LECTURE No.3

GENERAL ISSUES: DEFINITION OF BANKING RISKS, IMPORTANCE OF MANAGING THE BANKING RISKS

The financial market is extremely volatile due to the influence of various factors, objective or subjective; the credit institutions being aware of the fact that maximising profit implies a permanent incur of risk.

Most definitions of the **risk and risk management** are focused on the classical function of money, that of intermediary in the field of financial risks through their division. From this point of view it is usually regarded the problem of **unexpected losses in bank assets, losses caused by market, credit or liquidity risks**.

The risk may have a considerable impact over the bank or financial institution, both an impact consisting in the incurred direct losses, and an impact consisting in the effects over the customers, personnel, business partners and even over the bank authority.

In general, **the risk represents the probability of occurrence of an event that will produce serious consequences for the subject**. In the same context, it should be mentioned that for the risk exposure to be actual value of all losses or supplementary expenses the financial institution would or could cover. According to this definition, the risk exposure may be real or potential.

It is important to know that the risk is generated by a large number of operations and procedures. Therefore, in the financial field at least, the risk must be considered as a mistune or a complex of risks, usually independent through common targets or the fact that the occurrence of one risk may cause a chain occurrence of other risks. As a consequence, these operations and procedures permanently generate a risk exposure.

Banking risks are those risks the banks are confronted with in their current operations, and not only the risks specific to the classic banking activity.

It is obviously that a notable **banking strategy** must include both programs and procedures of managing banking risks; regarding the minimisation of the probability the risks would occur the potential exposure of the bank. The three objectives of the bank management are maximising profitability, minimising the risk exposure and observing the banking regulations. None of them has a major influence, as a task of the bank management consists of in establishing the central objective for each period.

Banks are also subject to all the risks that their customers face, risks as diverse as crop failure, environmental damage claims or the failure of a new product developed at a high cost.

The most significant and persistent risk faced by banks is **credit risk –** the risk that counterparts will be unable to meet their obligations. Credit risk arises from lending to individuals, companies, banks and governments, from entering into market transactions which give rise to a receipt on maturity, from stock lending and from transactions with supplies.

The **main types of risks involved in the banking** activity are: **financial risks, delivery risks, and environmental risks.**

Financial risk arise**s** from any business transaction undertaken by a bank, which is exposed to potential loss. The main financial risks are the following:

Credit risk
Interest rate risk
Liquidity risk
Foreign exchange risk
Capital risk

Credit risk may be defined as the risk that a counterparty of a financial transaction will fail to perform according to the term and conditions of the contract, thus causing the asset holder to suffer loss. This failure may be the result of bankruptcy, a temporary change in market conditions, or other factors adversely affecting the borrower's ability to pay.

The most obvious example of a credit risk is the risk that a customer will fail to repay a loan. However, it is important to appreciate that credit exposure extends to a large variety of bank's activities including the extensions of commitments and guarantees, acceptances, trade finance transactions, placements and the range of capital markets instruments activity such as foreign exchange, futures, swaps, bonds, options, equities and bullion.

Credit risk may also arise from off balance sheet transactions. A bank may guarantee a client's performance under a contract in return for a fee – giving rise to the risk that the bank may be called upon to fulfil its guarantee at some later date because its client has failed to meet its contractual obligations. This gives rise to a counterclaim against the guaranteed party for the money paid out under the guarantee.

Credit risk may take the form of delivery or settlement risk. Where a bank buys securities from a third party or transfers securities under a repurchase agreement, it faces a risk that the counterpart will be unable to deliver the securities on the due date leaving the bank exposed to the possibility that it will not be able to replace the securities at the same price.

Interest rate risk

A fundamental banking objective is to borrow funds at one rate and to lend them at higher rate. Interest rate risk, sometimes called funding risk, involves the effect in the bank profitability of changes on the market interest rates.

Interest rate risk refers to the financial risks caused by the interest rate fluctuations that affect both the profit obtained by the client and the indebtedness degree to the bank. A major increase of the interest rate may determine a financial pressure for the client's activity, which will not be able to repay the amounts due.

The main factors that increase the interest rate risk are: volatility of interest rates; and mismatches between the interests "reset" dates on assets and liabilities.

