General Considerations on a Report of Research about the Company's Risk Assessment and Forecast for Bankruptcy Evaluation and Prognosis

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Abstract: The research rapport is a synthesis concerning the conclusions of an already done research. This is a project laying at the basis of the theoretical, methodological and practical aspects of the process. The research project implies the existence of specific knowledge and skills acquired by means of personal experience. The research proposal has to include the stages as provided in the present paper. This plan is just an option which will be further improved in order to make an action schedule.

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JEL Classification: G0, G33, C35

1. Introduction

Due to the present possibilities of access to a great amount of economical information, a thorough analysis of the companies is required. Being very important for investors, managers as well as banks, such a study about the analysis and prognosis of bankruptcy is more than welcomed.

If a company manages to work on long terms, than it means that the managers and the owners are skilful and they develop their activity on an available market. The companies need time to make debts and the debtors have to foresee the need of time so that they shouldn't become anxious to close it. "Therefore time is a filter that separates the success and failure". (Anghel, 2002, p. 11)

Information about competitors, their weaknesses or strengths as well as the rapport between the offer and the demand are highly important for companies.

None of the economic agents will have an adequate behaviour unless they are explorative and inquisitive, no matter its status, because of the daily inevitable changes within the business world.

This will highlight the need and the sensible decision making, but for this correct information is needed. Obtaining such information is the result of a specially designed strategy.

The strategies have to follow the already established objectives. If the established means do not provide continuous information the image may be altered due to the lack of some of the parts. The risk is due to the fact that information is not easy to find and it is entirely useful. (Prunea, 2003, p. 25)

This is why the necessary information has to deal with the past, present and the near future. This kind of information is necessary for establishing the causes of the past events and the predictions of the future situations. But the actual state of a company is not the effect of only the previous evolution as unpredictable factors may influence it.

It is highly important for the purpose of the present paper as any society is interested in knowing the evolution of the events and its impact on the market and on the economical and financial situation. Once these tendencies are known, any company can adjust the resources to the established target.

2. Resources - Stages

2.1 Identification and list of the main ideas related to the research. The Concept of the way to bankruptcy

As for the main ideas I will extract some concepts from the special literature meant to frame the relevance if the bankruptcy.

The term “bankruptcy” is used as a generic term which includes those companies with financial difficulties. Some of the specialists even consider that failed means bankrupt.

The two terms “bankruptcy” and “failure are changeable in some authors’ definitions. Băileșteanu does not define the term, he only lists the stages that precede the bankruptcy: impossibility of making the current payments, lack of financial resources to pay the credits, cashing very late, losses.

“Bankruptcy points to the impossibility for a company to make the monthly payments. From the operational point of view, the company is bankrupt when the following happen: bankruptcy declaration, incapacity of paying the credits, withdrawal of the support of the creditors”. (Beaver)

According to Blum “bankruptcy is an event that points to the incapacity of paying the debts, entering the liquidation procedure or an agreement to reduce the debts”.

“The company which is in liquidation procedure or any other kind of reorganizing process for the benefit of the creditors is bankrupt”.

“Bankruptcy is defined as the business closed due to the decision of the Court.”(El Hanawy & Marris)

“Bankruptcy is defined as the declared incapacity of payment of the liquidation following a decision of the Court” (Taffler)

However, the financial failure is necessary but not enough as a condition for bankruptcy. It is difficult to predict the bankruptcy. A company is supposed to be in a bankruptcy procedure when it has financial problems related to the entire accountancy, to the cease of the payments to creditors, incapacity to buy the issues, etc.

There are three alternative types of bankruptcy procedure, named after obvious medical terms. The same way as the doctor recognizes the disease checking the symptoms, the same way is known the bankruptcy:

I. Chronic bankruptcy, indicating the fact that the company’s performances do not increase before the failure. Such a situation usually occurs when the company has a poor financial and economical situation and the trend has been constantly unfavourable.

II. Bankruptcy by means of insufficient income is present in the economical reality. After a long period of financial success, the company suddenly collapses after which there is a period of constant insignificant variation of the financial indicators when the company has an average level of debts, before the real bankruptcy. Only after a few more years there comes a rapid decline and then the bankruptcy. This is the classical situation as the initiative of the share holders, when they decide to close the company in order to avoid further loss. It is likely that the share holders try an intermediary operation reducing at minimum the activity waiting for a sale opportunity. If this does not come along, they decide the closure of the company.

