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Financial risk management strategies

Implementation of the financial activity in modern conditions is impossible without special methods of analysis and risk management. The function of financial risk management becomes an increasingly important role and becomes one of the most important conditions to ensure financial stability of the enterprise organizations. Financial Risk Management of the company is a specific area of financial management, which is abroad in recent years stood out as a special field of activity - the «risk-management».

Financial risk - the risk associated with the probability of loss of financial resources (cash). Financial risks arose simultaneously with the appearance of money and with the emergence of various types of monetary relations: the investor - the issuer, the lender - the borrower, the seller - the buyer, exporter - importer and others. Financial risks are an integral part of business activity in the market.

Key words: risk management, financial risk, financial stability, financial risk management.

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Қаржылық тәуекелдерді басқару стратегиясы

Қазіргі кезеңде тәуекелдерді басқару және талдаудың арнайы әдістерінсіз қаржылық қызметті жүргізу мүмкін емес. Қаржылық тәуекелдерді басқару қызметі бүгінгі таңда кәсіпкерлік ұйымдардың қаржылық тұрақтылығын қамтамасыз етудің ең басты шарттарының бірі болып табылады. Кәсіопорынның қаржылық тәуекелдерін басқару – қаржылық менеджменттің арнайы саласын білдіреді. Ол өз ретінде, соңғы кездері «тәуекел – менеджмент» деп аталатын ерекше сала қызметінен орын алады.

Қаржылық тәуекел – қаржылық ресурстарды (ақшалай құралдар) жоғалту мүмкіндігімен байланысты тәуекел болып табылады. Қаржылық тәуекелдер ақша айналысының және әртүрлі ақшалай қатынастардың пайда болуымен байланысты. Яғни, инвестор — эмитент, несие алушы — несие беруші, сатушы — алушы, экспортёр — импортёр және т.б. Қаржылық тәуекелдер нарық жағдайында кәсіпкерлік қызметтің ең маңызды құрамдас бөлігі болып табылады.

Түйін сөздер: тәуекелдерді басқару, қаржылық тәуекел, қаржылық тұрақтылық, қаржылық тәуекел менеджмент.

Садыханова Д.А.

Стратегии управления финансовыми рисками

Осуществление финансовой деятельности в современных условиях невозможно без специальных методов анализа и управления рисками. Функция управления финансовыми рисками приобретает все большую роль и становится одним из важнейших условий обеспечения финансовой стабильности предпринимательских организаций. Управление финансовыми рисками фирмы представляет собой специфическую сферу финансового менеджмента, которая за рубежом в последние годы выделилась в особую сферу деятельности — «риск-менеджмент».

Финансовый риск — риск, связанный с вероятностью потерь финансовых ресурсов (денежных средств). Финансовые риски возникли одновременно с появлением денежного обращения и с возникновением различного рода денежных отношений: инвестор — эмитент, кредитор — заёмщик, продавец — покупатель, экспортёр — импортёр и других. Финансовые риски являются неотъемлемой составляющей предпринимательской деятельности в условиях рынка.

Ключевые слова: управление рисками, финансовые риски, финансовая стабильность, финансовый риск менеджмент.

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FINANCIAL RISK MANAGEMENT STRATEGIES

Financial risks – these are the main risks of the bank. Operations of the bank are one big risk that cannot be avoided, but they can be managed.

Financial risks occur from the making process of getting monetary assets from customers and counterparties in contribution, in the form of loan or deposit funds in the account and continues to, forcing the Bank constantly balance their obligations and requirements. A modern bank - it is a complex, which is constantly working in risky environments and survives only because it is able to manage their financial risks. Financial risks are closely related to each other because of the interconnectedness of economic processes taking place in the bank. In addition, the main financial risks – deposit risk, credit risk, interest rate risk, investment risk and currency risk – dual in its content. Each of them is divided into endogenous (internal) and exogenous (external) risk. This is because each listed type of risk depends, firstly, against unfavorable changes in market conditions and, secondly, from internal errors and mistakes within the structure of the bank during the decision-making on a given issue regarding the use of bank instruments.

