CFAR-m features

Aggregation is a way to combine several single indicators representing different components (dimensions) of the same concept to form a single aggregate. The result leads to a single score, called a composite indicator, which has the ability to summarize a large amount of information in a comprehensible form. Aggregation requires the determination of a weighting scheme of the different components. This task is extremely difficult and is one of the central problems in the construction of composite indicators. Weights must take into account all existing forms of interaction between the components aggregated and have a significant effect on the result. However, there is no universally agreed methodology and the arbitrary nature of the weighting process by which components are combined constitutes the main weakness of composite indicators which CFAR-m overcomes.

CFAR-m OVERCOMES THIS PROBLEM:

- CFAR-m is an original method of aggregation based on neural networks which can summarize with great objectivity the information contained in a large number of variables emanating from many different fields.

- Its contribution lies in determining, from the database itself, a weighting scheme of variables specific to each individual. CFAR-m solves the major problem of fixing the *subjective* importance of each variable in the aggregation.

- It avoids the adoption of an equal weighting or a weighting based on exogenous criteria. The weightings for CFAR-m emanate only from the information content of variables themselves and their own internal dynamics.

THE RANKING PROVIDED BY CFAR-m HAS THE FOLLOWING ENABLES THE FOLLOWING ADVANTAGES:

- Objectivity: No handling of weightings - the weighting is resolutely objective and it emanates from the informational content of the variables themselves of their research and internal dynamics.

- Specificity: a specific equation for each individual piece of data to is used calculate the indicator

- Decision support: ability to run simulations and propose to the decision makers plans of action and optimal sequences of reforms.

In addition:

- It can provides the contribution of the variables to the ranking
- It keeps all the variables during the calculus and so it is helpful for extracting what is happening within the noise. This is very interesting for predicitve models.