



Endorsed by

Operational Risk

Includes
New One-Day
Basel II Seminar

MASTERING AND APPLYING OPERATIONAL RISK QUANTIFICATION METHODS

LONDON, SEPTEMBER 13 & 14 2001

PRE-COURSE, ONE-DAY SEMINAR
LONDON SEPTEMBER 12, 2001

The New Basel II Accord and its Implications for Operational Risk

FEATURE SPEAKERS:

Jonathan M. Davies, UBS Warburg
Leon Bloom, Deloitte & Touche LLP
Tony Blunden, Ernst & Young
Dr Jacques Pézier, Crédit Agricole Lazard Financial Products Bank

COURSE HIGHLIGHTS INCLUDE:

- Develop a framework for operational risk quantification and management techniques
- Examine a cutting edge approach for setting up an integrated management strategy
- Apply Bayesian Networks to enhance quantification techniques
- Master Statistical/Actuarial modelling approaches
- Evaluate the latest banking techniques for correlating operational risk

COURSE TUTORS INCLUDE:

Robert Huebner
DEUTSCHE BANK AG

Robin Phillips
J.P. MORGAN CHASE

Professor Carol Alexander
ISMA CENTRE, UNIVERSITY OF READING

Professor Marcelo Cruz
INDEPENDENT CONSULTANT

Christopher Cloke Browne
BNP PARIBAS

www.risktraining.com/operationeuro

PRE-COURSE SEMINAR: THE NEW BASEL II ACCORD AND ITS IMPLICATIONS FOR OPERATIONAL RISK

London, Wednesday 12 September 2001

8:30 Registration & Breakfast

9:00
IMPLEMENTING THE NEW ACCORD

- Structure of the New Accord
- What data do you need and how do you get it?
- Calculating the new capital requirements for reporting operational risks
- Validation process

Dr Dominic Cooper
B-SAFE LTD

10:00 Morning Break

10:30
HOW TO USE PILLAR II TO REDUCE THE PILLAR I CAPITAL

- Developing operational risk management information
- Using the management information
- Giving the information to the Board
- Sharing the information with the Regulator
- Benchmarking against Basel best practice

Tony Blunden
ERNST & YOUNG

11:30
**THE INFLUENCE OF THE BASEL COMMITTEE PROPOSALS
ON TOP DOWN VS. BOTTOM UP APPROACHES TO
OPERATIONAL RISK MANAGEMENT AND MEASUREMENT**

- Business vs. regulatory objectives of operational risk management and measurement
- Characteristics of top down vs. bottom up approaches
- Pros and cons of alternative approaches
- Implications of Basel II's three-stage approaches to the operational risk capital charge
- Calibration with credit risk
- Critical challenges in collecting experienced and expected loss data
- What is needed in the short and long terms

Leon Bloom
DELOITTE & TOUCHE LLP

12:30 Lunch

1:30
**INDUSTRY GROUPS (ISDA, ITWG AND IIF) AND THEIR
CONTRIBUTIONS TO BASEL**

- Definition of OR
- Categorisation
- Boundaries with credit and 'w' factor
- IMA research
- Scorecards
- IMA specification
- LDA specification
- Qualitative adjustments
- Linearity of functions

Jonathan M. Davies
UBS WARBURG

2:30 Afternoon Break

3:00
**A CRITICAL REVIEW OF BASEL II PROPOSALS ON
OPERATIONAL RISK**

- The Basel II proposals for operational risk
- Why the interest in operational risk?
- Four proposed stages for determining capital charges
- Why there are serious concerns
 - confusion between expected and unexpected losses
 - the ill-defined measurement time scale
 - the lack of consistency among capital charges
 - the unwarranted additives of charges
- What can be done about it?
 - a modified framework
 - the role of insurance charges

