

Counterparty default risk under the Solvency II regulatory regim

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Abstract

The risk-based solvency and supervisory standard for European (re)insurance companies, Solvency II, was introduced in 2016. This master thesis discusses the calculation of solvency capital requirement for counterparty default risk under the Solvency II regime, especially for reinsurance arrangements. Thus the principles and the three-pillar approach of solvency 2 with special regard to the first pillar will be reviewed. The structure of standard model of the solvency capital requirement will be studied looking on the calculation of SCR for the different risk modules. The main topic of this paper is reinsurance default risk, thus this module will be discussed in detail. After reviewing the model used in QIS4 along with its disadvantages, the underlying model of the standard formula is discussed. Furthermore, a stochastic model was introduced as an alternative for calculating the reinsurance credit risk. Whilst presenting the models, the characteristics and specialities of this module are highlighted.