Curriculum Vitae

STEPHEN J. TAYLOR

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This version February 2023

EMPLOYMENT

Lancaster University:

Lecturer in Operational Research, 1977-1988.

Lecturer in Finance, 1988-1989.

Reader in Finance, 1989-1993.

Professor of Finance, 1993-2020.

Emeritus Professor, 2020-.

Head, Department of Accounting and Finance, 1995-1998 and 2007-2009.

OTHER POSITIONS

Visiting Lecturer:

Monash University, Melbourne, 1984-1985.

European Institute for Advanced Studies in Management, Brussels,

1989, 1991, 1993, 1995, 1997 & 1999.

Institute for Advanced Studies, Vienna, 1993.

University of Canterbury, Christchurch, 1994.

City Polytechnic Hong Kong, 1994.

University of Technology Sydney, 1995 & 1997.

Aarhus University, 2001.

Peking University, 2005.

National Taiwan University, 2009.

Norwegian U. of Science and Technology, Trondheim, 2010, 2011 & 2012.

University of Auckland, 2013.

University of Queensland, 2013.

University of Coimbra, 2018.

External Examiner in various years for Warwick University undergraduate programmes and Manchester University BA, MBA and MSc programmes.

PhD External Examiner, for Cambridge University, Oxford University, Warwick University, London School of Economics, Imperial College etc. in the U.K. and also for universities in Denmark, Norway, Italy, Hong Kong, Australia and New Zealand.

DEGREES

BA, Mathematics, University of Cambridge, 1971-4.

MA, Operational Research, Lancaster University, 1974-5.

PhD, Operational Research, Lancaster University, 1975-8.

TEACHING

BA/BSc: Corporate finance, International finance, Quantitative finance,

Case exercises, Statistics, O.R. techniques

MSc: Financial markets, Financial econometrics, Statistics

MRes: Advanced research methods

PhD: Finance, Financial time series and applications, Derivatives

Executive: Asset price dynamics, Volatility and density forecasting

PUBLICATIONS

Books

1. S.J. Taylor, 1986, *Modelling Financial Time Series*, 268 pages, John Wiley and Sons, Chichester.

Japanese translation 1988, Tokyo-Keizai Shimpo Sha. Korean translation 1994.

Second edition: 2008, 296 pages, World Scientific Publishing, Singapore.

- 2. R.M.C. Guimaraes, B.G. Kingsman and S.J. Taylor (editors), 1989, A Reappraisal of the Efficiency of Financial Markets, 804 pages, Springer-Verlag, Heidelberg.
- 3. S.J. Taylor, 2005, *Asset Price Dynamics, Volatility, and Prediction*, 552 pages, Princeton University Press, Princeton.

Selected papers

- 1. S.J. Taylor and B.G. Kingsman, 1977, Comment: an autoregressive forecast of the world sugar future option market, *Journal of Financial and Quantitative Analysis* 12, 883-890.
- 2. S.J. Taylor and B.G. Kingsman, 1978, Non-stationarity in sugar prices, Journal of the Operational Research Society 29, 971-980.
- 3. S.J. Taylor, 1979, Empirical evidence for trends in capital markets, *Economics Letters* 3, 271-274.
- 4. S.J. Taylor and B.G. Kingsman, 1979, An analysis of the variance and distribution of commodity price-changes, *Australian Journal of Management* 4, 135-149.
- 5. S.J. Taylor, 1980, Conjectured models for trends in financial prices, tests and forecasts, *Journal of the Royal Statistical Society*, *Series A*, 143, 338-362.

Reprinted in: Futures Markets: Their Establishment and Performance, 1986, B.A. Goss editor, Croom Helm, Beckenham, 209-246.

Reprinted in: Forecasting Financial Markets, Volume 1, 2002, T.C. Mills editor, Edward Elgar, Cheltenham, 212-236.

