

# On some insurance risk applications of copulas

Monika Pekárová\*

Faculty of Civil Engineering

Slovak University of Technology in Bratislava

pekarova@math.sk

June 16, 2011

**Keywords:** copulas, fitting, application, DUCS.

## Abstract

Copulas provide a potential useful modeling tool to represent the dependence structure among variables and to generate joint distributions by combining given marginal distributions.

The goal of this paper is to provide simple applications for the practical use of copulas for risk management from an insurance point of view. In this paper we focus on special class of copulas and goodness-of-fit testing.

## References

- [1] Mesiar, R., Jágr, V., Juráňová, M. and Komorníková, M.: *Univariate conditioning of copulas*. Kybernetika 44, No 6, (2008) 807–816.
- [2] Mesiar, R. and Pekárová, M.: *DUCS copulas*. Kybernetika 46, No 6, (2010) 1069–1077.
- [3] Nelsen, R.B.: *An Introduction to Copulas*. Springer, New York, (2006).

---

\*The research was supported by APVV LPP - 0004-07.