Bibliography

- Abramowitz, Milton and Irene Stegun (1964). *Handbook of Mathematical Functions with Forumula, Graphs and Mathematical Tables.* Dover Publications.
- Aït-Sahalia, Yacine and Andrew W. Lo (Apr. 1998). "Nonparametric Estimation of State-Price Densities Implicit in Financial Asset Prices." In: *Journal of Finance* 53.2, pp. 499–547.
- Andersen, Torben G. and Tim Bollerslev (Nov. 1998). "Answering the Skeptics: Yes, Standard Volatility Models Do Provide Accurate Forecasts." In: *International Economic Review* 39.4, pp. 885–905.
- Andersen, Torben G. et al. (2003). "Modeling and Forecasting Realized Volatility." In: *Econometrica* 71.1, pp. 3–29.
- Andersen, Torben G. et al. (2007). "Real-time price discovery in global stock, bond and foreign exchange markets." In: *Journal of International Economics* 73.2, pp. 251–277.
- Andrews, Donald W K and Werner Ploberger (1994). "Optimal Tests when a Nuisance Parameter is Present only under the Alternative." In: *Econometrica* 62.6, pp. 1383–1414.
- Ang, Andrew, Joseph Chen, and Yuhang Xing (2006). "Downside Risk." In: *Review of Financial Studies* 19.4, pp. 1191–1239.
- Bai, Jushan and Serena Ng (2002). "Determining the number of factors in approximate factor models." In: *Econometrica* 70.1, pp. 191–221.
- Baldessari, Bruno (1967). "The Distribution of a Quadratic Form of Normal Random Variables." In: *The Annals of Mathematical Statistics* 38.6, pp. 1700–1704.
- Bandi, Federico and Jeffrey Russell (2008). "Microstructure Noise, Realized Variance, and Optimal Sampling." In: *The Review of Economic Studies* 75.2, pp. 339–369.
- Barndorff-Nielsen, Ole E. and Neil Shephard (2004). "Econometric Analysis of Realized Covariation: High Frequency Based Covariance, Regression, and Correlation in Financial Economics." In: *Econometrica* 72.3, pp. 885–925.
- Barndorff-Nielsen, Ole E. et al. (Nov. 2008). "Designing Realized Kernels to Measure the ex-post Variation of Equity Prices in the Presence of Noise." In: *Econometrica* 76.6, pp. 1481–1536.
- (2011). "Multivariate Realised Kernels: Consistent Positive Semi-definite Estimators of the Covariation of Equity Prices with Noise and Non-synchronous Trading." In: *Journal of Econometrics* 162, pp. 149–169.
- Baxter, Marianne and Robert G King (Nov. 1999). "Measuring Business Cycles: Approximate Band-Pass Filters For Economic Time Series." In: *The Review of Economics and Statistics* 81.4, pp. 575–593.
- Bekaert, Geert and Guojun Wu (2000). "Asymmetric Volatility and Risk in Equity Markets." In: *The Review of Financial Studies* 13.1, pp. 1–42. DOI: 10.1093/rfs/13.1.1. eprint: /oup/backfile/content_public/journal/rfs/13/1/10.1093_rfs_13.1.1/2/130001.pdf. URL: http://dx.doi.org/10.1093/rfs/13.1.1.

Berkowitz, Jeremy (2001). "Testing density forecasts, with applications to risk management." In: *Journal of Business & Economic Statistics* 19, pp. 465–474.

