



**"BABES-BOLYAI" UNIVERSITY
CLUJ-NAPOCA**

**Faculty of Economics and Business
Administration**



THESIS

**CONTRIBUTIONS TO IMPROVE ANALYSIS
AND MANAGEMENT OF ASSETS AND
LIABILITIES IN UNITS OF CREDIT
COOPERATIVES IN ROMANIA**

-ABSTRACT-

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- 2011 -

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Mr. (Mrs.) _____

We will make you know that on _____, at _____, in the hall of the Faculty of Economics and Business Administration, Cluj-Napoca, str Theodore Mihali no.58 - 60, Mr. **Țiplea Augustin** will support, in public, doctoral thesis entitled "Contributions to improve analysis and management of assets and liabilities in units of Credit Cooperatives in Romania", in order to obtain the scientific title of "Doctor of Economics."

Commission to support the thesis consists of:

President	Ph. D. Professor Dumitru Mățiș
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On this occasion, we send a summary of the thesis and we invite you to attend the public meeting to support the thesis.

RECTOR,

Ph. D. Professor Marga.Andrei

CONTENTS

	INTRODUCTION	4
	STATE OF KNOWLEDGE	11
1.	CREDIT UNIONS' AND BANKING MANAGEMENT'S ROLE IN THE CONTEMPORARY ECONOMY	14
1.1	Developments and trends in cooperative banking system in Romania	14
1.2	CREDITCOOP Cooperative Central Bank's Market Position in the banking system in Romania	19
1.3	Coordinates of management in the cooperative banking system	38
1.3.1	Components, functions and objectives of the cooperative banking management	38
1.3.2	Cooperative banking management's structure	40
1.4	Decision-making in the management of cooperative banks	47
1.4.1	Stages of decision-making in the management of cooperative banks	47
1.4.2	Financial analysis - important tool in the management of cooperative banks	49
1.4.3	The role of informational system in decision making	51
2	COOPERATIVE CREDIT AND ITS ROLE IN ECONOMY	58
2.1	Definition, classification, functions and features of credit	58
2.2	Types of credit in the credit union - characteristics and uses	66
2.2.1	Personal consumer credit	66
2.2.2	Credit for real estate investments	69
2.3	Credit in modern economic system	71
2.3.1	General principles and rules on lending	71
2.3.2	Stages of analysis in cooperatives credits' requests	78
3	ANALYSIS AND MANAGEMENT OF COOPERATIVE'S RESOURCES AND INVESTMENTS	81
3.1	Balance - a tool for assessing the financial position of cooperative banks	81
3.2	Analysis of cooperative banks' assets	84
3.3	Analysis of the correlation of assets with liabilities of cooperative units through the period of mobilization and commitment of resources	91
3.3.1	Analysis in dynamic of the investments in credit cooperatives	91
3.3.2	Analysis of balance sheet assets' structure of credit unions	98
3.3.3	Analysis of liquidity of investments	100
3.3.4	Analysis of resources' dynamic in credit cooperatives	109
3.3.5	Analysis of the cooperative banks' economic structures of passive	119
3.3.6	Analysis of correlation between assets and liabilities based on cash flows	123
3.3.6.1	Methods of assessment and reporting of cash flows	125
3.3.6.2	A model for linking banks' assets and liabilities using cash flows	130

**CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN
UNITS OF CREDIT COOPERATIVES IN ROMANIA**

3.4	Analysis of correlation between assets and liabilities in cooperative banks	131
3.5	Analysis of bank solvency - a result of optimizing the banking investments with equity	136
3.5.1	Capital adequacy indicators	142
3.5.1.1	Solvency ratio 1	142
3.5.1.2	Solvency ratio	143
3.5.1.3	Equity ratio (Leverage effect)	144
3.5.1.4	The ratio of equity and social capital	147
4	PERFORMANCE - RESULTS OF COOPERATIVE BANKS' MANAGEMENT	151
4.1	The concept of banking performance	151
4.2	Profitability analysis - central target of the management in credit unions	152
4.3	Methods of analysis of performance in cooperative banking units	154
4.3.1	Reflection of credit institution's performance	155
4.3.1.1	Analysis of revenues in cooperative banks	160
4.3.1.2	Analysis of expenditures in cooperative banks	163
4.3.2	Performance Analysis with bank rates	166
4.4	Investigation of explanatory factors of economic and financial performance of cooperative banks	182
5	RISKS ASSOCIATED TO COOPERATIVE BANKING ACTIVITY	191
5.1	Risks' manifestation in credit unions. Management policies and procedures	191
5.1.1	Policies and practices for managing liquidity risk in cooperative banks	192
5.1.2	Policies and procedures for managing credit risk in cooperative banks	195
5.1.3	Interest rate risk. Management procedures in cooperative banks	201
5.1.4	Policies of cooperative banks in operational risk management	206
5.2.	The risk profile and risk monitoring in credit cooperatives' entities	212
5.2.1	The risk profile of the cooperative banking entity	212
5.2.2	Measures to prevent bank risk	214
5.2.3	Bad loans and their treatment	218
5.2.3.1	Non-performing loans' costs incurred by the banks	218
5.2.3.2	The main causes of non-performing loans	219
5.2.3.3	Identification of non-performing loans	220
5.2.3.4	Treatment of non-performing loans	221
5.3	CAMPL rating system - means for global risk's assessment in cooperative banks	222
5.4	A rating model for cooperative banks in Romania	257
	CONCLUSIONS AND SUGGESTIONS	263
	B I B L I O G R A F Y	273
	LIST OF FIGURES	290
	LIST OF TABLES	292
	APPENDICES	293

PhD thesis entitled "*CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN UNITS OF CREDIT COOPERATIVES IN ROMANIA*" is the result of theoretical concerns and the experience in banking. This research aims to highlight methods of analysis of cooperative credit banks in Romania.

The purpose of this research theme is the creation of cooperative bank management procedures and mechanisms to help identify risks in lending.

We appreciate that the research topic chosen will be a challenge for both financial analysts, and especially for bankers and inspectors of loans, who by financial analysis reports can ensure accuracy in financial statements reflecting the movement of assets and liabilities of banks, and is an indicative guide for significant risk management in banking, guide that should consider the risk profile of individual banks and credit cooperatives and provide theoretical and practical solutions to prevent the transfer and hedging.

The theoretical and practical premise of the chosen research topic is that in the context of accounting harmonization, a defining process of the beginning of the Millennium III, the financial analysis assumes a crucial importance for all areas of socio-economic and above all for business. This new context, implies a complex of factors, in the local business environment and knowledge and efficient management of their influence is one of the basic conditions of business success.

We believe that the determinants of the Romanian economy - transition, integration and globalization - provides important opportunities for increasing economic and financial performance, achieving financial equilibrium, but involve major risks.

Along with saving and lending banks for housing, mortgage banks, electronic money institutions, credit co-operative banks enters the system of credit institutions in Romania, as they represent a zone of stability in uncertain economic environment.

Being established in rural areas, many cooperative banks enjoy a significant market share in local business and are often the highest in the number of branches and office locations in a local market.

CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN UNITS OF CREDIT COOPERATIVES IN ROMANIA

For a cooperative bank, there are three characteristics that are particularly relevant: the mechanism of government "one man / one vote"; pursuit of the objectives other than maximizing profit and a capital base, which consists largely of an endowment without final owners. In crediting cooperative members, an important role plays the financial analysis. This is done after preliminary discussions in order to grant credit to potential beneficiaries of bank credit. The main purpose of financial analysis conducted by an inspector from the credit bank is evaluating loan applications, determining the risk of a loan and if its grant is justified in terms of the bank.

Many of the bad loans credit arise when the inspector does not consider that financial analysis is an important factor in the final decision to grant or reject the applicant's credit application.

To reduce the risk of insolvency, each cooperative bank should build a rigorous financial analysis, given the two pillars of financial reporting and certain balance sheet and profit and loss of cooperative bank.

Credit Officer should identify the degree of risk that accompanies any application for credit and make an assessment of its acceptability for cooperative banks. If the risk is high, but still considered acceptable, it will be reflected in credit conditions.

The analysis undertaken found that credit co-operatives policy on credit risk analysis and risk associated with cooperative banks is focused on managing and limiting risk through an effective credit application that is based on the following levers: limiting the concentrations of risk; diversification of the types of loans, setting maximum repayment terms for each type of loan, the application of interest rates enough to cover the cost of resources, setting the standard formal procedure for evaluating projects and guarantees credited accepted.

During the thesis I found that the cooperative banks' asset quality is measured by the following factors: sound management practices and identify credit risk; the distribution, severity and trend of nonperforming assets for both balance sheet and off-balance sheet transactions; adequacy of provisions and other reserves; variety and quality of loan portfolio; the degree of concentration risk; the adequacy of policies and practices of credit management capacity of the proper administration of assets, including identification and collection of the problem assets; adequacy of internal control and information systems.

CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN UNITS OF CREDIT COOPERATIVES IN ROMANIA

To achieve the objective of ensuring liquidity, the strategy of credit cooperative banks in the future should consider the following aspects: increasing non-bank sources attracted from customers to introduce new savings products with high stability in the medium and long periods; cooperative credit banks should make the liquidity indicator value greater than unity for each maturity band; lending a maturity in a better correlation with actual maturity of sources, determining chargeability volatility depending on their real sources, the appointment of a cooperative bank credit manager who will permanently coordinate activities in liquidity field.

The strategic objective of each cooperative bank is to continually assess and maintain the structure and distribution of capital to cover all risks to which credit cooperative banks could be exposed. Actions identified during the research and who have been undertaken to maintain permanently the level and capital structure are: periodic review of capital adequacy assessment processes, identifying risk factors and maintain an additional level of capital to the minimum limits under the rules effect, adopting some measures to prevent capital decrease to the minimum under the rules.

The results of a cooperative bank depend largely on the quality of loan portfolio which it held, and the system of credit monitoring, credit monitoring being a part of the lending process.

By granting loans, the Bank assumes several types of risks determined to be the quality of the loan (insolvency) or financial structure of the cooperative bank, or general economic developments (interest risk).

Insolvency is the main risk, the proof of this is the large amount of collateral proof of insurance. To prevent this risk, the cooperative banks should attach great importance to these guarantees.

The financial structure of the banks determines the size of the risks assumed by the bank. In this case raises the question of longer term investment than in comparison with the collection of resources. For example if 50% of total resources are spot or short-term and investments are long-term, the cooperative bank increases its interest rate risk and, in addition can not establish the risk of lack of liquidity as depositors are cooperative members.

General economic developments can create risks for other types of cooperative banks. One is the risk of interest. To ensure against this risk, banks are trying to tie long-term resources for long term use.

Saving cooperative banks, in exceptional circumstances is a major concern since the collapse of a bank credit cooperative relations is the collapse of inter-and especially the collapse of a large part of customers, depositors, who can not fully recover amounts deposited.

To ensure the viability of a banking, bank management should monitor both the performance of the cooperative, the bank profitability, and liquidity risk. Bank profitability and liquidity are closely interdependent, according to bank's ability to create liquidity and the ability to place them on the market.

From this research I found that the activity of economic and financial analysis preceding loans, must be conducted based on defined criteria regarding: purpose of the loan and repayment source, the current risk profile of the counterparty and guarantees given, debt service history counterparty and capacity for current and future reimbursement.

Regarding the issue of large exposures in the credit cooperative organizations, practice has shown where it was treated carefully and was well controlled and observed there were no bad in lending, or they were lower.

The doctoral thesis was structured in five chapters starting from different views in the cooperative banking system development, continuing with the role of cooperative credit in the contemporary economy, then the problem of the financial position analysis of cooperative banks, and then seeks the role of profit in covering performance of management and ends with the adverse effects on credit institutions ineffective risk management.

The first chapter, entitled "**CREDIT UNIONS' AND BANKING MANAGEMENT'S ROLE IN THE CONTEMPORARY ECONOMY**" mainly deals with developments and trends in credit, cooperative banks' market position and management aspects of these outlets.

Territorial rays of affiliated cooperative banks operating in the same cooperative central bank can not interpenetrate, and the activity may take place only within the territorial range of the unit.

The main activities of a cooperative bank are deposits or other repayable funds and loans.

Deposits or other repayable funds are from the associate members, and individuals, legal persons or other entities domiciled, reside or work, that have registered offices and activities within the area of operation of the bank co.

The analysis of Romania's banking system revealed several aspects among which:

- ▶ compression of non-performing loans classified as doubtful or loss from 58.51% in 1998 to 20.81% in 2010 shows the effectiveness of central bank's measures regulatory and prudential supervision of banks, accompanied by the positive evolution of the real economy throughout the period.
- ▶ worsening the profitability level of ROA and ROE for the period 1998-2010. Decrease of the two indicators in 2008-2010 was identified not as a deterioration in the profitability of the banking sector, but rather as a sign of increasing competition, banks accepting lower profit margins in order to strengthen market position. These processes have led to a decrease in solvency for the period 2000-2010 and to maintain banking liquidity in the same parameters.
- ▶ late 2010, the banking system consisted of a total of 42 credit institutions, including: 2 state-owned (CEC and Eximbank), four major local private (Transilvania Bank, Commercial Bank Carpathian Libra Bank and Commercial Bank Railway) (compared to 7 in 2005), 26 foreign-owned (24 in 2005) and 9 branches of foreign banks (June 2005), and a cooperative bank CREDITCOOP.
- ▶ foreign banks and their branches have majority shares in the system and the credits (85.10% in 2010). At these banks, more than half of the investments are focused on loans, while banks with majority domestic debts owed approximately 14.90%.
- ▶ 2008 after witnessing a gradual reduction of the share of income from investments in government securities and central bank as a result of the evolution and maturation of monetary policy and banking and economic system to increase the share of interest income. Made credit boom, especially in the retail area, has led to the 2007 share of total income from interest income to reach 50% in 2008, 42% in 2010 to 58%.

