

# Seminários



Instituto de Gestão de Riscos Financeiros  
e Atuariais da PUC-Rio

## Management of Financial and Demographic Risk in Life Insurance and Pensions with Profit, Unit-Linked and Securitization

Ragnar Norberg (LSE)

## On Structural Breaks in Time Series

Richard Davis (Columbia University)

### Management of Financial and Demographic Risk in Life Insurance and Pensions with Profit, Unit-Linked and Securitization

On diversifiable and non-diversifiable risk: non-systematic mortality risk, systematic mortality risk, financial risk.

Management of non-diversifiable risk: the with profit scheme, unit-linked insurance, and alternative risk transfer (ATR). A closer look at ATR through mortality derivatives: optimal mean-variance hedging with a given set of derivatives and optimal design of the very derivatives. Some common sense: can the market really come to our rescue?

01/04/2009 - 10:00h

Sala de Multimeios do DEE  
(entrada pela sala 401-L)  
Prédio Cardeal Leme  
4o andar  
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### On Structural Breaks in Time Series

Many of the models used for financial time series are assumed to be stationary. This is often an unrealistic assumption and in this talk we will outline a procedure for modeling time series in which there are structural breaks. This could take the form of level shifts (changes in the mean), changes in variance, or changes in the dependence structure in the data. The procedure is based on fitting piecewise models, chosen to optimize the minimum description length (MDL). A number of illustrative examples will be given.