that even after applying higher capital adequacy and liquidity ratio requirements, the credit union can make more profit. The *low growth* situation showed that the credit union receives the largest profits and profitability when the deposit growth is minimal (low) – up to 15 %. The results showed that if the credit union is collecting deposits at lower interest rates, it does not only win lower interest costs and lower interest expenses, but because of lower liquidity ratio it can invest less in the government securities. Moreover, it can increase its loan portfolio during the short term, and then maintain

its growth at a slower rate and assure sufficient interest revenue. The credit union with higher deposit growth will be forced to invest more in government securities in order to maintain sufficient liquidity ratio, while lower deposit growth is more secure and financially stable for the credit union.

The research that was carried out has special novelty as this kind of study has not been carried out yet and the results obtained can be used when credit unions make their strategy plans. The study was performed by modelling different situations and various strategic investment decisions that imitate different deposit growth in the credit union. Therefore, this model can be used when analyzing other credit unions. This would help to evaluate the reliability and

applicability of the model. Since this study is based on the credit union's data forecast for the future, the same research can be carried out later by using historical – statistical data. Then it would be possible to check what decisions have been made in credit unions when choosing deposit growth just after the regulations were accepted and applied. This would show how these regulations influenced the results of the credit union. This research should also be repeated, if the Bank of Lithuania adopts a new regulation, or makes an amendment of the old ones, according to the indicators and standards in the new regulation. At present, such research with forecasted data can be made with other credit unions in order to see other results and compare them.

References

1. Chilingirian, N. (2012). CU Members Displacing Confidence in Economy, Finances // Credit Union Times, April.
2. Devlin, J. F. (2009). An Analysis of Influences on Total Financial Exclusion // The Service Industries Journal. Vol. 29, No. 8. Taylor and Francis. pp. 1021-1036. doi: 10.1080/02642060902764160.
3. Frame, W. S., Karels, G. V., McClatchey, C. (2002). The Effect of the Common Bond and Membership Expansion on Credit Union Risk // The Financial Review. Nr. 37. doi: 10.2139/ssrn.269218.
4. Kempson, E., Whyley, C. (1999). Kept in or opted out? Understanding and Combating Financial Exclusion. - Bristol: The Policy Press.
5. Klinedinst, M. (2010). A Strength of Credit Unions: Employee Productivity of Credit Unions versus Banks in the U.S.? // International Research Journal of Finance and Economics. Issue 57. Euro Journals Publishing.
6. Kredito unijos kelia klausimą dėl R. Kuodžio adekvatumo. Delfi naujienos. Internet access: <<http://verslas.delfi.lt/verslas/kredito-unijos-kelia-klausima-del-rkuodzio-adekvatumo.d?id=60719509>>, [accessed January 30, 2013].
7. Levišauskaitė, K., Kaupelytė, D. (2003). Credit Unions in Lithuania, their Regional Development and Perspectives // Organizacijų vadyba: sisteminiai tyrimai. Nr. 26. pp. 113-129.
8. Lietuvos Banko valdybos 2011 m. spalio 27 d. nutarimas Nr. 03-175: Atsakingojo skolinimo nuostatai. Internet access: <http://www.lb.lt/2011_10_27_03175>, [accessed January 30, 2013].
9. Lietuvos Banko valdybos 2012 m. rugpjūčio 17 d. nutarimas Nr. 03-184: Leidimo tapti kredito unijos vadovu išdavimo taisyklės. Internet access: <http://www.lb.lt/2012_03-184_taisykles>, [accessed January 30, 2013].
10. Lietuvos Banko valdybos 2012 m. rugpjūčio 17 d. nutarimas Nr. 03-185: Lietuvos Banko prižiūrėjo finansų rinkos dalyvio vadovo egzaminavimo taisyklės. Internet access: <http://www.lb.lt/2012_03-185_taisykles>, [accessed January 30, 2013].
11. Lietuvos Banko valdybos 2012 m. spalio 19 d. nutarimas Nr. 03-220: Kredito unijų likvidumo normatyvo ir padengimo likvidžiuoju turto rodiklio apskaičiavimo taisyklės. Internet access: <http://www.lb.lt/2012_03-220_taisykles>, [accessed January 30, 2013].
12. Lietuvos Banko valdybos 2012 m. lapkričio 29 d. nutarimas Nr. 03-245: Bendros vartojimo kredito kainos metinės normos skaičiavimo taisyklės. Internet access: <http://www.lb.lt/2012_03-245_

