
SCIENTIFIC ANALYSIS OF THE CONCEPT “CAPITAL SUFFICIENCY”: TRANSITION FROM REGULATIVE TO ECONOMIC CAPITAL OF THE BANK

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Keywords: capital sufficiency, the concept of regulative capital, the concept of economic capital, economic capital, risk capital.

In the article the concept “capital sufficiency” is analyzed in foreign and domestic bank practice. The content of capital sufficiency is considered in the context of the concept of regulative and economic capital. As a result the necessity to develop the concept of economic capital in Russian bank practice is revealed.

The sufficient volume of capital supports bank viability at every stage of its functioning and is of great importance for the provision of its financial responsibility and effectiveness. The measure of capital sufficiency in international and domestic bank theory is characterized in different ways.

In foreign practice capital sufficiency is called “capital adequacy” and is defined as the “ability of the bank to satisfy its depositors’ demands and the demands of other creditors due to the presence of sufficient means”.

J. Voit affirms that the problem of capital sufficiency is of current importance when the bank bears losses or is under the threat of bankruptcy.

As a rule current income must be sufficient to compensate transaction costs and ensures bank development and payment of dividends to shareholders. Besides, current income must ensure a part of capital which is necessary for financing the expansion of bank operations.

E. Reed, R. Cotter, E. Gill, R. Smith characterize sufficiency as the ability to compensate the losses and warn about bankruptcy.

J. Sinky supposes that the term “capital adequacy” reveals the general level of investment risk of this bank or bank system and has a notion about bank capital as a the buffer and pillow which absorb the losses.

Some foreign authors understand capital sufficiency as its level which protects a bank against the losses and contributes to system stability.

It should be emphasized that in the presented positions the sufficiency of capital indicates the maximum sum of risks and extreme losses of any kind which the bank may have without any damage for investors’ interests and other creditors.

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The specialists of the Universal Bank of reconstruction and development D. Maknoton, J.J. Carloson, Kl. Ditz give a more detailed definition of the sufficiency of capital. They define it as its level which is necessary for solving such strategic problems as possible future mergers or entering new and more risky types of business, as well as meeting the demands of regulatory bodies.

The majority of domestic scientific economists suppose that the term “capital sufficiency” give overall evaluation (mainly by the regulative bodies of bank safety) to the degree of its subjection to the risk: the bank will be supposed as reliable and financially stable in the part of the capital if the characteristics of the last one correspond to the calculating norms of sufficiency.

O.N. Antipova defines it as a general evaluation of bank reliability, the degree of the protection of its creditors’ and investors’ interests and the way to decrease the risk and insolvency.

T. M. Kosterina defines that capital sufficiency characterizes the activity of the bank according to its stability by the origin of different risks on active bank operations.

A.D. Sheremetieva and G.N. Scherbakova think that the concept of capital sufficiency (adequacy) of the bank accumulates such qualities as reliability, stability, ability to oppose to unfavorable factors and absorb the damage from losses.

P.P. Fetisov regards the sufficiency of capital as the ability of the bank to compensate the beat, warns about the bankruptcy and suggests to improve the quality of standard bank services no matter of possible losses.

E. V. Gerasimova supposes that the concept of capital sufficiency is an ability to com-

compensate the unexpected losses, emerging because of different risks of bank activity.

In our point of view V.V. Kiselev, L.T. Giljarovskaja and S.N. Panevina define capital sufficiency comprehensively. They characterize it as an ability of the bank to continue rendering the traditional sets of bank services in the same quantity and in the same quality irrespective of probable losses. The general measure of its sufficiency is the quantity which, on one hand, helps to ensure the maximum income and, on the other hand, the minimum risk of liquidity, bank reliability.

To sum it up, it should be emphasized that some economists identify the concept "sufficiency", "adequacy" of capital and "capital adequacy". They understand under the adequacy of capital its correspondence to the quantity and optimal structure to the level of the risk of assets according to the strategy and specific character of bank activity. It should be mentioned that firstly the concept of capital sufficiency denominates its quantity, adequacy-correspondence to something (for example, the adequacy of information, man's behavior etc.). That is why the use of the concept "capital sufficiency" is rational.

So, it is important to take into consideration that capital sufficiency of the bank in the predominate level depends on the choice of the concept of capital regulation which is made according to the interests and demands of society.

