A Method of Assessing Cooperation Between Insurance Organizations and Commercial Banks in Insuring Banking Risks

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Abstract. The article presents a method of assessing cooperation between banks and insurance organizations in insuring banking risks. Cooperation between these institutions has resulted in an increase in credit insurance premiums and investment life insurance, which are developed with the active participation of banks. The article focuses on banking risks insurance, associated with banking operations, excluding loss of and damage to property and health risks of the employees. Insurance can minimize the majority of banking risks. Insurance companies offer a limited range of banking risks insurance products. These include: BBB (Bankers’ Blanket Bond), mortgage insurance, ATM insurance, collateral protection insurance, and directors and officers liability insurance (D&O). Positive dynamics of insurance premiums in insuring banking risks is indicative of growing cooperation in this area and requires the assessment of cooperation between these financial institutions for further development and analysis of this insurance market segment. The article proposes a method of assessing cooperation between banks and insurance organizations in insuring banking risks, on the basis of which a method has been developed that includes quantitative and qualitative indicators to assess such cooperation. The method was tested on the micro-level, and the calculations were made on the example of the “Ingosstrakh” public joint-stock company (PJSC) and its client Bank SOYUZ joint-stock company (JSC). The calculations enable us to give a qualitative assessment of cooperation between the bank and the insurer in insurance of banking risks.

1. Introduction
Commercial banks, being the main participants in the financial market, are subject to numerous risks. Actualization of risks results in losses not only for depository institutions, but also their clients’ financial assets, which can in turn lead to an economic downfall. In banking management, great attention is paid to risk management aimed at minimizing risks. The most common method of risk management is insurance. This method is beneficial for the insurer, as it increases their income in the way of insurance premiums; and for the insurant, who has an opportunity to reduce loss by means of insurance indemnity in case of the insured event. However, in banking practice insurance is primarily used against risks, related to the bank’s assets and life and health of its employees. The Russian insurance market provides a relatively limited range of insurance products for specific banking risks, i.e. risks associated with banking operations. The normative framework of the Central Bank of Russia virtually ignores these aspects, although in some normative acts the banking regulator highlights the necessity of using insurance in order to minimize risks for depository institutions.
Relevance of the study is due to the necessity to assess cooperation between banks and insurance companies in terms of specific banking risks insurance, which will enable us to reveal problems and improve cooperation between these financial institutions; it will also promote growth of the banking sector and insurance market, and enable the Bank of Russia to predict how these financial markets will develop.

2. Problem statement and research directions

In order to assess cooperation between banks and insurers in terms of banking risks insurance, it becomes crucial to define the term “banking risks” so as to choose the appropriate risk management methods. Lack of a universal definition of the term has led to contradictory assessment of the volume of banking risks insurance, since insurance of a bank’s assets and employees’ life and health can distort the general idea of banking risks insurance. Three criteria underlie the classification of banking risks used in this article: type of bank operation (service), conditions for sustainable development of the depository institution and an agreement between the internal regulations in a bank with its strategy and statutory requirements [1]. This classification allows identifying risks, specific to banking activities; defining an adequate management method for each type of risk; and revealing those risks, which are, according to all indications, can be regarded as insured risks, whose minimization requires insurance. Lending is one of the main banking operations. Possible loss if a borrower fails to fulfill obligations under a loan agreement can be significant. Insurance is widely used to minimize the loan non-repayment risk, but in this case it is the bank borrowers who act as an insurant (borrowers are insured for life, health, risk of losing their job, collateral, etc.), and banks act as beneficiaries. Insurance premiums under the contracts of bank customers are included in bank insurance reporting and thus distort the general idea of banking risks insurance. Credit insurance occupies a significant share of the insurance market, being the main driver of growth. However, for banking risks management, the main problem is managing those risks that come from the bank itself and cannot be passed onto its customers. That is why, to bank risks we attribute those risks that are directly related to the operations of depository institutions, and when a depository institution acts as an insurant while choosing insurance as a method of minimizing risks.

Currently, the Russian insurance market offers the banking sector only a limited range of banking risks insurance products. These include: BBB (Bankers’ Blanket Bond), mortgage insurance, ATM insurance, collateral protection insurance, and directors and officers liability insurance (D&O). Only 21 insurance companies provide such types of insurance. Table 1 shows indicators for insuring banking risks (calculated on the basis of [2, 3, 4]), more specifically: premiums for banking risks insurance, premiums for insuring banks’ risks, including credit insurance, and correlation between them. The calculations do not take into account premiums for property and personal insurance, which can be used by banks for insurance protection of their property and life and health of the employees.