- 6. S.J. Taylor, 1982, Tests of the random walk hypothesis against a pricetrend hypothesis, *Journal of Financial and Quantitative Analysis* 17, 37-61.
- 7. S.J. Taylor, 1982, Financial returns modelled by the product of two stochastic processes, a study of daily sugar prices, 1961-79, in Time Series Analysis: Theory and Practice 1, O.D. Anderson editor, North Holland, Amsterdam, 203-226.

Reprinted in: Stochastic Volatility: Selected Readings, 2005, N. Shephard editor, Oxford University Press, Oxford, 60-82.

Reprinted in: Financial Risk Measurement and Management, 2012, F.X. Diebold editor, Edward Elgar, Cheltenham, 441-464.

Reprinted in: Volatility, 2018, T.G. Andersen and T. Bollerslev editors, Edward Elgar, Cheltenham, Volume I, 423-446.

8. S.J. Taylor, 1983, Trends in wool prices when Sydney futures are actively traded, *Australian Economic Papers* 22, 99-105.

- 9. S.J. Taylor, 1983, Strategies for investors in apparently inefficient futures markets, in Futures Markets Modelling, Managing and Monitoring Futures Trading, M.E. Streit editor, Basil Blackwell, Oxford, 165-198.
- 10. S.J. Taylor, 1984, The efficiency of the international money markets: a comment, *Journal of Business Finance and Accounting* 11, 579-581.
- 11. S.J. Taylor, 1984, Estimating the variances of autocorrelations calculated from financial time series, *Applied Statistics* 33, 300-308.
- 12. S.J. Taylor, 1985, The behaviour of futures prices over time, *Applied Economics* 17, 713-734.
- 13. S.J. Taylor and C.W.R. Ward, 1985, Relative accuracy of earnings forecasts made by UK stockbrokers, *The Investment Analyst* No. 75, 15-17.
- 14. S.J. Taylor, 1987, Forecasting the volatility of currency exchange rates, *International Journal of Forecasting* 3, 159-170.
 - Reprinted in: Forecasting Financial Markets, Volume 2, 2002, T.C. Mills editor, Edward Elgar, Cheltenham, 125-136.
 - Reprinted in: Financial Forecasting, Volume 2, 2003, R. Batchelor and P. Dua editors, Edward Elgar, Cheltenham, 389-400.
- 15. S.J. Taylor, 1988, Forecasting market prices, *International Journal of Forecasting* 4, 421-426.
- 16. S.J. Taylor, 1988, How efficient are the most liquid futures contracts? a study of Treasury Bond futures, *The Review of Futures Markets* 7, 574-592.
- 17. S.J. Taylor and A. Tari, 1989, Further evidence against the efficiency of futures markets, in A Reappraisal of the Efficiency of Financial Markets, 578-601.
- 18. S.J. Taylor, 1989, Simulating financial prices, *Journal of the Operational Research Society* 40, 567-569.
- S.J. Taylor, 1990, Profitable currency futures trading: a comparison of technical and time series trading rules, in The Currency Hedging Debate, L.R. Thomas editor, IFR Publishing Ltd., London, 203-239.
- 20. S. Poon and S.J. Taylor, 1991, Macroeconomic factors and the U.K. stock market, *Journal of Business Finance and Accounting* 18, 619-636.