III. Sharp bankruptcy supposes a high increase of the indicators (in contrast with the previous period of time), followed by a sudden bankruptcy, although the trend in the previous period did not allow for an unfavourable conclusion regarding the future of the company. "The way to bankruptcy" is followed from two perspectives, that of the financial balance and that of efficiency as follows:

a) The lack of financial balance occurs when the available actives do not concord with the current obligations (short term debts). The actives have a major implication in the effectiveness as well as the risks of a company.

There are 6 stages leading to the decrease in the liquidities and to the lack of balance between the liquid actives and the current debts, which eventually lead to bankruptcy:

1) The company has no problems in paying the debts, fact demonstrated by a good correlation between the current obligations and the current cash-flow, between the long-term investments and the cash.

2) The company makes other credits to solve temporary needs or the financing of an increase of the business rate.

3) The company postpone the debts to the suppliers and the instalments for the credits;

4) The company renegotiates the contracts with the suppliers, being in the impossibility of paying the debts on due time.

5) The company transforms a part of the immobility in cash;

6) If in the above mentioned stages the company has not managed to change its situation, the collapse is inevitable.

b) The effectiveness perspective

The term Market Value Added" (MVA) is very frequently used in the economical and financial analysis. The formula is the following: **MVA = V – (Ci+Pr)**

V= the market value of the company

Ci = the actual value of the capital invested by the share holders

Pr = the actual value of the reinvested profit

The initial rational expectations of the share holder are higher than the initially invested capital. (Ci+Pr).

The investor's perspective is highly important.

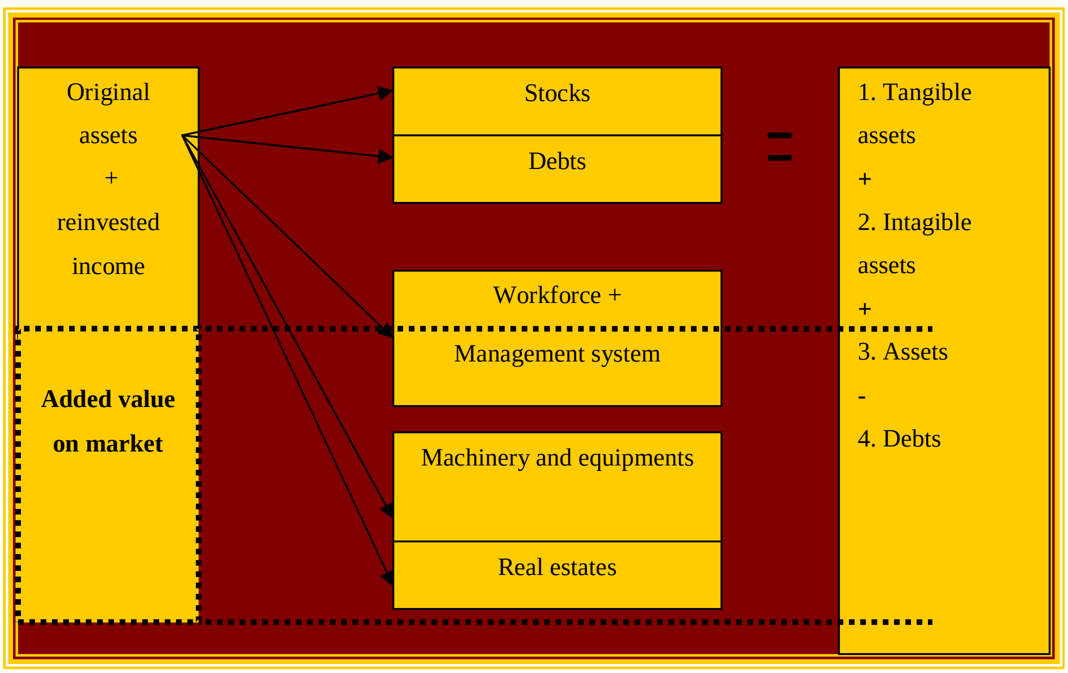

Figure 1. Undertaking in terms of investor

Within the efficiency perspective there are 5 stages leading to the bankruptcy:

1. The company is a market leader and it has a high profitability.
2. The company has an average profitability, the shareholders benefit of a positive MVA, therefore a normal situation

3. The company ensures a free of risk efficiency, so MVA=0 and no significant increase is expected in the near future, the owners being able to decide whether to sell the business of the actives.
4. The company has losses and it cannot pay the debts and the situation may not improve, the owners and the creditors will start the forced liquidation procedure.
5. The company has the biggest losses ever for the shareholders and creditors due to lack of demand, loss of the supplying market, the appearance of substitutable goods, equipment usage, all these determine the impossibility of selling the business or the actives, the cassation being necessary. (Anghel, 2002, p. 17)

2.2. Formulating a hypothesis, a possible solution.

Bankruptcy versus success

Why is it easier to define bankruptcy than success?