| Table 1. Key indicators for banking risks insurance in Russia. |
|---------------------------------------------------------------|
| Indicator | 2013 | 2014 | 2015 | 2016 |
| 1. Insurance premium for banking risks insurance, RUB bil. | 1.5 | 1.7 | 2.0 | 4.3 |
| 2. Insurance premium for banks’ risks insurance, including credit insurance, RUB bil. | 159.8 | 147.2 | 118.6 | 158.6 |
| 3. The share of insurance premium for banking risks insurance in the total amount of premium for insurance of banks’ risks, including credit insurance, (line 1/line 2), % | 0.93 | 1.15 | 1.69 | 2.71 |
| 4. The number of insurance companies offering banking risks insurance products | 22 | 22 | 21 | 21 |
The calculations show that the number of insurers engaged in insuring banking risks remains stable, but the insurance premium is growing, which signifies interest in mutual cooperation between banks and insurers. Banking risks insurance premiums, including life and property insurance for borrowers, show a steady increase. According to [5], in 2018, 5,996,894 life insurance contracts were made, of which 2,607,499 were life insurance contracts for the borrower (43.5%), accounting for 59.1 billion rubles of insurance premium. Official statistics do not provide any data on the borrowers’ property insurance under loan agreements, but given that insurance of a pledged item is mandatory by law [6], one can speak of significant amounts. Assessing cooperation between these organizations will make it possible to reveal the state and prospects of this insurance market segment.

When choosing a partner, financial performance indicators are used by commercial organizations for accreditation of insurance companies. They determine the requirements that the insurer must meet, and calculate the indicators that characterize the insurer’s financial stability, competitiveness, and results of their insurance activities [7,8,9,10]. Insurance companies, in turn, employ similar indicators to estimate their future client (a depository institution). In addition, during a surveyor inspection (pre-insurance verification), the insurer examines whether the bank’s risk management system and technical protection means comply with international safety standards.

In [11,12,13,14,15], various approaches and indicators for evaluating cooperation between banks and insurance companies are given. Let us summarize their findings and draw the main conclusions:
- the studied approaches do not provide a description of a method of assessing cooperation between insurance and depository institutions in insuring banking risks;
- counterparties’ cooperation evaluation is carried out either from the position of the insurer or from the position of the insurant (the bank);
- none of the considered approaches provides an opportunity to assess development potential of the banking risks insurance market.

Our goal is to assess cooperation between banks and insurance organizations in the field of insuring banking risks that are associated with banking operations and are considered to be specific risks. At the same time, we do not assess the traditional forms of cooperation between these institutions, well-studied and presented in scientific literature [16].

Main areas of our research are:
- formation of our own method of assessing cooperation between banks and insurance companies in the insurance of specific banking risks;
- development of a methodology based on our approach for evaluation of such cooperation;
- testing the methods created on the example of the leading financial institutions.

3. Results
In our approach, we put emphasis on assessing the results of cooperation between partners, specifically in insuring banking risks (other forms of cooperation between banks and insurers were not considered, as we are dealing only with the possibility of insuring risks associated with banking operations. Such forms of cooperation as insurance of other risks of banks, cross-sales of banking and insurance products, placement of reserves of insurance companies in bank deposits, etc. are not taken into account). The main concept of the proposed approach is based on the following provisions:
- assessment of the results of cooperation between contractors is carried out in a reciprocal manner, that is, from the positions of the insurant (bank) and the insurer (insurance company);
- we assess intermediate results at different steps of cooperation between partners in insuring banking risks;
- it becomes possible to assess the prospects for the development of a particular segment of the insurance market.

These provisions became the foundation of our method, which includes the main steps of insuring banking risks, and at each step we calculate the indicators in question. Transition to the next step is possible only provided a positive result at the previous one, when cooperation is approved by both parties (Table 2).
Table 2. Method of assessing cooperation between banks and insurance organizations in insuring banking risks.

| Step | Assessment of cooperation between counterparties at the preliminary stage of insuring banking risks |
|------|--------------------------------------------------------------------------------------------------|
| 1.1  | Choosing a partner: - level of insurance reserve coverage by own capital assets; - payout rate; - debt load; - the counterparty’s business reputation |
| 1.2  | Contract negotiation: - insurance coverage; - scope of insurance liability; - amount of insurance payout under the contract |
| 1.3  | Contract signing: - premium |

Step II. Assessment of the banking risks insurance contract implementation

2.1 Occurrence of the insured event

2.1.1 Insurance indemnity: - insurance indemnity; - promptness of indemnity; - actual damage; - property rescue costs

2.1.2 Denial of insurance indemnity: - the bank's loss caused by an insured event, not covered by insurance

2.2 No insured event: - benefits and discounts for contract prolongation (bonus-malus system)

Step III. Assessment of cooperation between banks and insurance companies (over the years)

3. Analysis of current cooperation and future prospects: - the number of banking risks insurance contracts; - the size of premiums under banking risks insurance contracts; - insurance indemnity under banking risks insurance contracts; - the size of banking risks insurance indemnity

Step IV. Analysis and assessment of the Russian banking risks insurance market (macrolevel)

4 Market assessment by the megaregulator: - the share of the banking risks insurance segment in the overall insurance market; - the number of insurance companies offering banking risks insurance products; - the dynamics of insurance premiums and banking risks insurance indemnities

Step V. Banking risks insurance potential

- indicators of financial performance improvement in depository and insurance organizations thanks to banking risks insurance.
In our opinion, the advantages of this method are as follows:

1) assessment of cooperation results is carried out both from the point of view of the insurer and the insurant (bank);

2) assessment is performed in steps: at each step of cooperation between the partners, calculation of the indicators is carried out, which then dictates whether to continue or cease cooperation;

3) quantitative and qualitative indicators are used;

4) a set of indicators is informative, accessible and compact;

5) the method can be used on both the micro- and macro-levels to assess the state and development prospects of the banking risks insurance segment.

