

Emne: Avdeling C-seminarer i statistikk

Neste seminar i statistikk er tirsdag 24 mars kl. 14.15 i seminarrom B81, 8. etasje i Niels Henrik Abels hus.

Rasmus Waage Petersen (Spar Nord Bank, Aalborg, Denmark.) holder foredrag om:

**A rating system for new retail bank customers**

Sammendrag:

The Basel II regulations for computing solvency for a bank requires calculation of risk weights for each of the banks loans. The weight for a loan depends on the risk parameters PD and LGD where PD is the probability of default (i.e. the probability that a customer stops paying back the loan) and LGD is the loss given default (i.e. the proportion of the loan which is lost given default). According to Basel II, the probability of default and the loss given default should be estimated from internal historical data. Often regression-type models are used where individual customer characteristics is used to obtain customer specific estimates of PD and LGD.

In this talk we consider estimation of PDs for a portfolio of loans to new retail bank customers in the Danish Spar Nord Bank. It turns out that the limited internal data regarding this portfolio does not allow direct estimation of a diversified PD model. Instead we have developed an expert based rating system where customers are divided into rating classes reflecting varying degrees of credit risk according to internal credit experts. The rating system is based on a rather simple statistical model which is fitted to a large data set of expert ratings of customer cases. Once the rating system is in place, it is a simple matter to estimate PDs by the empirical rates of default within each rating class.

We will discuss in particular the experimental design of the data set of customer cases used for the expert ratings, various modelling issues, and the performance of the rating system in relation to empirical credit risk.

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Velkommen!

Steffen Grønneberg og Nils Lid Hjort