Banks in their activity use a large set of instrument to manage their liabilities and assets. Accordingly, using of each instrument is connected to a specific risk. These banks transactions as leasing, factoring, clearing, trading like futures and options, have nothing common with each other, but at the same time, the risks associated with the use of these tools can be managed in a unified approach, which can be present in a simplified form as follows: banks should have experience of using of each instrument, including specialists - professionals who are responsible for using a particular instrument, the measures of restrictions the use of instrument and methods to control for operations; even in the most profitable using a single instrument necessary to determine the maximum possible amount of investment (risk) in one instrument, and possibly the maximum amount of damages to the instrument for the period; banks should also conduct market analysis and try to offer customers the tools that from the point of view of the bank's, necessary to enterprises for their activities, i.e. to manage not only their risk, but the risk of their customers, which is quite wise, as successfully working customers – one of the foundations of the health of the bank; banks

should minimize the use of all types of instruments for speculative and risky transactions, as adventurous bank management leads in most cases only to damages; banks should strictly limit trading operations, to determine the highest level of open interest for each instrument.

Thus, the basic rule of banking risk management could read as follows: all operations of the bank, starting with engagement and ending placements, should be diversified as much as possible. The risk would be less than the greater will be the sources of funding and placement of bank investment. The purpose of diversification – is the ability for the bank as much as possible to be less dependent on specific risk factors. The most stable are the banks that are least are specialized in one particular factor of their activities. The essence of market economy is in constant adaptation to changing market conditions, market conditions and economic situations, and if bank is less dependent on the particular group of factors, it is more stable and viable. The diversifications of the bank's operations are: diversification of the bank's clients, obtained funds, the bank territories, used tools, active transactions, loan portfolio by customer, and portfolio of bank investments.

Often, banks are forced to stop their activities with a positive balance when they cannot find sources of financing their activities. Precisely when the bank cannot raise sufficient resources for its operations or for their expansion in the market it undergoes a crisis. The fact that significant liabilities of the bank required a long time and therefore always use the short-term and costly interbank market is risky. Small banks generally face problems of financing their operations, so they are forced to merge with equal-sized banks or join the larger banks as affiliates. Other banks (mostly average) looking for a way to expand the deposit base by opening branches and conduct fierce competition for depositors and customers. Another way to solve the problem of financing could be issue long-term bonds.

Attracting bond is a type of passive operations that are worth considering in more detail. With passive operations bank generates its own resources for the implementation of active operations. The passive operations of the banks are actually funded loans, deposit operations, interbank credits and deductions from income to raise the charter capital. Only the last type of operation generates own funds of banks. Interbank loans often needed to form a short-term liquidity and deposit transactions are the main source of resources for active banking operations. The risks of passive operations primarily consist in the possible difficulties with resource provision of active operations. Most often, such risk arises from the banks which focus on the deposit base of several specific investors or groups of companies. Risks of deposit operations mean a possible failure to resource provision of active operations. Most often, this type of risk associated with the primary deposit role of a bank's customer or group of «sister» companies. Long-term claim deposits can lead to losses, which may be affected by factors of political and economic nature as well as information the emergence of the bank crisis.

In order to prevent the risk of banks should:

Keep a balance between passive and active deposit operations;

To monitor the quality, liquidity and volume of the securities in the investment portfolio of the bank to increase the liquidity of the bank;

Diversify the deposit portfolio of clients in different industries, industry groups, and to a lot of different clients;

To expand the branch network to diversify the bank loan operations areas;

To determine the optimal value of own funds and risk assets;

To ensure accuracy in the performance assumed obligations;

To delay the issuance of loans and credit lines, if the bank is not sure to attract an adequate amount of liabilities for loan operations.

An important point in the management of deposit risks is an analysis of deposit banking market, which gives information about the terms of attracting deposits by other banks. The bank will be more competitive if it can offer: better terms of deposits, new financial products and additional services in the form of consultations on management of client risk, a higher level of service, privacy deposits.