The problem of choosing the structure that must fix the capital standards for the bank and what must predominate in the approaches of its regulation: the government or the banks themselves, the guidelines for regulation from the government or from the competitive market is of current importance in bank theory.

The analyst of bank affairs J. Allen affirms that "The problem about capital sufficiency is always unclear for the bank. Probably the only measure of sufficiency is the unanimous agreement of market. In other words, the part of own assets in relation to market must increase until the market reacts approvingly".

F.Sinky Junior admits "it will be rational to give Allen's recommendation not to regulating services, but to the market to define the bounds of capital sufficiency ... Besides, in the situation, when thousands of local banks do not feel

the disciplined influence of the market, the establishment of the norms of capital sufficiency is justified enough.

It should be emphasized that the regulation of capital by the government became a part of bank activity long ago, because it is supposed that free market is not an effective tool of managing all kinds of risk which is typical for bank business. Banks are the only institutions that have short-term obligations which can be removed as soon as the clients' confidence fall. Only a few banks have possibility to eliminate at once its credit package if there is a damage of mass removal of deposits. Besides, banks do not take into consideration the probable influence of its risk on the clients of other banks.

Originally since 1988 within prudential supervision - direct, oriented at quantity, there is a concept of capital regulation which is revealed in the document "International approaches to the methods of measures and capital standards" (Bazel agreement I). Since 1997, according to the document "Basic principles of the effective supervision for bank activity" the necessity to identify the regulative capital according to the level of bank risks and include the elements according to their ability to defray the losses; stimulate the capital to exceed the minimum (the 6th principle).

The regulative demands to the capital are unified and possible to be used by every bank, irrespective of its industry, organizational and legal, competitive and other features. They must be objective, comparable for the majority of the lending institutes and not excessively limited. Originally the regulatory bodies protect bank system against potentially "weak" banks by fixing the definite demands to the volume of the own capital which is necessary for registration and for getting a corresponding license for making bank transactions. The Russian Bank tries to limit the quantity of bankruptcies of commercial banks by identifying the minimum capital standards. The establishment of the minimum level of own capital which is necessary for the registration of entrepreneur in the capacity of the bank - institutional capital sufficiency. Then regulatory bodies fix the norms of capital sufficiency - dynamic sufficiency. It should be mentioned that emphasizing the static and dynamic aspect of capital sufficiency links to the definite moments of the activity of credit compa-

ny: as the volume of fixed capital does not correspond to the cost of the derived money and property, it tells us about statics and dynamics in the correlation of the authorized capital and property in the condition of banks functioning.

For the first time the Russian Bank fixed the minimum capital volume in 1998 that corresponded to the demands of international standards. Though the difficulties which the Russian bank system had to collide with after the financial crisis in 1988 and bankruptcies which followed it led to the reconsideration and temporary suspension of these demands till 01.01.2001.

Within the establishment of the demands to capital sufficiency The Bank of Russia does not create the economic conditions which can give the qualitative rise and focuses on quantitative features. It disturbs the principles of effective bank supervision. J. Kereken comes to the conclusion that the increase of capital demands in general “ does not make the bank collapses more rare, as it was without them”.

ital will be more than the smaller part of the own capital in bank means. The substantiation of the rise of the authorized capital can be supposed economically acceptable, if such rise provides the profitability of own capital which is not lower than its acceptable minimum. Thus, the concept of the sufficiency of own capital has its special essence. Such contradiction causes the necessity to form the tools of their agreement.

The regulative capital is calculated to correspond to the norms of supervision services and is intended to pay the unexpected losses. The reserves are created for already identified and expected losses. The regulative capital is an obligatory capital which the bank must have in the correlation to the regulator’s demands and is obliged to pay the losses, particularly unexpected losses which arise because of the investment portfolio or its off-balanced activity.