- 21. S.J. Taylor, 1992, Efficiency of the Yen futures market at the Chicago Mercantile Exchange, in Rational Expectations and Efficiency in Futures Markets, B.A. Goss editor, Routledge, London, 109-128.
- 22. S. Poon, S.J. Taylor and C.W.R. Ward, 1992, Portfolio diversification: a pictorial analysis of the U.K. stock market, *Journal of Business Finance and Accounting* 19, 87-101.
- 23. S.J. Taylor, 1992, Rewards available to currency futures speculators: compensation for risk or evidence of inefficient pricing?, *Economic Record* 68 (supplement), 105-116.
- S. Poon and S.J. Taylor, 1992, Stock returns and volatility: an empirical study of the U.K. stock market, *Journal of Banking and Finance* 16, 37-59.
- 25. S.J. Taylor, 1994, Predicting the volatility of stock prices using ARCH models, with U.K. examples, *Managerial Finance* 20, Number 2/3, 102-117.
- 26. S.J. Taylor, 1994, Modelling stochastic volatility: a review and comparative study, *Mathematical Finance* 4, 183-204.
 - Reprinted in: Volatility, 1998, R. Jarrow editor, Risk Books, London, 95-108.
- 27. X. Xu and S.J. Taylor, 1994, The term structure of volatility implied by foreign exchange options, *Journal of Financial and Quantitative Analysis* 29, 57-74.
 - Reprinted in: Volatility, 1998, R. Jarrow editor, Risk Books, London, 179-190.
 - Reprinted in: Currency Derivatives, 1998, D.F. DeRosa editor, John Wiley, New York, 181-200.
- 28. S.J. Taylor, 1994, Trading futures using the channel rule: a study of the predictive power of technical analysis with currency examples, *Journal of Futures Markets* 14, 215-235.
 - Reprinted in: Handbook of Managed Futures: Performance, evaluation, and analysis, 1997, C. C. Peters and B. Warwick, editors, McGraw-Hill, 399-422.
- S.J. Taylor and X. Xu, 1994, The magnitude of implied volatility smiles: theory and empirical evidence for exchange rates, *Review of Futures Markets* 13, 355-380.
 - Reprinted in: Currency Derivatives, 1998, D.F. DeRosa editor, John Wiley, New York, 165-180.

30. X. Xu and S.J. Taylor, 1995, Conditional volatility and the informational efficiency of the PHLX currency options market, *Journal of Banking and Finance* 19, 803-821.

Reprinted in: Forecasting Financial Markets, 1996, C. Dunis editor, John Wiley, Chichester, 181-200.

Reprinted in: Financial Forecasting, Volume 2, 2003, R. Batchelor and P. Dua editors, Edward Elgar, Cheltenham, 518-536.

31. S.J. Taylor and X. Xu, 1997, The incremental volatility information in one million foreign exchange quotations, *Journal of Empirical Finance* 4, 317-340.

Reprinted in: Financial Markets Tick by Tick, 1999, P. Lequeux editor, John Wiley, Chichester, 65-90.

- 32. Y. Chang and S.J. Taylor, 1998, Intraday effects of foreign exchange intervention by the Bank of Japan, *Journal of International Money and Finance* 17, 191-210.
- S.J. Taylor, 1999, Markov processes and the distribution of volatility: a comparison of discrete and continuous specifications, *Philosophical Transactions of the Royal Society of London*, Series A 357, 2059-2070.
- 34. S.J. Taylor, 2000, Stock index and price dynamics in the U.K. and the U.S.: new evidence from a trading rule and statistical analysis, *European Journal of Finance* 6, 39-69.
- 35. B.J. Blair, S. Poon and S.J. Taylor, 2001, Modelling S&P 100 volatility: the information content of stock returns, *Journal of Banking and Finance* 25, 1665-1679.
- 36. B.J. Blair, S. Poon and S.J. Taylor, 2001, Forecasting S&P 100 volatility: the incremental information content of implied volatilities and high frequency index returns, *Journal of Econometrics* 105, 5-26.
 - Reprinted in: Handbook of Quantitative Finance and Risk Management, 2010, C.F. Lee, A.C. Lee and J.C. Lee editors, Springer, New York, 1333-1344.
- 37. M. Martens, Y. Chang and S.J. Taylor, 2002, Intraday volatility forecasts using different seasonality adjustment methods, *Journal of Financial Research* 25, 283-297.
- 38. N.M.P.C. Areal and S.J. Taylor, 2002, The realized volatility of FTSE-100 futures prices, *Journal of Futures Markets* 22, 627-648.

