
The Newsletter of the EURO Working Group on Financial Modelling

NEWSFLOW

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NEWSFLOW

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Subscription is free for members of the EURO Working Group on Financial Modelling. See last page for information on membership.

Invitation to readers

Readers are invited to actively contribute to the newsletter. Examples are book reviews, announcements, opinions, lists of published papers, etc.

You can also find information about the Euro Working Group on the internet site

<http://www2.eur.nl/topics/finance/ewgfm/ewgfm.htm>

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Editorial

Financial mathematics, volatility and global risks: sitting on a volcano?

Since 1986, the primary field of interest for the EURO Working Group on Financial Modelling has been to develop financial models to solve problems faced by financial decision makers in the firm, intermediaries and the investment community. Where do we stand today?

Every financial analyst is well aware of the sequence of major financial disasters, a by-product of a combination of imprudence and bad governance. Recent illustrations include LTCM, Enron, Tyco, Worldcom, Parmalat, and last but not least, the collapse of the hedge fund Amaranth following heavy losses on natural gas investments. Every risk analyst is also aware of the mounting volatility risk in emerging markets amplified by the spill-over effect in the global economy which acts like a real echo chamber. Examples include the 1982 debt crisis, the 1994 Tequila crisis, the 1998 Asian crisis that prompted ramifications in Latin America and Eastern Europe, the 2002 Argentinean crisis, and recent currency upheavals in Turkey, Indonesia and elsewhere. There are clearing settlement, electronic trading and regulatory issues that threaten to escalate into systemic threats, including in the fast-expanding repo business. And as if all this were not enough, the soaring US current account deficit is a threat hanging over exchange rate stability. These risks are enhanced by the lack of global regulation, be it within the hands of the IMF or the BIS.

Are we thus sitting on a financial volcano? Risk management is more and more complex due to both the global integration of markets and NTIC. In the meantime, technical sophistication in financial mathematics development seems without bounds. Financial modelling is a shared passion for many in the academic and professional circles. Are we facing a new risk?: that of diminishing returns, not so much in the increasing refinement of maths algorithms, but rather in the underlying economic and financial meaning and usefulness of statistical fuzzy numbers, double stochastic Poisson processes, skewness and leptokurtosis?

Though Ulrick Beck argues that we live in a ‘global risk society’, the “discovery” of risk owes much to the seminal work of Pascal, Fermat, and Leibniz, and its analytical refinements to Bachelier, Markowitz, Knight, Merton and Scholes, *inter alii*. A warning shot was delivered by Benoît Mandelbrot at a recent conference at Ceram’s Global Finance Chair, implicitly aimed at other guests such as Myron Scholes. He stressed that a number of key assumptions constitute the un-revisited theoretical base of many financial models: Firstly, people are rational, self-interested and profit-maximizers. Their preferences can be expressed in straightforward economic “utility functions”. This is more or less taken for granted even though behavioural finance casts light on the often irrational behaviour of investors whose psychological biases cause prices to deviate from their « correct » levels. Secondly, all investors are alike, with the same investment goals, the same time-horizon, and the same information, hence homogeneous expectations: they are “price-takers”, not makers. This is also taken for granted even though Stiglitz pointed out the role of asymmetry of information. Thirdly, it is assumed that price change is practically continuous. This makes it possible to reduce all investment decisions to the mean and variance of expected prices, mathematical proxies for return and risk. Fourthly, price changes follow a Brownian motion, a cornerstone of the assumption of independence and normal distribution. Under Gaussian rules, bubbles, crises and dramas are mysterious exceptions.

Mandelbrot’s fractal geometry takes seriously that risk is much larger and more frequent in a free, global-market economy and that standard financial models ignoring “fat-tails” are not adequate to capture riskiness. The 39^o Conference of the EWGFM will be a good opportunity to examine these challenges and explore solutions. European researchers will rub shoulders with market practitioners, including David Harding, CEO of Winton Capital, and with other colleagues. We look forward to meeting all of you in Sophia Antipolis, on November 16-17, for exciting research presentations and fruitful discussions on financial mathematics, including market bubbles (before testing Champagne “bubbles” if you plan to stay over for the weekend, in Cannes, Nice or Monte Carlo!)

Michel Henry Bouchet

Call for papers EJOR

Thus far, the European Journal of Operational Research has published a number of special issues on Financial Modelling:

Issue 74/2, edited by T. Martikainen, I. Virtanen and P. Yli-Olli;

Issue 91/2, edited by E. Castagnoli and J. Spronk. In 1998, the European Journal of Operational Research together with the EURO Working Group on Financial Modelling decided to start a more regular series of feature issues.

A feature issue on financial modelling is an issue of EJOR partly or wholly devoted to financial modelling. The intended frequency of these feature issues on financial modelling is once or twice per year.

Papers on financial modelling are solicited that help to solve financial-economic decision problems in practice. Papers may relate to new insights, both theoretical and empirical, into the environment in which decision makers operate new tools available to the decision makers and to the integration of these tools within frameworks for financial-economic decision-making. Papers that stimulate and strengthen the interaction between financial economic theory and the practice of financial decision-making will be especially welcome.

The first feature issue was published as Issue Volume 114, Number 2, April 16, 1999, and edited by J. Spronk. A stream of issues followed this; some of which have been published and the others will follow soon.

