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# FEATURES OF RISK MANAGEMENT OF BANK DEPOSITS IN CONDITIONS OF ECONOMY TRANSFORMATION

Deposit risks are an integral part of a bank's activity and arise when a banking institution executes passive operations. Early withdrawal of deposit funds by depositors of the bank, insufficient funds to repay liabilities, even on small volumes, can lead to a decrease in the liquidity and solvency of the banking institution, to cause panic among depositors and to stipulate bank bankruptcy. That is why, implementation of effective risk management of the bank in the conditions of an unstable market environment necessitates the definition of the main trends in the field of deposit risk management of the bank, which will allow to take effective management decisions, designed to minimize the negative effects of deposit risk.

The research conducted has the following results. The essence of deposit risk of the bank is investigated. The problems of bank deposit risk management at the present stage of development of the banking sector of Ukraine are substantiated. The tendencies of development of the deposit services market in Ukraine and the consequences of the impact of deposit risk on banks' activity are described. The dominance of short-term deposits in the structure of liabilities of banks is established. The tendency of growth of volume of foreign currency deposits in the deposit portfolio of Ukrainian banks is shown. The dynamics of deposit deposits of Ukrainian banks by currency and terms of placement is given. Proposed measures to increase the efficiency of management of deposit risks of banking institutions of Ukraine.

**Keywords**: deposit risk, deposit resources, deposit policy, deposit. Fig.1, Ref.11

## Г.О. Манятовська, В.В. Волкова ОСОБЛИВОСТІ УПРАВЛІННЯ ДЕПОЗИТНИМИ РИЗИКАМИ БАНКУ В УМОВАХ ТРАНСФОРМАЦІЇ ЕКОНОМІКИ

Досліджено сутність депозитного ризику банку. Обґрунтовано проблеми управління депозитними ризиками банку на сучасному етапі розвитку банківського сектору України. Схарактеризовано тенденції розвитку ринку депозитних послуг в Україні та наслідки впливу депозитного ризику на діяльність банків. Встановлено домінування короткострокових вкладів у структурі зобов'язань банків. Відображено тенденцію зростання обсягу валютних вкладів у депозитному портфелі банків України. Наведено динаміку депозитних вкладів банків України за валютою та строками розміщення. Запропоновано заходи щодо підвищення ефективності управління депозитними ризиками банківських установ України.

Ключові слова: депозитний ризик, депозитні ресурси, депозитна політика, синтезовані депозитні продукти, депозит.

## А.О. Манятовськая, В.В. Волкова, ОСОБЕННОСТИ УПРАВЛЕНИЯ ДЕПОЗИТНЫМИ РИСКАМИ БАНКА В УСЛОВИЯХ ТРАНСФОРМАЦИИ ЭКОНОМИКИ

Исследована сущность депозитного риска банка. Обоснованы проблемы управления депозитным рисками банка на современном этапе развития банковского сектора Украины. Охарактеризованы тенденции развития рынка депозитных услуг в

Украине и последствия влияния депозитного риска на деятельность банков. Определено доминирование краткосрочных вкладов в структуре обязательств банков. Обозначено тенденцию роста объема валютных вкладов в депозитном портфеле банков Украины. Приведена динамика депозитных вкладов банков Украины по валюте и срокам размещения. Предложены мероприятия по повышению эффективности управления депозитными рисками банковских учреждений Украины.

**Ключевые слова:** депозитный риск, трансформация экономики, депозитная политика, синтезированные депозитные продукты, депозит.

**Formulation of the problem.** Deposit risks are an integral part of a bank's activity and arise when a banking institution executes passive operations. Early withdrawal of deposit funds by depositors of the bank, insufficient funds to repay liabilities, even in small volumes, can lead to a decrease in the liquidity and solvency of the banking institution, to cause panic among depositors and to stipulate bank bankruptcy. That is why, implementation of effective risk management of the bank in the conditions of an unstable market environment necessitates the definition of the main trends in the field of deposit risk management of the bank, which will allow to take effective management decisions, designed to minimize the negative effects of deposit risk.

