

## THE DEVELOPMENT OF METHODS AND TOOLS OF MAKING DECISIONS DURING THE PROCESS OF RISK MANAGEMENT IN MULTI-BRANCH COMMERCIAL BANK

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**Key words:** bank, branch, risk, system, technology, process, management, automatization, control, disclosure.

The article presents newest methodological aspects of the risk management process in banks. The obvious legislative issues are exposed to the critical analysis. The author has developed brain packages, technological and recursive schemes of risk systems functioning in multi-branch commercial banks from a position of the big systems theory. So this way can provide focus for an even larger picture when introduced as an integral part of a comprehensive multi-branch risk-strategy that includes limit and system management instruments relevant to regulatory, economic and capital requirements.

The methodological aspects of the process of risk management in banks are researched, the subject-object characteristic of the process is given, the existing legislative system, regulating the process of risk management in banks, is critically analyzed. The author gives brain packages and the technology of the organization of the risk management process and the recursive schemes of functioning of the risk management systems from a point of the big systems theory.

At present time Russian economy, as well as the whole Russian banking system, is taking a risk of the world market conjuncture changes, of the global world economy growth slowdown, great political risks in the fight of the developed countries for the energy resources and trade markets.

In this case our country is obliged to have funds and reserves, reliable industrial and financial systems. In the terms of Russian market economy, which is based on large, mostly pri-

vate assets, we cannot forget about the possible process of the capital outflow. In this case credits will become unavailable, housing construction temps will slow down, wealth and purchase possibility will decrease. Banks will have to cut down or refinance their inflated credit portfolios, deal with defaults of payment and write-off overdue indebtedness. The liquidity of the bank system will be shaken.

For the described situation not to become a reality, it is necessary to think about the processes happening in the banking sector, namely: what is the level of the risk management system in banks, is it under control of the Bank of Russia according to the terms of the federal law of July 10, 2002 № 86 – FZ?

At first, the mentioned system, in fact, consists of not more than 10 normative acts – the main norm-setting documents of the bank of Russia – regulating the level of the main financial risks of credit organizations (credit, mar-

№	Normative documents and indicators	Regulated risks		
		Credit	Market	Liquidity
1	Instruction of Bank of Russia of 16.01.2004. № 110-I (normative N1 - N12)	Yes	Yes	Yes
2	Statute of Bank of Russia of 24.09.1999. № 89-P (currency risk as a part of N1)	Yes	Yes	Yes
3	Directory of Bank of Russia of 31.03.2000. № 766-U	Yes	Yes	Yes
4	Directory of bank of Russia of 16.01.2004 г. № 1379-U (indicators of liquidity level and assets value)	Yes	Yes	Yes
5	Statute of Bank of Russia of 26.03.2004. № 254-P and Statute of Bank of Russia of 20.03.2006 № 283-P (reserves)	Yes	No	No
6	Instruction of Bank of Russia of 15.07.2004 г. № 124-I (limits).	No	Yes	No
7	Letter of Bank of Russia of 23.06.2004. № 70-T (typical risks)	Yes	Yes	Yes
8	Letter of 27.07.2000. № 139-T	No	Yes	Yes

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ket and liquidity risks). These documents are represented in a table.

After the detailed examine of the mentioned material we can make a conclusion that the legislative base of Russian banking system is not well formed: there is no clear definition, division and classification of financial risks, the differences with the non-financial risks are not described, there is no clear unified methodology of risk management (only single not connected formulas and methodic on certain risks) and so on. Even more, in most of the mentioned cases the normative acts have a recommendatory description. This means, that the process of development of the risk management system in Russian Federation is set on the stage of comprehension and acceptance, but not on the stage of analysis and development and, of course, not on the stage of management.