Liquidity risk arises when bank experiences a shortage of liquid funds to meet short-term obligations, even if the bank has sufficient assets that can be realized. It occurs as derived from other types of risks. The level of liquidity is the extent of financing the major illiquid assets by major liabilities, which are stable. Discrepancy between the timing of liabilities and assets is an immediate source of liquidity risk and is the inability to raise the necessary liabilities in time to finance existing investments. In world practice, developed several liquidity management approaches. The basic approach of liquidity management is distribution of resources among the various groups of assets. The distribution of resources is performed by two major schemes – the scheme of «general fund» and the scheme «banks in the bank.»

At the heart of the scheme, «the general fund» is the idea of the distribution of the total amount of liabilities (general fund) between different types of assets, regardless of the source of the formation resources. To provide specific active operation under this scheme not taken into account income sources: demand deposits or term deposits. This scheme not takes into account the different requirements of liquidity to the existing structure of the deposits. Scheme of assets management «banks in the Bank» envisages formation of assets, depending not only on the total amount, but also on the structure of the involved resources. Thus, a large share of funds raised through demand deposits shall be placed in short-term and highly liquid assets and the share of time deposits - in loans and long-term securities, the bank's own funds may be used for investments in real estate (offices of the bank), and long-term assets. This scheme defines a number of «centers of liquidity - profitability,» which are used to place the funds raised from various sources. These centers are called «bank within a bank.» The bank as if there are «Bank of demand deposits», «Bank of time deposits», «Bank of capital.» Breaking the bank liabilities on various «banks» in terms of liquidity and profitability, the bank shall determine how their placement of each «bank» shall be separate from other «banks.» Since demand deposits require the highest coverage of liquid assets, a significant portion of funds from the «bank demand deposits» will be sent to the primary provisions (for example, 1% more than the set of the required reserves, which must be kept at the central bank). The rest of the demand deposits would go mainly to the secondary reserves, and the greatest part - in loans, more precisely in the short term. Funds of «bank of time deposits» will be distributed differently. A large proportion of this will go to the creation of assets in the form of medium - and long-term loans and investments in long-term securities.

The liquidity crisis begins, as a rule, with the problems of banking risk management (mainly credit and interest rate) and of delay in payment for the obligations of the bank, after which as a result of rumors the bank gets the reputation of insolvent institutions. Then begins the slow process of customer churn, the closing lines of credit, withdrawal of deposits, exacerbating liquidity problems and it leads to the actual bankruptcy. In order to avoid a liquidity crisis, it is necessary to reduce the risk management of credit and interest rate risks. Further it is important to ensure constant availability of the necessary assets in liquid form, which can be achieved by using several approaches. The most popular approach to liquidity management is the approach based on strict adherence to individually maintain a certain level of the bank's assets in the form of excess liquidity, that is in the form of cash, instantly ready to pay on demand, which can ensure the timely implementation of short-term bank liabilities on time payments and payments of bank loans and deposits. However, this approach is not currently considered to be relevant, because it diverts bank funds from active operations, and hence its application reduces ultimate bank profits.

The second approach to maintain liquidity is to create a large network of branches that accumulate deposits of legal entities and individuals. In the case of the serious condition with liquidity bank can always attract him the necessary funds by the advertising company or a slight increase in interest rates on deposits; third approach to ensure an acceptable level of liquidity is to create the optimal structure of the liquidity of bank liabilities, corresponding to the level of liquidity of the asset structure, which reduces the dependence of the bank on unsustainable sources. The last approach to managing liquidity - is creation of reserve sources of funding to unimpeded operative raise funds through the interbank market or the stock market.

Further, the management of liquidity needs rigid planning, control and accounting of off-balance sheet liabilities, guarantees, lines of credit, overdraft agreements on customer accounts, etc. An important measure in this direction is the control of confidential information about the state of bank among the staff and timely information in the event of adverse situations in the bank. The great value has an entry of bank into the international markets; in order the same institution could have higher liquidity in the international market, than on the domestic. Except the above-stated there are methods of complex regulation of liquidity.

