The Quantitative Finance Research Centre

UNIVERSITY OF TECHNOLOGY SYDNEY
School of Finance & Economics

PRACTITIONER WORKSHOP

Hilton Hotel, Sydney, 13 December 2010

Dynamic Copula and other Risk Management Methods

By Professor Umberto Cherubini

This workshop will provide a unique opportunity to learn cutting edge methods for capturing market and risk factor co-movements in the pricing of financial products and the measurement of risk. Most of the course will be based on original material from the presenter's book *Dynamic Copula Methods in Finance*, John Wiley Finance Series. Matlab Code used in the book will be provided to participants. The course is intended to be self contained. It will review the basic tools used to measure dependence in financial markets and will then go on to address frontier topics.

A gentle introduction to multivariate risk measurement

- Copula functions: basic principles and facts
- Dependence and tails
- Long or short correlation

Basket equity and credit derivatives

- A taxonomy of multivariate equity products
- Top down versus bottom up
- Modelling the term structure of equity derivatives
- Credit risk transfer and multivariate credit derivatives
- CVA valuation using copula functions
- Modelling the term structure of credit losses

Risk management applications

- Temporal and spatial aggregation in risk measurement
- Beyond the square root rule

Umberto Cherubini is a Professor of Mathematical Finance at the University of Bologna. He is Fellow of *Ente Einaudi*, the education branch of the Bank of Italy, and he sits in the Scientific Committee of *Abiformazione*, the Risk Management Education program of the Italian Banking Association (ABI), where he is coordinator of Market Risk. Before joining academia, he was Head of the Risk Management and Forecasting Unit at the Economic Research Department of BCI-Comit. He has lectured extensively on derivatives, structured products and risk management in professional training courses in Italy, UK and US. He has published in international journals in economics and finance, and is co-author of the books *Copula Methods in Finance*, and *Structured Finance: The Object Oriented Approach*, and *Fourier Transform Methods in Finance*, all in the John Wiley Finance Series.
(www.polyhedron.it/Cherubini.htm)

Who should attend?

Quantitative analysts, traders, risk managers, financial engineers, researchers, regulators and individuals interested in quantitative issues in risk management

Information

This workshop day at QMF 2010: $1,300
(payment on/before 4 August 2010) Early Bird
The registration fee also includes GST, morning and afternoon teas, and lunch.

Date, Time & Venue
13 December 2010 / 9.00 am - 5.00 pm
Hilton Hotel Sydney, 488 George Street, Sydney NSW 2000
The number of participants is limited. Please register soon to secure your place.

Registration

Contact the Conference Coordinator to receive a registration form, or visit the QFRC website.

Contact Details
Quantitative Finance Research Centre
School of Finance and Economics
University of Technology, Sydney
PO Box 123
Broadway NSW 2007, Australia

Tel: +612 9514 7777 Fx: +612 9514 7722
Email: qmf@uts.edu.au
www.qfrc.uts.edu.au/qmf