Dr Jacques Pézier
CRÉDIT AGRICOLE LAZARD FINANCIAL PRODUCTS BANK

4:00 End of Seminar

TWO-DAY TRAINING COURSE: MASTERING AND APPLYING OPERATIONAL RISK QUANTIFICATION METHODS

DAY ONE

London, Thursday 13 September 2001

8:30 Registration & Breakfast

9:00
THE EVOLUTION OF OPERATIONAL RISK

- Operational risk genesis
- Objectives and processes
- Risks and controls
- Internal and external data
- Quantification and modelling

Tony Blunden
ERNST & YOUNG

10:30 Morning Break

11:00
**IMPLEMENTING THE FRAMEWORK FOR OPERATIONAL
RISK QUANTIFICATION AND MANAGEMENT**

- Data collection
- Tools
- Reports
- Monitoring & management processes
- Incentives

Robert Huebner
DEUTSCHE BANK AG

TWO-DAY TRAINING COURSE: MASTERING AND APPLYING OPERATIONAL RISK QUANTIFICATION METHODS

12:30 Lunch

1:30

OPERATIONAL RISK: ACTUARIAL VS. CAUSAL MODELLING

- Unique characteristics of operational risk that impact choice of modelling method
- Illustration of Actuarial loss modelling method based on historical loss data
- Shortcomings of Parametric approaches that are based solely on historical data
- Illustration, with examples of Causal modelling techniques that combine historical data with expert input
 - system dynamics simulation
 - fuzzy logic
 - bayesian Belief Networks/influence diagrams

Samir Shah

TILLINGHAST-TOWERS PERRIN

3:00 Afternoon Break

3:30

BAYESIAN METHODS FOR MEASURING OPERATIONAL RISKS

- Introduction to Bayesian statistics
- Bayesian methods for sparse data
- Bayesian estimation: Application to estimating a loss probability
- Bayesian Networks and their applications to operational risks
- Back-testing and scenario analysis
- Decision networks and applications to the management of operational risks

Professor Carol Alexander

ISMA CENTRE, UNIVERSITY OF READING

5:00 End of Day One

DAY TWO

London, Friday 14 September 2001

8:30 Registration & Breakfast

9:00

A TECHNICAL FRAMEWORK FOR CORRELATING OPERATIONAL RISK EVENTS

- Splitting operational risk types
 - high frequency/low severity (P&L)
 - low frequency/high severity (capital)
- Why low frequency/high severity are most relevant to operational risk calculations
- Challenges for statistical approaches to evaluating loss events
- A framework for evaluating operational risk
 - modelling the operational structure (building a "Risk Map")
 - correlating events
 - allocating capital to events
 - developing scenario analysis
 - linking with business decisions

Christopher Cloke Browne

BNP PARIBAS

10:30 Morning Break

11:00

STATISTICAL/ACTUARIAL MODELLING AND ECONOMETRIC CAUSAL MODELS

- Categorizing and quantifying high/low frequency, high/low impact risk-probability distribution
- Distribution parameters and the 'goodness of fit'
- Modelling operational errors- the relationship of operational risk with market and credit risks
- Selecting and evaluating operational risk quantification proxies
- Mishandling losses and processing errors
- Use of Monte Carlo techniques
- Extreme Value Theory in operational risk
- Utilisation of econometrics in operational risk
- Artificial intelligence techniques
- Stress tests/scenario analysis in operational risk
- Pricing and hedging operational risk

Professor Marcelo Cruz

INDEPENDENT CONSULTANT

12:30 Lunch

1:30

A CASE STUDY AT J.P. MORGAN CHASE: SETTING UP AN INTEGRATED OPERATIONAL RISK MANAGEMENT STRATEGY

- Self assessment
- Errors and loss data collection
- Risk-based capital
- Integration: A compelling vision of the future
- Governance structure for active management
- Importance of industry co-operation

Robin Phillips

J.P. MORGAN CHASE

3:00 Afternoon Break

3:30

SYSTEMS AND TECHNOLOGY/E-COMMERCE ISSUES IN OPERATIONAL RISK

- Technology risk in the banking industry
- What makes technology risk so hard to quantify?
- Quantitative assessment of technology risk
- Modelling methodologies to quantify technology risk

Bahram Mirzai

SWISS RE NEW MARKETS

5:00 End of Course

C O U R S E T U T O R S

Due to a lack of historical data, the task of quantifying operational risk has been a prolonged benchmarking process, making these "intangible," or non-cash risks difficult to quantify. Devising an effective course of action for quantification continues to become implicit for risk managers with the use of improved modelling techniques, and through effective capital allocation.