- taisykles>, [accessed January 30, 2013].
13. Lietuvos Banko valdybos 2012 m. gruodžio 21 d. nutarimas Nr. 03-284: Dėl kredito unijų veiklos riziką ribojančių normatyvų. Internet access: <http://www.lb.lt/del_lietuvos_banko_valdybos_1995_m_lapkricio_3_d_nutarimo_nr_105_del_kredito_uniju_veiklos_rizika_ribojanciu_normatyvu_pakeitimo_1>, [accessed January 30, 2013].
 14. Lietuvos Banko valdybos 2012 m. gruodžio 21 d. nutarimas Nr. 03-285: Dėl kredito unijų veiklos riziką ribojančių normatyvų apskaičiavimo. Internet access: <http://www.lb.lt/del_lietuvos_banko_valdybos_2009_m_kovo_26_d_nutarimo_nr_37_del_kredito_uniju_veiklos_rizika_ribojanciu_normatyvu_apskaiciavimo_pakeitimo_1>, [accessed January 30, 2013].
 15. Lietuvos Banko valdybos 2012 m. gruodžio 21 d. nutarimas Nr. 03-286: Dėl kredito unijų didžiausios paskolos sumos vienam skolininkui ir didelių paskolų apskaičiavimo taisyklių patvirtinimo. Internet access: <http://www.lb.lt/del_lietuvos_banko_valdybos_2008_m_gruodzio_16_d_nutarimo_nr_202_del_kredito_uniju_didziausios_paskolos_sumos_vienam_skolininkui_ir_dideliu_paskolu_apskaiciavimo_taisykliu_patvirtinimo_pakeitimo_1>, [accessed January 30, 2013].
 16. Lietuvos Banko valdybos 2013 m. sausio 24 d. nutarimas Nr. 03-13: Dėl kapitalo pakankamumo skaičiavimo bendrųjų nuostatų. Internet access: <http://www.lb.lt/del_lietuvos_banko_valdybos_2006_m_lapkricio_9_d_nutarimo_nr_138_del_kapitalo_pakankamumo_skaiciavimo_bendruju_nuostatu_pakeitimo>, [accessed January 30, 2013].
 17. Lucas, P. (2007). Top 10 Reasons why the Credit Union Brand is Positioned for Success // *Credit Union Journal*, December.
 18. Mavrenko, T. (2011). Development of Microfinance in Latvia: New Look at Savings and Credit Unions // *Journal of Business Management*. No. 4.
 19. Saunders, A., Cornett, M. M. (2008). *Financial Institutions Management. A Risk Management Approach*. - McGraw Hill.
 20. Stewart, T. (2010). Addressing Financial Exclusion among Families Living in Poverty // *Journal of Poverty and Social Justice*. Vol. 18, No. 2. Policy Press. pp. 185-192. doi: 10.1332/175982710X513830.
 21. Xiao, J. J., Sorhaindo, B., Garman, E. T. (2006). Financial Behaviours of Consumers in Credit Counselling // *International Journal of Consumer Studies*. No. 30 (2). doi: 10.1111/j.1470-6431-2005.00455.x.
 22. Jones, P. A. (2001). *The Growth Of Credit Unions And Credit Co-operatives – Is The Past Still Present?* // *Banking and Social Cohesion. Alternative Responses to a Global Market*, Jon Carpenter Publishing, Oxford.

The paper submitted: May 25, 2013

Prepared for publication: September 1, 2013

Mantautas RAČKAUSKAS, Kristina LEVIŠAUSKAITĖ

CENTRINIO BANKO REGULIAVIMO ĮTAKA KREDITO UNIJŲ VEIKLAI LIETUVOJE

S a n t r a u k a

Kredito unijos – tai specifinis bankininkystės modelis, paremtas demokratinio valdymu, kooperatiniais ir bendruomeniškumo principais. Kredito unijų veikla yra išskirtinė ne vien valdymo principais, bet ir teikiamų paslaugų įkainiais. Nuo pat atsiradimo kredito unijų sektorius augo, didėjo indėlių kiekis, vidutinė indėlio suma, taip pat augo ir paskolų portfelis, stambėjo paskolos. Kredito unijos į bankus panašios tik teikiamų paslaugų pobūdžiu, tačiau patys veiklos principai yra iš esmės skirtingi. Kredito unijos veikia

kooperatiniais pagrindais, todėl nariai gali dalyvauti jų valdyme. Taip pat skiriasi ir kapitalo struktūra – bankuose kapitalas yra akcinis, o kredito unijose – pajinis. Lietuvos kredito unijos pasižymi ir tuo, kad joms taikomi išskirtinai griežtesni normatyvai nei bankams.

