

CAROL OLIVIA ALEXANDER

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WORK ADDRESS

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EDUCATION

1976 B.Sc. (Sussex) in Mathematics with Experimental Psychology (First Class)
1980 Ph.D. (Sussex) in Algebraic Number Theory (Supervised by Walter Ledermann)
1985 M.Sc. (LSE) in Mathematical Economics and Econometrics

APPOINTMENTS

1977 – 1978 Editor, John Wiley (one year interim PhD research)
1981 – 1982 Postdoctoral Research Fellow, University of Amsterdam
1982 – 1983 Bond Analyst, UBS Phillips and Drew, London
1983 – 1985 Teaching and Research Assistant, London School of Economics (part-time)
1985 – 1996 Lecturer in Mathematics and Economics, University of Sussex
1996 – 1998 Lecturer in Mathematics, University of Sussex (part-time)
1996 – 1998 Academic Director, Algorithmics Inc., London (part-time)
1998 Director, Head of Market Risk Modelling, Nikko Securities, London
1988 – 1999 Visiting Research Fellow, Oxford Centre for Industrial and Applied Mathematics
1999 – 2012 Chair of Financial Risk Management, ICMA Centre, Henley Business School
2007 – 2008 Risk Research Advisor, SAS International
2012 – now Professor of Finance, University of Sussex
2013 – now Head of Business and Management, University of Sussex

GRANTS

1981 Leverhulme Foundation, post-doctoral research grant, University of Amsterdam
1986 Nuffield Foundation, award for new lecturers in science, University of Sussex
1994 ESRC, research grant for time series analysis in financial markets
2003 Foundation for Managed Derivatives Research, grant for research into hedge funds
2003 British Academy, research grant (with S. Burke, Henley Business School)
2005 Australian Prudential Regulatory Authority, research grant (with E. Sheedy, Macquarie)
2008 Europlace Institute of Finance, research grant (with S. Ohana, ESCP-EAP)

HONOURS, PATENTS and AWARDS

1996 Winner, First International Non-Linear Financial Forecasting Competition
(with Sussex MAPS postdoctoral research student, Ian Giblin)
2002 Honorary Professorship, Academy of Economic Sciences, Bucharest
2003 International Financial Risk Institute (IFRI), 9th roundtable award
2007 Professional Risk Managers International Association (PRMIA)
Annual higher standard award (jointly held, with Prof. Robert Merton)
2009 U.S. Patent Number 7,571,130: Hedging exchange traded mutual funds or other
portfolio basket products google.com/patents/US20030233302
2010 University award for Outstanding Contributions to Teaching and Learning
2011 U.S. Patent Number 7,979,336: A system for pricing financial instruments
google.com/patents/US7979336

EXTERNAL ACADEMIC ACTIVITIES

- 1999 – 2000 Visiting Research Fellow, OCIAM, Oxford University
 - 2003 – 2006 Expert Witness, Richards Butler, London
 - 2007 – 2009 Editorial Board, Journal of Banking and Finance
 - 2011 – 2013 Editorial Board, Journal of Investment Strategies
 - 2007 – now Editorial Board, Journal of Portfolio Management
 - 2011 – now External Assessor, PhD Programme in Economics and Finance, St. Gallen University
 - 2011 – now External Examiner, Mathematical Finance Programme, Sussex University
 - 2011 – now Member of CFA Advisory Council
 - 2013 – now Co-Editor-in-Chief of Journal of Banking and Finance
- See also PRMIA activities overleaf

Selected keynotes at professional conferences

- 2003 9th Annual Round Table of the International Financial Risk Institute (IFRI, London)
- 2003 1st International Congress on Financial and Derivatives Markets, (BM&F, Brazil)
- 2007 Risk and Return Russia, (Incisive Media, Moscow)
- 2009 Quant Congress USA (Incisive Media, New York)
- 2010 Changing Risk Landscape, Financial Times (London)
- 2012 PRMIA 10th Anniversary Global Risk Conference (New York)
- 2012 Royal Institution (London), 14-10 Club for Quant Finance Professionals

