



CO-DIAGNOSIS: TOOL-DIAGNOSIS IN THE DETECTION OF INDICATIONS FOR THE SURVIVAL OF COMPANIES IN THE PRECONCURSIONAL PHASE

Description

It is an automatic procedure that obtains models or patterns of survival of companies with financial problems, based on the application of different methodologies of artificial intelligence.

In a constantly evolving and highly competitive global market, companies are forced to respond proactively and quickly with business decisions, sometimes very risky. Due to the current economic crisis, companies that sell their products in the market are forced to enter the bankruptcy process due to problems with their creditors. In order to avoid a compulsory procedure, which implies a change in business management (managers are replaced by insolvency administrators), companies can apply to enter the pre-bankruptcy phase. In this phase they can negotiate their refinancing, without the pressure of the creditors, since the contest is paralyzed. An evaluation of the actual situation of the company is necessary.

The CO-DIAGNOSia tool helps financial institutions, auditors, insolvency administrators, judges, executives ... to decide, objectively and justifiably, whether the company has a chance to continue in the market or not in a fast, simple and not expensive means. For a preliminary analysis, a detailed study of the economic-financial information of the company, which would involve a high expense, is not required.

How does it work

The objective is to introduce certain business indicators (sector, size, liquidity, profitability ...) into a program (which integrates different artificial intelligence methodologies) to give a quick diagnosis on whether the company has the possibility to survive and continue in the market or not.

These indicators have been obtained by analyzing the real accounting, financial and non-financial characteristics of Spanish companies in a competitive situation. Once the result has been obtained, it will be the expert who will make his decisions taking into account the diagnosis obtained and his professional judgment.



Advantages

The diagnostic procedure of the CO-DIAGNOSia tool allows the following advantages to be obtained:

- Systematize procedures objectively.
- Reduce the cost of the preliminary analysis of companies with financial problems.
- Reduce the time taken for decision making.
- Simplify the decision-making process.

Easy to handle, understand and interpret by the end user.

Where has it been developed

The research was carried out in the [Research Group Risk in Insurance and Finance](#), former INIFCO ([Research in Financial Information and Competition](#)). We have designed models that have been tested using a sample of real data of bankruptcy companies with national representation. It has been successfully applied since the classification results are satisfactory.

And also

Services provided include:

- Study of particular problems of the client and determination of the mode of application to each particular problem.
- Adjusting the model to the customer data.
- Computer development of the program applied to the needs of the client.
- Training of company personnel for the best use of the program and its adaptation to new situations.
- Assistance, after the conclusion of the transfer process, for the resolution of problems, both theoretical and practical, that can be presented.

Responsible Researcher

Nombre: [María Jesús Segovia Vargas](#)
[María del Mar Camacho Miñano](#)

Department: **Group Risk in Insurance and Finance - UCM.**

Faculty: **Economic and business Sciences**