The main factors that mitigate interest rate risk are: established limits on mismatch position; hedging with financial futures or other instruments; management monitoring exposure.

Liquidity risk

It is the risk that occurs when the bank will not be able to meet its cash or payment obligations as they fall due. The risk arises because cash flows on assets and liabilities do not match. Due to the size and spread of the resources, the bank is often called to borrow "short" and lend "long". This gives rise to the risk that depositors may seek to withdraw their funds and the bank may not be able to effect repayment except by raising additional Deposits at a higher cost, or by a forced sale of assets, perhaps at a loss.

Thus, an important aspect of the banking business is the fact that the depositors may withdraw their money whenever they want, for deposits at sight, and at the established term, for deposits at term. If a bank can not meet these obligations, the customers' trust in the bank will diminish, even in the whole banking system. The customers will not wish anymore to deposit their money in banks, and there may appear massive withdrawals of funds, with a negative effect over the national economy.

The main factors that increase the interest rate risk are: erosion of confidence in the bank, in the market place because of earnings difficulties or other reasons; dependence on one market or a few counterparties for deposits; unstable financial markets; extensive "short" borrowing or "long" lending.

This is why it is necessary to forecast exactly the changes that may occur in the level and structure of the interest rate, this being correlated with the evolution of macroeconomic indicators. For the current period and for the near future, mainly the banks' clients undertake the interest rate risk related to national currency activities. This is caused by the fact that the credit and deposit interest rate modifies continuously because of the fluctuations of the market; the exception is given by the deposit certificates that have a fixed interest. We must always take into consideration the analysis of the structure of the deposits and investments, as well as their evolution.

It is desired to minimise the interest rate risk according to the relationship between the interest caring assets and liabilities. The value of the ratio must be as close to 1 as possible.

The main factors that mitigate interest rate risk are: maintenance of a high level of liquid assets (e.g. cash, money at call, marketable securities); standby credit facilities with other institutions; availability of related party funding; a lender at last resort to reassure depositors (e.g. Government deposit insurance); maintenance of a closely matched maturity structure between assets and liabilities.

Foreign exchange risk is related to interest rate risk and liquidity risk. It arises from a mismatch: this time of currency and assets and liabilities.

Thus, the currency may fluctuate in an unexpected direction or higher than it has been anticipated. This type of risk is determined by the exchange operation, that affects the situation of the clients who obtain a credit in foreign currency and do not perform exports, or those revenues from exports do not cover the debt contracted. Transactions affected include both on balance sheet (e.g. loans, deposits), and off-balance sheet (e.g. forward currency contracts) items. Foreign exchange risk is also called currency risk.

The main factors that increase currency risk is volatility of exchange rates; significant open currency position.

The main factors that mitigate currency risk are: position limits; management monitoring of exposure; use of hedging techniques.

In Romania, the supervision of the foreign exchange risk is accomplished:

a) by banks;

b) by the National Bank of Romania, on the basis of the foreign exchange position indicators reported by banks.

With a view to limiting the foreign exchange risk the banks have the following obligations:

a) to have a record system which permits permanently both the immediate registration of the operations in foreign exchange and the calculation of their results, as well as the determination of the adjusted individual foreign exchange positions and the total foreign exchange position;

b) to have a supervision and administration system of the foreign exchange risk on the basis of norms and internal procedures approved of by the bank's board of directors; c) to have a permanent control system for checking the observation of the internal procedures, necessary with a view to accomplishing the precedent orders;

d) to designate a manager who ensures the permanent co-ordination of the bank's foreign exchange activity.

Delivery risks include the following risks: operational, technological, new product, and strategic risk.

Operational risk, sometimes called *burden risk*, is the ability of the bank to deliver its financial services in a profitable manner. Both the ability to deliver such services and to control the overhead associated with them are important elements.

Technological risk refers to the risk that a delivery system may become inefficient because of new delivery systems.

New-product risk is the danger associated with the introduction of new products and services. Lower than anticipated demand, higher than anticipated cost, the lack of management talents in new markets can lead to severe problems with new products.

Strategic risk refers to the ability of the bank to select geographic and product areas that will be profitable for the bank in a complex future environment.