Selected plenary talks at academic conferences

- 2003 New Directions in Risk Management, Frankfurt
- 2004 German Finance Association 9th Annual Congress, Augsburg
- 2004 Campus for Finance, Germany
- 2005 Quantitative Methods in Finance Conference, Sydney
- 2008 3rd Annual Mathematics in Finance International Conference, Kruger, South Africa
- 2010 HVB-Institute for Mathematical Finance, Munich
- 2011 Campus for Finance, Germany
- 2012 9th Applied Financial Economics Conference, Greece
- 2013 Fields Institute, Toronto, Canada

Selected workshops, seminars and conferences

- 2009/8/7 Quant Congress Europe (London)
 - 2010 FOW Derivatives World (London), Post-Crisis Risk Measurement (CFA UK)
 - 2011 Model Risk Validation (Paris)
 - 2010/11/12 PRMIA webinars (Global)
 - 2013 Simulation workshop, Bolzano, Italy
 - 2013 African Institute of Mathematical Sciences, Cape Town
- Further details on request

Selected refereeing

Journal of Banking and Finance, Financial Analysts Journal, Finance and Stochastics, Quantitative Finance, Journal of Portfolio Management, Journal Futures Markets, Journal Economic Dynamics and Control, Journal Applied Econometrics, Journal Financial Econometrics, Journal of Business Finance and Accounting, International Journal of Theoretical and Applied Finance, European Financial Management, Annals of Econometrics, Applied Mathematical Finance, Journal of Alternative Investments, Applied Financial Economics, European Journal of Finance, Finance Letters, European Journal of Operational Research, Review of Finance

PhD Examining

2008	External Examiner	Imperial College Student of Mark Davis
2009	External Examiner	University Paris-Dauphine Student of Helyette German

INDUSTRY LINKS

Consultancy

1990 – 1991	First generation GARCH models, Hill Samuel Bank, London
1992	Volatility trading models, Equitable House Investments, London
1994 – 2003	Hedge-fund software design, Pennoyer Capital Management, New York
1996 – 1997	Spot-futures arbitrage models, EDF Man, London
1996	Internal value-at-risk model implementation, Shell Pension Fund, Netherlands
1997 – 1998	Orthogonal GARCH models, Robert Fleming, London
2001 – 2007	High frequency pricing and hedging of active exchange traded funds, NYSE Amex LLC, New York
2009 – 2010	Value-at-risk model design, Credit Agricole Asset Management, London
2012 – now	Model validation, ICE Clear Europe
2012 – now	Tindecro Asset Management, Zurich

Professional Risk Manager's International Association (PRMIA)

2002 – 2009	Founding Chair of the Academic Advisory Council
2003 – 2004	Produced Professional Risk Manager's Handbook (with E. Sheedy, Macquarie)
2007	Recipient of Higher Standard Award (with Robert Merton)
2009 – 2012	Board Member
2010 – 2012	Chair of Board
2011	Founding editor of Intelligent Risk prmia.org/irisk

TEACHING

1985 – 1998	Lecture Courses	University of Sussex
	Econometrics, post-graduate	Economics Group
	Maths for Economists, 2yr under-graduate	Economics Group
	Maths for Biologists, 1yr under-graduate	Mathematics Group
	Group Theory, 2yr under-graduate	Mathematics Group
	Linear Algebra, 1yr under-graduate	Mathematics Group
1985 – 1998	Seminars and Workshops	University of Sussex
	Microeconomics, 2yr undergraduate	Economics Group
	Macroeconomics, 2yr undergraduate	Economics Group
	Statistics, 2yr undergraduate	Mathematics Group
	Game Theory, postgraduate	Mathematics Group
2000 – 2012	MSc Lecture Courses	University of Reading
2000 – 2004	Market Risk	ICMA Centre
2004 – 2011	Volatility Analysis	ICMA Centre
2005 – 2012	Quantitative Methods for Finance	ICMA Centre

