SYNTHETIC ANALYSIS OF CREDIT RISK - PREVENTION AND MANAGEMENT

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Rezumat
The uncertainty of the economic and social environment in which a company operates represents the essential feature from which are discharged all types of hazards. Protection against risks, mitigation of their effects that are measured by the losses generated are issues which led to the continuous improvement of the measure of prevention and management of risk.

The article puts in to highlight a number of aspects related to the prevention and management of credit risk, two key actions on the conduct of the business of a firm, but in carrying out the activities. In the presentation of the article we focused on a synthetic analysis of the sources of information used in credit risk analysis based on information from sources both within the company and outside of it.

The importance of prevention and management of credit consists in being able to forecast the possible production of the event of credit risk and of taking in time the necessary decisions in order to reduce this and some adverse consequences. The essence of credit risk can be expressed by the possibility of the quantification of likelihood appearance of this risk with consequences which have a direct effect on the activity of banks or financial institutions.

Cuvinte cheie: credit risk, prevention, transfer, political risk, commercial risk

Clasificare JEL : E5 - Monetary Policy, Central Banking, and the Supply of Money and Credit

1. Introducere
The risk is and will always be one of the main components of an activity with effects often negative, effects which are reflected in the results of any type of activity; any activity is subject to risks.

Prevention and risk management should be an integral part of running a management on a company or a bank; it certainly represents a tool whose usefulness is fully realized, both in theory and in practice. Credit risk can be seen as the risk of insolvency of the debtor, default risk and is the probability of not collecting at maturity date the cash flow determined by the credit.

It is very easy for a company to become unable to repay a loan. This may be due mainly to the firm's internal factors, such as:
- quality of management - is difficult to assess by the bank, so it requires a third-party relationships on company management and personnel management relations;
- the inability of the company to adapt to the new market conditions, or in patents, inventions, innovations;
- time to collect claims from beneficiaries can cause bottlenecks and hence financial distortions to the production and activity of enterprises.

Credit analysis is the assessment of credit risk. Credit risk must be determined by what the bank expects to make from lending. The credit process bears potential gains; they can be grouped into two categories: direct and indirect gains. (Roxin, 1997)

Information about the financial structure is useful in order to anticipate the needs of credit and how the results and future cash flows will be distributed to those who have an interest in the company. They are also useful for anticipating the company’s chances to receive funding in the future. Creditors look at information provided by financial statements from another perspective than managers or investors. Their interest is directed towards ensuring the recovery of loans and extending them. Also, creditors are looking for information on ensuring their credits. But the financial position is not reflected for all creditors by the same information. Commercial creditors look at the financial position differently than the financial creditors. The creditors who have an interest in the company’s activity have completely different approach on the financial position of an entity (financial creditors that make a long-term investment in the entity). (Samara, 2009)
2. Sources of information used in credit risk analysis

In assessing the financial situation and warranty of the client, the bank relies on external information, mainly from the client. The bank has to investigate the amount needed for this purpose, what guarantees are offered, what options for repayment the client has etc. In assessing the loan application, the analyst should analyze the client also in the context of the global economy (for loans in small amounts) or in the national or international economy (for loans in amounts large or very large). (Niţu, 2000)

Credit risk analysis must be based on financial analysis which in turn is based on information provided by the customer of the following accounting documents: balance sheet, profit and loss account, trial balance, cash-flow situation. Based on financial analysis of a business a bank can prevent or identify and manage credit risk involving an analysis of customer performance risk, liquidity risk and risk of capital structure and financing.

In what concerns the credit decision made by the bank, it must show a careful analysis of the risks involved and establish their mitigation measures. Sources of information for assessing these risks can be grouped into two categories: internal sources that provide information within the firm and external sources which provide information from the external environment of the company.

Internal sources are based on:
- data provided by the company - the data that the credit analyst has to analyze and finally select the data that will allow: the repayment ability, the ability to cope with any adverse situations that will occur during the duration of the loan, repayment method in the event of bankruptcy before loan maturity.
- data from businesses carried by the company in correlation with the economic and financial results - they must be critically analyzed by the bank as they come from a subjective source;
- data regarding the client’s position on the market where it carries its activity;
- concluded financial statements and audit report;
- financial projections based on the crediting period;
- state of all financial commitments (banking, leasing, factoring etc.);
- the investment plan if the company is developing an investment project, together with the financing plan.

