

Assessing the impact of the incremental improvement in credit scoring – ROC curves and beyond

Better credit scorecards translate into better financial results for a credit institution. This connection, however, is not always sufficiently transparent and understandable for managers. Increasing the Gini coefficient by a few percentage points often seems underestimated, when in fact it can lead to a significant improvement in the profitability of a credit portfolio.

I will present a simple tool (a mathematical model) which translates an incremental improvement in credit scoring - measured by the AUROC or the Gini coefficient - into an improvement in the bank's performance. Depending on needs and assumptions, the tool, based on binormal ROC curves, enables the estimation of the reduction in defaults, the increase in loan volumes, or the increase in profits. The implementation of the model in R/shiny will also be presented.