Analysis of recent research and publications. The essence and theoretical approaches to managing bank deposit risks are reflected in the works of such foreign scientists as, B. Bojinov, M. Vidolova, A. Voslaky, A. Slyuvka, B. Lopushevich, E. Milanova, M. Nedelchev, H. Khadzhinikolova and others [1-3]. Among domestic scientists, the issue of managing deposit risks was investigated by M. Hvorostovska, O. Karas, I. Dyakonova, O. Pernarovsky, V. Gerasimenko, A. Suvorov and others [4-6]. At the same time issues of risk management of deposits is still insufficiently investigated and also are very sharp in modern economic.

**Purpose of the article.** On the basis of the analysis of the Ukrainian deposit services market development, to identify the peculiarities and main trends of bank deposit risk management in an unstable market environment and to formulate directions for increasing the efficiency of deposit risk management of the bank.

**Research results.** In their activities, banking institutions are constantly faced with a variety of risks. The process of risk management is considered as a key area of banking management. At the same time, the risk in the banking business is most often associated primarily with the financial losses of the bank, which arise in the event of uncertainty about the implementation of a particular event in the future.

In order to minimize risks, banking institutions should organize the identification and evaluation of their main varieties in banking activities, the search for effective methods for their monitoring and monitoring, and the establishment of appropriate systems for managing them [3].

Considering a number of scientific sources that focus on risk - management of banking institutions and management of the bank's deposit risk, it was found that there is no single interpretation of the concept of "deposit risk". Quite common is the point of view of scientists to consider deposit risk both from the side of the client, and from the bank.

For example, O. Titievskaya believes that the deposit risk from the client - "this is the probability of not returning the whole or the amount of deposit resources, as a result of bankruptcy of the bank", from the bank - "this is the probability of transferring the client's resources to another bank or early withdrawal of the deposit due to the deterioration of the solvency of the bank or other motives of deposit holders "[7].

In his scientific works, N. Lunjakova, also delineates the deposit risk of the bank and the client, and believes that "the bank's deposit risk in the general interpretation is the probability of not meeting the expected level of deposits due to the adverse effect of external or internal factors in the conditions of the indefinite activity of the bank." Moreover, among the factors of the client's deposit risk, both external and internal factors related to the efficiency of management of the attracted resources by the banking institutions are considered [8, p.107].

Following the principle of delineating the deposit risk of the bank and the client can be traced in the works of T.M. Bulgarians, V.V. Gerasimenko, S.V. Volosovich, O. V. Vasyurenko, V.O. Khokhlov and other scholars.

From our point of view, in disclosing the essence of the bank's deposit risk, it should be emphasized that it is associated with economic losses of both entities of the deposit agreement, and not only the bank or client (Fig.1).

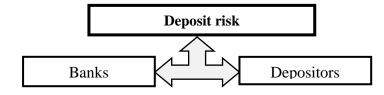


Fig.1 Components of deposit risk

After all, early withdrawal of funds negatively affects the state of liquidity of the banking institution, restricts its ability to carry out active operations on a planned scale, which concerns the depositor of the bank, then he suffers from either not receiving income from the deposit or failed to realize the goal of saving.

So, summing up the interpretation of this concept, we consider that the essence of the bank's deposit risk is, first of all, unpredictable withdrawal of deposit funds by customers, under the influence of external and internal factors, which negatively affects the economic interests of subjects of deposit relations.

Among the main factors of the emergence of deposit risk are distinguished by both external and internal factors. External factors include the behavior of clients, the motives of the owners of savings, the economic situation in the country, the political situation, legislative changes, exchange rate, and so on. Such factors influence the deposit risks of both clients and banking institutions.

The internal factors of the emergence of bank deposit risk are an imbalance in the financial activities of the banking institution. These factors include:

- inefficient and inefficient management of funds raised;
- absence of qualitatively new deposit products that would allow to attract new customers;
- ineffective organizational and marketing policies of the banks;
- low level of incentives for employees;
- imbalance of attracted and placed funds by terms;
- high credit risk;
- noncompetitive banking products, and so on.

It should be noted that the deposit activity of the bank and the level of deposit risk depend on changes in the legislative framework of Ukraine and the peculiarities of legislative regulation of transactions with deposits of individuals and legal entities, taxation of personal income on deposits. This leads to a situation of uncertainty in the activities of banking institutions on the behavior of depositors in the new environment.

