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CATEGORIES OF RISKS MANIFESTED IN THE BANKING INSTITUTIONS AND THEIR'S MANAGERIAL VALENCES

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Abstract

The objective of the present paper is an ensemble presentation of some elements bounded by the risks categories involves by the nature of the activities realised by the banking institution. Is also presented the mode in which these risks can be restricted or even eliminated, through the important role of the managerial team. In the beginning of the paper we present, very succinct, the past and present role of the management for the activities orientation, for the wanted objectives touching.

The necessity orientation of the activities carrying on by the human communities needs, always, to touch the wanted objectives purpose, a certain orientation, fact who lead to the management appearance and development.

Although, the management acquired the character of a distinct activity only at the beginning of the IX-th century [4, p. 3.]. Ulterior, the management knowledge became absolutely necessary for any business leadership, indifferent by its volume and importance.

In the context of the financial-economic activities diversification, the enterprises are permanently subdued, and any decisions will take, to the risk factors.

The administration and, especially, the risks diminution appeals to the managerial instruments, an important role being the one of the risk management orientated on the:

- *identification* (realised with the departmental complex of the economic institutions);
- the *analysis* (supposing the hierarchy and the impact of the risk over the enterprise);
- the *treatment* of the risk factors (retaining, transfer, diminution and even the firm's activity re-orientation).

Generally speaking, the risk is the image of a global probable loss who can appear as consequence of certain present or future activities carrying on and for which evaluation do not exists direct methods, because of its relative character.

According its nature, the risk administration return to the public authority (who has as objective the prevention and the limitation of the risk following the evolution way of the prices, interest rate, foreign currency etc.), or to the experts (who adopt concrete methods and instruments for the risk administration according the nature of the profession and the supposed risk, taking action in the direction of the prevention and limitation of the eventually losses or to exploit the risk in the profit maximization purpose).

A classification of the banking risks, according to a series of criteria is the one presented in table 1 [3, p. 18-21].

Between the previously mentioned risks we will talk, further on, about the one bounded by crediting, liquidity and solvability.

The **crediting risk** or the debtor's insolvability risk appears as consequence of the overrunning, by the debtors, of theirs obligations stipulated in the credit contract.

Table 1 The classification of the banking risks

Criteria	Types of risk
Market	*Risks determined by the product market* (supposed the administration of the exploitation incomes and expenses); can take the form of the: - crediting risk (appears as consequence of the value loss registered by the debtor's assets); - strategy risk (the whole business can be eliminated by the market because of the competition reasons); - banking norms risk (bounded by the revocation of the financial institutions licences); - operation risk (suppose the incorrect functioning of the calculus systems); - merchandise (suppose the merchandises price effects over the transactions); - human resources risk (represents the effect of the personal policy); - legal risk (bound by the creditors responsibility and by eventual disputes); - product risk (the wear and the non competitiveness of the banking products). *Risks determined by the capital market* (affects the value of all companies): - the interest's rate risk; - the liquidity risk; - the foreign currency risk (bounded to the monetary transactions); - the payment risk.
Risk exposure	*Pure risks* (generated by banking activities and processes which can have, as result, a loss appearance): - physics (destruction of the fixed and circulating assets); - financial (destruction of documents, non recovering of losses etc.); - criminal and fraud; - of responsability. *Speculative risks* (generated by the desire of profit maximisation)
Banking characteristics	*Financial risks* (the more important group of banking risks): - liquidity risk (the possible deterioration of the finance possibilities); - the solvability risk (the insufficiency of the own fond for the loss covering). *Activity risks*: - operationally (difficulties in customers serving); - technology; - the introduction of new banking products; - strategy (according to the period of time and the existing conditions). *Environmental risks*: - fraud risk; - economic risk (connected to the economic medium evolution); - competitive risk; - legal risk.

That overrunning will have as effect the appearance, for the creditor, of some loses caused by the non recovering of the advanced sums to the debtors and, respective, of the correspondent interests, at the established term. The covering source for these loses will be the creditor's profit. For the diminution till disappearance of that type of risk, the creditor realise an analysis of the risk factors who put their impression over the future debtor activity, risk which can be by internal or external nature.

