Master thesis in Probability of Default Modelling

Background

Nordea is required to hold collective provisions to reflect the impairment of the assets and to cover future losses. The calculation of the collective provisions is currently done in accordance to the International Accounting Standards (IAS 39). The standards prescribe reservation for “incurred losses” leading to backward looking methodology. Starting from January 2018 the bank must follow International Financial Reporting Standards (IFRS 9). The coming standards are based on “expected loss” and forward looking methodology. The project will examine the practical challenges in modelling and implementation of Probability of Default (PD) values in the new standards.

The purpose of the thesis

IFRS9 suggests provisioning in two stages. In the first stage the collective provisions are calculated using a one year point-in-time PD. The second stage is the case of significant deterioration of the asset, where the PD over the life-time of the asset must be used. Given that the loan can have large lifetime, or even have no maturity at all, the point-in-time assumption becomes invalid. Additionally, you will have to incorporate the effect of macro-economic data into calculation of PDs in both stages.

In the thesis you will have access to Nordea’s extensive credit data in order to model PD values to be used in both stages of provisioning. As a practical implementation of the results, the IFRS9 levels of collective provisions will be calculated.

The structure of the thesis will consist of the study of the literature and what has been done in the area, the practical implementation of this on Nordea’s portfolio and further development of this novel area.

Your profile(s)

We are seeking a high performing individual, currently completing a Master degree in economics, mathematics, statistics or engineering. A successful candidate must have a proficiency in English and database/programming skills, preferably in SAS, R, Matlab or Excel/VBA.

Application

If it sounds interesting, please send your application in English or in Swedish to Alexander.Kliushnyk@nordea.com with your CV and grade transcript (bachelor and master) attached.

The application deadline is June 30th 2015.
The candidates will be interviewed on a rolling basis.

For further information please contact Alexander Kliushnyk at +46 10 156 32 71.