Bank deposit risk arises as a result of an unexpected decrease in the bank's resource base, which may be caused by an unpredictable partial or complete withdrawal of funds from deposit and current accounts of clients. Deposit risk has a two-way effect both on the banking institution and on the owner of the deposit, as well as one of the reasons for the bank's bankruptcy and the loss of the depositor's funds [9].

The deposit policy of the bank is aimed at providing the bank with resources for a certain time and at a certain price. Its implementation means the solution of two opposite tasks: the stability of the resource base and minimization of the costs of its formation. The ideal option involves a situation where, long-term deposits are balanced long-term deposits. Otherwise, the bank may face the problem of rising costs of resources and obtaining losses from long-term investment.

Another form of risk management of deposit resources is the loss in the form of lost profits due to the need to get a certain percentage of the volume of resource base for cash and settlement services. For the bank, these assets are non-profitable, their size depends on the trust of the bank and the state, as well as on the structure of the bank's clientele. It is also advisable to pay attention to the accounting of seasonal and monthly fluctuations in the volume of deposit resources. Of great significance is the factor of allocation of the resource base. It is believed that when investing 85% or more of the deposit, the bank conducts a risk deposit policy [10]. The National Bank of Ukraine reduces this risk by introducing a mandatory reserve for a portion of borrowed funds depending on the term for which the deposit agreement is concluded.

Deposit risk is one of the prerequisites for the risk of liquidity of a bank. Unpredictable withdrawal of deposit money leads to a reduction in financial stability and the ability of the bank to fulfill its obligations quickly and fully. This is confirmed by the situation prevailing in the banking sector of Ukraine in the period from 2013 to 2017.

During this period there was a decrease in the resource base of banks due to a significant outflow of household deposits, which was caused by a decrease in real incomes, financial and geopolitical uncertainty in the state. Significant portion of funds withdrawn from deposit accounts, which increased the impact of deposit risk on solvency and bank resilience.

In 2014, Ukrainian banks lost one third of the deposit portfolio, a similar phenomenon significantly reduced the solvency of some of them and led to the introduction of NBU interim administration and liquidation of 33 banks. In 2016 the banking system decreased by 44.4%, more than 80 banking institutions were withdrawn from the market. As of 01.09.2017, according to the NBU, the number of operating banks in Ukraine was 88 institutions [9].

Such events negatively affected the liquidity of the banking system of the country and increased the distrust of depositors, as a result, increased the level of deposit risk and its negative impact on the liquidity and financial stability of the banking institutions of the country.

Development of the Ukrainian deposit services market in the period from 2013 - 2017. was characterized by a tendency to increase panic among clients and mistrust of banking institutions, which resulted in the transfer of funds from one institution to another. As a result, depositors increasingly preferred deposits in foreign banks or abroad.

Between 2013 and 2015 the banking system lost 10% of the deposit portfolio of the population, indicating a high deposit risk of banking institutions in this period and a loss of confidence in banks on the part of the population.

The distribution of funds of individuals and legal entities in the deposit portfolio of banks in the period from 2013 to 2017 has changed significantly.

In 2017 the volumes of attracted by banks of business funds almost equaled with the amount of money of the population, while 4 years ago they were 1.7 times less than the amount of individuals' funds.

In 2016, the duration of the deposit structure is slowly shifted towards long-term deposits, but in the structure of liabilities, banks still dominate short-term deposits. 68% of the population's funds are deposits on demand and up to 1 year. The average life span of deposits is gradually increasing. The share of new deposits over six months has increased from 23% in December 2015 to 29% in September 2016, which will strengthen the liquidity of banking institutions and create a base for expanding medium and long-term lending to the economy.

In order to stabilize the situation in the banking sector of Ukraine for the period from 2013 to 2017, the NBU has introduced a number of measures to eliminate insolvent banks, raising bank standards, and so on. In particular, amendments were made to the legislative acts regulating the conditions for the repayment of term deposits. This regulation of deposit operations will allow banks to reduce deposit risk, as the bank will be able to use the attracted resources throughout the term for which the deposit agreement was concluded [10].

Most banks have already applied the provisions of the Law on the Limitation of Early Deposits and introduced a ban on early withdrawal of funds. On such deposits the average rate is 2-5% higher than for deposits with the possibility of early withdrawal. By raising interest rates on deposits, banks are trying to attract customers and increase the volume of attracted resources, but they are exposed to interest rate risk on deposits.