- 39. B.J. Blair, S. Poon and S.J. Taylor, 2002, Asymmetric and crash effects in stock volatility for the S&P 100 index and its constituents, *Applied Financial Economics* 12, 319-329.
- 40. Y. Chang and S.J. Taylor, 2003, Information arrivals and intraday exchange rate volatility, *Journal of International Financial Markets, Institutions and Money* 13, 85-112.
- 41. S. Pong, M.B. Shackleton, S.J. Taylor and X. Xu, 2004, Forecasting currency volatility: a comparison of implied volatilities and AR(FI)MA models, *Journal of Banking and Finance* 28, 2541-2563.
- 42. Y. Wang, A. Keswani and S.J. Taylor, 2006, The relationships between sentiment, returns and volatility, *International Journal of Forecasting* 22, 109-123.
- 43. S.M. Bartram, S.J. Taylor and Y. Wang, 2007, The Euro and European financial market dependence, *Journal of Banking and Finance* 31, 1461-1481.
- 44. X. Liu, M.B. Shackleton, S.J. Taylor and X. Xu, 2007, Closed-form transformations from risk-neutral to real-world densities, *Journal of Banking and Finance* 31, 1501-1520.
- 45. S.J. Taylor, 2008, Stock price volatility, in The New Palgrave Dictionary of Economics (second edition), S.N. Durlauf and L.E. Blume editors, Palgrave MacMillan, volume 8, 8-10.
- 46. S. Pong, M.B. Shackleton and S.J. Taylor, 2008, Distinguishing short and long memory volatility specifications, *Econometrics Journal* 11, 617-637.
- 47. S.J. Taylor, P.K. Yadav and Y. Zhang, 2009, Cross-sectional analysis of risk-neutral skewness, *Journal of Derivatives* 16, Number 4, 38-52.
- 48. X. Liu, M.B. Shackleton, S.J. Taylor and X. Xu, 2009, Empirical pricing kernels obtained from the UK index options market, *Applied Economics Letters* 16, 989-993.
- 49. S.J. Taylor and Y. Wang, 2010, Option prices and risk-neutral densities for currency cross-rates, *Journal of Futures Markets* 30, 324-360.
- 50. S.J. Taylor, P.K. Yadav and Y. Zhang, 2010, The information content of implied volatilities and model-free volatility expectations: evidence from options written on individual stocks, *Journal of Banking and Finance* 34, 871-881.

- 51. M.B. Shackleton, S.J. Taylor and P. Yu, 2010, A multi-horizon comparison of density forecasts for the S&P 500 using index returns and option prices, *Journal of Banking and Finance* 34, 2678-2693.
- 52. Y. Zhang, S.J. Taylor and L. Wang, 2013, Investigating the information content of the model-free volatility expectation by Monte Carlo methods, *Journal of Futures Markets* 33, 1071-1095.
- 53. D. Gilder, M.B. Shackleton and S.J. Taylor, 2014, Cojumps in stock prices: empirical evidence, *Journal of Banking and Finance* 40, 443-459.
- 54. S.J. Taylor, C.-F. Tzeng and M. Widdicks, 2014, Bankruptcy probabilities inferred from option prices, *Journal of Derivatives* 22, Number 2, 8-31.
- 55. S.J. Taylor, 2015, Consequences for option pricing of a long memory in volatility, in Handbook of Financial Econometrics and Statistics, C.F. Lee and J.C. Lee editors, Springer, New York, Volume 2, 903-933.
- 56. R. Fan, S.J. Taylor and M. Sandri, 2018, Density forecast comparisons for stock prices, obtained from high-frequency returns and daily option prices, *Journal of Futures Markets* 38, 83-103.
- 57. S.J. Taylor, C.-F. Tzeng and M. Widdicks, 2018, Information about price and volatility jumps inferred from option prices, *Journal of Futures Markets* 38, 1206-1226.
- T.G. Andersen, I. Archakov, L. Grund, N. Hautsch, Y. Li, S. Nasekin, I. Nolte, M.C. Pham, S.J. Taylor and V. Todorov, 2021, A descriptive study of highfrequency trade and quote option data, *Journal of Financial Econometrics* 19, 128-177.
- 59. S.Y. Hong, I. Nolte, S.J. Taylor and X. Zhao, 2023, Volatility estimation and forecasts based on price durations, *Journal of Financial Econometrics* 21, 106-144.