The second important defect of the risk management system in Russian banks or more precisely to say, the second cause of absence of this system is the low level of automation of the processes of control and reporting. And this concerns not only the structure “commercial bank – central bank”, but also the structure “bank filial – bank head office”. A global cybernetic program shell/software is required to link up the whole process. So banks will be able to define unobvious risks and manage them in real time. If we make an analogy “risk – computer virus”, than “Kaspersky Laboratory” products environment can be taken as a basis, where central bank will play the role of the laboratory itself and commercial bank – the role of the PC users, that scan the system for risks/viruses.

The lack of the unified standards of risk management, of its descriptive and mathematical models causes troubles in creating any program shell/software and is the starting point in the research.

So, the methodology of analysis an the subject-object characteristic of the risk management process should take the main place in creating and developing of the decision making systems. In this way it's easy to represent bank as an object, as a cell of business activity, as a company in the sphere of credit-accounting business.

As well as gaining profit, a company, operating in a competitive environment should also have an aim to raise its products competitiveness, to examine their business rivals activities, to occupy its own market niche, to form a

development strategy, to estimate its operating abilities, strong and weak points, links with external environment<sup>1</sup>.

Credits and other services are the goods of such company, that form in the aggregate with other operations some sort of bank product, which is actively advertised, moved through the distributional channels and reaches the final consumer.

In this case, bank is a special sort of company that produces financial and credit services, payment services for cash and cashless operations, money and payments communication services and different kinds of transformational services<sup>2</sup>.

Like any economic system, such system is misbalanced, when it's affected by different internal and external processes of different strength and directions (economic crisis, innovations, inflation, etc). Such misbalance gives birth to a risk - a product of two factors measured in monetary expression: possible sum of losses and possibility of appearing of such losses. Of course, every risk has an accidental element, an element of uncertainty. In this case many researches speak about the following risks: credit, market, liquidity and operational risks. But in this case the classification should be extended and the risks should be diversified by: the character of origin (internal, quantitative - filial, clients, operations and external, qualitative - politics, economy), by the level of affection on the system as a whole (which part of the banking system is affected by the risk).

So, the risk management process (RMP) is a pretty complex, highly intellectual, technological process (pict.1), which demands knowledge and understanding of heterogeneousness and interconnection of a variety of factors that cause risks.

The main brain packages of such process organization are the following:

1. RMP should take into consideration multiple classifications of risks and should be universal. The algorithms of risk operation should have a unified methodology and basis.

2. Risks and their origins in the RMP system should be examined in dynamic and on a constant basis. It is necessary to accumulate the experience and the data base of all risky situations.

3. It's necessary to constantly renew the systems and algorithms of RMP and to find

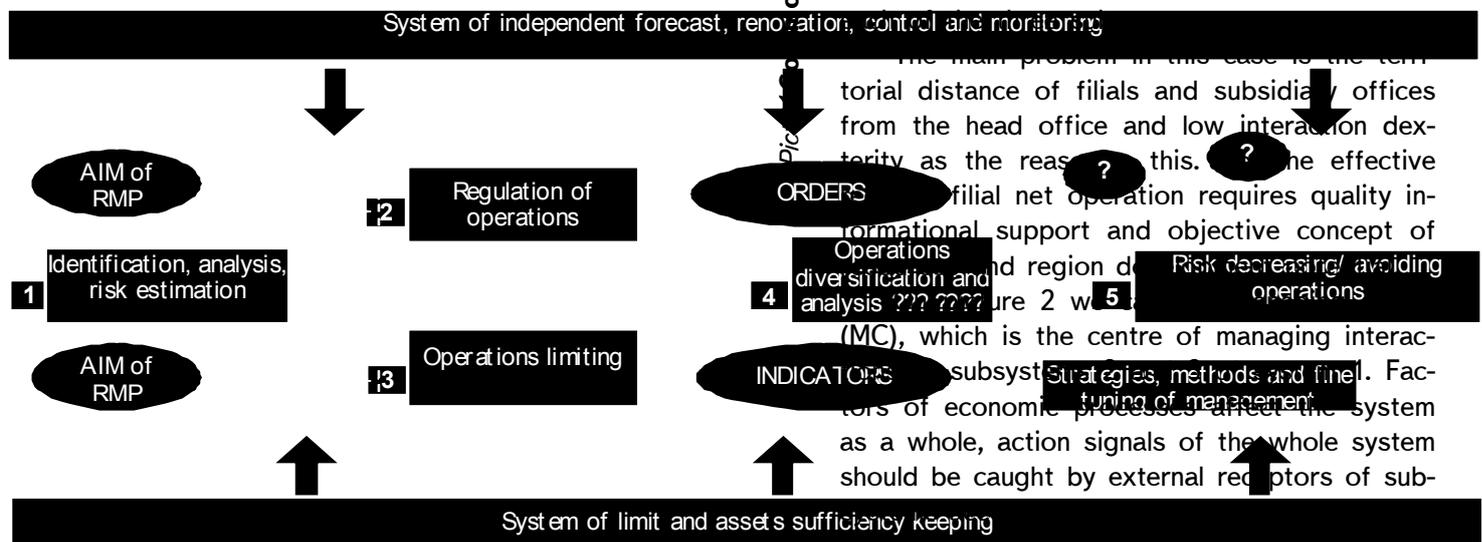
6. The RMP systems should be automated as far as it is possible.