The share of currency investments in the deposit portfolio of individuals in 2013-2017 ranged from 42.7% to 55.6%. The rapid growth of deposits in foreign currency indicates willingness of depositors to protect their savings from a significant devaluation of the national currency. The tendency of an increase in the share of foreign currency deposits with further devaluation of the hryvnia increases deposit risks and the risk of liquidity of banks. Thus, the burden on the Guarantee Fund for Individuals increases if the bank is declared insolvent, as compensatory payments from the Fund are made in the national currency.

In the deposit portfolio of Ukrainian banks, the share of legal entities in foreign currency in 2016 increased by 11.4%. In general, during the analyzed period, there has been a gradual increase in the volume of deposits of legal entities both in foreign and in national currencies.

However, considering the structure of deposits of legal entities in terms of placement of funds, short-term deposits will prevail. Therefore, this is a very convenient for business option of accumulation of resources. An enterprise at any time can withdraw funds from the account and receive accrued interest.

Rates on such deposits are usually lower, but there is always the possibility of early termination of the agreement, which indicates the deposit risk for the bank.

Summarizing the above, it can be argued that the level of deposit risk of a bank depends on a large number of internal and external factors, among which:

- deposit policy of the bank;
- number of depositors of the banking institution;
- situational behavior of depositors;
- the ratio of short-term and long-term deposits;
- the ratio of currency deposits and deposits in hryvnia;
- stability of the banking system as a whole;
- income level of the population and etc.

The presence of a large number of preconditions for the formation of deposit risks determines the complexity of forecasting and managing the bank's deposit risks.

The main problems that arise in the process of managing bank deposit risks:

• loss of customer confidence in banking institutions, against the backdrop of an unstable situation in the banking sector and constant processes of its reform;

• complexity of forecasting behavior of the depositor and prediction of possible reasons for early withdrawal of funds or change of banking institution for servicing;

• the lack of opportunities for taking into account external factors of deposit risk formation, through the use of existing models of forecasting the level of deposit risk of the bank, based on the analysis of average daily balances of deposit funds in the accounts;

• the complexity of taking account of seasonal factors of occurrence of deposit risks at their forecasting.

The main ways to increase the efficiency of management of deposit risks of the bank, in the conditions of impossibility of influence on external factors of their formation, should be the following measures:

- 1. creation of a coordinated system of control, planning and forecasting of the volume of attracted deposit resources by a banking institution;
- 2. development of innovative, synthesized deposit products, which will enable the bank to attract new customers and restore the trust of depositors;
- 3. effective material and moral stimulation of bank employees, which will help to intensify work with clients and increase the volume of attracted deposit resources;
- 4. introduction of qualitatively new regulatory measures by the state, in relation to deposit insurance. For example, expanding the sources of financial resources creation for the Deposit Guarantee Fund, which will increase the amount of indemnity;
- 5. improvement of the legislative framework in the field of securitization of assets and refinancing of banking institutions;
- 6. increase transparency of management and activities of banking institutions.

Foreign experience shows that one such product may become a structured deposit, which not only guarantees the return of all invested funds, but also takes into account the influence of inflation on the income of the depositor and will have a significantly higher interest rate for the usual deposit services. Moreover, the banking institution is obliged to invest a larger share of borrowed funds in highly reliable financial instruments with a fixed income.

**Conclusion**. Thus, after analyzing the tendencies of the development of the deposit services market in Ukraine for 2013-2017, we identified the negative consequences of deposit risks in the form of loss of confidence of the population in the banking system and the liquidation of more than 80 insolvent banking institutions were revealed, the decrease of which liquidity level resulted from a significant outflow of deposit funds. In the structure of liabilities of banks dominated short-term deposits and deposits in foreign currency. On the basis of the research, the main problems of bank deposit risk management were identified and measures were taken to increase the risk-management efficiency of the bank in the deposit service market.

Thus, deposit risks require special attention from the part of banking management, as it is a prerequisite for reducing the liquidity of a banking institution and can lead to bankruptcy if the bank is not able to timely cover the lack of funds to fulfill its obligations.

However, the mechanism of managing bank deposit risks in an unstable market environment requires constant improvement, which may be the subject of further research.

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