- Beveridge, S and C R Nelson (1981). "A new approach to decomposition of economic time series into permanent and transitory components with particular attention to measurement of the 'business cycle'." In: *Journal of Monetary Economics* 7.2, pp. 151–174.
- Black, Fischer (1972). "Capital Market Equilibrium with Restricted Borrowing." In: *The Journal of Business* 45.3, pp. 444–455. ISSN: 0021-9398.
- Bollerslev, Tim (1986). "Generalized Autoregressive Conditional Heteroskedasticity." In: *Journal of Econometrics* 31.3, pp. 307–327.
- (Aug. 1987). "A Conditionally Heteroskedastic Time Series Model for Security Prices and Rates of Return Data." In: *Review of Economics and Statistics* 69.3, pp. 542–547.
- (1990). "Modeling the Coherence in Short-Run Nominal Exchange Rates: A Multivariate Generalized ARCH Model." In: *Review of Economics and Statistics* 72.3, pp. 498–505.
- Bollerslev, Tim, Robert F. Engle, and Jeffrey M. Wooldridge (1988). "A Capital Asset Pricing Model with Time-Varying Covariances." In: *Journal of Political Economy* 96.1, pp. 116–131.
- Bollerslev, Tim and Jeffrey M. Wooldridge (1992). "Quasi-Maximum Likelihood Estimation and Inference in Dynamic Models with Time-Varying Covariances." In: *Econometric Reviews* 11.2, pp. 143–172.
- Breeden, Douglas T. and Robert H. Litzenberger (1978). "Prices of State Contingent Claims Implicit in Option Prices." In: *Journal of Business* 51, pp. 621–651.
- Britten-Jones, Mark and Anthony Neuberger (2000). "Option Prices, Implied Price Processes, and Stochastic Volatility." In: *Journal of Finance* 55.2, pp. 839–866.
- Burns, Patrick, Robert F. Engle, and Joe Mezrich (1998). "Correlations and Volatilities of Asynchronous Data." In: *Journal of Derivatives* 5.4, pp. 7–18.
- Campbell, John Y. (1996). "Understanding Risk and Return." In: *Journal of Political Economy* 104, pp. 298–345.
- Cappiello, Lorenzo, Robert F. Engle, and Kevin Sheppard (2006). "Asymmetric dynamics in the correlations of global equity and bond returns." In: *Journal of Financial Econometrics* 4.4, pp. 537–572.
- Casella, George and Roger L Berger (2001). Statistical Inference (Hardcover). 2nd ed. Duxbury.
- CBOE (2003). VIX: CBOE Volatility Index. Tech. rep. Chicago Board Options Exchange. URL: http://www.cboe.com/micro/vix/vixwhite.pdf.
- Chernick, Michael R (2008). *Bootstrap Methods: A Guide for Practitioners and Researchers*. Wiley Series in Probability and Statistics. Hoboken, New Jersey: John Wiley & Sons Inc, p. 592.
- Christie, Andrew A. (1982). "The stochastic behavior of common stock variances: Value, leverage and interest rate effects." In: *Journal of Financial Economics* 10.4, pp. 407–432. ISSN: 0304-405X. DOI: https://doi.org/10.1016/0304-405X(82)90018-6. URL: http://www.sciencedirect.com/science/article/pii/0304405X82900186.
- Christoffersen, Peter F (2003). *Elements of Financial Risk Management*. London: Academic Press Inc.
- Cochrane, John H (2001). Asset Pricing. Princeton, N. J.: Princeton University Press.
- Collard, Fabrice et al. (2018). "Ambiguity And The Historical Equity Premium." In: *Quantitative Economics* 9.2, pp. 945–993.

Corsi, Fulvio (2009). "A Simple Approximate Long-Memory Model of Realized Volatility." In: *Journal of Financial Econometrics* 7.2, pp. 174–196. eprint: http://jfec.oxfordjournals.org/cgi/reprint/7/2/174.pdf.

