Personal website
LinkedIn
Twitter

University of Sussex Business School
Email: c.alexander@sussex.ac.uk

EDUCATION

1976	B.Sc. (Sussex) in Mathematics with Experimental Psychology
1980	Ph.D. (Sussex) in Algebraic Number Theory
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
1998 – 1999	Visiting Research Fellow, Oxford Centre for Industrial and Applied Mathematics
1999 – 2012	Chair of Financial Risk Management, ICMA Centre, Henley Business School
2012 – now	Professor of Finance, University of Sussex
2013 – 2015	Head of Business and Management (now University of Sussex Business School)
2019 – now	Visiting Professor, Peking University

HONOURS, PATENTS and AWARDS

1996	Winner, First International Non-Linear Financial Forecasting Competition (with 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) Higher Standard Award (with Robert Merton)
2009	U.S. Patent Number 7,571,130: Hedging exchange traded mutual funds or other portfolio basket products
2010	University of Reading award for outstanding contributions to teaching and learning
2011	U.S. Patent Number 7,979,336: A system for pricing financial instruments
2022	Top 10 Female Quants on Wall Street, Top 10 Quant Professors, Top 10 Crypto Voices

PUBLICATIONS

Working Papers in Preparation

- Alexander, C., Chen, C., J. Deng and T. Wang (2023) Efficiency of Cryptocurrency Options Markets
- Alexander, C., Chen, C. (2023) Rarity Metrics for Non-Fungible Tokens
- Alexander, C. and A. Kaeck (2023) Pro-cyclical Dynamics and Spillover Effects of Variable Leveraged Tokens
- Alexander, C., D. Heck, A. Kaeck and R. Riorden (2023) Price Formation in Self-Regulated and Semi-Regulated Centralized Crypto Exchanges

Working Papers Under Review

- Alexander, C., Chen, D. and and I. Imeraj (2022) Crypto Inverse and Quanto Options in a Black-Scholes World
- Alexander, C. and M. Dakos (2022) The New Tokenomics of Crowdfunding
- Alexander, C., W. Wei and Chen, C.(2022) Matching Kollo Measures

Academic Journal Articles

1. Alexander, C. and I. Imeraj (2023) Delta Hedging Bitcoin Options with a Smile. *Quantitative Finance*, Open Access.
2. Alexander, C. and M. Dakos (2023) Assessing the Accuracy of Exponentially Weighted Moving Average Models for Value-at-Risk and Expected Shortfall of Crypto Portfolios. *Quantitative Finance*, 23(3), 393 - 427. Open Access
3. Alexander, C., Deng, J. and B. Zou (2023) Hedging with Bitcoin Futures – The Effect of Liquidation Loss Aversion and Aggressive Trading. *European Journal of Operational Research* 306(1), 487 - 493. Open Access
4. Alexander, C., X. Meng, and Y. Han (2022) Static and Dynamic Models for Multivariate Distribution Forecasts. *International Journal of Forecasting* Open Access
5. Alexander, C., Deng, J., Feng, J. and H. Wan (2022) Net Buying Pressure and the Information in Bitcoin Option Trades. *Journal of Financial Markets* 63, 100764. Open Access
6. Alexander, C., Heck, D. and A. Kaeck (2022) The Role of Binance in Bitcoin Volatility Transmission. *Applied Mathematical Finance*.29(1), 1 - 32. Open Access
7. Alexander, C., Coulon, M., Han, Y. and X. Meng (2022) Evaluating the Discrimination Ability of Proper Multi-Variate Scoring Rules. *Annals of Operations Research*, Open Access
8. Alexander, C., Meng, X. and W. Wei (2022) Targetting Kollo Skewness with Random Orthogonal Matrix Simulation. *European Journal of Operational Research*, 299(1), 362-376. Open Access.
9. Alexander, C., Chen, X. and C. Ward (2021) Risk-Adjusted Valuation for Real Option Decisions. *Journal of Economic Behaviour and Organisation*, 191, 1046-1064.
10. Alexander C. and X. Chen (2021) Model Risk in Real Option Valuation *Annals of Operations Research*, 299(1), 1025-1056
11. Alexander, C. and A. Imeraj (2021) The Bitcoin VIX and its Variance Risk Premium. *Journal of Alternative Investments*, 23 (4) 84-109