On picture 1 we can see the stages of the risk management process technology. On the first stage of aim defining it's important to precisely determine the level of starting appropriate risk along with the keeping the determined income and the effect of the operation. Such risk will be high, so far it's not affected by 5 major technological operations aimed for risk decreasing.

Than the risk will be decreased or reasonably kept on some level till the last 5<sup>th</sup> technological stage. The whole technology should be based on a powerful organizational structure and should take into consideration factors of corporative management and the common scheme "risk - benefit" in aggregate with active-passive operations.

Let's head to the analysis of functioning of the risk management system in multi-filial commercial banks. This system consists of three subsystems: head office, filial and subsidiary office. For the whole risk management system to operate dependably it is necessary to form an interconnected scheme of responsibility for

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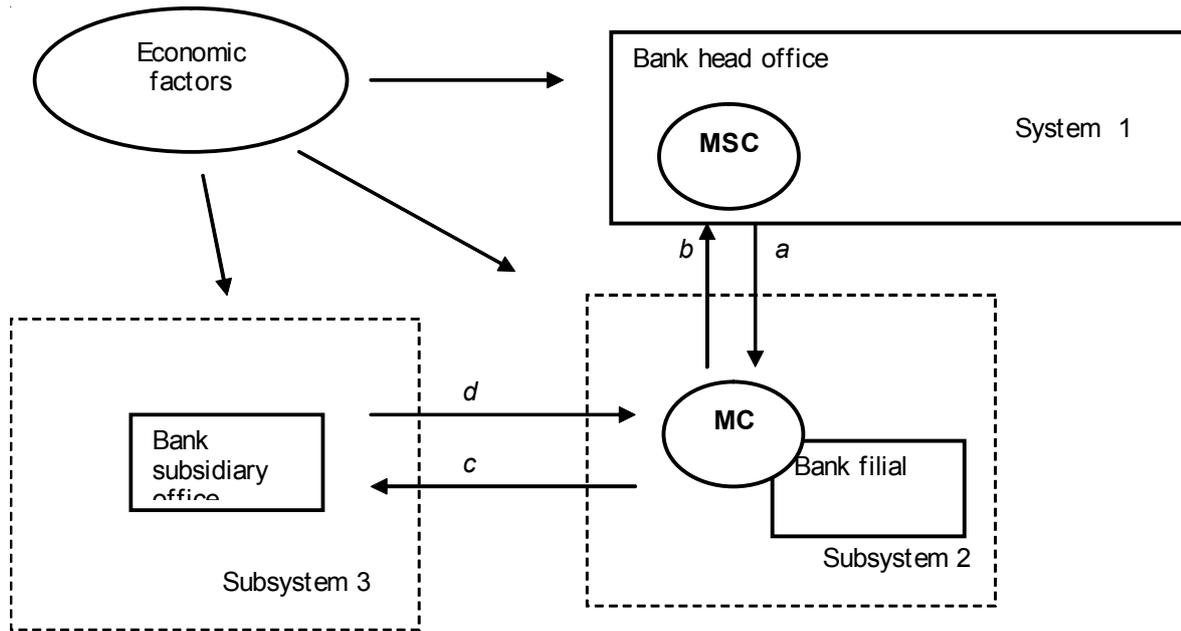
new internal and external factors affecting the process at the moment.