Selected working papers

- S.J. Taylor, 2008, An econometric defence of pure-jump price dynamics.
- S.J. Taylor, 2022, S&P 500 microstructure noise components: empirical inferences from futures and ETF prices.

Citations

Google Scholar: 12,000+

RESEARCH ACTIVITIES

Areas of interest

The behaviour of stock, commodity and currency prices in general and, in particular:

- (a) Measuring and forecasting the volatility of market prices using spot, futures and options prices.
- (b) Studies of high-frequency market quotations and transaction prices.

PhD theses supervised

Nelson Areal Ping-Chen Tsai
Guillermo Benavides Chi-Feng Tzeng
Bevan Blair Yaw-Huei Wang
Yuanchen Chang Alec Ward

Rui Fan Gang Xu
Dudley Gilder Xinzhong Xu
Xiaoquan Liu Peng Yu
Tristan Linke Chenyu Zhang
Jose Moreira Yuanyuan Zhang
Shiuyan Pong Xiaolu Zhao

Ser-Huang Poon Helder Sebastiao

Research grants

Awarded by ESRC, NATO, Inquire UK and Inquire Europe.

Major project: "Order Book Foundations of Price Risks and Liquidity: An Integrated Equity and Derivatives Markets Perspective".

Funded by: Economic and Social Research Council (ESRC), £355,037,

Austrian Science Fund (FWF), €250,000.

Awarded to: Ingmar Nolte and Stephen Taylor, Lancaster University,

Nikolaus Hautsch, University of Vienna.

From: Spring 2017 to Summer 2021.

Professional societies

Founding Member, Society for Financial Econometrics.

European Finance Association:

Executive Committee 1991-1994

Co-organiser of the Symposium on Empirical Derivatives Research 2003

Programme Committee member, several years

Associate Editor

Mathematical Finance (1991-2006)
European Finance Review (1997-2003)
European Financial Management (1995-2005)
Journal of Business Finance and Accounting (2001-2013)
Journal of Banking and Finance (2003-2011)

Journal refereeing

For 30+ journals, including:

Biometrika

Econometrica

European Finance Review

International Economic Review

- J. American Statistical Association
- J. Banking and Finance
- J. Business and Economic Statistics
- J. Econometrics
- J. Economic Theory
- J. Empirical Finance
- J. Financial and Quantitative Analysis
- J. Futures Markets
- J. International Money and Finance
- J. Money, Credit and Banking

Management Science

Mathematical Finance

Review of Finance

<u>International conference presentations</u>

56+, including meetings of the American Finance Association, the European Finance Association, the Society for Financial Econometrics, the French Finance Association, the Financial Management Association and the European Financial Management Association.

Invited talks

2006 onwards:

MathFinance conference, Frankfurt

High-Frequency Finance conference, Sandbjerg

Joint workshop, LSE/Imperial/Oxford

Bank of England, London

Universidad Carlos III Madrid

University of Manchester

University of Warwick

University of Zurich

ESRC PhD course, Exeter

University of Basel

Financial Econometrics conference, Imperial College

Portuguese Finance Association, Coimbra

Bachelier Finance Society, London

International Institute of Forecasters workshop, Lisbon

National Chengchi University, Taipei

National Central University, Jhongli

National Taiwan University, Taipei

Financial Econometrics workshop, Alesund

Peking University

Financial Econometrics conference, Copenhagen

University of Auckland

University of Otago, Dunedin

University of Canterbury, Christchurch

Auckland University of Technology

University of Hannover

University of Liverpool

ADMINISTRATION

Head, Department of Accounting and Finance, 1995-1998 and 2007-2009, member of Senate and Management School Policy and Resources Committee.

Director of Management School doctoral programmes, 2010-2012.

At various times Director of Undergraduate Studies, First Year Tutor, Second Year Tutor, Final Year Tutor, Examinations Officer, Director of PhD Studies, Research Seminars Co-ordinator, Alumni Newsletter Editor.