12. Alexander, C. and J. Rauch (2021) A General Property for Time Aggregation. *European Journal of Operational Research*, 291(2), 536-548
13. Alexander, C. and E. Lazar (2021) The Continuous Limit of Weak GARCH. *Econometric Reviews* 40(2), 197-216
14. Alexander, C., Lazar, E. and S. Stanescu (2021) Analytic Moments for GARCH Processes. *International Journal of Forecasting* 37(1), 105-124
15. Alexander, C. and D. Heck (2020) Price Discovery in Bitcoin: The Impact of Unregulated Markets. *Journal of Financial Stability* 50, 1-18.
16. Alexander, C., Choi, J., Massie, H. and S. Sohn (2020) Price Discovery and Microstructure in Ether Spot and Derivatives Markets. *International Review of Financial Analysis*, 71
17. Alexander C., Choi, J., Park, H., and S. Sohn (2019) BitMEX Bitcoin Derivatives: Price Discovery, Informational Efficiency and Hedging Effectiveness. *Journal of Futures Markets*, 40(1) 23-43
18. Alexander C. and M. Dakos (2019) A Critical Investigation of Cryptocurrency Data and Analysis *Quantitative Finance*, 20(2), 173-188
19. Alexander C., Kaeck, A. and Sumawong, A. (2019) A Parsimonious Parametric Model for Generating Margin Requirements for Futures *European Journal of Operational Research*, 273(1), 31-43
20. Leontsinis, S., and C. Alexander (2017) Arithmetic Variance Swaps *Quantitative Finance*, 17(4), 551-569.
21. Alexander, C., Korovilas, D. and J. Kapraun (2016) Diversification with Volatility Products *Journal of International Money and Finance*, 65, 213-235
22. Alexander, C., J. Kapraun and Korovilas, D. (2015) Trading and Investing in Volatility Products *Financial Markets, Institutions and Instruments*, 24(4), 313-347
23. 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
24. Kaeck, A. and C. Alexander (2013) Stochastic Volatility Jump-Diffusions for European Equity Index Dynamics. *European Financial Management* 19(3), 470-496
25. Alexander, C. and D. Korovilas (2013) Volatility Exchange-Traded Notes: Curse or Cure? *Journal of Alternative Investments* 15(2), 52-70
26. 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
27. 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
28. Ledermann, D. and C. Alexander (2012) Further Properties of Random Orthogonal Matrix Simulation. *Mathematics and Computers in Simulation* 83, 56-79
29. 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
30. Alexander, C. and J-M. Sarabia (2012) Quantile Uncertainty and Value-at-Risk. *Risk Analysis: An International Journal* 32(8), 1293-1308
31. Alexander, C., Cordeiro, G., Ortega, E. and J-M. Sarabia (2012) Generalized Beta-Generated Distributions. *Computational Statistics and Data Analysis* 56(6), 1880-1897
32. Alexander, C. and A. Venkatramanan (2012) Analytic Approximations for Multi-Asset Option Pricing. *Mathematical Finance* 22(4), 667-689

33. 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
34. Alexander, C., A. Rubinov, M. Kalepky and S. Leontsinis (2012) Regime-Dependent Smile-Adjusted Delta Hedging. *Journal of Futures Markets.* 32(3), 202-229
35. Venkatramanan, A. and C. Alexander (2011) Closed-form Approximations for Spread Options. *Applied Mathematical Finance.* 18(5), 447-472
36. Ledermann, W., Alexander, C. and D. Ledermann (2011) Random Orthogonal Matrix Simulation. *Linear Algebra and its Applications*, 434, 1444-1467
37. Alexander, C. and E. Lazar (2009) Modelling Regime-Specific Stock Price Volatility. *Oxford Bulletin of Economics and Statistics*, 71:6, 761 - 797
38. Alexander, C., A. Kaeck and L. Nogueira (2009) Model Risk Adjusted Hedge Ratios. *Journal of Futures Markets*, 29:11, 1021-1045
39. 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
40. Alexander, C. and A. Kaeck (2008) Regime-Dependent Determinants of Credit Default Swap Spreads. *Journal of Banking and Finance*, 32:6, 1008 - 1021.
41. Alexander, C. and A. Barbosa (2008) Hedging Exchange Traded Funds. *Journal of Banking and Finance*, 32:2, 326-337
42. Alexander, C. and L. Nogueira (2007) Model-Free Price Hedge Ratios for Homogeneous Claims on Tradable Assets. *Quantitative Finance*, 7:5, 473 - 479
43. Alexander, C. and A. Barbosa (2007) Effectiveness of Minimum-Variance Hedging. *Journal of Portfolio Management*, 33:2, 46 - 59
44. Alexander, C. and L. Nogueira (2007) Model-Free Hedge Ratios and Scale-Invariant Models. *Journal of Banking and Finance*, 31:6, 1839-1861
45. 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
46. Alexander, C. and E. Lazar (2006) Normal Mixture GARCH: Applications to Foreign Exchange Markets. *Journal of Applied Econometrics*, 21:2 307-336
47. Alexander, C. and A. Dimitriu (2005) Rank Alpha Funds of Hedge Funds. *Journal of Alternative Investments*, 8:2, 48-61
48. Alexander, C. and A. Dimitriu (2005) Detecting Switching Strategies in Equity Hedge Fund Returns. *Journal of Alternative Investments*, 8:1, 7-13
49. Alexander, C. (2005) The Present and Future of Risk Management. *Journal of Financial Econometrics*, 3:1, 3-25
50. Alexander, C. and A. Barbosa (2005) The Spider in the Hedge. *Review of Futures Markets*, 11:1, 89-113
51. Alexander, C. and A. Dimitriu (2005) Indexing and Statistical Arbitrage: Tracking Error or Cointegration? *Journal of Portfolio Management*, 31:2, 50-63
52. Alexander, C. and A. Dimitriu (2005) Indexing, Cointegration and Equity Market Regimes. *International Journal of Finance and Economics*, 10, 213-231

