

Abstract

The thesis focuses on the analysis of the impact of the inflation uncertainty on the reinsurance pricing, particularly on its measures of risk. Vector autoregression models are used to predict the medium-term inflation and simulate different inflation paths. The consideration of various scenarios of future inflation captured by the stochastic modelling increases the value at risk (VaR) and the tail value of risk (TVaR) of mean ceded loss to the reinsurer. The thesis finds that the inflation uncertainty measured by the stochastic inflation matters and it is important from risk management and hedging perspectives. As a result, additional loadings could be added to the price for the mitigation of the inflation risk. Although the effect of stochasticity of the future inflation is not significant on mean loss, it is the case for the risk of measures, especially for the contracts with high retention relatively to the underlying exposure.

JEL Classification	F12, F21, F23, H25, H71, H87
Keywords	reinsurance pricing, inflation forecasting, inflation risk, long-tail line of business
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