● As risk factors which action from the exterior of the firm we can talk about social aspects, technologic one and, not least, about the economic aspects.

Looking the problem under social aspect, the creditor must orientate his analysis to aspects as the following one [5, p. 46]:

√ the demographic aspects looking the population (the demographic evolution, changes in the population's ages structure, the population incomes distribution, the population occupation degree);

√ changes in the population life style;

√ the attitude for business;

√ the cultural values of the region.

Under technologic aspect, the effects of that development type will be present in the production sphere (through the costs decrease and, also, through the appearance of new products and services), in the goods quality (the last one will register an increase trend) and, respective, for the business administration who will became more efficient, having at disposition performance communication equipments.

The present state of the economy and its future tendencies put their impression over the firm through some elements such as:

√ the economy state (recession, recovering or boom); characterised through a high level of the unemployment rate, the recession period will influence, negative, the demand; the economic boom leads to an incomes increase, to the unemployment decrease and, as consequence, have as effect an increase of the goods and services demand;

√ the inflation evolution (a high inflation will lead to a diminution, in real terms, of the money, with effects over the provisioning costs, over the salaries and, finally, over the profit; the salaries fond diminution will contribute to the unemployment increase and, implicit, to the demand diminution; a small inflation rate will have inverse effects than the mentioned one, leading to the demand stimulation);

√ monetary policy (that is orientated to two elements of maximum importance: the inflation rate – an increasing value of it means more difficulties for the credit engagement and the foreign currency – its decrease, in certain limits, will influence positively the exports, stimulating it);

√ the fiscal policy (an burdensome fiscal system will have, as effect, the diminution of the firm's profits and the diminution of the population incomes, so, finally, the diminution of the investments and demand).

● The internal risk factors are:

√ the product's life cycle (beginning, growth, maturity and decline); each of the four stages influence the demand and, implicit, the selling, in different ways according to the table 2.

Table 2 The influence of the product's life cycle over the demand

The phase	Characteristics	Influence
Beginning	Costs bounded by the product promotion and publicity Big prices necessary for the recuperation of the market penetration costs Small prices (but in the profitability limit) to conquer of a market segment	Small demand because the customers do not know the product or big demand for the one who wants new products
Growth	The product's quality persuade the customers The prices became stable or have even a descendent evolution	The selling increase and implicit, the production increase
Maturity	The product is well known	Maximum selling Maximum profitability Important monetary flux
Decline	The product's necessity disappear Appears other products, better or cheaper The customers saturation looking the respective product	The selling decrease immediately or gradual

√ the used technology (a modern technology, with investments in the research-development domain and with a high innovation degree will have, as effect, the costs diminution, the establishing of attractive prices and the obtaining of a competitive advantage);

√ the managerial capacity (the strategy and the intuition have a major role in the establishing of the firm's objectives on long and short term, according to the existent resources). The last one will be successfully if will promote an appropriate development strategy, will benefit by an efficient organizational structure, by access to the finance sources etc.

The crediting risk analysis and valuation suppose, in a first stage, the risk valuation followed by its administration, the used method being the one of the outlines. The last one suppose, from the bank and for the soliciting firms, the risk categories presented in table 3.

Table 3 Categories of risks involved by the outlines method and their characteristics