53. Alexander, C. and A. Scourse (2004) Bivariate Normal Mixture Spread Option Valuation. *Quantitative Finance*, 4:6 1-12
54. 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
55. 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
56. Alexander, C. and A. Dimitriu (2004) Equity Indexing: Optimising Passive Investments. *Quantitative Finance*, 4:3 C30 - C33
57. Alexander, C. (2002) Principal Component Models for Generating Large Covariance Matrices. *Review of Banking, Finance and Monetary Economics, Economic Notes*, 31:2, 337-359
58. 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
59. Alexander, C. (2000) Measuring Operational Risks with Bayesian Belief Networks. *Derivatives, Use Trading and Regulation.* 6:2, 166-196
60. Alexander, C. (1999) Optimal Hedging using Cointegration. *Philosophical Transactions of the Royal Society Series A*, 357, 2039-2058
61. Alexander, C. and C. Leigh (1997) On the Covariance Matrices used in Value-at-Risk Models. *Journal of Derivatives*, 4:3 50-62
62. 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
63. 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
64. Alexander, C. and J. Wyeth (1996) Causality Testing in Models of Spatial Market Integration. *Journal of Development Studies*, 32:1, 144-146
65. Alexander, C. (1996) Evaluating the Use of RiskMetrics as a Risk Measurement Tool. *Derivatives: Use Trading and Regulation*, 2:3, 277-285
66. Alexander, C. and H. Rendall (1995) Data Generation Processes of Spatial Series: Analysis of Ephemeral Channel Form. *Geographical Analysis*, 27:1, 78-93
67. Alexander, C. (1995) Common Volatility in the Foreign Exchange Market. *Applied Financial Economics*, 5:1, 1-10.
68. 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
69. Alexander, C. and M. Barrow (1994) Seasonality and Cointegration of Regional House Prices in the UK. *Urban Studies*, 31:10, 1667-1689
70. Alexander, C. and W. Ledermann (1994) The Constrained Nash Bargaining Solution. *Journal of the Operational Research Society*, 45:5, 954-958
71. 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
72. Alexander, C. and A. Johnson (1992) Are Foreign Exchange Markets Really Efficient? *Economics Letters*, 40, 449-453

73. Alexander, C., I. Giblin and D. Newton (1992) The Symmetry of Fractals. *Mathematical Intelligencer*, 14:2, 32-34

74. Alexander, C. (1992) The Kalai-Smorodinsky Bargaining Solution in Wage Negotiations. *Journal of the Operational Research Society*, 43:8, 779-786

75. Alexander, C. (1988) On a Converse to the Tschebotarev Density Theorem. *Journal of the Australian Mathematical Society* Series A, 44, 287-293

76. Alexander, C. (1987) Duality in Non-Normal Quartic Number Fields. *American Mathematical Monthly*, 94, 279-284

77. 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

78. Alexander, C. (2008) Market Risk Analysis, Volume I: Quantitative Methods in Finance. Wiley

79. Alexander, C. (2008) Market Risk Analysis, Volume II: Practical Financial Econometrics. Wiley

80. Alexander, C. (2008) Market Risk Analysis, Volume III: Pricing, Hedging and Trading Financial Instruments. Wiley

81. Alexander, C. (2008) Market Risk Analysis, Volume IV: Value at Risk Models. Wiley

82. Alexander, C. (2001) Market Models: A Guide to Financial Data Analysis. Wiley

Edited Books

83. Alexander, C. and D. Cumming eds. (2020) Corruption and Fraud in Financial Markets: Malpractice, Manipulation and Misconduct. Wiley