The main subject of this measure is the Russian Bank which estimates the activity of the bank according to the adherence to the fixed norms and commercial banks which use it to

Quantitative features of the standard of capital sufficiency of Russian commercial banks

Period	Values, %
1991 – 1996	4
1997	5
1998	7
1999	
for the banks with capital less than 5 million euro	9
more than 5 million euro	8
2000 - 2009 :	
for the banks with capital less than 5 million euro	11
more than 5 million euro	10

There is a conflict of interests between the banks and regulative services concerning capital sufficiency: supervision services indicating the necessity of the growth of bank capital suppose that the capital is sufficient if it decreases the risks as much as possible. The managers suppose that it can be sufficient to ensure the financial bases of activity and the growth of assets. As a result, the leaders of credit companies and supervision services try to find the optimal correlation choosing between the level of bank reliability in order to resist successfully to unexpected financial difficulties (which will be higher than the part of own capital in the general sum of means), and profitability of cap-

form an account for supervision service. These norms can be called consumer as their main goal is to protect the consumers’ interests, - the clients of the bank. The concept of the regulative capital is supposed to pay the unexpected risks, so it should be taken into consideration that the unexpectedness is an approximation to the ambiguity.

It follows that the theory excludes the possibility of happening these events and the methodical and practical base under the concept of economic capital which is based on the estimation of default probability and the estimation of its negative consequences for the creditors disappears.

Then the changes of the tendency in bank regulation (the increase of flexibility, exactness, demoralization, market regulation), and the approach of taking into consideration the individual peculiarities of every bank activity caused the new concept of economic capital in 2004 which repulses in the document “ International convergence of the change of capital and capital standards: new approaches” (Bazel agreement II).

Within the supervision oriented at risk we tell about qualitative regulation and the use of signals from the market by supervision services. The methods of qualitative supervision include bank obligation to use self-regulation methods, it means the regulation oriented at qualitative features may control the system of managing bank risks and financial features. In the concept of supervision oriented at risk all kinds of risks should be identified and the level of risks acceptable for the bank should be chased. If the level is high it is necessary to increase the reserves for expected losses and check if the bank is protected against the unexpected losses by the corresponded reserves of capital. So, if in prudential supervision the facts of violation are fixed, in the supervision oriented at risk the causes of possible losses are revealed. The concept of supervision oriented at risk gives supervision the preventive character and directs “ the resources of control” to the spheres of bigger risk according to the estimation of the level of risk of business processes.

As a result the services of bank supervision made banks to create the capital reserve for the expected losses and the presence of own capital for paying off the unexpected losses: “economic capital” concept.

Some scientists suppose that economic capital is the part of bank capital which is able to pay the unexpected (hardly probable) risks.

Others understand the notion of economic capital as the sum which is used to pay the unexpected losses linked to bank activity for getting profit and losses. Margaret E. Ozium defines “ economic capital” as the means which can be mobilized for paying off the losses.

The majority of economists give wider definition to the notion of economic capital as the amount that is necessary for the bank to pay the typical bank risks it collides with to sup-

port the definite standard of financial responsibility or in the case of default. They suppose that economic capital is a risk capital defined by the bank with the use of inner models and methods and which is necessary to pay the risk which is peculiar to the bank.

Economic capital is called “ Risk Adjusted Capital”, “capital at Risk” and is a level of the unexpected losses for a certain time period.

Capital at Risk is characterized by risk investment. So, T. L. Chernositova includes into them the credits directed at the development of the new directions of science and technology which foresee great investments. In case of global financial crisis for Russian credit organizations risk capital is the investment into property.

So, economic capital is calculated to define its adequacy for paying off the unexpected losses from the risks which are already taken by the banks or the risks which the bank has to get in the future, it means that in its calculation the articles of capital are included which are the reserves for the expected and unexpected losses.

We came to the conclusion that the concept “capital at risk” and “ economic capital” reflect the risk referring to development conditions .

It is obvious that the amount of risks which become a dark spot for bank capital depends on the recognition of the expected risks and on the adequate estimation of the level of the supposed losses. So, if the expected risks are well recognized, it means that they are accounted in the price and reserve politics, the economic capital can be less , and if badly recognized- more. So, economic capital in contrast to the regulative one is a live and unsteady substance. Economic capital is calculated for a certain period and with definite probability. In some cases it can be more or less necessary in comparison to the regulative capital. It should be mentioned that the regulative services try to exclude the situation when the economic capital will be necessary more than the regulative one.