The environmental risks include the following risks: defalcation, economic, competitive, regulatory risk.

Defalcation risk is the risk of theft or fraud by bank officers or employees.

It must be carefully guarded against to avoid substantial losses.

Economic risks are associated with national and regional economic factors that can affect the bank performance.

Competitive risk arises because more and more financial and non-financial firms can offer most bank products and services.

Regulatory risk involves living with some rules that place a bank at competitive disadvantage and ever-present danger that legislators and regulators will change the rules in an unfavourable manner to the bank.

Other British authors divide the main risks in two big categories of risks, such as: product market risks, and capital market risk.

Strategy Risk (business risk)

It is the risk that all the business line will succumb because of the competition or obsolescence. One such example may be represented by the relative disappearance of the traditional market with high credits with low risk for companies, these being replaced by commercial papers.

Another example of strategy risk is that in which a bank is not ready or not able to become competitive in a new activity. For example, in the activity of cards issuance, some banks postponed this process and they could not earn a competitive advantage in this field. This conservatory attitude of waiting for the market itself to develop represents a risk.

Bank Settlement Risk

The financial institutions, as profit centres, function in compliance with licenses that may be revoked and this may lead to the loss of important investments. Thus in USA in the past decades banks nationalisation has taken place. In Romania, we can mention the license withdrawal from some banks that although were non-operational, engaged important investments for headquarters and equipment in the moment of withdrawal. Also, another settlement risk may be the withdrawal of dealer license from the Romanian banking market of some Romanian and foreign banks.

The settlement risk can be met when a bank specialised in one field becomes a universal bank, and thus it is going to compete with the other banks that act in the same domains.

In this category there can be found an additional risk that is the possibility of the regulatory authority to change the operating policies. One example here is the Romanian Stock Exchange modification of the calculation of the mutual funds assets, regulation that led to the collapse of some institutions.

Regulatory authorities may decide who should stay and who should leave the financial market, through the capital adequacy requirements. Thus the National Bank of Romania, by increasing the level of the subscribed social capital.

Merchandise Risk

The merchandise prices may affect banks, as well as other creditors, unforeseen sometimes, having general impact over the savings and debtors.

For example, the rising of the energy price may influence the inflation, contributing to the increase of the financial rates based on a fixed interest rate. Also the increase of the oil price may lead to different results in some companies.

Human Resources Risk

This represents the subtlest type of risk, very difficult to be measured, resulting from the personnel policy: recruitment, training, motivation and maintenance of specialists.

If one specialist leaves, the whole activity or only one working system is compromised. The protection against this risk implies the payment of more employees in order to insure the knowledge and experience of the leaving employee.

A similar risk is the wrong motivation of the employees. Under certain circumstances it may have significant results. It refers to the lack of stimulants or their wrong application.

Legal Risk

We encounter two sides of such risks:

a) the creditors' responsibility in case the debtor's claim that the bankruptcy was caused by the fact that the bank had promised it would not withdraw the credit or that it would grant supplementary credits;

b) Litigation related to toxic materials deposited on the dispossessed field.

These are unforeseen measures difficult to be estimated, which must be taken into consideration by the financial institutions, as they can reach high values.

Generally speaking, the capital markets and their risks affect all the companies, especially the financial institutions, where it is hard to make a clear differentiation between the product market and the capital market.

For example, the interest rate risk for fixed rate credits is a capital market risk; at the same time the fixed rate credit risk may determine the bankruptcy of a poor debtor, and thus, the interest rate risk becomes a credit risk that is actually a product market risk.

The banks supply financial products and services to industry and consumers. The financial services involve their own risks, specific to the capital market on which they function. From the capital market point of view there exist the following types of risk:

Interest rate risk

Liquidity risk

Currency risk

Discount risk

Basic risk

Capital Market

Risk

Discount Risk

This is a particular type of error risk, which involves the bank's competitors.

It refers to the money transfer between national and international banks.

This risk is carefully handled by using sophisticated technology for payment pursuit. Thus, only one payment is performed at the end of the day, instead of numerous payments from individual transactions.

Basic Risk

It is a currency risk variation. In order to protect against the interest rate transactions with various basic assets can be used, being pursued mainly the existing and predictable relationship between them. The FUTURES contracts may be used as hedging instruments.

