Abstract:

In the present thesis we will firstly familiarize ourselves with the term of operational risk, it's definition presented in the directives *Basel II* and *Solvency II*, and afterwards with the methods of calculation *Capital Requirements for Operational Risk*, set by these directives. In the second part of the thesis we will concentrate on the methods of modelling operational loss data. We will introduce the *Extreme Value Theory* which describes possible approaches to modelling data with significant values that occur infrequently; the typical characteristic of operational risk data. We will mainly focus on the model for threshold exceedances which utilizes *Generalized Pareto Distribution* to model the distribution of those excesses. The teoretical knowledge of this theory and the appropriate modelling will be applied on simulated loss data. Finally we will test the ability of presented methods to model loss data distributions.