

JON GREGORY

ACADEMIC & QUANTITATIVE FINANCE PROFILE

Quantitative Finance • Derivatives • Counterparty Credit Risk • xVA • Credit Risk • Financial Regulation

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Academic Profile

Quantitative finance practitioner, researcher, author and educator with a PhD from the University of Cambridge and almost three decades of experience spanning academic teaching, financial institutions, consulting and expert testimony. Specialist in derivatives valuation, counterparty credit risk, xVA, credit derivatives, quantitative finance, structured credit, collateral, funding and financial regulation.

Currently teaches on the Oxford University Mathematical Finance MSc and the Certificate of Quantitative Finance (CQF), and is a faculty member at London Financial Studies. Has delivered university lectures and executive education at leading institutions internationally and has conducted more than 200 public and in-house training courses in more than 20 countries.

Author of The xVA Challenge – A Valuation Adjustment Framework for Modern Derivatives Markets (now in its 5th edition) and several other books on counterparty risk, credit derivatives and central clearing. Managing Editor of *Quantitative Finance* and referee for a number of international journals.

University Teaching & Academic Engagement

Oxford University — Mathematical Finance MSc — teaching in quantitative finance / derivatives-related subjects.

Certificate in Quantitative Finance (CQF) — Lecturer / faculty, teaching quantitative finance and financial markets.

London Financial Studies — Faculty member.

Bocconi University — Lectures and courses.

CASS Business School — Lectures and courses.

Saïd Business School, University of Oxford — Lectures and courses.

CEMFI — Quantitative Finance Summer School — lectures and courses.

Fields Institute — Lectures and courses.

International teaching and executive education: More than 200 public and in-house courses over the last 10 years, covering fixed income, equity and derivative securities, credit derivatives, quantitative finance, derivatives pricing, market risk, portfolio management, credit risk, counterparty risk and related topics, delivered in over 20 countries.

Regular speaker at international conferences.

Research Interests

Derivatives and valuation adjustments; quantitative finance; credit portfolio risk; credit derivatives and structured finance; central counterparties; collateral and funding; regulatory policy; counterparty credit risk and wrong-way risk.

Professional Experience

2021–Present Consultant, The World Bank Group

Advisory in relation to loan valuation and valuation adjustments.

2009–Present Senior Advisor, Solum Financial Derivatives Advisory, London

Consulting and advisory work in derivatives valuation, counterparty credit risk and structured credit. Banking advisory services in Capital Markets.

2017–2020 Advisor & Member of Academic Advisory Board, IHS Markit

Advisory and academic engagement.

2005–2008 Director, Global Head of Quantitative Credit Analytics, Barclays Capital, London

Led a team of around 50 people building valuation models and undertaking quantitative research across all business lines within the credit business.

1997–2005 Global Head of Quantitative Credit Research, BNP Paribas, London

Led quantitative credit research; involved in development of the credit derivatives business, market risk modelling, convertible bonds and economic capital.

1996–1997 Analyst, Salomon Brothers (now Citigroup), London

Analyst in the Fixed Income Division.

Expert Witness & Litigation Experience

Engaged as an expert witness in complex financial-market disputes involving valuation, credit products, derivatives and valuation adjustments. Experience includes preparation of expert and rebuttal reports, deposition and court testimony.

CDO pricing / alleged mis-selling — US\$500 million collateralised debt obligation; retained by the defence in relation to pricing; expert report, rebuttal report and deposition. Settled in 2013.

Derivative profit reporting / valuation adjustments — Advised a major financial regulator and provided expert reports. Finalised in 2014.

Structured credit / leveraged super senior products — Expert report concerning potential fraudulent accounting and valuation of leveraged super senior (LSS) products. Finalised in 2015.

Derivative close-out / valuation adjustments — Expert engagement concerning valuation of derivative products in close-out and associated treatment of valuation adjustments. Finalised in 2017.

Alleged mis-rating of synthetic CDOs — Provided expert and rebuttal reports and testified in court. Settled in 2018.

Alleged mis-rating of SCDOs — Provided expert and rebuttal reports. Settled in 2019.

Alleged mis-rating of SCDOs — Ongoing expert engagement.

Funding valuation adjustments — Ongoing expert engagement concerning calculation of funding valuation adjustments in derivatives valuation.

Collateral remuneration — Ongoing expert engagement concerning collateral remuneration in the event of negative interest rates.