INTERNAL ADMINISTRATION

- 1985 – 1999** **Convenor of BSc/BA Degrees** **University of Sussex**
Mathematics with Economics
Mathematics and Economics
Economics with Mathematics
- 2005 – now** **Convenor of MSc Degrees** **ICMA Centre**
Introduced first UK MSc in Financial Risk Management
Obtained PRM accreditation: joint-first MSc programme globally
Introduced and marketed Financial Engineering MSc
- 2005 – 2006** **Convenor MSc Research Projects** **ICMA Centre**
Wrote extensive student handbook
Developed LMS site. Supervisor allocation and student support
- 2005 – now** **Elite Postgraduate Exchange** **ICMA Centre-TU Munich**
Student exchange with HVB-Institute for Mathematical Finance
Initiated and administered programme
- 2000 – 2008** **Director of Research** **ICMA Centre**
Established ICMA Centre finance research reputation worldwide:
Introduced and disseminated electronic discussion paper series
Introduced weekly research seminars
Developed research strategy and plan
Management of website research section
- 2010 – 2012** **Director of Enterprise** **ICMA Centre**
Development of industry links
Research funding and student placements
- 2013 – now** **Head of Business and Management** **University of Sussex**
Managing subject groups in Finance, Banking, Accounting, Marketing,
Organisational Behaviour, Human Resource Management,
International Business, Strategy and Enterprise

INTERNATIONAL UNIVERSITY LINKS

- 2005 – now** **MSc Student Exchange** **TU Munich**
Supervision of finance thesis and research papers for 1 or 2 ‘Elite’ MSc students per year
Collaboration with Professor Rudi Zagst, Chair of Mathematical Finance, TU Munich
- 2008 – now** **ESCP-EAP, Paris**
Joint-holder of Europlace Institute of Finance grant for research into emissions and energy markets
with Steve Ohana, Associate Professor ESCP-EAP
- 2010 – 2011** **Academic Visitor** **University of Cantabria, Spain**
Research collaboration with Jose Maria Sarabia, Professor of Statistics, Department of Economics

2011 External Assessor St. Gallen University, Switzerland
Finance assessor for teaching quality on Ph.D. Program in Economics and Finance
– with Bo Honore (Economics) and Yacine Ait-Sahalia (Econometrics) both of Princeton University

2012 Trondheim University, Norway
Norwegian national PhD student summer school: New Directions in Quantitative Finance Research
Collaboration with Prof. Sjur Westgaard, Norwegian University for Science and Technology
Norwegian national research school in business economics and administration <http://nfb.nhh.no>

2013 Quantitative Finance International Network – QFIN

PhD SUPERVISION

Further details: carolalexander.org/phd_students.php

Current PhD Students with Expected Year of Completion

2014	Annanit Sumawong	Trading and Hedging Energy Futures
2014	Xi Chen	Real Options and Decisions in Corporate Finance
2014	Johannes Rauch	Generalized Realised Skewness and Kurtosis

Past PhD Students with Current Occupation

2004	Ali Bora Yigitbasioglu	Defaultable Convertible Bonds with Volatility Uncertainty and Call Notice Periods Senior portfolio manager and FX macro prop trader, Cambridge Strategy, London
2004	Anca Dimitriu	Portfolio Optimization Models for Traditional and Alternative Investments Investment strategist, Goldman Sachs; Propriety trader, Millenium Capital, London
2005	Dmitri Lvov	Pricing Convertible Bonds and Bermudan Swaptions by Monte Carlo Simulation VP commodities quant research, JP Morgan-Chase Bank, London
2006	Leonardo Nogueira	Pricing and Hedging Options with Local and Stochastic Volatility Models Head of quant research, Brazilian Central Bank
2006	Emese Lazar	Multi-State Volatility Models: Theory and Applications Lecturer in finance, ICMA Centre, Henley Business School at Reading
2007	Andreza Barbosa	Pricing and Hedging Exchange Traded Funds Director, EMEA Head of Risk, Futures and OTC Clearing, Citigroup, London.
2008	Naoufel El Bachir	Stochastic Default Intensity Modeling with Dependent Jump Processes Founding parter, FinBoost, quantitative financial analysis consultancy, London
2008	Aanand Venkatrammanan	Multi-Asset Option Pricing Algorithmic trader, Goldman Sachs, London
2010	Joydeep Lahiri	Jump Diffusions for Modelling Default Intensity Senior analyst, Hermes Asset Management, London