Our method was used to calculate the results of cooperation between the “Ingosstrakh”, PJSC and its client Bank SOYUZ, JSC. Assessment of counterparty cooperation was carried out in steps in accordance with the developed method based on financial statements over 2013-2016. We calculated the indicators, evaluated by the insurant (bank) and the insurer (insurance company), as well as the indicators that were of interest to both the insurer and the insurant.

Table 3 summarizes the indicators that characterize the relationship between the bank and the insurance organization for the analyzed period [17, 18, 19, 20, 21].

Table 3. The result of cooperation between The Bank SOYUZ, JSC and “Ingrosstrakh”, PJSC in insuring banking risks in 2013-2016.

| Indicator | Sum insured (RUB th.) | Insurance premium (RUB th.) | Insurance indemnity (RUB th.) | The size of banking risks insurance indemnity, % |
|-----------|----------------------|----------------------------|-------------------------------|-----------------------------------------------|
| 2013      | 2,264,840.8          | 2,417.34                   | 5,619                         | 232.4                                         |
| 2014      | 2,919,398.4          | 5,043.25                   | 10,946                        | 217.04                                        |
| 2015      | 2,253,232.0          | 7,947.54                   | 3,832                         | 48.21                                         |
| 2016      | 2,108,123.0          | 3,647.75                   | 1,737                         | 47.6                                          |

To reduce banking risks, Bank SOYUZ actively uses such insurance products offered by “Ingosstrakh” as: insurance of valuables in storage and during transportation; insurance of ATMs and cash inside; insurance of risks when using bank cards; insurance of collateral subjects, transferred to the bank as collateral for loans, etc. During the analyzed period, the annual insurance for this type of insurance amounted to 2.3-2.9 billion rubles. In 2013-2014, cooperation between the partners was beneficial to Soyuz, because its insurance costs were more than 2 times lower than the amount of insurance compensation received (indemnity size – 217-232%). In 2015-2016, banking risks insurance was extremely effective for “Ingosstrakh”, as the insurance premium received was significantly higher than the amount of the insurance indemnity paid (indemnity size – about 48%).

In [22], the calculations based on an econometric model are given, which made it possible to estimate the potential of insuring banking risks in the form of an increment in the banks’ income. For 2008-2015, the calculations showed that, with an increase in the volume of insurance premiums paid by Russian banks by 1 billion rubles, their income rose by an average of 7.409 billion rubles annually (at present value).

It can be concluded that the calculations based on our method make it possible to obtain a quantitative and qualitative assessment of cooperation between banks and insurance companies in insuring specific banking risks.
4. Conclusion

Cooperation between banks and insurance organizations provides benefits for both sides, which could be outlined as follows:

− the exchange of client base while providing various financial services, apt examples of which are investment life insurance and credit insurance;
− insurance companies have an opportunity to use banks as agents to promote their insurance products; in turn, banks provide the necessary cash management services;
− creation of hybrid financial products, for example, bank cards, which provide insurance protection when traveling abroad;
− insurance of banks’ property and life of their employees.

Cooperation between banks and insurers is reflected in the constantly growing insurance premium for insuring banking risks. However, insurance of specific banking risks is not sufficiently developed, and in 2016 it was less than 3% of the total insurance premium for bank risk insurance.

As of yet, the assessment of cooperation between banks and insurers has not been thoroughly represented in scientific literature or normative documents of the regulator.

A method of assessing cooperation between banks and insurers is proposed, which is based on a number of provisions that make it possible to consider the practical experience of cooperation and build a cooperation algorithm at each step of such cooperation. At the macro-level, one can assess the development prospects of this segment of the insurance market.

Based on our approach presented in this article, a method of assessing cooperation in insuring banking risks has been developed, which contains quantitative and qualitative indicators. The set of indicators is informative and accessible, which makes the method applicable. The method of assessing cooperation between leading financial institutions in insuring banking risks on the micro-level was illustrated by the example of “Ingosstrakh” and Bank SOYUZ. The results of using this method on the macro-level are given in [22, 23] and indicate an improvement in the financial results of the Russian banking sector with an increase in costs of insuring banking risks.

Assessment of cooperation between banks and insurance organizations in insuring banking risks allows to encourage their cooperation, increase the efficiency of both counterparties, which will have a positive effect on the banking risks insurance segment, and development and implementation of new insurance products. The Bank of Russia is able to assess trends in the most important segments of the financial market, use the results obtained to determine the direction of their development, and regulate the activities of banks and insurance organizations.

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