The use/abuse of copulas in actuarial science and finance

Abstract

This is an assignment for the actuarial models course in my masterprogram. The assignment is to summarize and discuss using [dempster'correlation'2002], [donnelly'devil'nodate] and [frees'understanding'1998] as a source:

- The purpose is to understand the impact of the assumption regarding the dependence structure between risk factors.
- This is done by means of the concept of copulas.
- In particular, we study the impact of misused copulas and correlation in the valuation of collateralized debt obligations (CDO's).