2010	Stamatis Leontsinis	Model-Free Moment Indices Quantitative analyst, Fulcrum Asset Management, London
2010	Silvia Stanescu	Analytic Moments for GARCH Processes Lecturer in finance, Kent University
2010	Andreas Kaeck	Equity Index and Index Derivative Dynamics Associate professor of finance, St. Gallen University
2010	Daniel Ledermann	Random Orthogonal Matrix Simulation Quant analyst, HSBC, London
2012	Dimitris Korovilas	Trading Volatility Quant analyst, Citigroup, London

PUBLICATIONS

Downloadable versions: carolalexander.org/academic_journals.php

Refereed Academic Journal Articles

- Alexander, C., Lazar, E. and S. Stanescu (2013) Forecasting VaR using analytic higher moments for GARCH processes *International Review of Financial Analysis* 30, 36-45
- Kaeck, A. and C. Alexander (2013) Stochastic volatility jump-diffusions for European equity index dynamics. *European Financial Management*.
doi: 10.1111/j.1468-036X.2011.00613.x
- Alexander, C. and D. Korovilas (2013) Volatility exchange-traded notes: Curse or cure? Forthcoming in *Journal of Alternative Investments*. Fall Issue.
- Kaeck, A. and C. Alexander (2013) Continuous-time VIX dynamics: On the role of stochastic volatility of volatility. *International Review of Financial Analysis* 28, 45-46
- Alexander, C., Propoczuk, M. and A. Sumawong (2013) The (de)merits of minimum-variance hedging: Application to the crack spread. *Energy Economics* 36, 698-707
- Ledermann, D. and C. Alexander (2012) Further properties of random orthogonal matrix simulation. *Mathematics and Computers in Simulation* 83, 56-79
- Kaeck, A. and C. Alexander (2012) Volatility dynamics for the S&P 500: Further evidence from non-affine, multi-factor jump diffusions. *Journal of Banking and Finance* 36(11), 3110-3121
- Alexander, C. and J-M. Sarabia (2012) Quantile uncertainty and value-at-risk. *Risk Analysis: An International Journal* 32(8), 1293-1308
- Alexander, C., Cordeiro, G., Ortega, E. and J-M. Sarabia (2012) Generalized beta generated distributions. *Computational Statistics and Data Analysis* 56(6), 1880-1897
- Alexander, C. and A. Venkatramanan (2012) Analytic approximations for multi-asset option pricing. *Mathematical Finance* 22(4), 667-689
- Alexander, C. and A. Kaeck (2012) Does model fit matter for hedging? Evidence from FTSE 100 options. *Journal of Futures Markets* 32(7), 609-638
- Alexander, C., A. Rubinov, M. Kalepky and S. Leontsinis (2012) Regime-dependent smile-adjusted delta hedging. *Journal of Futures Markets*. 32(3), 202-229
- Venkatramanan, A. and C. Alexander (2011) Closed-form approximations for spread options. *Applied Mathematical Finance*. 18(5), 447-472

