

Title: Non-proportional Reinsurance in Solvency II
Author: Tereza Havlíková
Department: Department of Probability and Mathematical Statistics
Supervisor: RNDr. Ing. Iva Justová, Ph.D.
Supervisor's e-mail address: iva_justova@hotmail.com

Abstract: The aim of this thesis is to analyse non-proportional reinsurance of non-life insurance. Taking into account the latest Quantitative Impact Study QIS 5, we calculate the capital requirement under Solvency II and we focus on the premium and reserve risk. The first part of this work describes basic concepts and formulas. Furthermore, in the main part we describe the standard formula for the calculation of the capital requirement from which we derive a formula for the calculation of the capital requirement but this time taking into account the impact of reinsurance. In the last chapter, we apply the approach on an example, in which we examine the influence of parameters on the capital requirement.

Keywords: non-proportional reinsurance, Solvency II, non-life underwriting risk