Authors who want to submit to the upcoming feature issue are kindly invited to submit four copies of their paper to the Guest Editor Financial Modelling:

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With respect to format and other requirements of submitted work, the authors are kindly referred to the Instructions to Authors, which can be found in every issue of EJOR. For the feature papers there is a separate board of editors, consisting of

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<http://www.jfdm.org>

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UNIVERSITY OF BERGAMO SPRING SCHOOL

**Stochastic Programming:
theory and applications**

10-20 April 2007

For more information check the website:

www.unibg.it/sps2007

Announcement

Interesting possibilities to publish your papers
electronically, without losing your rights to submit
these papers to journals:

www.ssrn.com

and

www.finance-research.net

Sophia Antipolis (France)

16-17 November 2006

Program

Thursday, November 16th

- 08.30-09.00 Registration
- 09.00-09.30 Welcome – Opening Ceremony
- 09.30-10.30 *Keynote speaker:*
Mr. David Harding, CEO,
Winton Capital Management
- 10.30-10.45 Coffee Break**
- 10.45-12.45 *Plenary Session: Portfolio Management*
Papers by:
Hallerbach/Pouchkarev/Spronk, Pettere,
Simonelli and Yue Qi-Hirschberger

Moderator: Michael Payte
- 13.00-14.30 Lunch**
Keynote speaker:
Dr. Michel Dacorogna,
Converium, Ltd.
- 14.30-16.00 *Plenary Session: Portfolio Management
and Modelling Tools*
Papers by:
Krzemienowski, Granero, Tichy and
Skulimowski

Moderator: Juan E. Trinidad Segovia
- 16.00-16.30 Coffee Break**
- 16.30-18.00 *Plenary Session: Banking*
Papers by:
Gupta/Chevalier, Barseghyan,
Soares/Lopez

Moderator: Michel H. Bouchet
- 19.00-21.00 Dinner**
Keynote speaker

Friday, November 17th

- 08.30-09.00 Registration
- 09.30-10.30 *Plenary Session: Asset Pricing*
Papers by: Hampton, Giles, Wagner

Moderator: Bertrand Gros Lambert
- 10.30-11.00 Coffee Break**
- 11.00-12.30 Parallel Sessions
Session 1: Asset Pricing
Papers by:
Fantcho, Fantcho, Huetl

Moderator: Tarek Anyuni
- Session 2: Corporate Finance
Papers by:
Schauten/Spronk, Romic, Yousfi

Moderator: Barbara Petit
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- 14.15-16.00 *Plenary Session: Asset Allocation*
Papers by:
Farinell/Tibiletti, Lioui/Poncet

Moderator: Jaap Spronk
- 16.00-16.15 Coffee Break**
- 16.30-18.30 Session 1: Option Pricing & Derivatives
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Moderator: David Hampton
- Session 2: Capital Markets
Papers by:
Dragota, Dragota, Tangian

Moderator: Gérard Valin

Information

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Next meeting(s)

2007

The 40th meeting will be held in Rotterdam (The Netherlands), from 10-12 May 2007.

41st EWG Meeting

The location of the 41st meeting will be announced as soon as possible.

For more information about organising a meeting, please contact Jaap Spronk (spronk@few.eur.nl) or Hélène Molenaar (molenaar@few.eur.nl)

Working Papers

ERIM

You can find publications of the Erasmus Research Institute of Management (ERIM) on the following website:

<http://www.fbk.eur.nl/ERIM>

ECFR

From the *Erasmus Center for Financial Research* (ECFR), Erasmus University Rotterdam, Room H11-01, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands, some papers can be ordered:

For more information:

<http://www.ecfr.nl>

TINBERGEN INSTITUTE

For more information:

<http://www.tinbergen.nl/>

Please add other relevant sites if you want!

EURO Working Group on Financial Modelling

The EURO Working Group on Financial Modelling was founded in September 1986 in Lisbon. The primary field of interest for the Working Group can be described as “financial models that help to solve problems faced by financial decision makers in the firm, intermediaries and the investment community. From this the following objectives of the Working Group are distinguished:

- providing an international forum for exchange of information and experience on financial modelling;
- encouraging research in financial modelling (new techniques, methodologies, empirical studies, software, etc.);
- stimulating and strengthening the interaction between financial economic theory and the practice of financial decision making;
- cooperating and exchanging information with other universities and financial institutions throughout Europe.

It can be stated safely that the Working Group has become an established one. To give an idea: over 400 members, 38 international meetings and an own newsletter (*NEWSFLOW*) are three examples of the success until now.

Meetings

The meetings of the Working Group are organized twice a year, in April/May and in October/November. Earlier meetings were held in Belgium, Curaçao, Cyprus, Finland, France, Hungary, Italy, Lithuania, the Netherlands, United Kingdom, Germany, Greece, Croatia, Poland and Spain. There are now members in 34 countries spread over 4 continents. The meetings are attended by 80-100 members on average, most of them scientists but also representatives from the financial institutions, and are usually organized on Thursday, Friday and Saturday morning. The organizers are expected to schedule three types of sessions: a round table session with invited speaker(s), regular sessions with the presentation of refereed papers and balloon sessions in which unrefereed papers, new topics and ‘loose’ ideas can be discussed.

Newsletter

NEWSFLOW, the newsletter of the Working Group is published twice a year, about one month before each meeting. Newsflow is also published on the Internet site <http://www.eur.nl/topics/finance/ewgfm/ewgfm.htm>

It contains general information about the Working Group and the next meeting(s), letters from readers, announcements of financial seminars, calls for papers, a list of working papers, etc. For information about *NEWSFLOW* or for publication of your contributions please contact the editor: H  l  ne Molenaar, address below.

Membership

For information about membership of the EURO Working Group on Financial Modelling, you may write to:

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