- Creal, Drew, Siem Jan Koopman, and André Lucas (2013). "Generalized autoregressive score models with applications." In: *Journal of Applied Econometrics* 28.5, pp. 777–795.
- Davidson, Russell and James G MacKinnon (2003). *Econometric Theory and Methods*. Oxford University Press.
- Demeterfi, Kresimir et al. (1999). *More Than You Ever Wanted To Know About Volatility Swaps*. Quantitative Strategies Research Notes. Goldman Sachs.
- Diebold, Francis X. and Roberto S Mariano (July 1995). "Comparing Predictive Accuracy." In: *Journal of Business & Economic Statistics* 13.3, pp. 253–263.
- Ding, Z and R Engle (2001). "Large Scale Conditional Matrix Modeling, Estimation and Testing." In: *Academia Economic Papers* 29.2, pp. 157–184.
- Ding, Zhuanxin, Clive W. J. Granger, and Robert F. Engle (1993). "A Long Memory Property of Stock Market Returns and a New Model." In: *Journal of Empirical Finance* 1.1, pp. 83–106.
- Dittmar, Robert F (2002). "Nonlinear Pricing Kernels, Kurtosis Preference, and the Cross-Section of Equity Returns." In: *Journal of Finance* 57.1, pp. 369–403.
- Efron, Bradley and Robert J. Tibshirani (1998). *An introduction to the bootstrap.* Boca Raton; London: Chapman & Hal.
- Efron, Bradley et al. (2004). "Least angle regression." In: Annals of Statistics 32, pp. 407–499.
- Elliott, Graham, Ted Rothenberg, and James Stock (1996). "Efficient Tests for an Autoregressive Unit Root." In: *Econometrica* 64, pp. 813–836.
- Enders, Walter (2004). Applied econometric time series. 2nd. Hoboken, NJ: J. Wiley.
- Engle, Robert F. (1982). "Autoregressive Conditional Heteroskedasticity with Esimtates of the Variance of U.K. Inflation." In: *Econometrica* 50.4, pp. 987–1008.
- (1995). ARCH: selected readings. Oxford University Press, USA. ISBN: 019877432X.
- (2002a). "New Frontiers for ARCH models." In: *Journal of Applied Econometrics* 17, pp. 425–446
- (2002b). "New frontiers for ARCH models." In: *Journal of Applied Econometrics* 17.5, pp. 425–446.
- Engle, Robert F. and Kenneth F Kroner (1995). "Multivariate Simultaneous Generalized ARCH." In: *Econometric Theory* 11.1, pp. 122–150.
- Engle, Robert F. and Li Li (1998). "Macroeconomic Announcements and Volatility of Treasury Futures."
- Engle, Robert F., David M Lilien, and Russell P Robins (Mar. 1987). "Estimating Time-varying Risk Premia in the Term Structure: The ARCH-M Model." In: *Econometrica* 55.2, pp. 391–407.
- Engle, Robert F. and Simone Manganelli (2004). "CAViaR: conditional autoregressive value at risk by regression quantiles." In: *Journal of Business & Economic Statistics* 22, pp. 367–381.
- Epps, Thomas W (1979). "Comovements in Stock Prices in the Very Short Run." In: *Journal of the American Statistical Society* 74, pp. 291–296.
- Fama, E F and J D MacBeth (1973). "Risk, Return, and Equilibrium: Empirical Tests." In: *The Journal of Political Economy* 81.3, pp. 607–636.
- Fama, Eugene F and Kenneth R French (1992). "The Cross-Section of Expected Stock Returns." In: *Journal of Finance* 47, pp. 427–465.

Fama, Eugene F and Kenneth R French (1993). "Common Risk Factors in the returns on Stocks and Bonds." In: *Journal of Financial Economics* 33, pp. 3–56.

- Fan, Jianqing and Qiwei Yao (Aug. 2005). *Nonlinear Time Series: Nonparametric and Parametric Methods*. Springer Series in Statistics. Springer, p. 552.
- Gallant, A Ronald (1997). *An Introduction to Econometric Theory: Measure-Theoretic Probability and Statistics with Applications to Economics*. Princeton University Press.
- Glosten, Lawrence R., Ravi Jagannathan, and David E. Runkle (1993). "On the Relationship between the expected value and the volatility of the nominal excess return on stocks." In: *Journal of Finance* 48.5.
- Gourieroux, Christian and Joann Jasiak (Aug. 2009). "Value at Risk." In: *Handbook of Financial Econometrics*. Ed. by Yacine Aït-Sahalia and Lars Peter Hansen. Elsevier Science.
- Greene, William H (Aug. 2007). Econometric Analysis. 6th ed. Prentice Hall, p. 1216.
- Grimmett, Geoffrey and David Stirzaker (2001). *Probability and Random Processes*. Oxford University Press.
- Haan, Wouter den and Andrew T Levin (2000). *Robust Covariance Estimation with Data-Dependent VAR Prewhitening Order*. Tech. rep. University of California San Diego.
- Hall, Alastair R (2005). Generalized Method of Moments. Oxford: Oxford University Press.
- Hamilton, James D. (Mar. 1989). "A New Approach to Economic Analysis of Nonstationary Time Series." In: *Econometrica* 57.2, pp. 357–384.
- (1994). Time series analysis. Princeton, N.J.: Princeton University Press.
- Hannan, E. J. and B. G. Quinn (1979). "The Determination of the Order of an Autoregression." In: *Journal of the Royal Statistical Society. Series B (Methodological)* 41.2, pp. 190–195. ISSN: 0035-9246. URL: http://www.jstor.org/stable/2985032.
- Hansen, Bruce E. (Aug. 1994). "Autoregressive Conditional Density Estimation." In: *International Economic Review* 35.3, pp. 705–730.
- Hansen, Lars Peter (1982). "Large Sample Properties of Generalized Method of Moments Estimators." In: *Econometrica* 50.4, pp. 1029–1054.
- Hansen, Lars Peter and Kenneth J Singleton (1982). "Generalized Instrumental Variables Estimation of Nonlinear Rational Expectations Models." In: *Econometrica* 50.5, pp. 1269–1286.
- Hansen, Peter Reinhard and Asger Lunde (2005). "A Realized Variance for the Whole Day Based on Intermittent High-Frequency Data." In: *Journal of Financial Econometrics* 3.4, pp. 525–554. DOI: 10.1093/jjfinec/nbi028. URL: http://jfec.oxfordjournals.org/cgi/content/abstract/3/4/525.
- (2006). "Consistent ranking of volatility models." In: *Journal of Econometrics* 127.1-2, pp. 97–121.
- Hastie, Trevor et al. (2007). "Forward stagewise regression and the monotone lasso." In: *Electronic Journal of Statistics* 1.1, pp. 1–29.
- Hayashi, Fumio (2000). Econometrics. Princeton University Press.
- Hodrick, Robert J and Edward C Prescott (Feb. 1997). "Postwar U.S. Business Cycles: An Empirical Investigation." In: *Journal of Money, Credit and Banking* 29.1, pp. 1–16.
- Hong, Yongmiao, Jun Tu, and Guofu Zhou (2007). "Asymmetries in Stock Returns: Statistical Tests and Economic Evaluation." In: *Rev. Financ. Stud.* 20.5, pp. 1547–1581. DOI: 10.1093/rfs/hh1037.
- Huber, Peter J (2004). Robust Statistics. Hoboken, New Jersey: John Wiley & Sons Inc.