So, in the performance short-term objectives of bank liquidity it is possible to use the model based on the following methods: management of a position on correspondent accounts for ensuring payments of clients and payments according to bank obligations; ensuring payments of bank on investments in financial instruments, on economic contracts, a reinforcement of branches, exchange offices; determination amount of funds necessary for attraction or possible location overnight loans. In the solution medium-term objectives of liquidity it is possible to use the model based on the following methods: constant maintenance of the liquidity structure of the consolidated balance sheet of the bank with the forecasts of dynamics of liabilities and the priorities of operations and services; definition of percentage policy on the basis of forecasting of dynamics of interest rates; calculation of possible long-

term investments of bank and investments in further development of bank.

Interest rate risk - is the risk of losses by banks, credit institutions, investment institutions as a result of exceeding the interest rates paid on borrowed funds of over rates on placed assets. Management of assets and liabilities as the concept used in banking, first of all, consists in regulation of levels of interest rates for assets and liabilities according to changes of market conditions. In analyzing of interest rate risk it is necessary foresee how will change the size of assets and obligations sensitive to interest rates with change of this rates.

For the analysis of the risk associated with interest rate, important are the following: the risk of transactions in different types of interest rates; assessment of the level of bank capital in monetary terms; analysis of the structure of interest rates by maturity, i.e. how change interest rates at approach of a maturity date of debts and how it correlates with market expectations about changes in the level of interest rates in the future; analysis of the length and duration of repayment. That is, is it possible to measure the risk associated with interest-rate, during the period of validity and period of repayment of borrowed funds. The bank isn't able to regulate such risk if it can't even approximately measure it; risks connected with alternative opportunities of investment decisions.

Interest rates are divided into fixed and floating. The risk of fixed interest rates consists in possibility of unfavorable for the bank differences between loans granted at fixed interest rates and deposits attracted to floating rates or vice versa.

At the present stage in order to minimize risk of changes in interest rates are increasingly using variable interest rates, which in the long-term lending by almost completely eliminates the issue of interest rate risk. In fact, floating mechanism allows interest rate on placed assets to vary depending on changes in the current market rate, thus allowing the bank to avoid possible losses.

To estimate the interest rate risk in the total portfolio of the bank is important to use a standard methodology for analysis of interest rate risk that is comparable to other methods of banking institutions. There are the following indicators of interest rate risk: absolute interest margin (M) - the difference between total interest income of bank on active operations (II) and the total interest expense for passive operations (IE):

$$M = II - IE \quad (1)$$

Interest rate spread (relative interest margin) - the difference between the weighted average of the interest rate on the income assets (R_A) and the interest rate on liabilities, requiring bank expenses (R_L):

$$S = S_A - S_{L,} \quad (2)$$

where S_A = II /A x 100%, A – average annual income-generating assets;

S_L = IE /L x 100%, L – average annual value of liabilities that require interest expense.

Elasticity of the spread - the ratio of increase in the interest rate on income-generating assets to the increase in the interest rate on liabilities, requiring interest expense:

$$S = S_A / S_A \; S_L / S_{L,} \quad (3)$$

if the value of S <1, the spread - elastic,
if S > 1, the spread – inelastic.

Gap. The notion of Gap (G) has in mind the definition of the resources of the bank, which is exposed to interest rate risk. The task of the bank in applying the concept of Gap is to bring this gap to the minimum. The value of G is determined by the following formula:

$$G = a - l = Lf - Af, \quad (4)$$

where a and l - the value of assets and liabilities with floating rate, Af and Lf - the value of assets and liabilities with fixed rates.

Determining the cost of bank capital in monetary terms include: cash flow forecasting; analysis of risks arising from cash flow; planning of liquidity of ensuring financial liabilities according to funding sources, amounts, a mismatch in the amount of cash flows and interest rates; cost of providing loans should include also the cost of interest payments due to be paid in the future. If the duration of the assets exceeds the duration of liabilities, it is considered that the current value of the assets is more sensitive to interest rates than a liability. Therefore we can say that in the case of rising interest rates (lowering them) assets will decrease (increase) is more significant than the increase (decrease) in liabilities. In the case where the bank has the difference between the duration of assets and liabilities, repayment duration, it can reduce the level of risk associated with interest rates making transactions to hedge against risk, making transactions to hedge against risk, such as FRA or futures to change the length of repayment profile of loans and reduce the level of risk associated with interest rates. However, in this case, the bank will also carry a risk, but it is there will be other kinds – the risk of tool, trading risk, credit risk.