The external sources from which information necessary for the credit risk analysis are:
- information from internal bank sources: internal reports, internal base of risk, sectoral studies, products and services given to the client, turnover, etc;
- Central Banking Credit and Bureau Credit;
- commercial information sources;
- other sources: opinions and references of suppliers, customers, media, Trade Register Office to check that the company exists, website of the Ministry of Finance to validate the financial statements submitted by the company to the bank where it applied for the loan.

Summarizing the sources of information that banks have available we mention: (Niţu, 2000)
- The client’s financial statements (balance sheet, profit and loss account, funds flow statement);
- Financial and non-financial plans of the client;
- Auditors/ censors report;
- Bank reports;
- Stock Exchanges and NASDAQ reports;
- Different bodies (Chamber of Commerce and Industry, Trade Register).

In the analysis performed by the bank in offering a loan, it appeals to financial analysis that allows identifying strengths and weaknesses related to the operating cycle and can facilitate a decision on the type of financing proposed. There will be examined: short-term financing needs (cash needs), credit forms best adapted to long-term investments, types of security required and their coverage level.

The bank, respectively the credit analyst requires to the company that solicited a credit the balance sheet and profit and loss account and also the annexes, all of which will allow a better understanding of financial operations conducted within one year. If there is no historical relationship between the company and the bank it will be required financial statements for the last four or five years of activity. If the company is already a customer of the bank it will be required documents only for the year accounting period and also forecasts for the current year. As a recommendation it would be preferable to be required only the records certificated by a chartered accountant or by a company with recognized business of accounting and financial audit.

In terms of quality of the potential borrower, the credit analyst must ensure that he understands how it works and will pursue a number of issues such as: products and services offered by the company in question, identifying customers and suppliers, identifying company’s position on the market and realizing a SWOT analysis, establishing the level of competition and the influence factors of competitiveness.
3. Prevention of credit risk

3.1. Credit risk prevention from the perspective of bank

By lending the banks assume various risks that can be determined by: the quality of the borrower, the general economic evolution, the bank's financial structure.

Variables that generate banking risk may come from:

- Macroeconomic changes: overall GDP dynamic and its structural elements, inflation rate and monetary policy evolution, etc.;
- Changes resulting from economic, financial and banking regulations that influence the effectiveness and safety of banking activity;
- Political and economic conditions existing and future with implications on debt service.

Prevention of credit risk involves organizing the lending process, starting from defining the credit policy and ending with monitoring and controlling the loans, based on risk prediction in order to reduce or eliminate its unwanted effects. (Deaconu, 2008)

Risk prevention represents an activity that targets two main aspects: division of risk and its limitation.

The division assumes avoiding risk concentration by diversifying risks and their limitation is achieved by rules set by each bank. For businesses, the bank will distribute credit risks by giving credits both to large and small producers, working with different sectors of activity and having a large territorial distribution. For individuals, banks will grant loans preferably to employees, self-employed and retired. Diversification on areas where the bank acts allows maintaining credit risk within manageable limits. On the other hand, some large-scale enterprises have large credit needs that a single bank cannot meet.

Limitation of risks can have a self regulatory character (imposed by the bank) or regulatory (imposed by NBR). Risk limitation can be made by each bank through: (Deaconu, 2008)

- setting a their own global limit (maximum) for its total risky commitments to total risky (the credit is included), as a ratio between these commitments and total assets or total equity of the bank;
- setting credit limits for each borrower, group of borrowers, sector or geographical area to prevent significant changes in the economic situation of these entities adversely affect the bank's risk exposure.

Protection against credit risk materializes in three essential directions: (Galiceanu et all, 1997)

1. Risk prevention (covering loan and related interest credited by the economic efficiency);
2. mitigate credit risk by setting specific risk provisions,
3. cover the loan and related interest in case of inefficiency in the entity, in case of risk production is called the warranty protection.

3.2. Credit risk prevention from the perspective of the enterprise

Businesses have interest whenever possible to prevent credit risk. This prevention is achieved through two means: commercial and contractual.

Customer tracking is performed in two stages:

- at the reception order: information awareness,
- self-research: it involves questioning networks of agents, clubs exporters and foreign trade advisers.

Using this channel is easy, but it is not very weak on account of heterogeneous sources and the absence of control and data reliability.