Obviously, the financial institutions, the commercial banks, in their financial service rendering activity, administrate their own risks, but they may also transfer the risk through the hedging transactions. If the bank can not avoid the risk, its burden, and respectively, its costs are both administrated and transferred.

A rapid growth of the risk is noticed both on the product market and on the capital market in the financial services, and at the same time the increase in the preoccupation for protection against the risk. The derivatives represent thus, ways to avoid the risks on the capital market. The swaps, options and futures contracts are instruments used for risk transfer.

Other types of risks are:

The fraud risk is defined as a deception or an act either by stating what is false or by suppression of the truth in order to deceive another, gain an advantage over another. The fraud does not represent a risk only for a bank, but also for its depositors that have entrusted their capital.

The country risk is defined as the non-reimbursement act generated by an insolvency determined by the debtor's financial position and not by the deterioration of his financial situation. It does not represent a credit risk because the debtor's insolvency does not appear.

The market risk refers to the unfavourable variations of the market value of the positions during the minimum period of time needed to the settlement of the positions.

The market risk appears due to the fact that the prices of these financial values are determined on the market, and they are modified.

Managing risks

At the present time, there is no generally accepted system for risk management. By their nature, commercial banks often obtain their profit by performing their activity in certain segments of the market. Bank's capacity to ensure against excessive risk depends on:

• capital size;

• its bank management quality;

• its technical expertise;

• Personnel experience in the corresponding market segment.

The banks must have their own system to monitor and control the risk.

Generally, bank's prudential measures against risk may be the following:

• Bank management must be aware of the risks resulting from the bank's activity, and must be able to measure, monitor and control these types of risks;

• Bank must have clear policies, as well as risk measurement and control procedures;

• Bank management must establish the internal limits of risk;

• Periodical reports must be concluded, analysed and controlled by the bank's internal control and its censors.

After the uncertainties caused by the 1975 crisis, the necessity to elaborate some rules for the bank administration and the consolidation of the clients' security appeared. These rules are expressed through the "Cooke Ratios".

They refer to the banks' liquidity and solvency.

In many states worldwide, the minimum compulsory reserves represent an instrument of the monetary policy. The Central Bank supervises the liquidity indexes that establish the banks' general rating. These indexes are calculated based on the banks' financial reports presented periodically to the Central Bank or in this case of a control.

Solvency – represents the capacity of one natural or legal person, or bank to face the commitments taking into account the resources constituting the patrimony or assets.

Solvency is interesting when granting a credit, allowing the identification of
possible non-repayment on the due date. For banks, solvency represents the capacity to cover losses for the credits granted without jeopardising the deposits' repayment.

The major role of the supervision authority is that to prevent the systemic risk by promoting efficient bank supervision which may ensure the accomplishment of the stability and viability of the banking system.

For this purpose, in Romania, it was necessary to implement the Banking Rating System and the Early Warning System. This system represents an efficient instrument for the evaluation of the banking institutions in order to identify those banks that are inefficient financially and operationally. The rating system is based on the evaluation of the following six components: capital adequacy; asset quality; management; earnings; liquidity. Each component was evaluated on a scale of values from 1 to 5, taking into consideration the bank performance. Thus, 1 represents the highest level and 5 the lowest.

In Romania, in order to determine the necessary specific credit risk provisions related to one credit or investment, under the NBR Regulation, it is necessary to perform the following steps:

1 – assign credits or investments in the corresponding credit risk categories;

2 – determine the basis of calculation for the specific credit risk provision;

3 – apply the provision co-efficient over the basis of the calculation obtained.

Banks shall proceed to remove to off-balance sheet all of the sums related to a credit or investment in the following cases:

1 – no less than those sums registering a debt service of more than 360 days;

2 – those in which the executor formula has been invested:

credit contract, as well as contracts of guarantee as the case may be;

a definitive legal decision which orders against the credit contract as well as against the contract of guarantee as the case may be, or against the contract of investment;

3 – where the procedure of executor style of patrimony in the case of individuals has been initiated;

4 – where the procedure of judicial reorganisation or the bankruptcy procedure against the debtor has been initiated.