Categories of risks	**Characteristics**
Financial	Financial difficulties appeared in a firm activity, especially looking its liabilities to the bank. The analysis of this type of risk is based on the financial situations of the economic agent, on official statistics dates or on the banking evidences. Use the J. Conan –M. Holder model which suppose that the bankruptcy risk valuation is making according to the following relation: $Z = 0{,}24X_1 + 0{,}22X_2 + 0{,}16X_3 - 0{,}87X_4 - 0{,}10X_5$ where: X_1 = REE/TL (REE – raw exploitation excess; TD – total liabilities); X_2 = PC/TA (PC – permanent capital; TA – total active); X_3 = CAS/TA (CAS – circulating assets minus stocks; TA – total active); X_4 = FE/T (FE – financial expenses; T – turnover); X_5 = PE/AV (PE – personal expenses; AV – added value). Interpretation: $Z > 0{,}16$ – bankruptcy risk smaller than de 10% (a very good financial situation); $0{,}10 < Z < 0{,}16$ – bankruptcy risk between 10 – 30% (good situation); $0{,}04 < Z < 0{,}10$ – bankruptcy risk between 30 – 65% (observing situation); $Z < 0{,}04$ – bankruptcy risk over 65%.
Commercial	Represents incertitude in the debts cashing or in the contractors payment Will be determined with the indicators: MPC = medium period of debts cashing: (debts/T) x number of days; MPCP = medium period for the contractors payment: (un pay contractors/T) x number of days. Interpretation: PMÎC >PMPF (big risk); PMÎC =PMPF (medium risk); PMÎC < PMPF (small risk).
Of guarantee	Appears as consequence of some difficulties in the capitalization of the goods brought as guarantee by the firm, for the case in which the last one do not reimburse the credit and, also, do not pay the correspondent interest
Managerial	Determinate by de quality of the managerial team and supposing: - the qualification and the experience of it in the firm activity domain; - efficient leadership capacity proved by the evolution, during the time, of the financial-economic indicators; - the quality of the relations with the firm partners, employees, the organizational spirit, the adaptation to changes etc.; - the existence or the inexistence of some corresponding relations with the credit institution.
Of sensitivity	Is characteristic to the long term investments Suppose the individual risk of an investment project following the modification of the actualisation clear value or of the internal rate of profitability for the case when an entrance variable will be modified and all the other remain constant.

The elements used to appreciate the financial risk and the measure of it ,determined for a firm “X” with the previous method, are presented in table 4-5.

Table 4 The elements needed for the calculus of the financial risk components

Time	**REE**	**TL**	**PC**	**TA**
2001	57.320	43.256	527.500	547.324
2002	142.530	62.568	579.538	642.106

Time	REE	TL	PC	TA	
2003	363.120	174.472	726.279	900.751	
2004	106.210	473.180	742.796	1.215.976	
2005	74.720	949.591	891.507	1.841.098	
2006	-20.440	2.349.067	955.712	2.639.737	
2007	-231.890	2.729.485	1.218.086	3.947.563	
Time	**CAS**	**FE**	**PE**	**T**	**AV**
2001	39.452	10.653	122.944	393.689	256.840
2002	74.950	4.031	177.192	848.598	562.130
2003	115.008	6.405	210.469	1.165.504	991.220
2004	150.606	534	437.112	1.963.605	1.293.460
2005	248.487	5.166	493.346	2.502.983	1.875.080
2006	418.983	20.532	884.555	3.636.919	2.493.790
2007	1.061.122	34.444	1.403.217	6.961.118	4.260.270

Table 5 The values of the financial risk for the period of time 2001-2007

Time	X1	X2	X3	X4	X5	Z
2001	1,3251	0,9637	0,0721	0,0270	0,4786	0,4703
2002	2,2780	0,9025	0,1167	0,0047	0,3152	0,7283
2003	2,0812	0,8063	0,1276	0,0054	0,2123	0,6714
2004	0,2244	0,6108	0,1238	0,0002	0,3379	0,1740
2005	0,0786	0,4842	0,1349	0,0020	0,2631	0,1190
2006	-0,0087	0,3620	0,1587	0,0056	0,3547	0,0626
2007	-0,0849	0,3085	0,2688	0,0049	0,3294	0,0533

The results interpretation are presented in table 6.

Table 6 Interpretation of the obtained results looking the "X" firm

Time	Z	
2001	0,4703	Z > 0,16 – bankruptcy risk smaller than de 10% (a very good financial situation);
2002	0,7283	Z > 0,16 – bankruptcy risk smaller than de 10% (a very good financial situation);
2003	0,6714	Z > 0,16 – bankruptcy risk smaller than de 10% (a very good financial situation);
2004	0,1740	Z > 0,16 – bankruptcy risk smaller than de 10% (a very good financial situation);
2005	0,1190	0,10 < Z < 0,16 – bankruptcy risk between 10 – 30% (good situation);
2006	0,0626	0,04 < Z < 0,10 – bankruptcy risk between 30 – 65% (observing situation);
2007	0,0533	0,04 < Z < 0,10 – bankruptcy risk between 30 – 65% (observing situation);

For the protection against the crediting risk, the credit institutions must apply a series of measures as the one presented in table 7.