Pastarųjų metų Lietuvos finansų rinkos suirutę lydėjo eilė Lietuvos Banko nutarimų pakeitimų griežtinančių esamus reikalavimus finansų rinkoje. Taip pat atsirado ir naujų nutarimų, kurie ypač įtakoja

tolimesnį kredito unijų augimą ir vystymąsi. Šiame straipsnyje yra atliekama šių Lietuvos bankų nutarimų analizė ir jų poveikio kredito unijos veiklai tyrimas. Šiame straipsnyje aptarti aktualūs nutarimai, kurie vienaip ar kitaip įtakoja kredito unijų veiklą. Vieni jų yra atnaujinami, kiti – visiškai nauji, tačiau ir vieni, ir kiti yra kur kas griežtesni nei ankstesnieji, todėl tikėtina, jog kredito unijos turės perorientuoti savo veiklą, kad juos atitiktų ir veiktų pelningai. Atsiradus papildomiems likvidumo ir kapitalo pakankamumo normatyvams kredito unijos turės atsakingiau skolintis ir skolinti, kad būtų tenkinami Lietuvos Banko keliami reikalavimai. Norėdama labiau augti kredito unija turės keisti investavimo kryptis ir labiau investuoti į Valstybės vertybinius popierius tam, kad būtų užtikrintas reikiamas likvidumo normatyvas.

Tyrimui atlikti buvo sudarytas modelis, kuris įvertina kredito unijos augimą lemiančių veiksnių įtaką kredito unijos veiklos rezultatams, atsižvelgiant į naują centrinio banko reguliavimą. Modelį sudaro keturios dalys: strategijos pasirinkimas, reguliavimo priemonės įvertinimas, aktyvų paskirstymas ir rezultatas. Šis modelis ne tik leidžia pasirinkti kintamuosius prognozuojant ateities duomenis, bet ir pasirinkti strateginius investavimo sprendimus, įtakančius kredito unijos rezultatus. Matant, kaip keičiasi unijos veiklos rezultatai įtakojami naujų reguliavimų, naudojant modelį galima priimti kredito unijai naudingiausią scenarijų optimaliam augimo ir veiklos efektyvumo deriniui užtikrinti.

Tyrimė, atliktame pagal sukurtą modelį, buvo analizuotos keturios situacijos, imituojančios skirtingą

indėlių augimą kredito unijoje ateityje. Siekiant įvertinti kaip kredito unija tenkintų keliamus reikalavimus ateityje, buvo modeliuojamos skirtingos situacijos – kai indėlių suma auga iki 15 %, kai auga 15-25 %, kai jų augimas vos viršija 25 % ir kai augimas yra didesnis nei 25 %, bet neviršija 50 %. Atlikus aukšto augimo tyrimą paaiškėjo, kad toks augimas kredito unijai yra visiškai nenaudingas, nes kredito unija pradeda dirbti nuostolingai – negali išduoti tokio kiekio paskolų, kuris generuotų atitinkamą kiekį pajamų. Viršyto augimo scenarijaus tyrimas parodė, jog peržengus augimo ribą ir įsigaliojus aukštesniems rodikliams, kredito unija turėtų mažinti paskolų išdavimą ir didinti investicijas į valstybės vertybinius popierius. Konservatyvaus augimo atvejo tyrimas parodė, jog net taikant aukštesnius kapitalo pakankamumo ir likvidumo rodiklius, kredito unija gali uždirbti daugiau pelno. Nors kredito unijos turtas auga mažiau, o vertybinių popierių dalis aktyvuose yra didesnė, kredito unijos pelningumas gali būti didesnis, t.y. aktyvų grąža didesnė. Mažo augimo situacijos tyrimas parodė, jog kredito unija, neprivalo sparčiai augti ir pritraukti naujų indėlių norėdama būti pelninga.

Tyrimo rezultatai rodo, kad kredito unija laikydama minimalaus indėlių augimo ir taikydama jiems mažesnes palūkanų normas ne tik patiria mažesnes palūkanų išlaidas už indėlius, bet dėl taikomo mažesnio likvidumo normatyvo gali mažiau investuoti į valstybės vertybinius popierius ir didinti savo paskolų portfelį trumpuoju laikotarpiu, o vėliau palaikyti jo augimą mažesniu tempu.