Many studies within the economical and financial analysis focus on the prediction of bankruptcy, and it is not because of pessimism of the analysts, but it is due to the fact that it is easier to define methodologically bankruptcy than success.

From our point of view it is necessary that a company find its own “fate”, meaning being able to stop the business on time in order to retrieve something, and the invested capital and the employees being encouraged to leave for a more rentable domain.

Predicting the bankruptcy is very important as the costs of the liquidation are far less small than with the collapse, when nothing can be retrieved anymore.

2.3. Brief exposition of the target, objectives and main ideas of the research.

The aim of the project is the study of the theoretical basis, the development of the methodology concerning the bankruptcy risk at company level and fundament the different types of methods highlighting the situation of the company at a certain moment and discovering strategies to prevent risk, if it exists.

Achievement of this aim is conditioned by the following research tasks:

- The concept of bankruptcy in the specialised literature;

- Justification of the financial lack of balance;
- Analysis of the problems regarding the prediction limits of the bankruptcy;
- Highlighting the general methodological aspects of the risk of bankruptcy;
- The methodology of the experience in predicting bankruptcy;
- Economical factors differentiating the activity branches of the various industries;
- Opinions about the main controversies related to the prediction of bankruptcy;
- The prediction of the company analysed within the project;
- Elaboration and establishing the strategies of the bankruptcy risk within the analysed company.

2.4. The Research Plan (succession of stages)

After the documentation stage, the study of the theoretical development of the notion of bankruptcy, we will provide a frame including the steps to be followed. The project about the evaluation and the prognosis of the bankruptcy risk of the company will be structured as follows:

1. General considerations regarding the analysis and diagnosis of the risk,
2. Statistical methods of evaluation and prognosis of the bankruptcy risk,
3. Economic and financial analysis as a starting point in evaluating the bankruptcy risk;
4. Strategic and financial diagnosis **-** method of analysing the bankruptcy risk;
5. Conclusions and proposal about the analysis and prognosis of the bankruptcy risk.

2.5. Establishing the Research Strategy (methods, techniques instruments reported to the aim and objectives of the research)

As for the research problem, the aim and the objectives I will mix the methods, the techniques, rules and principles, the specific instruments. I will make ample use of the experimental, comparative, statistic, interact ional, qualitative and quantitative strategies.

The material will be logically structured starting with the main notions about the risks that the companies may face.

Function of the activity, the result of a company is more or less sensitive to events such as: energy cost rise, rise of the resources, rise of salaries, increase of the market competition, technological progress.. Any action is more or less risky according to the result.

The risk does not depend only on the above mentioned factors, but it depends on the costs and on their behaviour within the activity. Another risk factor for a company is the financial policy and the strategy of the respective company.

The evaluation of the bankruptcy risk can be made by **means of statistical methods of analysis** using the analysis of the financial balance as based on the patrimonial or functional balance, or by **statistical methods of analysing the dynamics** using the highlighted flux of the financial view.

The main operational instruments used by the financial analysis to investigate the bankruptcy risk are:

- The Circulating fund – its presence determines the absence of the insolvability risk, and its insufficiency indicates a sign of the lack of cash and consequently the risk of the non-payment.
- The Accountancy active – represents the guarantee of the creditors for the unfavourable activity of the company.
- The reliability indicator – is calculated by the banks and it expresses the capacity of a company to pay a credit.
- Instalment method - means solvability instalments such as: the general or patrimonial liquidity instalment, the rapid liquidity instalment, the financial levier, the patrimonial solvability instalment, the financial instalment, the short term instalment debt. All these are important for the analysis of the financial situation when compared to other companies in the dame field of activity or to the same instalments in the past.

The analysis of the dynamics if the bankruptcy risk is the elaboration of the financing layout, considered an overview of the resources explaining the variation of the patrimony of the company within a time limit.