4. It is necessary to learn how to forecast the RMP system conditions for the closest perspective and to understand the possible operations of the RMP system algorithms in case of unexpected circumstances.

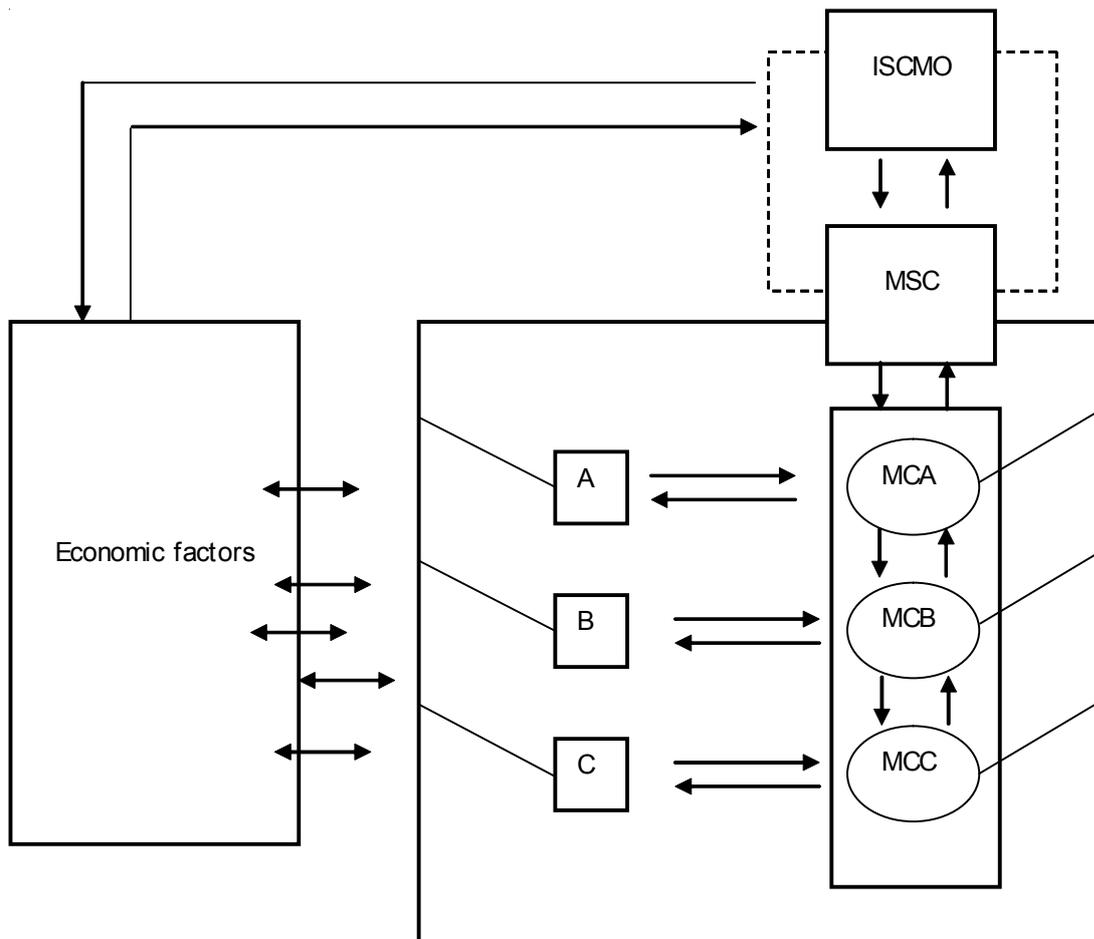
5. The operation algorithms of the control module, the updating module and the module of limits exceeding should be included into RMP.