14. Ledermann, W., Alexander, C. and D. Ledermann (2011) Random orthogonal matrix simulation. *Linear Algebra and its Applications*, 434, 1444-1467
15. Alexander, C. and E. Lazar (2009) Modelling regime-specific stock price volatility. *Oxford Bulletin of Economics and Statistics*, 71:6, 761 - 797
16. Alexander, C., A. Kaeck and L. Nogueira (2009) Model risk adjusted hedge ratios. *Journal of Futures Markets*, 29:11, 1021-1045
17. Alexander, C. and E. Sheedy (2008) Developing a stress testing framework based on market risk models. *Journal of Banking and Finance*, 32:10, 2220-2236
18. Alexander, C. and A. Kaeck (2008) Regime dependent determinants of credit default swap spreads. *Journal of Banking and Finance*, 32:6, 1008 - 1021.
19. Alexander, C. and A. Barbosa (2008) Hedging exchange traded funds. *Journal of Banking and Finance*, 32:2, 326-337
20. Alexander, C. and L. Nogueira (2007) Model-free price hedge ratios for homogeneous claims on tradable assets. *Quantitative Finance*, 7:5, 473 - 479
21. Alexander, C. and A. Barbosa (2007) Effectiveness of minimum variance hedging. *Journal of Portfolio Management*, 33:2, 46 - 59
22. Alexander, C. and L. Nogueira (2007) Model-free hedge ratios and scale-invariant models. *Journal of Banking and Finance*, 31:6, 1839-1861
23. Yigitsbasioglu, A. and C. Alexander (2006) Pricing and hedging convertible bonds: delayed calls and uncertain volatility. *International Journal of Theoretical and Applied Finance*, 9:2, 415-437
24. Alexander, C. and E. Lazar (2006) Normal mixture GARCH 1,1 : applications to foreign exchange markets. *Journal of Applied Econometrics*, 21:2 307-336
25. Alexander, C. and A. Dimitriu (2005) Rank alpha funds of hedge funds. *Journal of Alternative Investments*, 8:2, 48-61
26. Alexander, C. and A. Dimitriu (2005) Detecting switching strategies in equity hedge funds returns. *Journal of Alternative Investments*, 8:1, 7-13
27. Alexander, C. (2005) The present and future of risk management. *Journal of Financial Econometrics*, 3:1, 3-25
28. Alexander, C. and A. Barbosa (2005) The spider in the hedge. *Review of Futures Markets*, 11:1, 89-113
29. Alexander, C. and A. Dimitriu (2005) Indexing and statistical arbitrage: tracking error or cointegration? *Journal of Portfolio Management*, 31:2, 50-63
30. Alexander, C. and A. Dimitriu (2005) Indexing, cointegration and equity market regimes. *International Journal of Finance and Economics*, 10, 213-231
31. Alexander, C. and A. Scourse (2004) Bivariate normal mixture spread option valuation. *Quantitative Finance*, 4:6 1-12
32. Alexander, C. (2004) Normal mixture diffusion with uncertain volatility: modelling short and long term smile effects. *Journal of Banking and Finance*, 28:12, 2957-2980
33. Alexander, C. and A. Dimitriu (2004) Sources of out-performance in equity markets: common trends, mean reversion and herding. *Journal of Portfolio Management*, 30:4, 170-185
34. Alexander, C. and A. Dimitriu (2004) Equity indexing: optimising passive investments. *Quantitative Finance*, 4:3 C30 - C33
35. Alexander, C. (2002) Principal component models for generating large covariance matrices. *Review of Banking, Finance and Monetary Economics, Economic Notes*, 31:2, 337-359