Sometimes relying on the regulative capital the bank comes into the situation when the capital functions are not fulfilled. The volume of regulative capital misleads the regulative services, contractors, proprietors and the bank itself , in case of unfavorable conditions it can cause the total distrust of public to bank ac-

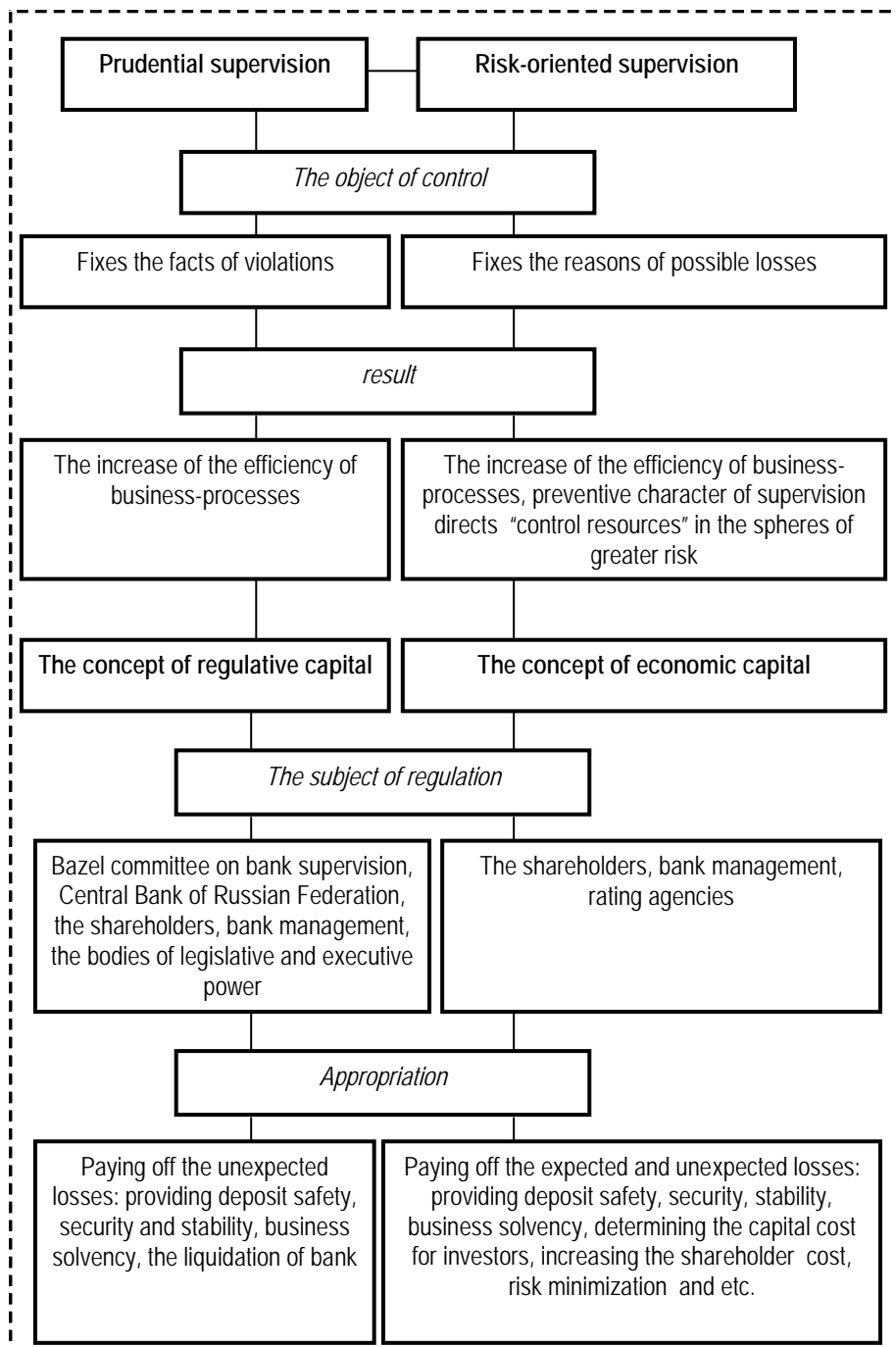


Fig. The essence of concept of the sufficiency of the capital

count and it can lead to another crisis of bank system.

The economic requirements to capital are subjective to a considerable degree and are based on the estimation of risks by bank leaders, depending on the politics and inclination to the risk of the bank and obligatory only for this bank. Bazel committee of bank supervision notes that regulative and economic demands to own capital are closely connected. The inner bank demands to differ the own capital in the level of risk provided by the capital. The super-

vision services do not demand from the banks to pay the risk of liquidity by own capital. The sizes of the actual own capital depend on the inclination of credit companies to the risk to a considerable degree, that is why there are well-defined, objective amounts of capital. Some banks also plan to use the models not officially recognized by supervision services to estimate the total credit risk.