Ivanov, Ventzislav and Lutz Kilian (2005). "A Practitioner's Guide to Lag Order Selection For VAR Impulse Response Analysis." In: *Studies in Nonlinear Dynamics & Econometrics* 9.1, pp. 1219–1253. URL: http://www.bepress.com/snde/vol9/iss1/art2.

- J.P.Morgan/Reuters (Dec. 1996). *RiskMetrics Technical Document*. Tech. rep. Morgan Guaranty Trust Company.
- Jiang, George J. and Yisong S. Tian (2005). "The Model-Free Implied Volatility and Its Information Content." In: *Review of Financial Studies* 18.4, pp. 1305–1342.
- Krolzig, Hans-Martin (Aug. 1997). *Markov-Switching Vector Autoregressions: Modelling, Statistical Inference, and Application to Business Cycle Analysis*. Lecture Notes in Economics and Mathematical Systems. Berlin: Springer-Verlag, p. 357.
- Lettau, Martin and Sydney Ludvigson (2001a). "Consumption, Aggregate Wealth, and Expected Stock Returns." In: *Journal of Finance* 56.8, pp. 815–849.
- (2001b). "Resurrecting the (C)CAPM: A Cross-sectional Test when Risk Premia are Yime-varying."
 In: Journal of Political Economy 109.6, pp. 1238–1287.
- Lintner, John (1965). "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets." In: *The Review of Economics and Statistics* 47.1, pp. 13–37. ISSN: 0034-6535.
- Lucas, Robert E (Nov. 1978). "Asset Prices in an Exchange Economy." In: *Econometrica* 46.6, pp. 1429–1445.
- Markowitz, Harry (1959). Portfolio Selection: Efficient Diversification of Investments. John Wiley.
- McNeil, Alexander J, Rudiger Frey, and Paul Embrechts (2005). *Quantitative Risk Management : Concepts, Techniques, and Tools.* Woodstock, Oxfordshire: Princeton University Press.
- Merton, Robert C (1973). "An Intertemporal Capital Asset Pricing Model." In: *Econometrica* 41, pp. 867–887.
- Mittelhammer, Ron C (1999). *Mathematical Statistics for Economics and Business*. Springer, p. 723. Nelson, Daniel B. (1991). "Conditional Heteroskedasticity in Asset Returns: A new approach." In: *Econometrica* 59.2, pp. 347–370.
- Nelson, Daniel B. and Charles Q. Cao (1992). "Inequality Constraints in the univariate GARCH model." In: *Journal of Business & Economic Statistics* 10.2, pp. 229–235.
- Newey, Whitney K and Kenneth D West (1987). "A Simple, Positive Definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix." In: *Econometrica* 55.3, pp. 703–708.
- Noureldin, Diaa, Neil Shephard, and Kevin Sheppard (2012). "Multivariate High-Frequency-Based Volatility (HEAVY) Models." In: *Journal of Applied Econometrics* 27.6, pp. 907–933.
- Patton, Andrew (2006). "Modelling Asymmetric Exchange Rate Dependence." In: *International Economic Review* 47.2, pp. 527–556.
- Patton, Andrew, Dimitris N Politis, and Halbert White (2009). "Correction to Automatic Block-Length Selection for the Dependent Bootstrap by D. Politis and H. White." In: *Econometric Reviews* 28.4, pp. 372–375. DOI: 10.1080/07474930802459016.
- Patton, Andrew and Kevin Sheppard (Dec. 2009). "Evaluating Volatility Forecasts." In: *Handbook of Financial Time Series*. Ed. by Torben G.ustav Andersen et al. Springer, p. 750.
- Perez-Quiros, Gabriel and Allan Timmermann (2000). "Firm Size and Cyclical Variations in Stock Returns." In: *Journal of Finance* 55.3, pp. 1229–1262.
- Pesaran, H. Hashem and Yongcheol Shin (Jan. 15, 1998). "Generalized impulse response analysis in linear multivariate models." In: *Economics Letters* 58.1, pp. 17–29. ISSN: 0165-1765. DOI:

- 10.1016/S0165-1765(97)00214-0. URL: http://www.sciencedirect.com/science/article/pii/S0165176597002140.
- Politis, D. N. and J. P. Romano (1994). "The stationary bootstrap." In: *Journal of the American Statistical Association* 89.428, pp. 1303–1313.
- Roll, Richard (1977). "A critique of the asset pricing theory's tests; Part I: On past and potential testability of the theory." In: *Journal of Financial Economics* 4, pp. 129–176.
- Ross, Stephen A (1976). "The Arbitrage Theory of Capital Asset Pricing." In: *Journal of Economic Theory* 13.3, pp. 341–360.
- Rousseeuw, Peter J and Annick M Leroy (2003). *Robust Regression and Outlier Detection*. Hoboken, New Jersey: John Wiley & Sons Inc.
- Shanken, Jay (1992). "On the Estimation of Beta-Pricing Models." In: *The Review of Financial Studies* 5.1, pp. 1–33.
- Sharpe, William (1964). "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk." In: *Journal of Finance* 19, pp. 425–442.
- Sharpe, William F (1994). "The Sharpe Ratio." In: *The Journal of Portfolio Management* 21.1, pp. 49–58.
- Sims, Christopher A. (1980). "Macroeconomics and Reality." In: *Econometrica* 48, pp. 1–48.
- Sklar, A (1959). "Fonctions de répartition à n dimensions et leurs marges." In: *Publ. Inst. Statist. Univ. Paris* 8, pp. 229–231.
- Taylor, Stephen J. (1986). Modeling Financial Time Series. John Wiley and Sons Ltd.
- (2005). *Asset price dynamics, volatility, and prediction*. Princeton, N.J.; Oxford: Princeton University Press.
- Tibshirani, Robert (1996). "Regression shrinkage and selection via the lasso." In: *Journal of the Royal Statistical Society, Series B* 58, pp. 267–288.
- Tong, H (1978). "On a threshold model." In: *Pattern Recognition and Signal Processing*. Ed. by C H Chen. Amsterdam: Sijhoff and Noordoff.
- Veronesi, Peitro (1999). "Stock Market Overreaction to Bad News in Good Times: A Rational Expectations Equilibrium Model." In: *The Review of Financial Studies* 12, pp. 975–1007.
- Wackerly, Dennis, William Mendenhall, and Richard L Scheaffer (2001). *Mathematical Statistics with Applications*. 6th ed. Duxbury Press.
- White, Halbert (1980). "A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity." In: *Econometrica* 48.4, pp. 817–838.
- (1996). *Estimation, Inference and Specification Analysis*. Econometric Society Monographs. Cambridge: Cambridge University Press.
- (2000). "A Reality Check for Data Snooping." In: *Econometrica* 68.5, pp. 1097–1126.
- Zakoian, Jean-Michel (1994). "Threshold Heteroskedastic Models." In: *Journal of Economic Dynamics and Control* 18.5, pp. 931–955.
- Zumbach, Gilles (2007). The RiskMetrics 2006 methodology. Tech. rep. RiskMetrics Group.