Table 7 Measures adopted against the crediting risk

Measures	Characteristics	Action directions
Preventive	Have the role to avoid the risk appearance Are less expensive than the curative one	The guarantees constituted for the bank. According to the assured advantages, these guarantees can be personal (the bank have no juridical advantage over the debtor) and, respective, real (confer a real right over the debtor's patrimony). The credit accordance must be conditioned by the estimation of it recovering possibility The establishing of an interest's rate superior than the one of the inflation and of the interest's rate established by the RNB (Romanian National Bank), to obtain profit, for the refinance case.
Operative	Its role is to prevent the risk	The closing, in advantageous conditions for the bank, of the crediting contract. Other measures [1, p. 113]: - the perception of no utilisation, administration and risk

Measures	Characteristics	Action directions
		commissions; - the daily checking of the customers account extracts (cash account and the cash accounts from credits); - the checking of the account cashing and payments regularity; - the periodical checking of the accounting documents of the economic agent; - the following of the way in which the customer pays his contractual obligations; - the incomes from interests and the commissions who correspond to each operation collecting; - the guarantees following on the whole credit period of time; - the permanent following of the debtor's position on market (the turnover, the clear profit, the contracts number, stocks, contractors, customers, liabilities).
Curative	Intervenes for the case of the risk appearance Are expensive Have protecting role for the bank	The credit contract interruption, for the case when the debtor do not respect his contractual obligations. The constituting of a reserve fond.

As conclusion, the directions of action for the crediting risk limitation supposed, generally, the following aspects [2, p. 111]:

√ a detailed analysis of the debtor's credibility looking the reimburse of the contracted credit;
√ the establishing of certain limits looking a debtor crediting;
√ the limitation of the big borrows granting;
√ the constitution of provisions with reserve character.

Considerate as the most important banking risk, the **liquidity risk** can be understand through the appearance of certain difficulties looking the obtaining of the resources necessary to meet the own engagements, at a certain moment. This type of risk increase direct proportionally with the impossibility to anticipate the demands of new borrows, with the increase of the cash retiring quantum and, respective, with the limitation or even the inexistence of the access to new resources of that type.

An aspect of special importance looking that type of risk is represented by the liquidity's administration translated [2, p. 116] through the assurance of a permanent covering of the finance necessity, with the aspects involved by it. To satisfy the liquidities needs we can appeal to assets (can be immediately transfer to a value near to its nominal value – available funds and deposits to the central bank or to the correspondent banks, thesaurus bonds, treasury certificates and other negotiable titles, etc.), or to passives (the emission of the borrow titles in cash obtaining purpose – borrows which take the form of the deposit certificates emission, borrows from other banks or from the central bank etc.) [3, p.51-52]. A succinct presentation of the liquidity needs manifested on the banking institutions is presented in table 8.

Table 8 Types and characteristics of the liquidity needs on the banking institutions

Liquidity	Characteristics	Action directions
On short term	Influence factors:	
	Seasoning	The anticipating of the seasoning fluctuations of the credits demand on the basis of the previously experience (using the dynamic analysis of the series of dates)
	The operations of the big	The estimation of that kind of liquidities needs will

Liquidity	Characteristics	Action directions
	customers	suppose the knowledge of the finance needs, of the intentions and of the big customers profile.
	The volatility of the deposits and credits	Its estimation through specified programs based on the previously experience and according to the exploitation cycle phase.
Cyclic	Hard to anticipate Very difficult anticipation for the appearance moment	The estimation suppose the following methods of calculus and analysis: - the analysis of the credit lines comportment; - the correlation between the deposits dynamic and the one of the interest's rate; - statistical analysis programs.
On long term	Relatively simple determination	The classification of the balance-sheet's elements: - the assets are liquid – till 90 days or solid; - the passives are classified in volatile or stable.
Unpredictable	Impossible to anticipate Provoked by events with pure aleatory character: - rumours with effect in the deposits diminution; - the suspension or the drastic diminution of a finance source; - an absolute surprising volume for the requested credits	The existence of an own plan of urgency measures supposing the establishing of certain urgency sources necessary to cover a certain liquidity need

The liquidity problem and the assurance mode of it returns to the banking management, with significant implications over the monetary policy, supposing the constitution of compulsory minimal reserves and, respective, the foreign currency liquidity settlements.