The assessment presented in this chapter emerges the idea that the work of improving the banking system in Romania was undertaken by the Central Bank as a consequence of the consolidation and development of cooperative banking system in Romania.

Undoubtedly, analysis of assets and liabilities is a fundamental field in the management of cooperative bank which results in efficient management of assets and liabilities of banks and allowing credit institutions to determine the optimal size of assets and liabilities, by taking decisions that would allow to achieve this ideal situation.

Finally, a good decision-making in a cooperative banking unit is based on numerous techniques that can be used by managers who join the bank from the situation analysis and assessment solutions. Therefore we believe that financial analysis has a very important role in the decisions of a bank, where there are particular techniques used by managers to interpret financial information and estimates.

The second chapter of the thesis entitled "**COOPERATIVE CREDIT AND ITS ROLE IN THE ECONOMY**" deals with credit issues in the wider economy and the cooperative credit in particular having regard to banking system reform that took place in the period after 1990.

In this chapter, there have been raised significant issues concerning credit characteristics, functions and features of credit and categories in cooperative banking units, namely consumer credit cooperatives and credit for real estate investments.

The form of consumer credit loan is a form of cooperative banks, for the cooperative members in order to buy in installments durables and consumer goods in general. In determining the value of consumer credit and investment credit cooperative banks consider the applicant income, including interest repaid monthly rate may not exceed 25% of the applicant's monthly income. In order to grant credit cooperative banks require collateral, usually property subject to credit is taken by setting up a mortgage guarantee on it in the bank.

To reduce the risk of lending to applicants whose likelihood of non-contractual obligations is "average" will require real guarantees (deposit, mortgage, pledge auto), whose fair value is deducted from exposure cooperative organization to the debtor complies with rules regarding classification loans and investments and the creation, adjustment and use of credit risk provisions in CREDITCOOP network.

Cooperative banks take into account, in particular, income from wages, retirement from farming and leases. They will be taken in the calculation of creditworthiness within 120% of average monthly net income for the previous year, except for income from pensions, income applicants who have obtained an employee during the claim the credit, if the place has changed work during the year asking if the credit or employment based changed during the claim the credit.

The value of an investment property loan can not exceed 75% of the purchase value of the property which is requested loan and / or value estimate.

In the last paragraphs there are aspects of the principles, rules of credit and lending stages of the cooperative banks.

The third chapter entitled **"ANALYSIS AND MANAGEMENT OF COOPERATIVE'S RESOURCES AND INVESTMENTS"** deals with issues of bank assets and liabilities, liquidity and solvency, cash flow and management strategies considered to prevent entry into insolvency of the bank credit institution, which is an important part of financial institutions analysis.

Throughout this chapter there was a review of the evolution of financial reporting in banks, on which occasion I showed characteristics of financial reporting in banks compared with other financial reporting entity.

At the same time we did an analysis of investment resources and cooperative banks based on financial analysis techniques and methods.

As a result of research undertaken in the banking environment we have identified a system of indicators in management information available to the credit institution that can prevent the risk of liquidity, solvency and provides useful information on the state of the credit institution's profitability. Thus, we performed financial analysis on 12 cooperative credit banks, over six years, where we used this system of indicators with which we have identified a number of reserves in financial reporting in terms of performance, liquidity and solvency of these banking entities.

We found that the banking assets of analyzed credit unions evolved oscillating, ascending, descending respectively. Thus, cooperative banks total assets decreased by 26.95% in 2005-2006, after which annual increases during 2007-2009 from 67.76% in 2007, 40.83% in 2008 3.21% in 2009 and 9.30% in 2010. Negative development during 2005-2006 was influenced decisively by cooperative banks located in the southwest region.