The arrival of the New Basel II Accord also brings with it, new regulatory standards. Under the Accord, banks will be required to allocate a standard percentage of capital for ensuring against unexpected losses, one of the fundamental principles of operational risk management.

Each delegate will gain a working knowledge of effective operational risk management and capital allocation strategies through a variety of complex modelling and management techniques. The sessions have been designed to target the key considerations of each particular subject, and will be piloted in a practical fashion, so that what you achieve is a total learning experience.

The course instructors have been selected for their unparalleled excellence, as both industry practitioners and leading academics

Professor Carol Alexander, Chair of Risk Management
ISMA CENTRE, UNIVERSITY OF READING

Professor Carol Alexander was formerly a Director and Head of Market Risk Modelling for Nikko Global Holdings, and Academic Director of Algorithmics Inc. Her editorial experience includes 12 books on mathematics and finance. Consultancy experience includes building the first generation GARCH models, volatility trading models, design and construction of fund management software based on co-integration, internal VaR models, orthogonal GARCH implementation, and spot-futures arbitrage models.

Leon Bloom, Partner & Leader of Global Financial Services Industries Risk Management and Control Practice
DELOITTE & TOUCHE LLP

Leon Bloom is the leader of the firm's Global Financial Services Industries (GFSI) Risk Management and Control Practice. Leon's focus includes the provision of risk management and control, governance, and compliance and payment system consulting services to public and private sector clients. Leon is a co-architect of the Deloitte & Touche LLP Operational Risk Management (ORM) methodology and has led its implementation in some of the world's leading financial institutions.

Tony Blunden, Director of Operational Risk, Business Risk Consulting
ERNST & YOUNG

Tony's areas of focus are the identification and development of clients' needs, the development of Ernst & Young's risk product set and internal training. Based in the London office, Tony is a recognised speaker and chair at operational risk conferences and author of operational risk articles. He was one of a very few practitioners invited to appear before the Joint Committee of the Houses of Lords and Commons enquiring into Financial Services and Markets.

Christopher Cloke Browne, Fixed Income Capital Manager
BNP PARIBAS

Christopher advises the Fixed Income Business Managers on the efficient deployment of their allocated economic capital to generate revenues. Strategies include risk transfer in the markets or a change in business emphasis. His team has developed a sophisticated framework for measuring, analysing and optimising risk profiles.

Dr Dominic Cooper, Managing Director
B-SAFE LTD

Dr Dominic Cooper has published on the topics of operational risk and organisational culture, and has spoken on these subjects at many major international conferences. Dominic's company, B-Safe Ltd, has developed applications that enable organisations to control their operational risks by measuring, monitoring and analysing

operational risk behaviours.

Professor Marcelo Cruz
INDEPENDENT CONSULTANT

Marcelo Cruz has over six years of experience in operational risk modelling and derivatives trading for major investment banks. His most recent position was in leading operational risk methodology development at UBS. Currently, Dr Cruz works as a consultant to several large financial institutions. His academic interests include publications in professional journals and academic texts on risk management.

Jonathan M. Davies, Head of Operational Risk Control
UBS WARBURG (UBSW)

Jonathan is responsible for the development of the UBS Warburg Operational Risk measurement and risk management processes. Jonathan has had 10 years experience at UBS Warburg in many functions across Risk Control, Operations, Financial Control and Business Unit Control. He actively represents the bank to regulators and the industry on the development of a regulatory capital framework. He chairs the ISDA working group on operational risk and is a member of the ITWG and the IIF working groups

Robert Huebner, Head of Operational Risk Assessment
DEUTSCHE BANK AG

Robert Huebner is Head Of Operational Risk Assessment and OR MIS in the area Chief Risk Officer Operational Risk. He is responsible for the development of DB Groups worldwide operational risk management information system and the development and implementation of DB "Risk Map", which is DB Group's operational risk self assessment tool. Since early 1999, he has worked on operational risk management and developed Deutsche's operational risk framework.