36. Alexander, C., I. Giblin and W. Weddington (2002) Cointegration and asset allocation: a new active hedge fund strategy. *Research in International Business and Finance*, 16, 65-90
37. Alexander, C. (2000) Measuring operational risks with Bayesian belief networks. *Derivatives, Use Trading and Regulation*. 6:2, 166-196
38. Alexander, C. (1999) Optimal hedging using cointegration. *Philosophical Transactions of the Royal Society Series A*, 357, 2039-2058
39. Alexander, C. and C. Leigh (1997) On the covariance matrices used in value-at-risk models. *Journal of Derivatives*, 4:3 50-62
40. Alexander, C. and I. Giblin (1996) Multivariate embedding methods: forecasting high-frequency data in the first international non-linear financial forecasting competition. *Journal of Computational Intelligence in Finance*, 5:6, 17-24
41. Alexander, C. and W. Ledermann (1996) Are Nash bargaining wage agreements unique? An investigation into bargaining sets for firm/union negotiations. *Oxford Economic Papers*, 48:2, 1-11
42. Alexander, C. and J. Wyeth (1996) Causality testing in models of spatial market integration. *Journal of Development Studies*, 32:1, 144-146
43. Alexander, C. (1996) Evaluating the use of RiskMetrics as a risk measurement tool for your operation. *Derivatives: Use Trading and Regulation*, 2:3, 277-285
44. Alexander, C. and H. Rendall (1995) Data generation processes of spatial series: Analysis of ephemeral channel form. *Geographical Analysis*, 27:1, 78-93
45. Alexander, C. (1995) Common volatility in the foreign exchange market. *Applied Financial Economics*, 5:1, 1-10.
46. Alexander, C. and J. Wyeth (1994) Cointegration and market integration: an application to the Indonesian rice market. *Journal of Development Studies*, 30:2, 303-308
47. Alexander, C. and M. Barrow (1994) Seasonality and cointegration of regional house prices in the UK. *Urban Studies*, 31:10, 1667-1689
48. Alexander, C. and W. Ledermann (1994) The constrained Nash bargaining solution. *Journal of the Operational Research Society*, 45:5, 954-958
49. Alexander, C. (1993) The changing relationship between productivity, wages and unemployment in the U.K. *Oxford Bulletin of Economics and Statistics*, 55:1, 87-102
50. Alexander, C. and A. Johnson (1992) Are foreign exchange markets really efficient? *Economics Letters*, 40, 449-453
51. Alexander, C., I. Giblin and D. Newton (1992) The symmetry of fractals. *Mathematical Intelligencer*, 14:2, 32-34
52. Alexander, C. (1992) The Kalai-Smorodinsky bargaining solution in wage negotiations. *Journal of the Operational Research Society*, 43:8, 779-786
53. Alexander, C. (1988) On a converse to the Tschebotarev density theorem. *Journal of the Australian Mathematical Society Series A*, 44, 287-293
54. Alexander, C. (1987) Duality in non-normal quartic fields. *American Mathematical Monthly*, 94, 279-284
55. Alexander, C. and W. Ledermann (1985) Integral bases of dihedral number fields. *Journal of the Australian Mathematical Society Series A*, 38, 351-371

Authored Books

See marketriskanalysis.com for further details of contents, discussion forums and videos for (2008) books.

56. Alexander, C. (2008) Market Risk Analysis, Volume I: Quantitative Methods in Finance. Wiley
57. Alexander, C. (2008) Market Risk Analysis, Volume II: Practical Financial Econometrics. Wiley
58. Alexander, C. (2008) Market Risk Analysis, Volume III: Pricing, Hedging and Trading Financial Instruments. Wiley
59. Alexander, C. (2008) Market Risk Analysis, Volume IV: Value at Risk Models. Wiley
60. Alexander, C. (2001) Market Models: A Guide to Financial Data Analysis. Wiley