The rapid growth of assets in the north-west throughout the period analyzed by means assuming the management of these cooperative banks to undue risks in terms of information and management systems that can not keep pace with the growth rate of assets. Even if the cooperative banks are well managed may arise from risk management issues adue to an excessive increase in the loan portfolio, and short-term can cause an increase in liquidity risk.

CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN UNITS OF CREDIT COOPERATIVES IN ROMANIA

The debt ratio is total liabilities of more than 63% likely to jeopardize the future of cooperative banking units. The causes of this development can be identified from the analysis of the components of the resources attracted.

Thus, throughout the period analyzed, the percentage (50%) of total hold "debts of the customer" aspect that is considered positive, on the one hand because of the confidence of members, on the other hand the consolidation of resources to finance financial credit these units. Liabilities to credit institutions evolve from a minimum of 0.36% to a maximum of 7.23% of total liabilities of credit institutions.

Management of cooperative banks should consider the ratio between the volume of deposits mobilized inverse size and degree of these banks. In other words, these banks, which are medium sized and small, the volume of deposits is relatively high compared to large banks, at which the volume of deposits is relatively low. With an extensive network , cooperative banks are an important bank, consisting of mobilization of significant resources for the banking system and minimizing the cost of these mobilized resources.

Cash flow analysis showed that throughout the period analyzed cooperative banks have generated positive cash flows from financing activities and negative flows from operating and investments activities.

In the analyzed cooperative banks, we found that the ratio of sensitivity is higher than one, which means a long position of interest, adverse interest rate reduction. On the other hand indicator income / interest expenses is a downward trend, which increases the annual interest rate risk at the analyzed banks.

At the same time we have a solvency ratio that stood for the entire period analyzed at a level exceeding 37% and 12% upper limit, something which highlights the state of solvency of credit unions examined. The indicator is also above the average recorded in the banking system in Romania.

At analyzed credit cooperatives, the solvency ratio 2 was higher than the minimum 8% required by Basel II, as follows: 35.46% in 2005, 36.94% in 2006, 38.60% in 2007; 43.20% in 2008, 44.17% in 2009 and 44.77% in 2010.

The analysis undertaken showed that the leverage has evolved increased from 30.59% in 2005 to 34.96% in June 2009 due to a faster increase of the assets than to equity.

The fourth chapter is devoted to "**PERFORMANCE - RESULTS OF COOPERATIVE BANKS' MANAGEMENT**" is an important component of an analysis and an integral part of financial banking management.

During the performance analysis, an important component of it is the analysis based on its performance rates and the analysis of the correlation between performance and risk.

We found that the result of current activity, the result of the year gross and net result of the exercise had a similar downward trend compared to 2005 throughout the period analyzed, which indicates some management problems at analyzed banks.

On the other hand, income at credit cooperatives has been influenced by interest income (over 54%), followed by fee income (between 12.90% and 25.03 weight%) and other income (share between 0.84% and 17.56%).

The evolution in dynamic of cooperative banks is due to administrative expenses (share above 50%), followed by adjustments on receivables (over 20% share) and payable expense interest (share above 15%). Commission costs, although important in a credit institution, are not amounting to more than 4-5% in total.

In the analysis of cooperative banks ROE had the following evolution: 9.46% in 2005, 7.94% in 2006, 4.76% in 2007, 2.81% in 2008, 1.72% in 2009 2.24% in 2010 and the trend is increasing. In Romania, in the whole banking system, the indicator showed the following levels: 12.66% in 2005, 10.247% in 2006, 9.43% in 2007, 17.04% in 2008, 3.22% in 2009 and 2.13% in 2010. This means that, throughout the period considered, the registered value of the indicator at cooperatives has been considered far below the value calculated by the NBR for the entire Romanian banking system.

At credit unions, the indicator ROA continues declining from 2.89% in 2005 to 0.78% in 2010. Romanian banking system as a whole, the indicator levels have evolved: 1.60% in 2005, 1.28% in 2006, 1.01% in 2007, 1.63% in 2008, 2.28% in 2009 -0.09% in 2010. It can be said that between 2005 and 2010 analyzed banks have been considered having values above average of the indicator in Romania.

Statistical research undertaken in the last paragraph has highlighted factors that explain economic and financial performance of credit cooperatives. This was achieved through panel data models because the regression equations will be estimated based on data sets that are both time series data and crosssectional.