Example. Traders may have a tendency to accept dubious businesses just to obtain the turnover. In fact, their risk is often limited to the amount of commission lost.

The awareness information are given by:

- banks: first, in terms of financial risk these banks offer to their network of correspondents, often for free, a business information service. To be reliable, the information must relate to each client examined, on a large number of transactions and on a centralization of all incidents of payment;
- commercial information specialists: specialized companies provide remarkable quality information and services. Data are collected from suppliers, banks, customers and local chamber of commerce and are embedded in files that are available through a terminal.

Throughout its activity the company is important to have a day to day customer base. Tracking customer file is performed both in the commercial risk and political risk.

Track commercial risk

They are associated with the supplying and selling operations on the internal and external markets. Among the most important commercial risks, mention can be made of: the price risk; the transport risk; the selling risk. (Avrătescu, 2008)

On the subject we state that is noted in a section recorded as ‘clients’ with all faults on payment (delay in receiving goods, the deferred due date, request for an extension of credit). All information relative to the customer's...
financial health will be reviewed and confirmed or refuted. These data generally come from agents from local media or from exporters from the same activity sector.

- **Track of political risk**

  The political factors, very important, act directly or indirectly, influencing the strategies and the policies of the firms as well as the decisions of achieving the goals which are set by them. The political risks are caused by the changes that occur in the case of the political factors’ strategy and current actions they undertake in their own country (at national, regional and local level), in the countries with which the company has direct and indirect contracts. The most frequent political risks are independent of the company’s actions. Among them, mention can be made of: (Avrămescu, 2008)
  - risks of limiting the imports and/or exports;
  - the risk of limiting the currency transfer;
  - the risk of refusing to admit the company’s products on the territory of certain states;
  - the risk referring to sequestration and/or buying certain goods belonging to some foreign economic agents;
  - the country risk, reflecting not only political factors, but also economic and social ones.

Measurement and prediction of country risk is based on observation data grouped in the following table:

**Facts that allow track of country risk**

<table>
<thead>
<tr>
<th>Political factors</th>
<th>Economic factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolution</td>
<td>Prolonged deficits of the balance of payments</td>
</tr>
<tr>
<td>Regime change</td>
<td>External trade balances</td>
</tr>
<tr>
<td>Nationalization</td>
<td>Level of reserves in foreign currency</td>
</tr>
<tr>
<td>War participation</td>
<td>Level of indebtedness</td>
</tr>
<tr>
<td>Ministerial reshuffle</td>
<td>Galloping inflation</td>
</tr>
<tr>
<td>Change in the majority</td>
<td>Economic relations with major world powers</td>
</tr>
<tr>
<td>Creating a central office of changes</td>
<td>Request for debt restructuring</td>
</tr>
<tr>
<td>Propagation of strikes</td>
<td>Price renegotiation</td>
</tr>
</tbody>
</table>

Another way to learn about the political risk is to follow up the evolution of: insurance premiums depending on each country and indicators of specialized bodies in this risk analysis. Payment instruments and techniques have a major influence on credit risk. Intensity of commercial risk is dependent on them and is shown in the diagrams below.

**The commercial risk depending on payment instruments**

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Certified check ( during the legal period)</th>
<th>Bank check</th>
<th>Bill of exchange and promissory note – with stream bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International postal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check of the company (is included the target check)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bill of exchange</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Promissory note</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- fix documentary against acceptance</td>
<td>Delivery against payment documents</td>
<td>Irrevocable documentary credit</td>
<td>Irrevocable letter</td>
</tr>
<tr>
<td>- simple collection</td>
<td>For reimbursement</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level of the risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Default after acceptance of goods</td>
<td>Failure due to a political event</td>
<td>No risk of default</td>
<td></td>
</tr>
<tr>
<td>Cargo refusal by the client</td>
<td></td>
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</tr>
</tbody>
</table>

Meanwhile, payment between commercial negotiation and the conditions above may lead the customer, or to demand compensation for payment security obtained or to interrupt trade talks taking into account the confidence with which it is credited by the seller. In order to promote the signature on the order, the exporting company must often accept the credit risk in return for his trade. It is also possible to transfer it. To transfer risks is them to be covered by an entity outside the enterprise. This coverage can be made near an insurance company or a financial institution.
4. Management of credit risk

