

# Raziskovalni center Ekonomske fakultete

organizira znanstveno - raziskovalni seminar,

ki bo v **četrtek, 24. Oktobra 2013,** ob **13:00 uri**

v **P-109** na **Ekonomski fakulteti v Ljubljani.**

Predstavljen bo članek:

**“**Robust measurement of implied correlations**”**

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˝Correlations between asset prices play an important role in various risk management and pricing problems. Implied correlations which are moving towards 1 indicate that the diversification benefit one can obtain by composing a portfolio, is evaporating. In the extreme case there is no diversification possible in an asset portfolio and stock picking doesn't make sense anymore as the portfolio return is not determined by the particular stocks composing the portfolio, but whether one is exposed to the stock market or not. Asset correlations are changing over time. Typically, one will observe increased correlation levels when the market is in distress. The term implied correlation refers to a market based estimate for the average level of correlation between the log-returns of a number of stocks. We determine implied correlation levels by matching the observed index option price with a model-based index option price. We show that the current market practice for determining implied correlations is a particular member of our general framework. Our benchmark model assumes lognormal marginals and a Gaussian copula. In reality, implied stock volatilities will not be constant, which implies that the assumption of lognormal marginals is violated. We account for this departure from the Black & Scholes setting by including the whole volatility surface of the stocks.

Knowledge about the implied level of correlation is specially needed in volatile times. The traditional approach tends to fail in these situations, which makes the traditional implied correlation a bad estimate in times when it is needed the most. Indeed, we show that traditional approach results in an underestimation of the true correlation parameter. When some of the volatilities of the individual stocks are becoming large, the error becomes much more pronounced.˝

Na brezplačni seminar se lahko prijavite v Službi za znanstveno raziskovalno delo, po telefonu (01) 58-92-490, ali po e-pošti [research.seminars@ef.uni-lj.si](mailto:research.seminars@ef.uni-lj.si), in sicer do srede, 23.10.2013

**Vljudno vabljeni!**