Bahram Mirzai, Associate Director
SWISS RE NEW MARKETS

Dr Mirzai joined Swiss Re in 1998, and is responsible for operational risk measurement group. His focus has been on quantification and development of mitigation strategies for operational risks. He has published a number of articles on prediction models and modelling of correlated risks.

Dr Jacques Pézier, Head of UK Marketing,
CRÉDIT AGRICOLE LAZARD FINANCIAL PRODUCTS BANK
CAL FP, the first joint venture between Lazard and Crédit Agricole, provides Lazard clients with structured finance and risk management solutions tailored to their specific needs. Jacques was previously Head of Risk Management at CAL FP, looking after both the analysis of individual transactions and the general risk management methodology of the firm and its relationship with the regulator.

Robin Phillips, Vice President, Operational Risk Team
J.P. MORGAN CHASE

Robin Phillips is currently engaged in developing an integrated operational risk framework for the firm. His previous position was program manager for the Year 2000, project at J.P. Morgan. Mr. Phillips has a technology background and has held senior positions in various technology disciplines and businesses, including consulting assignments while previously employed by a leading international consultancy.

Samir Shah, Managing Consultant,
TILLINGHAST-TOWERS PERRIN

Samir Shah works across multiple lines-of-business at Towers Perrin in developing intellectual capital and working with clients to provide unique and customized applications of engineering sciences to management decision making. He specializes in the application of Operations Research methods such as computer simulation, optimisation and decisions and risk analysis to modelling business dynamics and decision-making.



Dear Executive,

MASTERING OPERATIONAL RISK QUANTIFICATION METHODS

LONDON, 13 & 14 SEPTEMBER 2001

Financial institutions have been busy preparing themselves for the implementation of the New Basel II Accord, and its operational risk requirements. Risk Training has created a practical training course through a comprehensive research process that focuses on measuring and managing your operational risks.

This particular course has been designed for professionals responsible for implementing operational risk measures and concepts. The presentations will cover a variety of quantification models, management techniques, and technology issues, and will be led by prominent academics and industry practitioners.

Delegates will have the opportunity to:

- Analyse applications for measuring operational risk using Bayesian Networks
- Examine Statistical/Actuarial and Econometric causal modelling techniques
- Evaluate the various quantification frameworks and capital requirements
- Learn what leading banks are doing, through various proprietary approaches
- Assess the latest technology techniques and operational risk systems

I look forward to welcoming you all,

Yours faithfully,

A handwritten signature in black ink that reads "Megan Bross".

Megan Bross
Course Producer

Risk

TRAINING

MASTERING AND APPLYING OPERATIONAL RISK QUANTIFICATION METHODS

Code: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

VIP no:

Please do not cover this box as it contains important marketing information

LONDON 12, 13 & 14 SEPTEMBER 2001

T O R E G I S T E R

Mail Conference Administration,
Risk Waters Group,
Haymarket House, 28-29 Haymarket,
London SW1Y 4RX, UK
Tel +44 (0)20 7484 9898
E-mail conf@riskwaters.com
Fax +44 (0)20 7484 9800

Mail Conference Administration,
Risk Waters Group,
270 Lafayette Street, Suite 700
New York, NY 10012
Tel +1 212 925 1864 x 197
Toll-Free 1-877 367-8008
Fax +1 212 925 7585

Web www.risktraining.com/operationeuro

Visit the **Risk Waters Group** web site for an update on our forthcoming conferences and courses and for information on our magazines and books at www.riskwaters.com

Registration details

I will be attending the course **Mastering & Applying Operational Risk Quantification Methods** (please tick the relevant box below)