Statistical analysis revealed that on average the largest economic and financial performance, but also the greatest risk of liquidity and debt in the period 2005-2010 were made by credit unions in the north-east, while credit unions from South-west has been the best in terms of liquidity and leverage. Credit Unions in the north-west, although the biggest, have the lowest performance, and the center, which are the lower, rank third if we refer to financial performance and financial leverage and position second in terms of liquidity and economic performance. I also found between the size of credit unions and their economic and financial performance is an inverse relationship between liquidity index and the economic and financial performance is a direct relationship, and leverage directly affects only financial performance.

In the last chapter entitled "**RISKS ASSOCIATED WITH COOPERATIVE BANKING ACTIVITY**", I made a comprehensive picture of the risk assessment of credit institutions with CAMPL rating system adapted to these credit institutions.

On this occasion, we have shown that early warning system allows to identify overall risk, meaning that a high rating means a positive sign for the bank manager that the policies based on a bank strategy are being correctly implemented, such as a low rating should be for bankers a warning about possible errors or fraud faced by the credit institution.

Analyzed cooperative credit banks classified in class rating 3 the entire period. Compound 3 rating means that banks classified in this group require a degree of concern on the part of supervisors on one or more of the five components mentioned. These institutions have a combination of deficiencies that may vary between moderate and severe. Management capacity and size demonstrates the desire to remedy the difficulties effectively and timely. In general, these institutions are less able to withstand market fluctuations, given their vulnerability to external influences increased, compared to banks with high compound "1" and "2". Furthermore, these institutions may be in significant conflict with existing laws and regulations. Risk management practices may be unsatisfactory depending on the institution size, complexity and risk category. These banks require more than routine surveillance, although their decline seems likely, given the general potential and their financial capacity. From 2007-2010, cooperative banks analyzed both total and per region are in the rating of "B", except for cooperative banks located in the Centre (rating "CCC" in 2009) and those located in the region Southwest, which in 2007 registered the rating "BBB" and in 2009 registered the rating "BB" in 2005-2006 progress was as follows: the total co-operative banks has been rated "BB" cooperative banks in North West has been rated "B" cooperative banks of region center showed grade "BBB" for the entire period, while the cooperative banks in the South West

showed an improvement of qualification of "BB" in 2005 " BBB" in 2006, cooperative banks located in the north-east region have worsened grade rating to "BB" in 2005 to "B" in 2006.

At the end of this chapter, we presented a model of rating based on the latest regulations of Basel III, and on notations such as rating agencies Moody's, Standard & Poor's, Fitch IBCA and Thomson Bank Watch.

Comparing the results of the system CAMPL and its "Bankcoop" model, we found that between them there is a similarity in that the rating "3" recorded through CAMPL and rating "BB" and "B", means a combination of deficiencies that may vary between moderate and severe, which requires careful monitoring of the internal surveillance organs and the central bank.

In the cooperative banks I have found significantly decrease of the risk of fraud as all transactions at the point of this can be done only with authorization from headquarters to the persons empowered to do so. In this way, there is a more effectively management for the information risk, a bank risk's component, which in recent years was the main cause of internal fraud from cooperative banks.

Finally, I consider that in order to limiting the impact of financial crisis on the Romanian economy and also upon the bank system, it is necessary to create the following premises:

- ▶ Taking constant prudential and administrative measures by the central bank to curb non-performing credit growth for the private sector and support loan in local currency at the expense of the currency.
- ▶ Location of reserve requirements to a high level to allow gradual adjustment of liquidity in the banking system in light of changing market conditions.
- ▶ Maintenance of overdue and doubtful debts ratio / equity at a low level.
- ▶ Keeping guaranteed level of deposits (per person and per bank) in credit institutions up to a value that encourages both individuals and legal persons, and to avoid panic, which once installed would the withdrawal of massive amounts deposited in the banking system.
- ▶ Change provisioning rules for proceeding with the restructuring or rescheduling of non-performing loans (currently, according to current rules, customers in case of restructuring or rescheduling can not be helped without the bank having problems with profitability and

**CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN
UNITS OF CREDIT COOPERATIVES IN ROMANIA**

solvency). Keeping the current level of provisions affects the liquidity and profitability and prudential indicators of the bank.

▶ An effective measure anticrisis is to reduce interest rates of monetary policy and contributing to increased investment.

B I B L I O G R A P H Y

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**CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN
UNITS OF CREDIT COOPERATIVES IN ROMANIA**

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**CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN
UNITS OF CREDIT COOPERATIVES IN ROMANIA**

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**CONTRIBUTIONS TO IMPROVE ANALYSIS AND MANAGEMENT OF ASSETS AND LIABILITIES IN
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