Another statistical method is the analysis of the influence of factors on the bankruptcy risk, which is: regression and correlation analysis, chain substitution method, bankruptcy risk analysis using the law (Gauss – Laplace), being the most familiar and the most used probability law, as it catches the best the evolution of the economical and financial phenomena.

Many experts and many financial organizations have attempted to establish a basis on which to predict the risk of bankruptcy a given society. Been used statistical method called analysis of discrimination, with which were analyzed in terms of financial companies that went bankrupt and companies that have made profits. With this analysis we determine the best linear combination of rates which lead to the clear distinction between the two companies, or different periods of the same company. This linear combination is known as function scores; whereas results in a value called score and the score obtained is assessed on the likelihood that the company considered to fail in the coming years.

Among the most well-known *scor functions* are the models of the scoring method. Beaver model, Altman Method, Conan and Holder Model, The French Bank Model, the „credit – men" Model or Security-analysis, as well as Romanian models: Manecuta si Nicolae Model, B Model – Bailesteanu, The Scor function Model – Paul Ivoniciu, The A Model – Ion Anghel. Another analysis is the strategic one of the respective company which supposes taking the following steps:

1. Evaluating the current results of the company by analysing the financial indicators and by analysing the objectives and the strategies of the company;
2. Evaluation of the managerial capacity;
3. Analysis of the business environment of the company;
4. The analysis of the strategic factors.

Two models are provided by the specialists to make the strategic analysis of the bankruptcy risk: The BCG Model - Boston Consulting Group and the A.D. Little Model.

The strategic approach of the bankruptcy risk, together with the other methods represents a useful and efficient instrument for the strategic financial diagnosis.

2.6. The Elements of the Validity of the Research Project and the Results to be obtained.

Bankruptcy is a major business problem and it is not limited to a certain industry, a certain company with a certain dimension or of a certain age. It is considered the way the market uses to get rid of the uncompetitive companies. Note should be taken that not always the bad management is the cause of the bankruptcy of a company, but the economical environment too.

Many of the studies related to bankruptcy ignored the economical environment variables, some even suggested that the macro economical variables should be included in the prediction of the bankruptcy of the company.

The inflation rate should also be taken into consideration within the time period so that it shouldn't overate 10,5%, meaning that this conclusion can differ when we deal with hyperinflation.

Therefore using a specific *deflator* from the analysed branch the increase of the relevance of the prediction models of the bankruptcy is obvious. Such an example of specific *deflators* to adjust the financial information in the metallurgic industry could be the following:

Variable	Deflator
Actives in the balance	Steel Price increase indicator
Debts in the balance	Interest rate
Information from the loss and gain folder	Indicator of the increase of the steel price

An adjusted model for the analysed company can be the usage of the macro economical variables dividing the stage of the analysed years into economical stages: economical increase, recession, stagflation, etc.

A study made (Mensah, 1984) showed that the prediction model of the bankruptcy including heterogeneous stages is inferior to the model developed in more stable periods from economical point of view.

In conclusion, by a thorough analysis of the factors concerning the branch and the general economic environment a more precise prediction of the bankruptcy can be achieved.

There is, however, a limit that must be taken into consideration, that is the inclusion of such variables expressing the characteristics of the industry and of the economical environment generates highly geographically limited models as compared to those based only on the financial rates.

3. Conclusions

We believe that such a research was necessary in order to improve our knowledge of the chosen domain, and the main purpose is that of bringing a series of corrections to the models which do not correspond to the Romanian reality, or may be the construction of our own model to adjust within the Romanian practice in the analysed activity.

The initial plan is just a variant which will be further improved to shape a more consistent action program.

4. References

Anghel, I. (2002). *Bankruptcy - radiography and prediction*. Bucharest: Economic.

Dalotă, M.D. & Dalotă, S. (2000). *Analysis and evaluation company*. Timişoara: Orizonturi Universitare.

Petrescu, S. (2008) *Financial analysis and diagnosis - accounting. Theoretical guide - Applied*, second revised and added edition. Bucharest: CECCAR.

Pripoaie, R. (2004). *Statistical analysis and forecasting of business bankruptcy risk*. Bucharest: Didactică şi Pedagogică, R.A.

Prunea, P. (2003). *The risk business. Aspects. Factors. Ways to reduce*. Bucharest: Economic.

Zaiţ, D. & Spalanzani, A. (2006). *Research in Economics and Management - Epistemological and methodological highlights*. Bucharest: Economic.