Edited Books

61. Alexander, C. and E. Sheedy eds. (2008) The Professional Risk Manager's Guide to Finance Theory and Application. McGraw-Hill
62. Alexander, C. and E. Sheedy eds. (2008) The Professional Risk Manager's Guide to Financial Markets. McGraw-Hill
63. Alexander, C. and E. Sheedy eds. (2008) The Professional Risk Manager's Guide to Financial Instruments. McGraw-Hill
64. Alexander, C. and E. Sheedy eds. (2004) The Professional Risk Manager's Handbook: Volume 1, Finance Theory, Instruments and Markets. PRMIA Publications, Illinois
65. Alexander, C. and E. Sheedy eds. (2004) The Professional Risk Manager's Handbook: Volume 2, Financial Mathematics. PRMIA Publications, Illinois
66. Alexander, C. and E. Sheedy eds. (2004) The Professional Risk Manager's Handbook: Volume 3, Financial Risk Management. PRMIA Publications, Illinois
67. Alexander, C. ed. (2003) Operational Risk: Regulation, Analysis and Management. FT-Prentice Hall
68. Alexander, C. ed. (2001) Mastering Risk Volume II. FT-Prentice Hall
69. Alexander, C. ed. (2000) Visions of Risk. FT-Prentice Hall
70. Alexander, C. ed. (1998) Risk Management and Analysis Volume I: Measuring and Modelling Financial Risk. Wiley
71. Alexander, C. ed. (1998) Risk Management and Analysis Volume II: New Markets and Products. Wiley
72. Alexander, C. ed. (1996) The Handbook of Risk Management and Analysis. Wiley
73. Alexander, C. (1980-1990) The Handbook of Applicable Mathematics. Assistant editor volumes I - V and co-editor volume VI. Wiley

Book Chapters, Reports and Conference Papers

74. Alexander, C. (2008) Hedging the risk of energy futures portfolios. Risk-Management in Commodity Markets: From Shipping to Agriculturals and Energy, H. Geman ed., Wiley
75. Alexander, C. (2008) Moving average models for volatility and correlation. Handbook of Finance, Volume 1, F. J. Fabozzi ed., Wiley
76. Alexander, C. (2008) Statistical models of operational loss. Handbook of Finance, Volume 1, F. J. Fabozzi ed., Wiley
77. Alexander, C. and A. Venkatramanan (2008) Commodity options. Handbook of Commodity Investing, F.J. Fabozzi, R. Fuss and D.G. Kaiser eds., Wiley

78. Alexander, C. and A. Dimitriu (2006) Rank alpha funds of hedge funds. *Fund of Hedge Funds: Performance, Assessment, Diversification and Statistical Properties*, G. N. Gregoriou ed., Elsevier
79. Alexander, C. (2005) Assessment of operational risk capital. *Risk Management: Challenge and Opportunity*, M. Frenkel, U. Hommel and M. Rudolf eds., Springer
80. Alexander, C. and A. Dimitriu (2005) Hedge Fund Index Tracking. *Hedge Funds: Insights in Performance Measurement, Risk Analysis, and Portfolio Allocation*, G.N. Gregoriou, G. Hubner, N. Papageorgiou, and F. Rouah eds., Wiley
81. Alexander C. and A. Dimitriu (2004) The Art of Investing. *Hedge Funds: Fund Selection and Optimal Allocations*. *Intelligent Hedge Fund Investing*, Barry Schachter ed., Risk Publications
82. Alexander, C. and L. Nogueira (2004) Stochastic local volatility. *Proceedings of the second international IASTED conference on financial engineering and applications*, MIT, 136-141
83. Alexander, C. and E. Lazar (2004) Time aggregation of normal mixture GARCH. *Proceedings of the second international IASTED conference on financial engineering and applications*, MIT, 210-215
84. Alexander, C. (2004) Principles of the skew. *Exotic Options*, Alexander Lipton ed., Risk Publications
85. Alexander, C. (2004) Correlation in crude oil and natural gas markets. *Managing Energy Price Risk 3rd Edition V. Kaminsky ed.*, Risk Publications
86. Alexander, C. (2004) Advanced value-at-risk Models. *Professional Risk Managers Handbook, Volume III*, C. Alexander and E. Sheedy eds., PRMIA Publications
87. Alexander, C. (2004) Operational value-at-risk. *Professional Risk Managers Handbook, Volume III*, C. Alexander and E. Sheedy eds., PRMIA Publications
88. Alexander, C. and Pezier, J. (2003) Assessment and aggregation of banking risks. *Commissioned report*. International Financial Risk Institute (IFCI)
89. Alexander, C. (2003) Statistical models for operational loss. *Operational Risk: Regulation, Analysis and Management*, C. Alexander ed., Pearson
90. Alexander, C. (2003) Managing operational risks with Bayesian networks. *Operational Risk: Regulation, Analysis and Management*, C. Alexander ed., Pearson
91. Alexander, C. (2001) Orthogonal GARCH. *Mastering Risk Volume II*, C. Alexander ed., Pearson
92. Alexander, C. (2001) Bayesian methods for measuring operational risks. *Mastering Risk Volume II*, C. Alexander ed., Pearson
93. Alexander, C. (1999) Correlation and cointegration in energy markets. *Managing Energy Price Risk, 2nd Edition. V. Kaminsky ed.*, Risk Publications
94. Alexander, C. (1998) Volatility and correlation: measurement, models and applications. *Risk Management and Analysis: Measuring and Modelling Financial Risk*. C. Alexander, ed., Wiley
95. Alexander, C. (1997) Estimating and forecasting volatility and correlation: methods and applications. *Risk Management and Financial Derivatives: A Guide to the Mathematics*, S. Das ed., LBC
96. Alexander, C. (1996) Volatility and correlation forecasting. *Handbook of Risk Management and Analysis*. C. Alexander ed., Wiley
97. Alexander, C. (1990) Non-cooperative finite games. *Handbook of Applicable Mathematics*. Volume VI. W. Ledermann and C. Alexander eds., Wiley