Therefore, at each stage of bank's activities in the field of interest rate management bank bears the risk. If the yield curve is not stable, the level of the index of the duration of repayment will not be a precise measure of interest rate risk, that is, the change of the yield curve brings another interest rate risk, which cannot be accurately determined by the index of the duration of repayment. This type of risk is usually not very large, but even it should be taken into account by the bank with the recalculation duration of repayment whenever the shapes of the yield curve. It should be borne in mind that the duration of repayment can vary over time even in the absence of changes in interest rates. This is due to the influence of other types of risk, independent of direct changes in interest rates, such as reinvestment risk and the risk of changes in value.

Interest rate risk depends on: changes in the portfolio of active operations and ratios of loans and investments with fixed and floating rate, the dynamics of their market prices; changes in passive portfolio transactions and relationships in deposits with fixed and floating rates; changes in the debt to equity ratio; the dynamics of changes in interest rates. Interest rate risk consists in the two main problems – management of assets and liabilities operations of the bank. Management of active operations correlated with the general level of liquidity of the bank and its customers, the level of competition and presents the current state of the market. Management of passive operations depend on the number of customers (in the head office and branches), the level of balances on current accounts, level of supply of deposits in the market, the bank's reputation and possibly advertising campaign to attract customers and deposits.

There are several basic approaches to the management of interest rate risk. First, the bank must always keep a positive gap between the interest income from the assets and interest expense on liabilities, in order to have a margin as the main source of bank profits; secondly, the increase in the difference (spread) between the average interest rate on assets and average interest rate on liabilities reduces the level of interest rate risk. The bank must purchase capital as cheaply as possible (to pay perhaps a lower interest rate), and then sell the assets at progressive rates (to get higher out of a possible interest rate); third imbalance of assets and liabilities with fixed and floating interest rates (Gap) increases the risk of the bank by an amount exceeding the amount of assets with variable interest rates on fixed-rate liabilities, and vice versa, and, fourth, reducing the risk of loss of interest can and should be limited by the methods of analysis of trends in the dynamics of interest rates, turnover of proven tools to diversify the bank's operations in various capital markets.

The following tools are applied to decrease in interest rates risks: insurance of interest rates risk with transfer of risk of insurance company; granting loans with a floating interest rate. It allows bank to follow market condition of interest rates and to avoid losses in case of increase of their level. FRA – is forward rate agreement, which provides the buyer protection against adverse interest rate fluctuations by fixing the interest rate for a specified period. Thus there is no real issuance of credit, but there is a payment of a difference of interest rates of one of the parties. If the agreed rates lower than the actual market rate at the date of payment, the seller compensates the buyer the amount of such excess. If the agreed rates greater than the actual day of payment, the seller compensates the buyer excess amount. Using FRA reduced the risks associated with changes in interest rates. The bank and the customer enter into an agreement on: the level of interest rates, period of time, conditions, loan or deposit. Thus there is a difference between paying interest, but not the loan amount; the sum does not change, the only change is the difference in interest rates; agreement for 3,6,9 or 12 months, or more; interest rate contracts are «over-the-counter»; data about the agreement are not reflected in the balance sheet; interest on loans based on LIBOR; execution possible in all major currencies. The main advantages of this approach is the following: the costs or revenues on interest rates are determined in such a way as that excluded stability associated with forecasting of the market; the agreement possible at any time for any amount up to a year or more, the agreement may be adjusted according to customer specifications. The disadvantage is that the buyer must pay the difference, if interest rates go down. Here FRA can be used if: conditions for future loan are known for sure, the buyer is aware of the risks of changes in interest rates on its interest currency.

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