84. Alexander, C. and E. Sheedy eds. (2008) The Professional Risk Manager's Guide to Finance Theory and Application. McGraw-Hill

85. Alexander, C. and E. Sheedy eds. (2008) The Professional Risk Manager's Guide to Financial Markets. McGraw-Hill

86. Alexander, C. and E. Sheedy eds. (2008) The Professional Risk Manager's Guide to Financial Instruments. McGraw-Hill

87. Alexander, C. and E. Sheedy eds. (2004) The Professional Risk Manager's Handbook: Volume 1, Finance Theory, Instruments and Markets. PRMIA Publications, Illinois

88. Alexander, C. and E. Sheedy eds. (2004) The Professional Risk Manager's Handbook: Volume 2, Financial Mathematics. PRMIA Publications, Illinois

89. Alexander, C. and E. Sheedy eds. (2004) The Professional Risk Manager's Handbook: Volume 3, Financial Risk Management. PRMIA Publications, Illinois

90. Alexander, C. ed. (2003) Operational Risk: Regulation, Analysis and Management. FT-Prentice Hall

91. Alexander, C. ed. (2001) Mastering Risk Volume II. FT-Prentice Hall

92. Alexander, C. ed. (2000) Visions of Risk. FT-Prentice Hall

93. Alexander, C. ed. (1998) Risk Management and Analysis Volume I: Measuring and Modelling Financial Risk. Wiley

94. Alexander, C. ed. (1998) Risk Management and Analysis Volume II: New Markets and Products. Wiley
95. Alexander, C. ed. (1996) The Handbook of Risk Management and Analysis. Wiley
96. Alexander, C. (1990) The Handbook of Applicable Mathematics. Volume VII: Supplement (Co-editor)
97. Alexander, C. (1984) The Handbook of Applicable Mathematics. Volume VIA and IVB: Statistics (Assistant editor)
98. Alexander, C. (1983) The Handbook of Applicable Mathematics. Volume VA and VB: Combinatorics and Geometry (Assistant editor)
99. Alexander, C. (1983) The Handbook of Applicable Mathematics. Volume IV: Analysis (Assistant editor)
100. Alexander, C. (1982) The Handbook of Applicable Mathematics. Volume III: Numerical Methods (Assistant editor)
101. Alexander, C. (1981) The Handbook of Applicable Mathematics. Volume II: Probability (Assistant editor)
102. Alexander, C. (1980) The Handbook of Applicable Mathematics. Volume I: Algebra (Assistant editor)

    volumes I - V and co-editor volume VI. Wiley

Book Chapters, Reports and Conference Papers

103. 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
104. Alexander, C. (2008) Moving average models for volatility and correlation. Handbook of Finance, Volume 1, F. J. Fabozzi ed., Wiley
105. Alexander, C. (2008) Statistical models of operational loss. Handbook of Finance, Volume 1, F. J. Fabozzi ed., Wiley
106. Alexander, C. and A. Venkatramanan (2008) Commodity options. Handbook of Commodity Investing, F.J. Fabozzi, R. Fuss and D.G. Kaiser eds., Wiley
107. 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
108. Alexander, C. (2005) Assessment of operational risk capital. Risk Management: Challenge and Opportunity, M. Frenkel, U. Hommel and M. Rudolf eds., Springer
109. 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
110. 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
111. Alexander, C. and L. Nogueira (2004) Stochastic local volatility. Proceedings of the second international IASTED conference on financial engineering and applications, MIT, 136-141
112. 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

113. Alexander, C. (2004) Principles of the skew. Exotic Options, Alexander Lipton ed., Risk Publications
114. Alexander, C. (2004) Correlation in crude oil and natural gas markets. Managing Energy Price Risk 3rd Edition V. Kaminsky ed., Risk Publications
115. Alexander, C. (2004) Advanced value-at-risk Models. Professional Risk Managers Handbook, Volume III, C. Alexander and E. Sheedy eds., PRMIA Publications
116. Alexander, C. (2004) Operational value-at-risk. Professional Risk Managers Handbook, Volume III, C. Alexander and E. Sheedy eds., PRMIA Publications
117. Alexander, C. and Pezier, J. (2003) Assessment and aggregation of banking risks. Commissioned report. International Financial Risk Institute (IFCI)
118. Alexander, C. (2003) Statistical models for operational loss. Operational Risk: Regulation, Analysis and Management, C. Alexander ed., Pearson
119. Alexander, C. (2003) Managing operational risks with Bayesian networks. Operational Risk: Regulation, Analysis and Management, C. Alexander ed., Pearson
120. Alexander, C. (2001) Orthogonal GARCH. Mastering Risk Volume II, C. Alexander ed., Pearson
121. Alexander, C. (2001) Bayesian methods for measuring operational risks. Mastering Risk Volume II, C. Alexander ed., Pearson
122. Alexander, C. (1999) Correlation and cointegration in energy markets. Managing Energy Price Risk, 2nd Edition. V. Kaminsky ed., Risk Publications
123. Alexander, C. (1998) Volatility and correlation: measurement, models and applications. Risk Management and Analysis: Measuring and Modelling Financial Risk. C. Alexander, ed., Wiley
124. 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
125. Alexander, C. (1996) Volatility and correlation forecasting. Handbook of Risk Management and Analysis. C. Alexander ed., Wiley
126. Alexander, C. (1990) Non-cooperative finite games. Handbook of Applicable Mathematics. Volume VII. W. Ledermann and C. Alexander eds., Wiley
127. Alexander, C. (1980) Groups. Handbook of Applicable Mathematics, Volume I. W. Ledermann ed., Wiley