Risk management is carried out through policy development, strategic and tactical decisions taken by the Bank Board, Credit Committee, Committee of Assets and Liabilities (ALCO), Investment Committee (INCO) and the Bank's Credit Committee. The main credit risk management responsibilities are divided as follows: (Manolescu, 2007)

- responsibility for realization of credit risk management belongs to Credit Section of the Sales Department, Sections / Services of Client Relations with Bank's branches;
- responsibility for realization of capital risk, currency risk, interest rate risk and liquidity risk and liquidity management belongs to the Finance and Liquidity Department and Securities Department of the Support Department;
- the responsibility for operational risk lies in with the Department of Accounting Organization and Control, Department of Computer Technologies, Security and personal service of the Bank;
- the Support department (Department of Computer Technologies) provides support information system for collecting and analyzing information regarding risk management. Department of Accounting and Control Organization, Service Coordination of working with clients from Sales Department coordinates collection of information from all divisions of the Bank and provides accurate and timely data needed for effective risk management.

Risk management has as objective the risk and performance optimization and planning their development and financing with consistency. The four main goals: (Deaconu, 2008)

a) ensuring sustainability of the institution through risk assessment that sooner or later translate into future costs;

b) extending the internal control monitoring of performance by supervision of the risks and possibility to compare performance between centers of responsibility, customer, product, taking into account risks;

c) the facility for decision regarding price for new business by knowing the risks, and, in particular, allowing their customer billing,

d) rebalancing the portfolio of activities or operations portfolios based on the results and effects of portfolio diversification. In this perspective, even a less profitable activity is justified if it reduces overall risk.

Risk management establishes two types of parallels between: (Dedu, 2003)

- global management and internal management

Managed, risks have to make the connection between global and internal management. Is a ‘vertically’ along the hierarchy of the institution – from top to down (top-down) which consists in translating the objectives and the overall limits of the risks into signals addressed to the operational leaders; from bottom to up ("bottom-up ") which means to strengthen the results and risks resulting from operations, tracking and comparing achievements with objectives. A complete device of risk management involves two other relations, the internal management of performance and risk. Their objective is to define the signals from different business units to address and coordinate information required by the top hierarchy. They are represented as:

- internal transfer pricing system between the different responsibility centers. Among other functions, it allows the calculation of margins and setting goals.

- system of allocating capital and risk between the centers of responsibility because, otherwise, nor their performance nor their risks can be compared.

Representation of these systems that makes the transition from global to the internal management is shown in diagram no.1.

![Diagram no.1](source: Dedu Vasile, Gestiune şi audit bancar, Ed. Economică, Bucureşti, 2003.)
5. Conclusions

In the activity carried out by any bank in a market economy, it faces problems of risk and uncertainty. The aim of banks, as commercial companies, is maximizing profit while minimizing risks. How risk-return relationship is indivisible, banks must take a certain dose of risk, provided that its size is kept within manageable limits. There is always risk, it came like a shadow to all bank operations and occurs or not depending on the conditions that are offered.

Measuring credit risk requires evaluating financial performance of all bank customers on the balance sheets, evaluation identical to the one used in offering loans. Following assessment on clients' financial performance, credits will be included in the following categories:

- standard - „A” category – includes customers whose economic and financial performance are very good and allow payment at maturity and interest rates. However, the analysis is envisaged the future maintenance of financial performance at a high level;
- in observation - „B” category – the financial performance are good or very good but they cannot maintain this situation on a longer period;
- under standard - „C” category – the financial performances are satisfactory but they have the tendency of getting worse;
- doubtful - „D” category – the financial performance is low and with an obvious cyclical at short periods of time;
- loss - „E” category – the financial performances show losses and there are clear perspectives that the rates and interest cannot be paid.

In conclusion the granting of credit to different companies involves: risks of capital loss or insolvency, asset risks or lack of liquidity, capital repatriation risks under foreign lending, capital erosion from inflation risks, interest change risk to resources mobilized;

The bank uses in its credit policy also restrictions to eliminate the risk of this activity. The bank does not grant loans to companies that

- recorded losses without prospects of recovery;
- did not contributed with equity to finance working capital or investments;
- were reorganized or liquidated;
- cannot meet the competition on the market where they develop the activity;
- loss of key suppliers, which led to temporary interruption of production and marketing.
6. References

[1] Avramescu T.C., The risks and advantages of the decisional process strategically associated to the Romanian companies, Annals of the University of Petroșani, Economics, 8(1), 2008;