DIY dependence tools or The virtues of mixing
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Agenda

- Three problems
- Background: Dependence structures
- Background: Mixing
- A quick and dirty copula
- Dependent reinsurer defaults
- Correlations with tail-dependencies
- Uncertainty, information and dependence

Three problems

- Actuaries are increasingly called upon to model dependencies between risks
- Some particular modelling challenges:
  - Have to simulate from tail dependent risks
  - Model clustering of reinsurance defaults
  - Combine a full correlation matrix spec with tail dependence
  - Will show easy ways of doing these