Practitioner Journal Articles

128. Alexander, C. (2023) Can you Beat the Black-Scholes Model at Delta Hedging? *Wilmott* (May)
129. Alexander, C. (2023) Crypto Risks to Watch in 2023. *Wilmott* (March)
130. Alexander, C. (2023) Volume and Volatility Spillovers between Crypto Exchanges. *Wilmott* (January)
131. Alexander, C. (2022) Generative Avatar Non-Fungible Token Collections. *Wilmott* (November)
132. Alexander, C. (2022) Behaviour of Bitcoin Implied Volatility. *Wilmott* (September)
133. Alexander, C. (2003) Operational risk aggregation. *Operational Risk* (April)
134. Alexander, C. (2003) Common correlation and calibrating the lognormal forward rate model. *Wilmott* (March), 68-78

135. Alexander, C. (2002) Rules and models. *Risk*, 15:1, S2-S5
136. Alexander, C. (2001) Taking control of operational risk. *Futures and Options World*, 366, 60-65
137. Alexander, C. and J. Pezier (2001) Binomial gammas. *Operational Risk* (April)
138. Alexander, C. (2001) Taming the skew. *Futures and Options World*, 367, 60-65
139. Alexander, C. (2001) Principles of the skew. *Risk* 14:1, S29- S32
140. Alexander, C. and R. Thillainathan (1996) The Asian connections. *Emerging Markets Investor*, 2:6 42-47
141. Alexander, C. and A. Johnson (1994) Dynamic links. *Risk*, 7:2, 56-61
142. Alexander, C. (1994) History debunked, *Risk*, 7:12, 59-63
143. Alexander, C. and I. Giblin (1994) Chaos in the system. *Risk*, 7:6, 71-76
144. Alexander, C. and N. Riyait (1992) The world according to GARCH. *Risk*, 5:8, 120-125
145. Alexander, C. (1984) Evaluation of index-linked gilts using inflation forecasts. *The Investment Analyst*, 72, 7-12

UNIVERSITY ADMINISTRATION

1985 – 1999 **Convenor of BSc/BA Degrees** **University of Sussex**
Joint Degrees in Mathematics and Economics

2005 – 2012 **Convenor of MSc Degrees** **ICMA Centre**
MSc Financial Risk Management, MSc Financial Engineering

2005 – 2011 **Postgraduate Exchange** **ICMA Centre-TU Munich**
Supervising Finance and Information Management MSc Students

2000 – 2012 **Director of Research, Director of Enterprise** **ICMA Centre**
Established ICMA Centre research reputation, development of industry links

2013 – 2014 **Head of Business and Management** **University of Sussex**
Managed development, expansion and transition to UoS Business School
Grew Faculty from ~ 45 to ~ 120

2018 – now **Head of Quantitative FinTech Research Group** **University of Sussex**
Managing research grants, seminars and consultancy
Design and introduction of new FinTech BSc and MSc degrees

TEACHING

1985 – 1998		**University of Sussex**
	Mathematics for Economists, 2yr UG	Economics
	Mathematics for Biologists, 1yr UG	Mathematics
	Group Theory, 2yr UG	Mathematics
	Linear Algebra, 1yr UG	Mathematics
	Microeconomics, 2yr UG	Economics
	Macroeconomics, 2yr UG	Economics
	Statistics, 2yr UG	Mathematics
	Game Theory, PG	Mathematics
	Econometrics, PG	Economics
2000 – 2012		**University of Reading**
	Market Risk, PG	Finance
	Volatility Analysis, PG	Finance
	Quantitative Methods for Finance, PG	Finance
2012 – 2018		**University of Sussex**
	Topics in Finance, PG	Mathematics
	Hot Topics in Finance, MBA	Finance
	Essential Quantitative Finance, PG	Finance
	Advanced Quantitative Finance, PG	Finance
2018		**TU Munich**
	Advanced Volatility Analysis, PG	Mathematics
2019		**Peking University**
	Financial Risk Management, PG	**HSBC Business School**
2018 – now		**University of Sussex**
	Financial Risk Management, UG	Mathematics/Finance
	Blockchains and Crypto Assets, UG	Mathematics/Finance
	Blockchains and Crypto Assets, PG	Finance