A major part of the liquidity risk's indicators calculated and analysed to avoid the appearance of the pay incapacity are presented in table 9.

Table 9 The liquidity risk's indicators

Indicators	Calculus mode
Global liquidity	Liquid Assets/current liabilities
Current liquidity	Treasury assets/liabilities on short term (the optimum value is 20%)
Liquidity according the seeing stacks	The total volume of the liquid assets/seeing stacks
The liquidity according total stacks	The total volume of the liquid assets /total seeing stacks
The liquidity according total stacks and borrows	Liquid assets/ involved stacks and borrows
The liquidity according the assets	Liquid assets /total balance-sheet's assets
The weight of the granted credits in total involved resources	Granted credits/total resources
The own fond coefficient and the one of the permanent resources	Long term resources/long term assets (the minimum level is 60%)
Clear passives	(Assets – passives) classified according to the payment day
The liquidity index	(Passives/assets) x medium number of days
The liquidity rate	New borrows/borrows with the payment day in the same period of time

The solvability risk (the bankruptcy risk) is a risk of the borrowing institution and is characterised through the insufficient of the own fond necessary to cover the potential losses. In other words, the bank risks to arrive in payments incapacity. According to the risks to which are exposed the banking institutes, the prudence principle fixing minimum thresholds for these fond. Even that, the covering of all future losses is impossible, if we take account of its character, presented in table 10.

Table 10 The nature and the characteristics of the losses which must be covered by the banking institutes

Nature of loss	Characteristics
Medium	Applies to the credit risk The appearance probability evolutes in the same sense with the operations number Represents economic provisions
Unexpected or maximal	Is a supplementary loss Can not be detected but for a small number of cases
Un normal or exceptional	Is bigger than the maximum loss Are very rare but important Have an appearance probability close to zero but, when they appears, can be fatal Are difficult to estimate in an objective manner because the „disaster” scenario, elaborated in that purpose, can be defined in different ways

To avoid or for the diminution of that risk, the banking institutions have the obligation to respect a series of settlements referring at [1, p. 38]: the absolute minimum value of the banking capital, its payment mode, the structure of the banking capital used for reporting, the size of the capital reported to the risky assets of the bank.

Looking the solvability risk's indicators, those can be determined reporting the own capitals to the clear exposure of the inside balance-sheet elements or outside the balance sheet elements, or reporting the bank's own fond to the clear exposure from the elements inside the balance-sheet and outside the balance-sheet elements. The clear exposure represents the bank's assets at their clear value, meaning after the deduction of all rectifying passives (amortizations, provisions). The clear exposure from elements outside the balance-sheet represents the elements outside the balance-sheet transformed in equivalent credit according to their transformation risk degree.

REFERENCES

[1]. Brendea C., Dăeanu V.E., Zamfirescu M., Ghiță Marilena, *Riscul şi performanța creditului bancar în România*, Bucureşti, 2001.

[2]. Dedu V., *Gestiune bancară, Ediția a II-a,* Editura Didactică şi Pedagogică, R.A., Bucureşti, 1999.

[3]. Donath Liliana, Cechin-Crista Persida, *Elemente de management al riscului bancar*, Editura MIRTON, Timişoara, 2006.

[4]. Nica Panaite C., Sasu C., Iftimescu A., Prodan Adriana, Coste V., Ciobanu I., Managementul firmei, Chişinău, 1994.

[5]. Institutul Bancar Român, *Creditarea agenților economici*, Editura LUMINA LEX, Bucureşti, 2003.