So, the main difference of economic capital from the regulative one is that it is calculated to define its adequacy for paying off the risks

accepted by the certain bank. It is necessary to take into consideration the peculiarities of the bank and provide profitable activity defined by the bank itself and originated from market demands. This is the best estimation of the required capital which the banks use to lead their own risk. As for the concept of economic capital, the level of capital sufficiency is the quantity which can pay the expected and unexpected risks. In the economic capital the protective function has the main manifestation: the economic capital is obliged to protect the bank against predictable and unpredictable risks not by the use of paying them off but by creating such scheme of bank business which is able to function in case of its origin.

Economic capital guarantees to the bank : the creation of the added cost for shareholders; possibility to lead the inclination to the risk; possibility of the integration of the unexpected losses with the definite level of importance from different kinds of risk; effectiveness of the distribution of means among different business subdivisions; reliable estimation of the effectiveness of the activity of subdivisions taking into account the risk level. The economic capital influences considerably the strategic decisions concerning the economic analysis of the effectiveness of the planed investment and management of financial costs.

Normative requirements concerning the management of economic capital include: ICAAP - Internal Capital Adequacy process (The process of the correspondence of inner capital); STEP - Supervisory Review and Evaluation process (Controlling survey and process of estimation).

The essence of the change and content of the concepts of capital sufficiency are presented in figure.

The increasing difficulty and complexity of bank business in present situation, the increasing spectrum and level of risks demand the changes of the direction of bank regulation to increase its objectivity, exactness, adaptability to the concrete conditions of bank functioning from national supervision services.

So, Russian banks must use the concept of economic capital in the situation of the spillover of national and international capital and rising competition.

Therefore it is necessary to provide the complexity of the transition on the following

directions: the creation of transition mechanism which includes regulative and practical components. The regulative component of Russian Bank has to carry the appropriate adjustments in the whole set of present normative documents and react on their imposition in credit companies (feedback).

The important step to the development of the concept of the economic capital in Russia is the process of reservation which foresees the economic flexibility which expresses in the professional judgment. According to the regulation of the Central Bank of RF from 24.03.2004 № 254-P "About the formation of reserves for possible losses, loans and debts and the regulation of the CB of RF from 20.03.2006 № 283-P "About the order of forming the reserves for possible losses by credit companies", the awarding of quality category of this or that asset within the creation of the reserves is implemented on the basis of professional judgment.

Within the formation of reserves the banks are given more freedom and subjectivity in respect of the establishment of credit risk.

The use of professional judgment is one of the perspective directions of prudential regulation, as it is based on the regulator's opinion and mostly on credit company itself about the risk level. It means that the regulator's acts are directed at the approach of regulative and economic capital.

The teamwork of the Bank of Russian and credit companies has to create the practical component. First of all, the ideology, finding solutions to the problems and working out the approaches to the solution, formulation of "the methodic and organizational conditions" for the new concept transition must be changed. Examining the possibility of the transition of Russian banks to the concept of economic capital we should take into consideration that the banks will be able to regulate their economic capital by themselves, if all their risks are described on the base of the statistic models and they have: responsible systems of management and also the systems of risk management; objective possibilities to get reliable information about financial conditions of their clients and also about possible changes.

Every bank must approach to decrease risks referring to the capital, it means it must calculate the probability of unfavorable situation. Approach to the establishment of economic capital demands

deeper evaluation of bank risks, possible with the account of accessible information about clients' activity and its credibility; the presence of modern statistic methods of the establishment of the possible risk events; with the account of regional peculiarities of bank activity; formation of real credit rating borrowers; presence of the appropriate organizational structure and specialists in the sphere of risks; definite level of stability in economics which let to carry out the prediction; essential independence of the bank in the sphere of risk establishment on the operations.

The approach from the concept of regulative capital to the concept of economic capital in Russia is necessary to examine as a perspective direction of the development of methodology of bank politics in the sphere of own capital management. The system of bank supervision built according to economic principles makes easier the process of managing bank capital and that is why the stability of bank system is increased. And the system oriented at administrative measures complicates bank activity and capital management and it may lead to crisis in bank sphere.

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