PhD SUPERVISION

2004	Ali Bora Yigitbasioglu	Defaultable Convertible Bonds with Volatility Uncertainty and Call Notice Periods
	Head of FX Total Return and Fixed Income, Pictet Asset Management, London	
2004	Anca Dimitriu	Portfolio Optimization Models for Traditional and Alternative Investments
	Partner, Albourne Partners, London	
2005	Dmitri Lvov	Pricing Convertible Bonds and Bermudan Swaptions by Monte Carlo Simulation
	Executive Director, Commodities Quant Research, JP Morgan, London	
2006	Leonardo Nogueira	Pricing and Hedging Options with Local and Stochastic Volatility Models
	Head of the Deputy Governor's Office for Monetary Policy, Brazilian Central Bank	
2006	Emese Lazar	Multi-State Volatility Models: Theory and Applications
	Associate Professor in Finance, ICMA Centre, Henley Business School at Reading	

2007	Andreza Barbosa	Pricing and Hedging Exchange Traded Funds
	Executive Director, Model Risk Management, Goldman Sachs, London.	
2008	Naoufel El Bachir	Stochastic Default Intensity Modeling with Dependent Jump Processes
	Executive Director, XVA Lead Quantitative Analyst at CIBC Capital Markets, London	
2008	Aanand Venkatrammanan	Multi-Asset Option Pricing
	Vice President, ETF Investment Strategies at Legal & General IM, London	
2010	Joydeep Lahiri	Jump Diffusions for Modelling Default Intensity
	Quantitative Risk Manager and Vice President at Swiss Re London	
2010	Stamatis Leontsinis	Model-Free Moment Indices
	Research Director, Quantitative Derivative Strategies, CdR Capital Ltd, London.	
2010	Silvia Stanescu	Analytic Moments for GARCH Processes
	Quantitative Analyst, Cantab Capital Partners	
2010	Andreas Kaeck	Equity Index and Index Derivative Dynamics
	Professor of Finance, University of Sussex	
2010	Daniel Ledermann	Random Orthogonal Matrix Simulation
	Senior Quantitative Analyst, HSBC, London	
2012	Dimitris Korovilas	Trading Volatility
	Investment Product Specialist at Scientific Beta	
2013	Julia Kapraun	Volatility Investments
	Assistant Professor, Goethe University, Germany	
2014	Anannit Sumawong	Trading and Hedging Energy Futures
	Senior Associate, PWC, London.	
2014	Xi Chen	Real Options and Decisions in Corporate Finance
	Lecturer, University of Sussex	
2015	Johannes Rauch	Higher Moment Risk Premia and Discretization Invariance
	Consultant, Oliver Wyman, Munich	
2019	Yang Han	New Methods for Multivariate Distribution Forecasting
	Consultant, McKinzie and Company, Munich	
2022	Michael Dakos	Econometric Analysis of Crypto Asset Markets
	Consultant, Ernst and Young, Athens	
2023 (Exp)	Wei Wei	Simulation with Exact Multivariate Skewness and Kurtosis
	University of Sussex	
2023 (Exp)	Daniel Heck	Information Flows in Crypto Asset
	University of Sussex	
2023 (Exp)	Arben Imeraj	Bitcoin Options
	University of Sussex	
2024 (Exp)	Yan Li	Shipping Networks
	University of Sussex	

INTERNATIONAL UNIVERSITY LINKS

2005 – 2019 MSc Student Exchange **TU Munich**
Supervision of dissertations and research papers for MSc students
Collaboration with Professor Rudi Zagst, Chair of Mathematical Finance, TU Munich

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)

2012 Visiting Professor **Trondheim University, Norway**
Norwegian National PhD Student Summer School in Quantitative Finance Research
Collaboration with Prof. Sjur Westgaard, Norwegian University for Science and Technology

2016 KPMG Chair **Frankfurt & TU Munich**
Research at the Chair of Mathematical Finance at TU Munich

2018 John von Neumann Chair of Mathematics **TU Munich**
Teaching and research at the Chair of Mathematical Finance at TU Munich