The main problem in this case is the territorial distance of filials and subsidiary offices from the head office and low interaction dexterity as the reason for this. The effective filial net operation requires quality informational support and objective concept of operations and region diversification and analysis. Risk decreasing/ avoiding operations (MC), which is the centre of managing interaction of subsystems and fine-tuning of management. Factors of economic processes affect the system as a whole, action signals of the whole system should be caught by external receptors of sub-

by the centre of strategic risk management (MSC). The information travels from system 1 to subsystems through horizontal-vertical links between them. Inside the subsystem 2 the information travels from the upper-level system 1 through the channel a to access the lower-level system 3 through the channel c. Operational data of subsidiary bank office is accumulated in subsystem 3 and with the accumulated effect it is sent to system 1 of the head office through subsystem 2 of bank filial through lines of interaction d and b.



Pict. 2. Risk management process in a multi-filial bank



Pict. 3. The independent system of central risk management organization in a bank with filials A, B, C

For the effective operation of RMP in multi-filial bank net it's necessary to have a managing centre and a centre of management strategy,

responsible for coordinated operation of all systems and subsystems. It should be mentioned that MC must constantly control and correct its

own operation and the operation of the lower-level systems and must make sure that it meets the MSC strategy of multi-filial net development and operation.

Let's look closely on the RMP in multi-filial bank with its own strategic system of management and development MSC at the level of high executive bank top-management (pict. 3), where each filial A, B, and C has its own MS at the level of local department with middle-level management (MSA, MSB and MSC) and has its own task to create and develop services and products at the market. Managing Sectors will be the instruments for risk management in A, B, and C. MS analyses, identifies and qualifies the risk, interacts with higher-level systems and neighboring MSes. E.g. A creates services and products part of which is sold and another part comes to B for elaboration and spreading. Lets also pretend, that A and B have sharp territorial and organizational differences. In this case, MS can change the development strategy in A by placing orders in MSA. But it's impossible to do locally for products and services connected with B and C, so far as MSA must inform MSB and MSC and develop with them terms and conditions of changes and interactions.

The independent system of central management organization at the level of bank directorate (ISCMO) helps to cope with this task. It's the highest system in RMP organization and it car-

ries out the whole process of risk management in a bank. The main role of ISCMO is to provide the necessary level of mutual feedback between parts of the system, to transport the information through levels, to give authority for strategic development of RMP. The feedback between the systems of MC, MSC and ISCMO is executed in a special way to organize circle scheme (right noose in pict. 3), which makes it possible to balance stimulating and restraining effects of the economic factors to put the RMP system into an equilibrium, If we look at the described material from the point of big systems theory that the schemes of RMP organization will have no local special sense, so far it's just a project-analytical conclusion. Multilevel hierarchy of big RMP system (pict. 2, 3) can be reproduced in any mini-process at the levels of subsidiary office, filial and so on. This recursive universal character of the schemes makes them interesting for implementation the technology of risk management in any multi-filial bank.

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<sup>1</sup> *Khochoyan Kh. G.* The place of the theory of competitive advantages in economic theory - SSEU journal, 2006.

<sup>2</sup> *Kaltyrin A.V.* Banks in the system of credit and financial relations of transfer economy. Shakhty, 1997. P. 109.

<sup>3</sup> *Lyabakh N. N., Chefranov S.V.* Information and analytical support of the scenarios of the development of world economy. Edited by Y.S. Kolesnikov. Rostov-na-Donu, 2005, P. 3.