- I would like to book a special discount package - all three days at a saving of £300
Seminar and the two-day training course (September 12, 13 & 14) **£2,698 + VAT @ 17.5% (£3,170.15) saving £300**
- I would like to attend the two-day training course only (September 13 & 14) **£1,999 + VAT @ 17.5% (£2,348.83)**
- I would like to attend the one-day pre-course seminar only (September 12) **£999 + VAT @ 17.5% (£1,173.83)**

Your registration fee includes breakfast, lunch and refreshments, pre course reading and your documentation pack. Book online or fax the completed form with your credit card details, or follow up the provisional reservation with a cheque payable to Risk Waters Group Ltd. In order that we process your registration with maximum efficiency, we request that a copy of this booking form accompanies your payment. Please complete the form below in BLOCK CAPITALS.

TITLE FIRST NAME FAMILY NAME

JOB TITLE / POSITION DEPARTMENT COMPANY

ADDRESS

CITY POST/ZIPCODE COUNTRY

TELEPHONE FAX EMAIL

APPROVING MANAGER TRAINING MANAGER

Please tick the description which best fits your company type

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> Commercial/Investment bank | <input type="checkbox"/> Exchange | <input type="checkbox"/> Accountancy/Audit | <input type="checkbox"/> Energy/Utility |
| <input type="checkbox"/> Brokerage | <input type="checkbox"/> Asset/Investment/Fund management co | <input type="checkbox"/> Consultancy/Boutique | <input type="checkbox"/> Non-financial corporation |
| <input type="checkbox"/> Building Society/Thrift | <input type="checkbox"/> Legal | <input type="checkbox"/> Government/Public Body | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Insurance company | <input type="checkbox"/> Regulator | <input type="checkbox"/> Software/Technology | |

Payment details

CRYD111

I enclose a cheque payable to **Risk Waters Group Ltd.**

Please debit my: AMEX VISA MASTERCARD DINERS CLUB (please supply 'valid from' date _____)

CARD NO: EXPIRY DATE:

ACCOUNT ADDRESS IF DIFFERENT FROM ABOVE

SIGNATURE DATE:

Risk Waters Group VAT No: GB 681 3190 38 For companies in EU member states only: Please write your VAT/TVA/BTW/IVA/ MCMS/MWST/FPA number here

Payment is required prior to the event. If you require an invoice please inform us stating whether you need an original or a fax copy. We accept company cheques, credit cards and bank transfers. Please allow a minimum of seven working days for a bank transfer to reach us and phone or fax us when it has been sent. Please state the event name and delegate name to which it relates.

Venue and accommodation details

Le Meridien Piccadilly
21 Piccadilly
London W1V 0BH
Tel: +44 (0) 20 7734 8000

Please call The Event Workshop on 01189 869111 or email beds@theeventworkshop.co.uk

Special Group Discounts:

When three or more delegates from the same company and city register for an event at the same time, they will receive a 15% discount on the registration fee.

Customer loyalty: Because we value your custom, any delegate who books onto three or more Risk events, conferences or courses, in the same calendar year, will receive an automatic 15% discount.

WARNING: Risk is a registered trademark, and the title, contents and style of this brochure are the copyright of Risk Waters Group. We will act on any infringement of our rights anywhere in the world. © Risk Waters Group 1998.

CANCELLATION
A refund (less 10% administration fee) will be made if notice of cancellation is received in writing three weeks before the event. We regret that no refunds can be given after this period. A substitute delegate is always welcome at no extra charge.

DISCLAIMER
The programme may change due to unforeseen circumstances, and Risk Waters Group reserves the right to alter the venue and/or speakers. Risk Waters Group accepts no responsibility for any loss or damage to property belonging to, nor for any personal injury incurred by, attendees at our conferences, whether within the conference venue or otherwise.

INCORRECT MAILING, DATA PROTECTION
If any of the details on the mailing label are incorrect, please return the brochure to the database administrator at Risk Waters Group so that we can update our records and ensure future mailings are correct.

Please tick this box and return this page if you do not want to receive details of special offers which may be of relevance to you.