The Natural Synergy of Environmetrics, Neural Finance & Standards

The fundamental complexity involved in Environmetrics is to deal with uncertainty due to a number of factors which are difficult to quantify and translate into neat mathematical functions. Therefore it is extremely hard to identify functional relationships within data sets relating to environmental parameters and detect patterns and undertake classification, prediction and/or control. The Research Team at Probus while seeking solutions to the quantification of seemingly unquantifiable data observed a similarity in process between certain areas of environmetrics and the study of Neural Finance methodologies. Amongst other synergies, for instance, both require study of stochastic and time series elements.

The study of Environmental, Social and Governance, (ESG) investment risk metrics, (all part of the Climate Change mitigation strategy) requires accounting for social elements, (especially within less developed countries) within politically fluid and uncertain environments but is considered to be an essential component in any investment risk matrix. Despite being demanded by the BINGO's,(Big International Non-Governmental Organisations) social good is notoriously difficult to quantify to the same degree that is achievable with both environmental and governance aspects. The success of neural finance methodologies, (Intelligence on European Pensions and Institutional Investment) in quantifying and predicting investment risk and the similarity of some elements of process led the Probus team to find potential solutions in the published works of two Professors of Economics from Sfax University Graduate Business School, these Professors have pioneered the use of neural network technologies to develop neural finance based predictive, natural disaster and political risk algorithms for The world Bank, IMF and major reinsurance companies.

Probus was able to share the 12 year empirical evidence and database with the Sfax Professors and from that data they and their research team were able to substantially improve the accuracy and performance of Probus investment grade ESG metrics.

While Sfax and all other academic partners remain independent and free of conflict of interest, the cooperative efforts of both Probus and the financial academic community continues to benefit from the relationship.

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