2018 Visiting Professor **La Sapienza University, Rome**
Research with Prof. Rita D'Ecclesia, Department of Statistics

2019 – now Visiting Professor **Peking University**
Peking University HSBC Business School, Shenzhen and Oxford

OTHER ACADEMIC ACTIVITIES

PhD Examining

2008	External Examiner	Imperial College Student of Mark Davis
2009	External Examiner	University Paris-Dauphine Student of Helyette German
2015	External Examiner	University of Cambridge Student of Andrew Harvey
2021	External Examiner	University of York Student of Alexander McNeil
2021	External Examiner	University of Oxford Student of Rama Cont

Selected Refereeing

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

International Young Finance Scholar's Conference

2014	Founder of First Conference
2015	Organiser of Second Conference
2017	Organiser of Fourth Conference
2019	Organiser of Sixth Conference
2021	Organiser of 7th International Young Finance Scholar's Conference

INVITED TALKS DURING LAST TEN YEARS

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, (Moscow)
2007	Quant Congress Europe (London)
2008	Quant Congress Europe (Paris)
2009	Quant Congress Europe (Amsetrdam)
2009	Quant Congress USA (New York)
2010	FOW Derivatives World (London), Post-Crisis Risk Measurement (CFA UK)
2010	Changing Risk Landscape, Financial Times (London)
2011	Model Risk Validation (Paris)
2012	PRMIA 10th Anniversary Global Risk Conference (New York)
2012	Royal Institution 14-10 Club (London)
2019	QuantMinds International (Hamburg)
2019	Cryptocompare Digital Asset Summit (London)
2020	QuantMinds International
2020	Cryptocompare Digital Asset Summit, London
2020	Westminster Business Forum Policy Conference: Fintech in the UK
2020	Quant Insights (Fitch, CFA)
2021	QuantMinds in Focus (Europe)
2021	Digital Markets Global (London)
2022	CFA Society, Austin (Texas)
2022	Fields CFI Workshop on Mathematical Finance and Cryptocurrencies (Toronto)
2022	QuantMinds Edge Conference (Virtual)
2022	QuantInsights Conference (Virtual)
2022	QuantMinds (Barcelona)
2022	Conference on Blockchains and Digital Assets (MIT)

Academic Talks, Invited Plenaries and Keynotes

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	Third Annual Mathematics in Finance International Conference, Kruger, South Africa
2010	HVB-Institute for Mathematical Finance, Munich
2011	Campus for Finance, Germany
2012	Ninth Applied Financial Economics Conference, Greece
2013	Fields Institute, Toronto, Canada
2017	Fourth Conference on Non-linear Dynamics and Financial Markets, Paris
2018	Fifth International Symposium in Computational Economics and Finance
2018	EURO2018: 29th Annual European Conference of Operational Research Societies
2021	Sustainable Finance Conference, Birmingham, UK
2021	Financial Economics Meeting: Post-Crisis Challenges
2021	Brazilian Finance Meeting, Virtual
2021	4^{th} Cryptocurrency Research Conference, Virtual
2021	SIAM Mathematical Finance Group, Virtual
2021	International Research Seminars in Finance, Virtual
2021	Frontiers in Quantitative Finance, Oxford
2022	Financial Management & Accounting Research Conference, Cyprus
2022	4th Asia Conference on Business and Economic Studies, Vietnam
2022	Derivatives Markets Conference, New Zealand
2022	University College, London
2022	Frontiers in Quantitative Finance (London)
2023	67^{th} Euro Working Group for Commodities and Financial Modelling Conference, Rome

Private Industry Seminars

2016	KPMG Chair Address to Chief Risk Officers, Frankfurt
2021	Office of Chief Economist, CFTC
2021	Santander Financial Engineering School (Spain)
2021	Financial Risk Hub Training Event (London)
2022	Financial Models Group, Bank of Montreal, Canada
2022	Economic Analysis and Research Department, Bank of Greece
2023	Financial Stability Board Financial Innovation Network (FIN) Meeting with Federal Reserve,
2023	Bank of America, London and New York

EXTERNAL ACTIVITIES

2002 – 2010	Chair of Academic Advisory Council, PRMIA
2010 –2012	Chair of Board, PRMIA
2003 – 2006	Expert Witness, Richards Butler, London
2007 – 2009	Associate Editor, Journal of Banking and Finance
2011 – 2013	Associate Editor, Journal of Investment Strategies
2007 – now	Associate Editor, Journal of Portfolio Management
2011 – 2012	External Assessor, PhD Programme in Economics and Finance, St. Gallen University
2011 – 2012	External Examiner, Mathematical Finance Programme, Sussex University
2011 – 2013	Member of CFA Advisory Council
2013 – now	Co-Editor of Journal of Banking and Finance, Elsevier
2015 – now	Advisory Editor, Journal of Commodity Markets, Elsevier
2018 – now	Steering Committee Member, Centre for Financial Industries, Fields Institute