Books

2001 *Credit: The Complete Guide to Pricing, Hedging and Risk Management* — with A. Arvanitis, Risk Books

2003 *Credit Derivatives: A Definitive Guide* — Editor, Risk Books

2009 *Counterparty Risk: The New Challenge for Global Financial Markets* — John Wiley & Sons

2012 *Counterparty Credit Risk and Credit Value Adjustment: A Continuing Challenge for Global Financial Markets* — 2nd edition, John Wiley & Sons

2014 *Central Counterparties: Clearing and Bilateral Margining for OTC Derivatives* — John Wiley & Sons

2015 *The xVA Challenge: Counterparty Credit Risk, Funding, Collateral and Capital* — 3rd edition, John Wiley & Sons

2019 *The xVA Challenge: Counterparty Credit Risk, Funding, Collateral and Capital* — 4th edition, John Wiley & Sons

2026 *The xVA Challenge: A Valuation Framework for Modern Derivatives Markets* — 5th edition, John Wiley & Sons

Selected Finance Publications

Arvanitis, Browne, Gregory & Martin (1998), “A Credit Risk Toolbox”, Risk, December 1998.

Arvanitis, Gregory & Laurent (1999), “Building Models for Credit Spreads”, Journal of Derivatives, Vol. 6, No. 3, pp. 27–43.

Gregory & Laurent (2003), “I will survive”, Risk, June, pp. 103–107.

Gregory & Laurent (2004), “In the core of correlation”, Risk, Vol. 17, No. 10, pp. 87–91.

Laurent & Gregory (2005), “Basket Default Swaps, CDOs and Factor Copulas”, Journal of Risk, Vol. 7, No. 4, pp. 103–122.

Burtschell, Gregory & Laurent (2007), “Beyond the Gaussian copula: stochastic and local correlation”, Journal of Credit Risk, Vol. 3, No. 1, pp. 21–62.

Gregory (2009), “Being two faced over counterparty credit risk”, Risk 22(2), pp. 86–90.

Vrins & Gregory (2011), “Getting CVA up and running”, Risk, October, pp. 76–79.

Gregory & German (2013), “Closing out DVA”, Risk, January, pp. 74–78.

Gregory (2016), “An analysis of initial margin requirements for central counterparties”, working paper.

Gregory (2018), “The impact of initial margin”, working paper.

Selected Book Chapters

Gregory & Laurent (2008), “Practical pricing of synthetic CDOs”, in *The Definitive Guide to CDOs*, G. Meissner (ed.), Chapter 9, pp. 223–257, Risk Books.

Laurent & Gregory (2008), “A Comparative analysis of CDO pricing models”, in *The Definitive Guide to CDOs*, G. Meissner (ed.), Chapter 15, pp. 389–427, Risk Books.

Gregory (2009), “The Counterparty Risk of Credit Derivatives Products”, in *Counterparty Credit Risk*, E. Canabarro (ed.), Chapter 7, pp. 137–164, Risk Books.

Gregory (2011), “Counterparty Risk in Credit Derivatives Contracts”, in *The Oxford Handbook of Credit Derivatives*, A. Lipton & A. Rennie (eds.), Chapter 11, pp. 383–405, Oxford University Press.

Aziz, Boetcher, Gregory & Kreinin (2014), “Best Market Practice for Calculation and Reporting of Wrong-Way Risk”, in *Counterparty Risk Management – Measurement, Pricing and Regulation*, E. Canabarro & M. Pykhtin (eds.), Risk Books.

Academic Qualifications

1993–1996 University of Cambridge — PhD, Quantum Simulation of Water Clusters. Supervisor: Professor Sir David Clary.

1990–1993 University of Bristol — BSc Chemistry, First Class Honours.

Selected Scientific Publications

Gregory & Clary (1994), “A Comparison of Conventional and Rigid Body Diffusion Monte Carlo Techniques. Application to Water Dimer”, *Chemical Physics Letters*, 228(6), 547–554.

Gregory & Clary (1995), “Calculations of the tunneling splittings in water dimer and trimer using diffusion Monte Carlo”, *Journal of Chemical Physics*, 102, 7817.

Gregory, Wales & Clary (1995), “Reaction path zero-point energy from diffusion Monte Carlo calculations”, *Journal of Chemical Physics*, 102, 1592.

Gregory & Clary (1995), “Three-body effects on molecular properties in the water trimer”, *Journal of Chemical Physics*, 103, 8924.

Liu et al., including Gregory & Clary (1996), “Characterization of a cage form of the water hexamer”, *Nature*, 381, 501–503.

Gregory & Clary (1996), “Structure of Water Clusters. The Contribution of Many-Body Forces, Monomer Relaxation, and Vibrational Zero-Point Energy”, *Journal of Physical Chemistry*, 100(46), 18014–18022.

Gregory & Clary (1996), “Quantum simulation of the benzene-water complex”, *Molecular Physics*, 88(1), 33–52.

Gregory et al. (1997), “The Water Dipole Moment in Water Clusters”, *Science*, 275(5301), 814–817.

Gregory & Clary (1998), “The dipole moment of the water dimer”, *Chemical Physics Letters*, 282(2), 147–151.

Academic & Professional Service

Managing Editor: Quantitative Finance.

Referee: Journal of Fixed Income, Journal of Credit Risk, Journal of Risk and Journal of Derivatives, among other international journals.

Academic Advisory Board: IHS Markit, 2017–2020.