98. Alexander, C. (1980) Groups. Handbook of Applicable Mathematics, Volume I. W. Ledermann ed., Wiley

Practitioner Journal Articles

99. Alexander, C. (2003) Operational risk aggregation. *Operational Risk* (April)
100. Alexander, C. (2003) Common correlation and calibrating the lognormal forward rate model. *Wilmott* (March), 68-78
101. Alexander, C. (2002) Rules and models. *Risk*, 15:1, S2-S5
102. Alexander, C. (2001) Taking control of operational risk. *Futures and Options World*, 366, 60-65
103. Alexander, C. and J. Pezier (2001) Binomial gammas. *Operational Risk* (April)
104. Alexander, C. (2001) Taming the skew. *Futures and Options World*, 367, 60-65
105. Alexander, C. (2001) Principles of the skew. *Risk* 14:1, S29- S32
106. Alexander, C. and R. Thillainathan (1996) The Asian connections. *Emerging Markets Investor*, 2:6 42-47
107. Alexander, C. and A. Johnson (1994) Dynamic links. *Risk*, 7:2, 56-61
108. Alexander, C. (1994) History debunked, *Risk*, 7:12, 59-63
109. Alexander, C. and I. Giblin (1994) Chaos in the system. *Risk*, 7:6, 71-76
110. Alexander, C. and N. Riyait (1992) The world according to GARCH. *Risk*, 5:8, 120-125
111. Alexander, C. (1984) Evaluation of index-linked gilts using inflation forecasts. *The Investment Analyst*, 72, 7-12

Papers under review

112. Alexander, C. and S. Leontsinis. New approaches to computing variance swap rates {R&R *Quantitative Finance*}
113. Alexander, C., E. Lazar and S. Stanescu. Analytic GARCH value-at-risk. {R&R *International Review of Financial Analysis*}
114. Alexander, C., E. Lazar and S. Stanescu. Analytic moments for GARCH returns and variances.
115. Alexander, C. and D. Korovilas. Diversification of equity with VIX futures: skewness preference and personal views.
116. Alexander, C. and X. Chen. A General Decision-Tree Approach to Real Option Valuation.

WEB STATISTICS

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Google Scholar Citations

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carolalexander.org

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Av. time per visit: 2.4 mins Av. no. pages viewed: 3.17

Carol Alexander, July 13, 2013