2019 – now	Fellow of the Institute of Finance and Financial Regulation
2019 – now	Associate Editor, Journal of Systematic Investing
2021 – now	Louis Bachelier Prize Committee
2021 – now	Scientific Advisory Board Member, Fintech and AI in Finance (COST) Action
2021 – now	FT Wilshire Digital Assets Advisory Group Member
2021 – now	Expert Witness, White & Case, Washington
2022 – now	Leverhulme Prize in Economics Selection Committee
2023	Research Visitor to the Bank of England (February)

INDUSTRY LINKS

Professional Risk Manager's International Association

2002 – 2010	Founding Chair of the Academic Advisory Council
2003 – 2004	Co-Edited Professional Risk Manager's Handbook (3 volumes, with E. Sheedy, Macquarie)
2007	Recipient of Higher Standard Award (with Robert Merton)
2009 – 2012	Board Member
2010 – 2012	Chair of Board and Founding Editor of Intelligent Risk

Consultancy

1990 – 1991	First Generation GARCH Models, Hill Samuel Bank, London
1992 – 1993	Volatility Trading Models, Equitable House Investments, London
1994 – 2003	Hedge Fund Strategy Design, Pennoyer Capital Management, New York
1996 – 1997	Spot-Futures Arbitrage Models, ED&F Man, London
1996 – 1997	Internal Value-at-Risk Model Design, Shell Pension Fund, Netherlands
1997 – 1998	Orthogonal GARCH Models, Robert Fleming, London
2001 – 2007	High Frequency Pricing and Hedging for Active ETFs, NYSE/AMEX, New York
2003 – 2006	Consulting Expert Witness, Richards Butler, London
2007 – 2008	Risk Research Advisor, SAS International
2009 – 2010	Value-at-Risk Model Design, Credit Agricole Asset Management, London
2012 – 2014	Margin Model Validation, ICE Clear Europe
2017 – now	Affiliated Academic Consultant, Fideres
2019 – now	Crypto Risk and Portfolio Advisory, Coinstrats, London
2020 – 2021	Development of Bitcoin Implied Volatility Index, CryptoCompare, London
2021 – 2022	Model Validation for Digital Asset Indices, CryptoCompare, London
2021 – 2022	Model Design for Derivatives Margining and Counterparty Risk Management, FTX, US
2021 – 2022	Consulting Expert Witness, White and Case, Washington
2022 – now	Co-Founder, OutRank.io
2022 – now	Research Advisor, Legal and General Investment Management, London

RESEARCH GRANTS

1981	Leverhulme Foundation	Two-year post-doc full funding
1986	Nuffield Foundation	Award for new science lecturers
1994	ESRC grant	Two years post-doc research assistance
2003	Foundation for Managed Derivatives Research	Small research grant
2003	British Academy	Small research grant
2005	Australian Prudential Regulatory Authority	Small research grant
2008	Europlace Institute of Finance	Small research grant

2012	Tindeco Asset Management	One year post-doc research assistance
2014	Global Risk Institute	Two years post-doc research assistance
2015	Defence Science and Technology Laboratory	Small research grant

OUTREACH

2000	Fintech TV	TV Interview
2000	The Great Recession	Student Recruitment Video
2000	The Banking Crisis	Student Recruitment Video
2000	Central Banks' Response to Covid-19	Student Recruitment Video
2000	Corruption and Fraud in Financial Markets	Student Recruitment Video
2021	De-Fi: The Future of Banking and Finance	Student Recruitment Video
2021	YouTube Channel	80 hrs of Lockdown Lectures
2021	Untitled Investment Talk	Podcast
2021	CBNC	TV Interview
2021	CBNC	TV Interview
2022	The Point	TV Interview Panel
2022	CNBC Documentary Series	Film
2022	When the Music Stops	Podcast
2022	New Money Review	Podcast
2022	Business without Bullshit 1	Podcast
2022	Business without Bullshit 2	Podcast
2023	FTX: The Legend of Sam	FT Film
2021 – now	Media and Talks webpage	Podcasts, TV Interviews, etc.
2021 – now	Blog webpage	Blogs with > 10,000+ reads

Citations and Rankings

12,042 citations, h-index 50, i10 index 122	My Google Scholar Page
63,000+ SSRN downloads, rank 476 out of 1,178,038 authors	My Website Analytics